Local Shareholders, Corporate Community Responsibility, and Shareholder Value

Hyoseok (David) Hwang[a], Hyun Gon Kim[b], Jung Yeun Kim[c]

Current Version: November 2019

JEL classification: G23, G30, M14

Keywords: Local Shareholders, Corporate Community Responsibility, Business Strategy

[a] *Hyoseok (David) Hwang is an Assistant Professor of Finance at the University of Wisconsin, Eau Claire, WI 54701, Phone: 715-836-2196, E-mail: hwangh@uwec.edu*

[b] *Hyun Gon Kim is an Assistant Professor of Management at Rutgers University, Camden, NJ 08102, Phone: 856-668-4593, E-mail: hyungon.kim@rutgers.edu*

[c] *Jung Yeun Kim is an Assistant Professor of Accounting at Rutgers University, Camden, NJ 08102, Phone: 856-225-6843, E-mail: june.jk.kim@rutgers.edu*

The author acknowledges partial financial support from the David Whitcomb Center for Research in Financial Services of Rutgers University.

Local Shareholders, Corporate Community Responsibility, and Shareholder Value

Abstract

This paper shows that local shareholders lead firms to engage in corporate social responsibility activities locally – corporate community responsibility (CCR). We find that mutual funds investing in local firms tend to increase CCR. Our identification strategy suggests a causal effect of local shareholders on CCR. Local shareholders and their firms employ CCR as business strategy and benefit themselves financially. Our results indicate that CCR tends to increase firm performance, measured with Tobin's Q, and operating cash flows, especially in the consumer-oriented industries where customer relations are critical. In addition, local shareholders (i.e., local funds) of higher CCR firms enjoy greater fund flows. Finally, we discuss possible mechanisms through which local shareholders influence firms' CCR policy.

"What is the role and responsibility of a for-profit, public company? We have always believed Starbucks can – and should – have a positive social impact on the communities we serve. One person, one cup and one neighborhood at a time."[1]

Corporations often express how they act as a good corporate citizen and serve the communities they operate. Firms increasingly consider community relations as part of corporate social responsibility (CSR) and publicly advertise their engagement with communities because well-designed community engagement programs could improve firm reputation, transparency, and financial capacity as well as contribute to local sustainability.[2] Especially for firms in consumer-oriented industries where consumer relations are critical, this could play an important role in growing their customer base. Therefore, community relations are a strategic concern for firms and shareholders.

Despite the strategic importance of community relations, there is little evidence in the literature regarding the economic impacts and motivations for community relations.[3] Many existing studies discussing about a firm's CSR performance rather focus on entire CSR than community relations. In addition, they suggest mixed conclusions on CSR with respect to firm performance, no relationship (McWilliams and Siegel, 2000), a positive relationship (Waddock and Graves, 1997), and a negative relationship (Wright and Ferris, 1997). Indeed, as Margolis, Elfenbein, and Walsh (2007) and Byun and Oh (2018) suggest, not all CSR activities create value for shareholders. Therefore, this paper examines whether a particular aspect of CSR, corporate community responsibility (CCR), can benefit firms and their shareholders.

Corporate engagement with communities provides considerable resources to communities (Brammer and Millington, 2003; Griffin, 2008; Hansen, Sextl and Reichwald,2010). Corporate giving of

[1] Starbucks Social Impact (https://www.starbucks.com/responsibility)
[2] See, for example, Barnett and Salomon (2006), Cochran (2007), Esteves (2008), and Byun and Oh (2018).
[3] Poor community relations can create a variety of costly problems (Barnett and Salomon, 2006). For example, a firm with poor community relations may face 'not-in-my-back-yard' (NIMBY) protests when attempting to open new plants, which could lower the ability of a firm to operate in a community and make it difficult to get a permit from local government (Dear, 1992; Sellers, 1993).

more than 250 leading US companies amounted to $23.8 billion in cash and product giving, of which 15% went to community and economic development programs and 28% went to education programs (CECP 2018). As a result, communities may pressure firms to get the benefits without bearing much of the costs, raising conflicts between management and shareholders if management take the pressure for its own reputation – i.e., agency costs (Masulis and Reza, 2015). Additionally, corporate insiders and non-insiders have different interests with respect to CSR, creating conflicts among shareholders (Barnea and Rubin, 2010). Since justifying CSR or more precisely CCR investments based on a risk-reward metrics may not be suitable, sustainable and persistent CCR activities require a tremendous support from shareholders. We thus investigate what types of shareholders within a firm pursue CCR and why they promote the community investments (i.e., CCR). We especially focus on the role of local shareholders – local mutual funds – on CCR because local shareholders are likely to work in the communities they live and could have more interests in improving their neighborhoods than other shareholders.

There are some distinctive features of local shareholders, relative to distant shareholders, with which they could influence corporate CCR practices. As Chhaochharia, Kumar and Niessen-Ruenzi (2012) show, local shareholders are effective monitors of corporate behavior. Firms with high local ownership have better internal governance (Lerner, 1995). Consequently, managers of high local ownership firms are less likely to engage in empire building and unlikely lead the quiet life. These findings suggest that local shareholders could prevent managers from investing in CCR for their own profits and help avoid agency costs. In that regard, local shareholders strategically allocate corporate resources to CCR and promote shareholder value. In addition to the monitoring effectiveness, local shareholders could have frequent face-to-face meetings with executives, visit product facilities, speak with employees, and understand the local economy better (Chen, Dong and Lin, 2016), which alleviates communication costs as well as information gathering costs.[4] With the information acquisition activities, local shareholders understand the firm's investments (e.g., CCR) better, helping managers to get required shareholder support. Finally, local

[4] See, for example, Coval and Moskowitz (1999) and Teo (2009).

shareholders are more likely to participate in community networks and spread the firm's social efforts and community relations.[5] Increasing awareness of a firm's effort for community investments eventually benefits the firm financially.

We thus investigate whether local shareholders facilitate and promote investments in CCR. Using mutual fund and CCR data, we find that local shareholders are likely to increase CCR. It is interesting that among other CSR activities – community, corporate governance, diversity, employee relations, environment, human rights, and product – CCR is positively associated with local ownership.[6] We control for those variables from CSR literature that affect a firm's CSR activities.[7] Especially, to tease out the effects of local shareholders on CCR, we control for institutional shareholders that is another proven driving force of CSR investments (Chen et al., 2016; Dyck, Lins, Roth and Wagner, 2018). Our results suggest that one standard deviation increase in local ownership is associated with an increase in CCR by around 21%. Community relations are particularly important for firms in consumer-oriented industries, so local shareholders are expected to push more investments in CCR for those firms. Consistent with the hypothesis, the positive relation between local ownership and CCR is more pronounced for consumer-oriented firms.

It is possible that local shareholders allocate their funds to local firms that actively promote CCR – reverse causality. To resolve the endogeneity concern, we employ a regression discontinuity (RD) design with Russell indexes.[8] On May 31st each year, firms are assigned to the Russell indexes based on their market capitalization rankings.[9] This index assignment is near random around the Russell 1000/2000 threshold and exogenous to firm characteristics such as CSR policy, while it leads to portfolio rebalancing

[5] Stakeholders awareness of CSR is the key channel through which financial benefits are obtained (McWilliams and Siegel, 2001; Servaes and Tamayo, 2013; Byun and Oh, 2018).
[6] Environmental activities are also positively associated with local ownership.
[7] See, for example, Dye (1985), Skinner (1997), Kothari, Leone, and Wasley (2005), Barnea and Rubin (2010), and Dhaliwal, Li, Tsang, and Yang (2011).
[8] The regression discontinuity design is a quasi-experimental design that investigates the casual effects of instrument variables by assigning a cutoff or threshold above or below which an instrument is assigned.
[9] The Russell indexes are popular benchmark indexes for institutional investors, including Russell 1000 with the largest one thousand firms and Russell 2000 with the next two thousand firms.

by institutional shareholders that benchmark against the Russell indexes, especially at their threshold (Chen et al. 2016; Crane, Michenaud and Weston, 2016; Hwang, 2019).[10]

Following Crane et al. (2016) and Appel, Gormley and Keim (2018), our empirical strategy uses two-stage least-squares (2SLS) specifications that model the first stage as a function of index inclusion on local ownership and the second stage testing the effects of instrumented local ownership on CCR. As the Russell 1000/2000 cutoff provides the discontinuity in index weights, the inclusion of the Russell 2000 index generates exogenous variations in local ownership in the first stage. The exogenous local holding changes are orthogonal to CCR, satisfying exclusion restrictions in the second stage. Therefore, we test the hypothesis that higher local ownership causes greater CCR. The results show that the inclusion of the Russell 2000 increases local ownership in firms around the threshold and leads to more CCR investments.

Next, we investigate possible motivations of local mutual funds for CCR. First, we find that higher CCR firms perform better, especially in consumer-oriented industries where CCR could bring the most impact.[11] Higher CCR firms are likely to have greater Tobin's Q and generate larger operating cash flows, which contributes to shareholder value. Secondly, local shareholders (i.e., local mutual funds) of the higher CCR firms receive greater fund flows. This finding remains the same even after controlling for fund characteristics such as fund performance. This result suggests that local mutual funds tend to attract more investors as they represent firms that engage more in community relations.

Finally, we discuss potential channels through which local shareholders influence a firm's CCR investment. Existing papers find that local investors are effective monitors and actively participate in firm operations through corporate governance (John, Knyazeva and Knyazeva, 2011; Chhaochharia et al., 2012; Hwang, 2019). They tend to introduce more shareholder proposals, cut excessive CEO pay, and replace CEOs with poor performance. In addition, local shareholders could vote for or against management-

[10] The smallest hundred firms in the Russell 1000 have a combined index weight of 0.99%, while the largest hundred firms in the Russell 2000 have a combined index weight of 17.47%.
[11] This explanation is consistent with Coval and Moskowitz (2001) and Teo (2009) that the physical presence of investors helps them perform better in a local area.

proposed agendas and directly communicate with CEOs on a firm's strategical concerns. As a result, local ownership improves corporate governance and induces value-enhancing decisions (Gaspar and Massa, 2007). Through these potential channels, local shareholders could pursue CCR strategically and, thus, increase shareholder value.

Our paper contributes to the CSR literature. Departing from papers that focus on firm managers' characteristics and private benefits to explain firms' CSR investments (Masulis and Reza, 2015; Cheng, Hong, and Shue, 2016; Cronqvist and Yu, 2017), we show that shareholders play a significant role in allocating capital to CSR. While Dyck et al. (2018) and Chen et al. (2016) also discuss the impact of institutional shareholders on a firm's CSR policy, we specifically focus on local institutional shareholders and their role in a firm's community engagement.

Our paper also contributes to the literature that investigates the effects of ownership structure on CSR. Previous studies show that different types of shareholders have different motivations and benefits toward firms' CSR engagements (Barnea and Rubin, 2010; Li and Zhang, 2010; Oh, Chang, and Martynov, 2011). Complex ownership structure creates conflicts among shareholders with respect to CSR. Managers may overinvest in CSR for their own benefit, while stakeholders may not bear any costs for CSR. We look at another dimension, proximity, in ownership structure that could explain a firm's CSR. To the best of our knowledge, this study is the first to investigate the role of local shareholders as a driving force of a firm's community investments.

Finally, a growing body of literature suggest that geographical proximity between investors and their investments creates economic benefits.[12] Investors prefer local firms mainly due to their information advantages, acknowledging that the physical distance could alleviate information costs (Chen et al. 2016). In addition, local shareholders monitor their portfolio firms more effectively and tend to engage in shareholder activism to influence corporate policies such as mergers and acquisitions (M&As), innovations,

[12] See, for example, Coval and Moskowitz (1999, 2001), Ivkovic and Weisbenner (2005), Baik, Kang, and Kim (2010), and Hwang (2019).

payouts, and CEO compensation (John et al., 2011; Chhaochharia et al., 2012; Hwang, 2019). Consequently, local ownership improves governance and induces value-enhancing decisions (Gaspar and Massa, 2007). We provide additional evidence of economic benefits from geographical proximity with local ownership and firm value.

The rest of the article is organized as follows: Section 2 presents the data and sample. Section 3 explains the empirical results. Section 4 explores potential motivations for local shareholders on CCR. Section 5 documents possible mechanisms. Section 6 concludes.

2. Data and Summary Statistics

2.1. Data and Sample Selection

We use data from following sources: financial accounting data from Compustat, market data and mutual fund characteristics from CRSP, CSR- and CCR-related data from Kinder, Lydenberg, and Domini (KLD), and mutual fund holdings and institutional ownership data from Thomson Reuters.[13] We begin with 24,561 firm-year observations for all firms covered by the firm of KLD for the years 2004-2013.[14] Then, we remove 9,102 observations due to no CSR scores in KLD. In addition, we delete firms for which financial accounting data is not available. Lastly, for our further investigation of consumer-oriented industry, we require that all firm-year observations have the necessary financial information for control variables and Fama-French 48-industry classifications.[15] The above procedures result in a final sample of 8,136 firm-year observations for the final sample from 2005-2013. To mitigate the effect of extreme outliers, all continuous variables are winsorized at the top and bottom one percentile.

[13] The Securities and Exchange Commission (SEC) requires an institutional investment manager who exercises investment discretion over $100 million or more in Section 13(f) securities to report their holdings on Form 13F.
[14] Although the original sample period is 2004-2013, our main regressions run from 2005 to 2013 due to using lagged variables as control variables.
[15] For consumer-oriented industries, we include 1. Agriculture, 2. Food products, 3. Candy and soda, 4. Beer and Liquor, 5. Tobacco Products, 6. Recreation, 7. Entertainment, 8. Printing and Publishing, 9. Consumer Goods, 10. Apparel, 11. Healthcare, 12. Medical Equipment, 13. Pharmaceutical Products, 16. Textiles, 22. Electrical Equipment, 23. Automobiles and Trucks, 24. Aircraft, 33. Personal Services, 34. Business Services, 38. Business Supplies, 40. Transportation, 41. Wholesale, 42. Retail, 43. Restaurants, Hotels, Motels, 44. Banking, 45. Insurance, 46. Real Estate, 47. Trading, based on Fama-French 48 industry classification.

2.2. Variable Measurement

2.2.1. Corporate Community Responsibility

We use the KLD database to measure CSR and CCR scores. We construct CSR scores based on seven dimensions: community, corporate governance, diversity, employee relations, environment, human rights, and product. We summarize the total CSR strengths and concerns from the seven dimensions first and then calculate a net CSR score as the total CSR strength minus the total CSR concerns. CCR is a net community score that is the community strength minus the community concern. To make these two CSR measures comparable between years, we standardize the scores for each year (Kotchen and Moon, 2012). We calculate the standardized CSR (STDCSR) and CCR (STDCCR) as a net CSR and a net CCR for each firm per year minus their means across firms for the same year, divided by their standard deviations, respectively.

2.2.2. Local Mutual Fund Ownership and Other Control Variables

We calculate actual distances between mutual funds and their portfolio firms based on the addresses of the headquarters. There are several ways to compute geographical distances, such as the geodesic distance (the shortest distance between two points on the surface of a sphere) and the driving distance. The local distance calculation in this study employs the geodesic distance; however, the results are not different when using the driving distance. We define local shareholders as mutual funds investing in a firm within 100 kilometers of their headquarters. Coval and Moskowitz (1999, 2001) suggest a 100-kilometer metric among several location metrics that, in most cases, are qualitatively and quantitatively similar. Since a firm could have multiple local mutual funds, the sum of local fund ownership for each firm is used as the primary variable of interest (*Local*). We also have an alternative measure, *Local/Total*, calculated as the sum of local fund ownership divided by total institutional ownership, with which we show the proportional ownership of local institutional shareholders over overall institutional shareholders.

We control for variables pertaining to firm characteristics and CSR characteristics. The firm characteristic variables are retrieved from Compustat, including firm size (*Size*), the book-to-market ratio

(*BM*), return on assets (*ROA*), and leverage ratio and capital expenditures (*CAPEX*). Given the skewed distribution of total assets, we proxy *Size* with logged total assets. Following Kothari, Leone and Wasley (2011), we measure financial reporting quality with the absolute discretionary accruals (|DACC|) to control for potential earnings management. Specifically, we measure discretionary accruals as the residuals from the performance-adjusted modified Jones model.[16]

We also add control variables from CSR literature, including litigation risk (*Litigation*), competitive pressure (*Competition*), financing activities (*FIN*) and global presence (*Global*) from the CSR literature (e.g., Dhaliwal et al., 2011). Liquidity is controlled because managers are motivated to increase liquidity for selling shares from their compensation plans. *Liquidity* is calculated as the number of shares traded in a year divided by the total shares outstanding at the year-end. Following Dye (1985), competition is controlled as competition amongst industries could reduce CSR activities and CSR disclosure. *Competition* is proxied with the Herfindhal-Hirshman Index multiplied by –1. Following Skinner (1997), litigation is added as a control variable as firms that are riskier tend to preempt potential lawsuits by making CSR disclosures. *Litigation* is an indicator variable that equals 1 if a firm operates in high-litigation industries (SIC codes of 2833–2836, 3570–3577, 3600–3674, 5200–5961, and 7370) and 0 otherwise. As per Dhaliwal et al. (2011), we further add *FIN* and *Global* as control variables. *FIN* is calculated as the sale of common and preferred shares minus the purchase of common and preferred shares plus the long-term debt issuance minus the long-term debt reduction. *Global* is an indicator variable that equals 1 if a firm reports foreign income and 0 otherwise. All detailed variable definitions are in the Appendix.

2.3. Descriptive Statistics

Table 1 reports descriptive statistics. Local has a mean of 0.0124 with standard deviation of 0.0262. Local/Total has a mean of 0.0158 with standard deviation of 0.0330. On average, the mean CSR and CCR

[16] Kothari et al. (2005) test whether a performance-matched discretionary-accrual approach (a type of control sample approach) is both well specified and powerful at estimating discretionary accruals. The paper uses ROA as the matching variable. Detailed descriptions of this measure are explained in the Appendix.

scores are -0.3513 and 0.812, respectively. The negative CSR score indicates that concerns exceed strengths. Descriptive statistics for all control variables are consistent with those reported in CSR literature.

[Insert Table 1 here]

3. Do Local Shareholders Promote Corporate Community Responsibility?

In this section, we investigate whether local shareholders lead firms to invest in CSR practices locally. We also test a causal relationship with an identification strategy.

3.1. Local Ownership and Corporate Community Responsibility

First, our main regression tests the associations between local ownership and CCR. Based on our hypothesis where local shareholders encourage CCR, the model specifications are as follows:

$$\begin{aligned} &STDCSR(STDCCR)_t \\ &= \alpha_0 + \alpha_1 Local_{t-1}(Local/Total_{t-1}) + \alpha_2 \log(Size_{t-1}) + \alpha_3 BM_{t-1} + \alpha_4 Leverage_{t-1} \\ &+ \alpha_5 ROA_{t-1} + \alpha_6 |DACC|_{t-1} + \alpha_7 CAPEX_{t-1} + \alpha_8 Liquidity_{t-1} + \alpha_9 Compesation_{t-1} \\ &+ \alpha_{10} Litigation_{t-1} + \alpha_{11} FIN_{t-1} + \alpha_{12} Global_{t-1} + \alpha_{13} IO_{t-1} + Year + Industry \\ &+ u_t, \end{aligned} \quad (1)$$

Our dependent variable is STDCSR (STDCCR), measured as standardized CSR (CCR). The primary variables of interest are *Local* and *Local/Total*, the sum of mutual fund ownership and the sum of mutual fund ownership over total institutional ownership, respectively. Control variables are detailed in the Appendix. All specifications are controlled for year and industry fixed effects.

Table 2 reports the multivariate regressions of CSR and CCR on local shareholders. We compare CSR with CCR and test whether local shareholders encourage CCR or entire CSR. Panel A reports the estimates for all industries, while Panel B shows only consumer-oriented industries. In Column (1) and (2)

of Panel A, we regress *STDCSR* and *STDCCR* on *Local* and the control variables. The coefficient estimate of *Local* is negative and insignificant with *STDCSR*, while it is positive and significant at the 1% level with *STDCCR*. The results suggest that local shareholders tend to increase CCR rather than overall CSR. The coefficient estimates on *Local* in Column (2), 1.3479, indicates that a one-standard deviation increase in local ownership raises CCR by around 21%.[17] We also estimate the model specifications with an alternate local ownership variable, *Local/Total*. The variable of interest reflects the investment proportions of local shareholders among institutional investors. The results remain the same, suggesting firms with higher local ownership are likely to increase CCR.

In Panel B, we run a sub-sample analysis with only consumer-oriented industry firms. The industry classifications follow the Fama-French 48-industry classifications. Community relations are especially critical for firms in consumer-oriented industries. Therefore, we expect that the associations between local shareholders and CCR are more pronounced. Consistent with the hypothesis, the coefficient estimates of *Local* and *Local/Total* are greater and statistically significant at the 1% level. As for STDCSR, the coefficients remain negative and insignificant.

[Insert Table 2 here]

3.2. Controlling for Endogeneity of Local Ownership

So far we find that local ownership increases CCR. However, an endogeneity of mutual fund ownership may create a spurious relationship between local ownership and CCR. It is possible that local shareholders selectively invest in firms that spend on CCR – reverse causality. Our identification strategy to resolve the concern considers the inclusion of the Russell 2000 index as a source of exogenous shocks to local mutual fund holdings. The Russell indexes are value-weighted indexes, consisting of the largest 1,000 U.S.-listed firms based on market capitalization on May 31st each year for the Russell 1000 and the

[17] The dependent variable in the model is STDCCR. Following the definition of STDCCR, we compute the amount to which local ownership increases CCR. Ceteris paribus, a one-standard deviation increase in local ownership raises CCR by about 0.0174 (21%) from the mean.

subsequent largest 2,000 firms for the Russell 2000. Then, Russell uses its June float-adjusted market capitalization to calculate the index weights.[18] Because of the value-weighted index design, there are significant differences in index weights for the smallest firms in the Russell 1000 and the largest firms in the Russell 2000.

Figure 1 plots the index weights for the smallest 250 firms in the Russell 1000 and the largest 250 firms in the Russell 2000, where a zero represents the thresholds for the Russell 1000/2000 (1000th largest firms). It shows that the threshold at which firms are assigned to either the Russell 1000 or the Russell 2000 creates a large discontinuity in index weights. Therefore, the threshold could be a good candidate for an instrument variable that generates exogenous variation in local mutual fund holdings but seems orthogonal to a firm's community investments.

Recent papers, however, point out some endogeneity concerns and challenges for the identification strategy due to Russell's policy that determines index memberships and weights (Crane et al., 2016; Appel et al, 2018; Gloßner, 2018; Wei and Young, 2018). After membership is determined by the end-of-May market capitalization, stocks within indexes are adjusted to include only those shares available to the public, referred to as "free float." This aims to exclude shares that are not available for purchase, and the Russell indexes are weighted by this so-called float-adjusted market capitalization. Consequently, firms with lower float-adjusted market capitalization (i.e., lower liquidity and higher inside ownership) move toward the bottom of the Russell 1000, while those with higher float-adjusted market capitalization (higher liquidity and lower inside ownership) occupy at the top of the Russell 2000. This could lead us incorrectly to attribute observed differences to index assignment rather than to the underlying differences in liquidity and inside ownership (Appel et al., 2016, 2018).

[18] That is, index membership is determined by the end-of-May market capitalization, and the index weight for each stock within the indexes is calculated with the June float-adjusted market capitalization. The float-adjusted market capitalization only includes the value of shares available to the public. Therefore, the 1,000th largest stock in the end-of-May market capitalization needs not be the smallest index weight stock in the Russell 1000 index. This creates some endogeneity issues for the identification strategy. See, for example, Appel et al. (2016, 2018), Crane et al. (2016), Gloßner (2018), and Wei and Young (2018).

In addition, Russell has changed its methodology since 2007 to mitigate unnecessary turnover. Beginning in June 2007, Russell implemented a banding methodology in which stocks within a certain range of the cutoff would not move in or out of the Russell 1000/2000 indexes. The reconstitution methodologies add issues and challenges to current studies using the indexes as IV estimation. Therefore, we add three additional control variables to account for the new policy: (1) an indicator variable that a firm will not switch indexes in reconstitution due to the banding policy, (2) an indicator variable that a firm was a member of the Russell 2000 in the previous year, and (3) an interaction term between (1) and (2). The additional control variables would capture the adjustments that occur due to the new banding policy beginning in 2007.

[Insert Figure 1 here]

We employ a two-stage least squares (2SLS) model, following the work of Appel et al. (2018).[19] Using the Russell index thresholds in a regression discontinuity design, the first- and second-stage specifications are as follows.

First stage:

$$Local_{i,t} = \alpha + \eta_1 Russell2000_{i,t} + \delta_1(Russell\ Rank_{i,t} - 1000) + \delta_2 Float_{i,t} + \theta_1 Band_{i,t} + \theta_2 Russell2000_{i,t-1} + \theta_3\left(Band_{i,t} \times Russell2000_{i,t-1}\right) + \tau_1 FE_{i,t} + \omega_{i,t}, \quad (2)$$

Second stage:

$$CCR_{i,t+1} = \kappa_t + \beta\widehat{Local_{i,t}} + \lambda_1(Russell\ Rank_{i,t} - 1000) + \lambda_2 Float_{i,t} + \chi_1 Band_{i,t} + \chi_2 Russell2000_{i,t-1} + \chi_3\left(Band_{i,t} \times Russell2000_{i,t-1}\right) + \psi_1 FE_{i,t} + \varepsilon_{i,t}, \quad (3)$$

[19] Several papers recently discussed the best empirical design to build identification on the indexes (Appel et al., 2018; Gloßner, 2018; Wei and Young, 2018). We follow the work of Appel et al. (2018).

The first stage estimates local mutual fund ownership as a function of the Russell indexes threshold in a RD design. The threshold creates a discontinuity in institutional holdings of shares, and especially for firms close to the cutoffs, we have a quasi-experimental design. $Russell2000_{i,t}$ is a binary treatment variable that represents inclusion in the Russell 2000 in year *t*. *Russell Rank* is a ranking variable from the Russell indexes, based on the end-of-May market capitalization.[20] We also control for the mechanical relationship with market capitalization ranking on both sides of the threshold with a distance to the threshold, $\left(Russell\ Rank_{i,t} - 1000\right)$, for firm i in year t. The index weights by the June float-adjusted market capitalization is taken into the specifications as the difference between the end-of-May market capitalization and the actual rank assigned by Russell in June, $Float_{i,t}$. Finally, the three additional variables mentioned above are controlled.

The second stage estimates CCR as a function of instrumented local ownership. CCR is measured in year *t*+1 after the year of index assignment. The regression specifications include control variables in the first stage. We expect the positive effect of an exogenous increase in local ownerships in sample firms. The first and second stages control for the year fixed effects. Table 3 reports the two-stage regressions of the innovation outcome variables. Lee and Lemieux (2010) document how to choose a bandwidth (a window around the cutoff) in a RD design. Too narrow a window generates imprecise estimates, while too wide a window produces biased estimates. More importantly, a wide bandwidth makes the comparisons on both sides of the firms around the cutoff less credible since we are looking at firms far from the cutoff, which typically dilutes the effects of the discontinuity. Therefore, we provide the results in a ±100 bandwidth around the threshold.

In the first stage, the coefficients on the treatment variable, $Russell2000_{i,t}$, are 2.8734 in Column (1). The result suggests that the addition to the Russell 2000 increases local mutual fund ownership in firms by about 2.87% on average. In the second stage, the coefficient estimate on instrumented local ownership is positive and significant at the 10% level, indicating that the increased local ownership leads to higher

[20] We appreciate FTSE Russell for sharing the Russell indexes data.

CCR. The annual Russell index assignments cause exogenous ownership changes, not only for local mutual funds, but also for entire institutional investors that benchmark the indexes. To differentiate shareholding changes in local ownership relative to overall institutional ownership, we use an alternate ownership variable, local fund ownership over overall institutional ownership, *Local/Total*, and run the same 2SLS estimations. The third and fourth columns report the estimation results. Overall, the inclusion of the Russell 2000 index increases local fund ownership relative to total institutional ownership and, thus, leads to greater CCR.

[Insert Table 3 here]

4. Why Do Local Shareholders Promote Corporate Community Responsibility?

In this section we ask, why, then, do local shareholders promote corporate community responsibility? What are the motivations behind CCR practices? Is there any economic benefit? To answer these questions, we investigate what matters most to the local shareholders. Our local shareholders are mutual funds investing in local firms. The two most important indicators that measure the quality of mutual funds are fund performance and fund flows. As local shareholders are especially concerned with fund performance and fund flows like any other mutual funds, we expect that their strategic practices imposed on portfolio firms are likely to benefit fund performance and fund flows. Therefore, this section examines whether CCR activities help local shareholders deliver better performance and higher fund flows or whether they simply cost them due to no economic benefits.

4.1 Firm Performance

To test fund performance, we rather focus on firm performance for two reasons. First, overall fund performance is measured with not only the performance of local firms, but also distant firms. We, thus, cannot distinguish the performance of mutual funds as local shareholders or distant shareholders. Secondly, we cannot separate fund performance based on a portfolio firm's CCR policy or any other investment policies. It is highly possible that a firm performs well not because of its CCR, but because of its other

strategic practices. Therefore, our empirical approach is to examine the relationship between a firm's performance and its CCR policy imposed by local shareholders directly. Since overall fund performance is comprised of its portfolio firms' performance, higher firm performance due to CCR investment would lead to better fund performance. Therefore, our estimation model is as follows.

$$
\begin{aligned}
&Tobin's\ Q_t(OCF_t) \\
&= \alpha_0 + \alpha_1 STDCCR_{t-1} + \alpha_2 \log(Size_{t-1}) + \alpha_3 BM_{t-1} + \alpha_4 Leverage_{t-1} + \alpha_5 ROA_{t-1} \\
&+ \alpha_6 |DACC|_{t-1} + \alpha_7 CAPEX_{t-1} + \alpha_8 Liquidity_{t-1} + \alpha_9 Compesation_{t-1} \\
&+ \alpha_{10} Litigation_{t-1} + \alpha_{11} FIN_{t-1} + \alpha_{12} Global_{t-1} + \alpha_{13} IO_{t-1} + Fixed\ Effects \\
&+ u_t, \qquad (4)
\end{aligned}
$$

We measure firm performance with two distinctive variables: *Tobin's Q* and operating cash flows (*OCF*). Tobin's Q represents investors' expectations about the risk-adjusted future cash flows of a firm, which are considered an equivalent measure of a market-to-book ratio (Anderson and Reeb, 2003; Cheng, 2008). Our second measure for firm performance, *OCF*, is calculated as operating cash flows scaled by total assets. It is less influenced by accrual accounting methods (Vorhies, Morgan and Autry, 2009), captures variation in organizational performance (Otley and Fakiolas, 2000), and provides incentives to market participants with value-relevant information (Defond and Hung, 2003). Our model specifications also include the control variables in Equation (1).

We report the regression results of both CSR and CCR on firm performance in Table 4. The first two columns of Panel A show that CSR investments (measured with *STDCSR*) tend to increase firm performance in overall industries.[21] The results are consistent with recent CSR literature that CSR practices produce better firm performance.[22] This verifies that our sample is not distant from the existing studies. The

[21] We also investigate other categories of CSR practices and their effects on firm performance, as overall CSR activities increase firm performance significantly. Based on KLD classifications, employee relations and product-related issues improve firm performance.

[22] See Edmans (2011), Flammer (2013), and Servaes and Tamayo (2013).

last two columns provide evidence that CCR practices lead to higher firm performance. The coefficients of *STDCCR* are positive and significant at the 1% level for Tobin's Q and at the 5% level for *OCF*, respectively. The coefficient estimates suggest that one standard deviation increase in *CCR* raises Tobin's Q by around 7% and generates about $17.7 million additional operating cash flows.[23] In Panel B, the magnitude of the impact on firm performance becomes larger when it comes to consumer-oriented firms. It is consistent with our findings so far that community investments are critical and could extend the customer base especially for those direct consumer-relation firms.

Previous literature offers some possible explanations as to why a firm's community investments increase firm performance. First, CCR activities are locally focused so that community members as well as stakeholders recognize the firm's social efforts in their communities. The key channel of the shareholder (or the stakeholder including community) maximization theory is the awareness of a firm's social investments.[24] Secondly, local shareholders could push their closely held firms to spend community-related investments more strategically in their areas. Even though not all CSR investments are strategic, local shareholders allocate their community investments more efficiently and strategically in exchange for future returns due to their information advantage in the community. Finally, local media could help deliver better firm performance because consumers in the area could avail themselves of more products and services provided by high CCR firms due to media coverage (Byun and Oh, 2018).

[Insert Table 4 here]

4.2. Fund Flows

Next, we investigate whether CCR activities help deliver greater fund flows for local shareholders. The mutual fund literature has extensively examined the flow-performance relationship. Some researchers argue that fund flows generally respond to past performance (Chevalier and Ellison, 1997; Berk and Green, 2004); while others suggest that fund flows are simply a result of a fund's marketing effort, not related to

[23] We compute the additional amount of the operating cash flows with the mean of total assets ($ 8,471,110,000).
[24] See, for example, McWilliams and Siegel (2001), Schuler and Cording (2006), and Servaes and Tamayo (2013)

fund performance (Jain and Wu, 2000); or both, prior performance and search costs (Sirri and Tufano, 1998). We propose that CCR practices could enhance fund flows in both ways.

Based on our findings, CCR policy tends to increase firm performance, which would consequently benefit funds with higher performance. This obviously satisfies fund investors and, thus, will attract more investors – i.e., larger fund flows. In addition, local shareholders advertise CCR practices for themselves as a marketing tool – advertisement to community members. Sirri and Tufano (1998) show that fund flows are directly related to media attention surrounding the fund due to a decrease in consumers' search costs. Consistent with this finding, as local media publicizes the social efforts of firms and their shareholders on community development, it is likely to increase the awareness of members of the community. This in turn could help deliver more money flows to local shareholders.

It is yet possible that fund investors are more worried about their funds' social investments which could result in uncertain outcomes. Investing in firms with high social investments is likely to reduce the set of investment opportunities and increase monitoring costs, which would negatively affect fund performance and thus discourage investors from joining the funds (Geczy, Stambugh and Levin 2005; Renneboog, Hoorst and Zhang 2008; Cortez, Silva and Areal 2009). Therefore, it is an empirical question to investigate the impacts of CCR on fund flows for local shareholders. We estimate the following model.

$$Fund\ Flows_t = \alpha_0 + \alpha_1 STDCCR_{t-1} + \alpha_2 Fund\ Controls_{t-1} + Fixed\ Effects + u_t, \quad (5)$$

We measure annual fund flows as:

$$Fund\ Flows_{j,t} = \frac{TNA_{j,t} - TNA_{j,t-1}(1+R_{j,t})}{TNA_{j,t-1}}, \quad (6)$$

where $TNA_{j,t}$ and $TNA_{j,t-1}$ are the total net assets for fund *j* at the end of years *t* and *t*-1, respectively, and $R_{j,t}$ is the return of fund *j* in year *t*. *Fund Controls* include variables that measure fund characteristics such

as fund performance, 12b1 fees, expense ratio, turnover ratio, and fund age.[25] We also control for year fixed effects.

Table 5 reports the regression results. The dependent variables are *Fund Flows* and *Scaled Fund Flows* (scaled by the number of local mutual funds). Our variable of interest is *STDCCR*. The coefficient estimates are positive and significant with or without fund control variables, implying that a firm's CCR activities tend to increase fund flows to local shareholders. Local shareholders employ CCR policy as an investment strategy and a marketing tool to enjoy greater fund flows.

[Insert Table 5 here]

5. Possible Mechanisms

In this section, we explore potential channels through which local shareholders could influence over corporate CCR practices. We specifically discuss shareholder proposals, voting, direct communication with managers, and exit strategy. A conceptual framework for each possible mechanism is as follows.

[Insert Figure 2 here]

5.1. Shareholder Proposal and Voting

Shareholder proposals and voting have long been used to strengthen shareholder voice for improving corporate governance and the implementation of decisions (Ertimur, Ferri and Stubben, 2010; O'Rourke, 2003; Prevost and Rao, 2000; Thomas and Cotter, 2007). Under the Rule 14a-8 adopted by the Securities and Exchange Commission (SEC) in 1942, shareholder proposals could be introduced with supporting materials in their own proxy statements prior to a firm's annual shareholder meeting. Despite its useful purpose for a long time, shareholder proposals have received little attention by either shareholders or even managers due to their cost and limited success (Pound, 1991; Thomas and Cotter, 2007), and they have been considered a weak mechanism for driving governance reform (Black, 1990; Bebchuk, 2005).

[25] We calculate fund performance as annual returns and fund age as the natural logarithm of fund age (the age of the oldest share class of the mutual fund measured in months since the inception date).

Shareholder proposals and voting on proposals, however, have become more important parts of shareholder activism in recent years (Katz, 2005; O'Rourke, 2003). The proposals could be practically simple and less costly under Rule 14a-8 in terms of raising important issues such as policy changes. Previous literature shows that shareholder proposals, as a complementary corporate governance mechanism, improve firm performance and affect governance structure reform as well (Brav, Jiang, Partnoy and Thomas, 2008; Prevost and Rao, 2000; Ryan and Schneider, 2002). For example, governance-related shareholder proposals have played pivotal roles in changing board of directors' or executives' decisions. In addition, institutional shareholders influence CSR decisions through these channels as they are able to pressure management to vote on CSR issues (O'Rourke, 2003). Social issue proposals such as environmental concerns, implementing ethical codes of conduct for manufacturing operations, diversity in organizations, or human right concerns, present the demand of shareholders (Thomas and Cotter, 2007).

Among the institutional shareholders, local shareholders could effectively monitor firms due to the low communication costs as well as information gathering costs. Chhaochharia et al. (2012) point out that local shareholders are more likely to attend a shareholder meeting and introduce shareholder proposals and voting due to lower monitoring and communication costs on the one hand. On the other hand, local shareholders are less likely to engage in undesirable meetings and corporate behaviors. Therefore, we suggest that higher local ownership firms could face more influence through shareholder proposals and voting.

5.2. Direct Communication and Exit Strategy

Direct communication and exit strategy are alternative mechanisms that influence management decisions. Shareholders, especially institutional shareholders, attempt to communicate directly with management on corporate policies and issues. Phasing out environmentally harmful materials at McDonalds and Home Depot were good examples of how shareholders directly communicate and engage with companies (FOE, 2001; O'Rourke, 2003). Before exiting to find alternative investments when management decisions are difficult to control and influence, institutional shareholders commonly choose to communicate

with managers first because good communications increase credibility and, thus, lead to a consensus between shareholders and management (Levit, 2019). Empirical evidence indicates that the prevalence of communications between investors and firms increases shareholder value (Becht, Franks, Mayer and Rossi 2009; Dimson, Oguzhan and Xi 2015; McCahery, Sautner and Starks 2016).

What if direct communication is not expected to be successful? Shareholders consequently prefer an 'exit strategy' or 'the threat of exit' to express their dissatisfaction with managers' decisions (Marler and Faugere, 2010). *Exit strategy*, referred to as the "Wall Street Walk", means the sales of shares by shareholders to express their various unsatisfied reasons related to a firm's performance or management decisions (Chung and Talaulicar, 2010; Hirschman, 1970; Parrino, Sias and Starks 2003; Ryan and Schneider, 2002). Between direct communication and exit strategy, shareholder decisions to engage with management are based on their judgement of the value in remaining or exiting (Goodman, 2014; Hirschman, 1970).

Local shareholders have higher chances of communicating with executives and employees due to their physical presence (Chen et al. 2016). Therefore, the direct communication between shareholders and managers could be a highly efficient and effective tool, acting as a positive moderator on corporate policies such as CCR investment on the one hand. On the other hand, local shareholders' exit strategy, as a consequent response to the failure of direct communication, thus has a broad impact on corporate decisions as financial markets react to the exit negatively.

6. Conclusion

We investigate the role of local shareholders in a firm's CSR practices. This paper finds that local shareholders lead firms to engage in corporate social responsibility activities locally – corporate community responsibility. We find that mutual funds investing in local firms tend to increase CCR. Our identification strategy suggests a causal effect of local shareholders on CCR. Local shareholders and their firms employ CCR as a business strategy and to benefit themselves financially. Our results indicate that CCR tends to increase firm performance measured with Tobin's Q and operating cash flows, especially in the consumer-

oriented industries where customer relations are critical. In addition, local shareholders (i.e., mutual funds) of higher CCR firms enjoy greater fund flows. Finally, we discuss possible mechanisms, shareholder proposals, voting, direct communications, exit strategy, through which local shareholders could influence firms' CCR policy.

References

Anderson RC, Reeb DM. 2003. Founding-Family ownership and firm performance: Evidence from the S&P 500. *Journal of Finance.* **58(3)**: 1301-1328.

Appel IR, Gormley TA, Keim DB. 2016. Passive investors, not passive owners. *Journal of Financial Economics* **121(1)**: 111-141.

Appel IR, Gormley TA, Keim DB. 2018. Identification using Russell 1000/2000 index assignments: a discussion of methodologies. Working paper.

Baik B, Kang JK, Kim JM. 2010. Local institutional investors, information asymmetries, and equity returns. *Journal of Financial Economics* **97**: 81-106.

Barnea A, Rubin A. 2010. Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics* **97(1)**: 71-86.

Barnett ML, Salomon RM. 2006. Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal* **27(11)**: 1101-1122

Bebchuk L. 2005. The case for increasing shareholder power. *Harvard Law Review* **118(3)**: 835–914.

Becht M, Franks J, Mayer C, Rossi S. 2009. Returns to shareholder activism: evidence from a clinical study of the Hermes UK Focus Fund. *Review of Financial Studies*. **22(8)**:3093–3129.

Berk JB, Green RC. 2004. Mutual fund flows and performance in rational markets. *Journal of Political Economy*. **112(6)**:1269-1295.

Black B.1990. Shareholder passivity reexamined. *Michigan Law Review* **89(December)**: 520–607.

Brammer S, Millington A. 2003. The effect of stakeholder preferences, organizational structure and industry type on corporate community involvement. *Journal of Business Ethics* **45(3)**: 213–226.

Brav A, Jiang W, Partnoy F, Thomas R. 2008. Hedge fund activism, corporate governance and firm performance. *Journal of Finance* **63(4)**: 1729–1775.

Byun SK, Oh JM. 2018. Local corporate responsibility, media coverage, and shareholder value. *Journal of Banking and Finance* **87**: 68-86.

Chen T, Dong H, Lin C. 2016. Institutional shareholders and corporate social responsibility: evidence from two quasi-natural experiments. Working paper.

Cheng IH, Hong H, Shue K. 2016. Do managers do good with other peoples' money? Working paper.

Chevalier J, Ellison G. 1997. Risk taking by mutual funds as a response to incentives. *Journal of Political Economy*. **105(December)**: 1167-1200.

Chhaochharia V, Kumar A, Niessen-Ruenzi A. 2012. Local investors and corporate governance. *Journal of Accounting and Economics* **54(1)**: 42-67.

Chung H, Talaulicar T. 2010. Forms and effects of shareholder activism. *Corporate Governance: An International Review* **18(4)**: 253–257.

Cochran PL. 2007. The evolution of corporate social responsibility. *Business Horizons* **50**: 449-454.

Cortez MC, Silva F, Areal N. 2009. The performance of European socially responsible funds. *Journal of Business Ethics* **87(4)**:573–588.

Coval JD, Moskowitz TJ. 1999. Home bias at home: local equity preference in domestic portfolios. *Journal of Finance* **64(6)**: 2045-2073.

Coval JD, Moskowitz TJ. 2001. The geography of investment: informed trading and asset prices. *Journal of Political Economy* **109(4)**: 811-841.

Crane AD, Michenaud S, Weston JP. 2016. The effect of institutional ownership on payout policy: evidence from index thresholds. *Review of Financial Studies* **29(6)**: 1377-1408.

Cronqvist H, Yu F. 2017. Shaped by their daughters: executives, female socialization, and corporate social responsibility. *Journal of Financial Economics* **126(3)**: 543-562.

Dear M. 1992. Understanding and overcoming the NIMBY syndrome. *Journal of the American Planning Association* **58(3)**: 288-300.

DeFond ML, Hung M. 2003. An empirical analysis of analysts' case flow forecasts. *Journal of Accounting and Economics* **35(1)**: 73-100.

Dhaliwal DS, Li OZ, Tsang A, Yang YG. 2011. Voluntary nonfinancial disclosure and the cost of equity capital: the initiation of corporate social responsibility reporting. *Accounting Review* **86(1)**: 59-100.

Dimson E, O˘guzhan K, Xi L. 2015. Active ownership. *Review of Financial Studies* **28(2)**:3225–3268.

Dyck A, Lins KV, Roth L, Wagner HF. 2018. Do institutional investors drive corporate social responsibility? International evidence. *Journal of Financial Economics* **131(3)**: 693-714.

Dye RA. 1985. Disclosure of non-proprietary information. *Journal of Accounting Research* **23(1)**: 123-145.

Edmans A. 2011. Does the stock market fully value intangibles? Employee satisfaction and equity prices. *Journal of Financial Economics* **101(3)**: 621-640.

Ertimur YF, Ferri C, Stubben S. 2010. Board of directors responsiveness to shareholders: evidence from shareholder proposals. *Journal of Corporate Finance* **16(1)**: 53–72.

Esteves AM. 2008. Mining and social development: refocusing community investment using multi-criteria decision analysis. *Resources Policy* **33(1)**: 39-47.

Flammer C. 2012. Corporate social responsibility and shareholder reaction: The environmental awareness of investors. Academy of Management Journal 56(3): 758-781.

Friends of the Earth (FOE). 2001. *Confronting Companies Using Shareholder Power: a handbook on Socially-Oriented Shareholder Activism.* http://www.foe.org/international/shareholder/index.html [10 July 2001].

Gaspar JM, Massa M. 2007. Local ownership as private information: evidence on the liquidity-monitoring trade-off. *Journal of Financial Economics* **83(3)**: 751-792.

Geczy C, Stambaugh RF, Levin D. 2005. Investing in socially responsible mutual funds. University of Pennsylvania working paper.

Gloßner S. 2018. The effects of institutional investors on frim outcomes: empirical pitfalls of quasi-experiments using Russell 1000/2000 index reconstitutions. Working paper.

Goodman J, Louche C, van Cranenburgh K, Arenas D. 2014. Social shareholder engagement: the dynamics of voice and exit. *Journal of Business Ethics* **125(2)**: 193-210.

Griffin JJ. 2008. Re-examining corporate community investment: Allen's Australian centre for corporate public affairs (ACCPA) corporate community involvement report. *Journal of Public Affairs* **8(3)**: 219–227.

Hansen E, Sextl M, Reichwald R. 2010. Managing strategic alliances through a community-enabled balanced scorecard: the case of Merck Ltd, Thailand. *Business Strategy and the Environment* **19(6)**: 387–399.

Hess D, Rogovsky N, Dunfee TW. 2002. The next wave of corporate community involvement: corporate social initiatives. *California Management Review* **44(2)**: 110–125.

Hirschman AO. 1970. *Exit, voice, and loyalty*. Cambridge, MA: Harvard University Press.

Hwang HD. 2019. The real effects of local investors: evidence from corporate innovation. Working paper.

Ivkovic Z, Weisbenner S. 2005. Local does as local is: information content of the geography of individual investors' common stock investments. *Journal of Finance* **60(1)**: 267-306.

Jain PC, Wu JS. 2002. Truth in mutual fund advertising: Evidence on future performance and fund flows. *Journal of Finance* **55(2)**: 937-958.

John K, Knyazeva A, Knyazeva D. 2011. Does geography matter? firm location and corporate payout policy. *Journal of Financial Economics* **101(3)**: 533-551.

Katz D. 2005. Corporate Governance: Shareholder Activism in 2004 and Implications for 2005.

Kothari SP, Leone AJ, Wasley CE. 2005. Performance matched discretionary accrual measures. *Journal of Accounting and Economics* **39(1)**: 163-197.

Kotchen M, Moon JJ. 2012. Corporate social responsibility for irresponsibility. *The B.E. Journal of Economic Analysis & Policy* **12(1)**: 1-23.

Lerner J. 1995. Venture capitalists and the oversight of private firms. *Journal of Finance* **50(1)**: 301-318.

Lee DS, Lemieux T. 2010. Regression discountinuity designs in economics. *Journal of Economic Literature* **48(2)**: 281-355.

Levit, D. 2019. Soft shareholder activism. *The Review of Financial Studies,* **32(7)**: 2775-2808.

Li W, Zhang R. 2010. Corporate social responsibility, ownership structure, and political interference: evidence from China. *Journal of Business Ethics* **96(4)**: 631-645.

Margolis JD, Elfenbein HA, Walsh J. 2007. Does it pay to be good and does it matter? a meta-analysis of the relationship between corporate social and financial performance. Working paper

Marler JH, Fauge`re C. 2010. Shareholder activism and middle management equity incentives. *Corporate Governance: An International Review* **18(4)**:313–328.

Masulis RW, Reza SW. 2015. Agency problems of corporate philanthropy. *Review of Financial Studies* **28(2)**: 592-636.

Mathews MR. 2008. Further thoughts on mega-accounting and the need for standards. *Issues in Social & Environmental Accounting* **2(2)**:158–175.

Matsumoto DA 2002. Management's incentives to avoid negative earnings surprises. *The Accounting Review* **77(3)**: 483-514.

McCahery J, Sautner A, Starks LT. 2016. Behind the scenes: the corporate governance preferences of institutional investors. *Journal of Finance* **71(6)**:2905–2932.

McWilliams A, Siegel D. 2000. Corporate social responsibility and financial performance: correlation or misspecification*? Strategic management journal* **21(5)**: 603-609.

McWilliams A, Siegel D. 2001. Corporate social responsibility: a theory of the firm perspective. *Academy of Management Review* **26**(1): 117-127.

Oh WY, Chang YK, Martynov A. 2011. The effect of ownership structure on corporate social responsibility: empirical evidence from Korea, *Journal of Business Ethics* **104(2)**: 283-297.

O'Rourke, A. 2003. A new politics of engagement: shareholder activism for corporate social responsibility. *Business strategy and the environment* **12(4)**: 227-239.

Otley, D., & Fakiolas, A. (2000). Reliance on accounting performance measures: dead end or new beginning?. *Accounting, Organizations and Society*, ***25*(4-5)**, 497-510.

Parrino R, Sias R, Starks L. 2003. Voting with their feet: institutional ownership changes around forced CEO turnover. *Journal of Financial Economics* **68(1)**: 3–46.

Pound J. 1991. Investor protection versus market efficiency. *Journal of Financial Economics* **29(2)**: 241–285.

Prevost AK, Rao RP. 2000. Of what value are shareholder proposals sponsored by public pension funds? *Journal of Business* **73(2)**:177–204.

Renneboog L, Horst T, Zhang C. 2008. Socially responsible investments: institutional aspects, performance, and investor behavior. *Journal of Banking and Finance* **32(9)**: 1732-1742.

Ryan LV, Schneider M. 2002. The antecedents of institutional investor activism. *Academy of Management Journal* **27(4)**: 554–573.

Schuler DA, Cording M. 2006. A corporate social performance – Corporate financial performance behavioral model for consumers. *Academy of Management Review* **31(3)**: 540-558.

Sellers M. 1993. NIMBY: a case study in conflict politics. *Public Administration Quarterly* **16(4)**: 460-477.

Servaes H, Tamayo A. 2013. The impact of corporate social responsibility on firm value: the role of customer awareness. *Management Science* **59(5)**: 1045-1061.

Sirri ER, Tufano P. 1998. Costly search and mutual fund flows. *Journal of Finance*. **53(October)**: 1589-1622.

Skinner DJ. 1997. Earnings disclosures and stockholder lawsuits. *Journal of Accounting and Economics* **23(3)**: 249-282.

Teo M. 2009. The geography of hedge funds. *Review of Financial Studies* **22(9)**: 3531-3561.

Thomas R, Cotter J. 2007. Shareholder proposals in the new millennium: shareholder support, board response, and market reaction. *Journal of Corporate Finance* **13(2/3)**: 368–391.

Vorhies DW, Morgan RE, Autry CW. 2009. product-market strategy and the marketing capabilities of the firm: impact on market effectiveness and cash flow performance. *Strategic Management Journal* **30(12)**: 1310-1334.

Waddock S, Graves S. 1997. The corporate social performance – financial performance link. *Strategic Management Journal* **18(4)**: 303-319.

Wei W, Young A. 2018. Selection bias or treatment effect? a re-examination of Russell 1000/2000 index reconstitution. Working paper.

Wright P, Ferris S. 1997. Agency conflict and corporate strategy: the effect of divestment on corporate value. *Strategic Management Journal* **18(1)**: 77-83.

Appendix. Variable Definitions

Variable Names	Variable Definitions
Local Variable	
Local	The number of shares of a firm, held by mutual funds located within 100 kilometers of the firm's headquarter, divided by the firm's total shares outstanding in year *t*
Local/Total	*Local* divided by total institutional ownership
Corporate Social Responsibility Variable	
CSR	The net score of a firm's corporate social responsibility (CSR) rating. It is calculated as total strengths minus total concerns of CSR based on seven social rating categories: community, corporate governance, diversity, employee relations, environment, human rights, and product (KLD STATS).
STDCSR	The standardized score of a firm's corporate social responsibility (CSR) rating, per Kotchen and Moon (2012). It is calculated as total strengths minus total concerns of CSR for each company each year, subtracting the mean across companies for the same year, and dividing by the standard deviation, based on seven social rating categories: community, corporate governance, diversity, employee relations, environment, human rights, and product (KLD STATS).
CCR	The net score of a firm's total community rating. (KLD STATS).
STDCCR	The standardized score of a firm's total community rating. It is calculated as net community score minus the mean across companies for the same year and divided by the standard deviation. (KLD STATS).
Firm Characteristic Variables	
Size	The total assets (in millions) (Compustat AT).
BM	Ratio of book value of equity to market value of equity (Compustat CEQ/(PRCC_F*CSHO)).
Leverage	The debt to asset ratio (Compustat (DLC+DLTT)/AT).
Tobin's Q	The market-to-book ratio for a firm's resources, defined in CRSP/Compustat codes calculated as, (PRCC_F*CSHO+LT)/(CEQ+LT).
OCF	Operating cash flow scaled by total assets (Compustat OANCF/AT).
ROA	Earnings before interest, taxes, depreciation, and amortization (Compustat EBITDA), divided by the firm's average total assets (Compustat AT).
|DACC|	The absolute value of performance adjusted discretionary accruals (Kothari et al., 2005). It adds $ROA_{i,t}$ to the modified Jones model to account for the effectiveness of performance. $$TA_{i,t} = \delta_0 + \delta_1\left(\frac{1}{ASSETS_{i,t-1}}\right) + \delta_2\Delta SALES_{i,t} + \delta_3 PPE_{i,t} + ROA_{i,t} + \upsilon_{i,t}$$ where TA = (ΔCA - ΔCL - ΔCash + ΔSTD - Depreciation); ΔCA is change in current assets; ΔCL is change in current liabilities; ΔCash is change in cash and cash equivalents; ΔSTD is change in debt that is included in current liabilities; Depreciation is depreciation and amortization expense; all scaled by lagged total assets. ASSETS is total assets. ΔSALES is change in sales revenues scaled by lagged total assets. PPE is gross property, plant, and equipment scaled by lagged total assets. ROA is income before extraordinary items scaled by lagged total assets.
CAPEX	Capital expenditures scaled by total assets (Compustat CAPX/AT).
IO	Institutional ownership
CSR Specific Control Variables	
Liquidity	The ratio of the number of shares traded in the year to the total shares outstanding at the year-end (Dhaliwal et al., 2011).
Litigation	An indicator variable that equals 1 if a firm operates in a high-litigation industry, which is defined based on SIC codes of 2833–2836, 3570–3577, 3600–3674, 5200–5961, and 7370 (Matsumoto, 2002; Dhaliwal et al., 2011).
Competition	Equals to the Herfindahl-Hirschman Index multiplied by -1.
FIN	The sale of common and preferred shares minus the purchase of common and preferred shares (Compustat SSTK-PRSTKC) plus the long-term debt issuance minus the long-term debt reduction (Compustat DLTIS-DLTR) scaled by total assets at the beginning of the year (Compustat AT) (Dhaliwal et al., 2011).
Global	An indicator variable that equals 1 if a firm reports foreign income (Compustat PIFO) (Dhaliwal et al., 2011).

Figure 1. Discontinuity in Index Weights Around Russell Indexes Threshold

This figure plots the index weighs of the Russell indexes around the Russell threshold from 2007 to 2013. The *x*-axis represents the distance from the Russell index thresholds using the actual Russell ranks, where the zero is for the smallest firm in the Russell 1000.

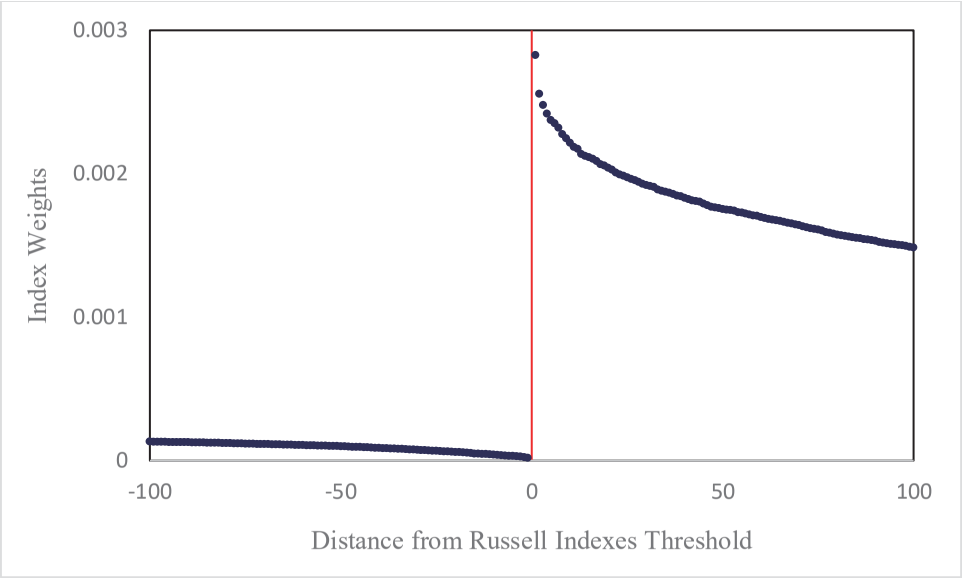

Figure 2. Possible Mechanism

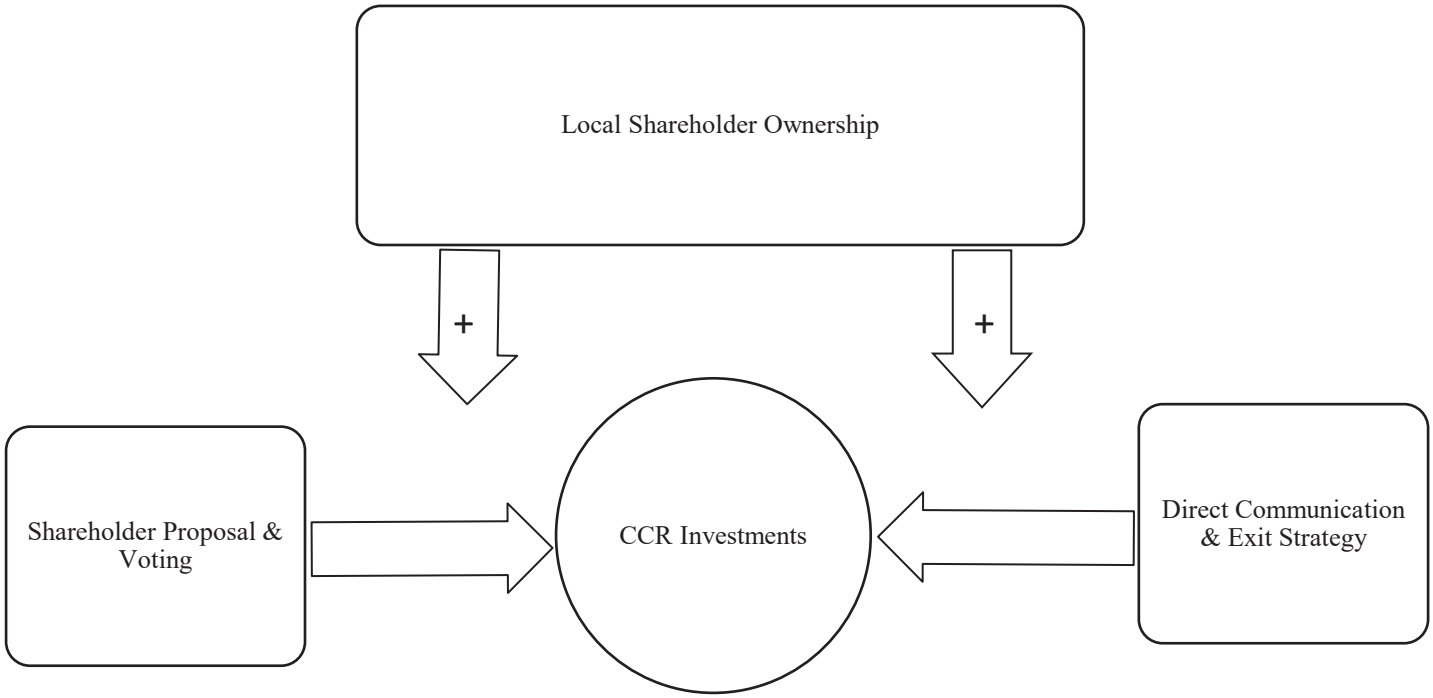

Table 1. Descriptive Statistics

Variables	Mean	Q1	Median	Q3	SD
Local Variables					
Local	0.0124	0.0000	0.0001	0.0106	0.0262
Local/Total	0.0158	0.0000	0.0001	0.0145	0.0330
CSR Variables					
CSR	-0.3513	-2.0000	-1.0000	1.0000	2.5718
CCR	0.0812	0.0000	0.0000	0.0000	0.4928
Firm Characteristics					
Size (in millions)	8,471.1100	484.8560	1,315.0300	4,213.1200	46,774.52
BM	0.5299	0.2734	0.4522	0.7017	0.3998
Tobin's Q	1.3659	0.5792	1.0084	1.7360	1.2001
OCF	0.0949	0.0535	0.0956	0.1444	0.0937
ROA	0.0351	0.0147	0.0472	0.0847	0.1106
|DACC|	0.1013	0.0275	0.0635	0.1279	0.1299
Leverage	0.2232	0.0362	0.1923	0.3375	0.2080
CAPEX	0.0856	0.0185	0.0343	0.0675	0.1762
Liquidity	14.4855	14.0493	14.5200	14.9720	0.7230
Competition	-0.0793	-0.0835	-0.0623	-0.0466	0.0562
Litigation	0.2235	0.0000	0.0000	0.0000	0.4166
Fin	-0.0016	-0.0402	-0.0026	0.0166	0.1000
Global	0.5817	0.0000	1.0000	1.0000	0.4933
IO	0.7503	0.6326	0.8002	0.9117	0.2321
Number of observations	8,361				

This table reports descriptive statistics. *Local* and *Local/Total* are measured as the sum of local mutual fund ownership and the sum of local mutual fund ownership over total institutional ownership, respectively. CSR and CCR are reported before standardization. All other variables are defined in the appendix.

Table 2. The Effects of Local Shareholders on CSR and CCR

Panel A. All Industries

Variable	(1) $STDCSR_t$	(2) $STDCCR_t$	(3) $STDCSR_t$	(4) $STDCCR_t$
$Local_{t-1}$	-0.1014	1.3479		
	(-0.25)	(3.58)***		
$Local/Total_{t-1}$			0.2638	1.0516
			(0.83)	(3.59)***
$Log(Size_{t-1})$	0.2174	0.1956	0.2175	0.1956
	(27.01)***	(26.47)***	(27.02)***	(26.52)***
BM_{t-1}	-0.2308	-0.1426	-0.2301	-0.1413
	(-8.92)***	(-6.01)***	(-8.90)***	(-5.95)***
$Leverage_{t-1}$	-0.3212	-0.2174	-0.3209	-0.2158
	(-5.22)***	(-3.85)***	(-5.22)***	(-3.82)***
ROA_{t-1}	0.1884	-0.0580	0.1877	-0.0611
	(1.87)*	(-0.63)	(1.86)*	(-0.66)
$\|DACC\|_{t-1}$	0.1815	0.0656	0.1821	0.0670
	(1.71)*	(0.67)	(1.71)*	(0.69)
$CAPEX_{t-1}$	0.1408	-0.1077	0.1415	-0.1053
	(1.68)*	(-1.40)	(1.69)*	(-1.37)
$Liquidity_{t-1}$	-0.0497	-0.0686	-0.0498	-0.0676
	(-2.77)***	(-4.16)***	(-2.77)***	(-4.09)***
$Competition_{t-1}$	1.5399	2.3778	1.5270	2.3836
	(1.95)**	(3.27)***	(1.93)**	(3.28)***
$Litigation_{t-1}$	0.3785	0.3203	0.3790	0.3210
	(8.47)***	(7.81)***	(8.48)***	(7.83)***
FIN_{t-1}	-0.3391	-0.2599	-0.3364	-0.2637
	(-2.97)***	(-2.48)***	(-2.95)***	(-2.52)***
$Global_{t-1}$	-0.0523	-0.0527	-0.0539	-0.0531
	(-1.95)**	(-2.14)**	(-2.01)**	(-2.16)**
IO_{t-1}	-0.2774	-0.1400	-0.2820	-0.1285
	(-5.38)***	(-2.96)***	(-5.51)***	(-2.74)***
Cons	-0.3370	0.4803	-0.3432	0.4455
	(-0.80)	(1.24)	(-0.81)	(1.15)
Year Fixed Effects	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Number of observations	8,631	8,631	8,631	8,631
Adjusted R^2	0.1620	0.1326	0.1621	0.1326

Panel B. Consumer Oriented Industries

Variable	(1) $STDCSR_t$	(2) $STDCCR_t$	(3) $STDCSR_t$	(4) $STDCCR_t$
$Local_{t-1}$	-0. 4367	2.4348		
	(-0.86)	(5.26)***		
$Local/Total_{t-1}$			-0.2189	2.0344
			(-0.53)	(5.46)***
$Log(Size_{t-1})$	0. 2444	0.2222	0.2443	0.2232
	(21.25)***	(21.25)***	(21.23)***	(21.35)***
BM_{t-1}	-0. 2515	-0.1445	-0.2511	-0.1435
	(-6.68)***	(-4.22)***	(-6.67)***	(-4.19)***
$Leverage_{t-1}$	-0.5492	-0.3515	-0.5490	-0.3483
	(-6.66)***	(-4.69)***	(-6.66)***	(-4.65)***
ROA_{t-1}	0. 2701	-0.1479	0.2707	-0.1409
	(1.96)**	(-1.18)	(1.97)**	(1.13)
$\|DACC\|_{t-1}$	0.4334	0.3322	0.4334	0.3440
	(2.72)***	(2.29)**	(2.72)***	(2.37)**
$CAPEX_{t-1}$	0.0753	-0.1300	0.0749	-0.1289
	(0.50)	(-0.94)	(0.49)	(-0.94)
$Liquidity_{t-1}$	-0.0535	-0.0375	-0.0538	-0.0346
	(-2.10)**	(-1.62)	(-2.12)**	(-1.50)
$Competition_{t-1}$	0.7303	1.4278	0.7218	1.4135
	(0.63)	(1.35)	(0.62)	(1.34)
$Litigation_{t-1}$	0.0021	0.1795	0.0020	0.1861
	(0.03)	(2.97)***	(0.03)	(3.08)***
FIN_{t-1}	-0.2170	-0.1348	-0.2157	-0.1394
	(-1.43)	(-0.97)	(-1.42)	(-1.01)
$Global_{t-1}$	-0.0357	-0.0388	-0.0363	-0.0423
	(-1.01)	(-1.21)**	(-1.02)	(-1.31)
IO_{t-1}	-0.2492	-0.2699	-0.2550	-0.2505
	(-3.40)***	(-4.05)***	(-3.50)***	(-3.79)***
Cons	-0.6349	-0.3420	-0.6264	-0.4272
	(-1.17)	(-0.69)	(-1.15)	(0.86)
Year Fixed Effects	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Number of observations	4,347	4,347	4,347	4,347
Adjusted R^2	0.2036	0.2085	0.2035	0.2089

This table reports the multivariate regressions of CSR and CCR on local shareholders. *Local* is measured as the sum of local mutual fund ownership, and *Local/Total* is measured as the sum of local mutual fund ownership over total institutional ownership. Control variables are defined in the Appendix. All regressions control for year and industry fixed effects. Consumer-oriented industry is classified based on the Fama-French 48 industry and detailed industry classification as described in the main manuscript. ***, **, and * denote significance levels of 1%, 5%, and 10%, respectively.

Table 3. Causality Tests Using Russell Indexes Thresholds

	First Stage	*Second Stage*	*First Stage*	*Second Stage*
Variable	(1) *Local*	(2) STDCCR	(3) $\widehat{Local/Total}$	(4) STDCCR
Russell2000	2.8734**		3.8128**	
	(2.35)		(2.52)	
$\widehat{Local}$		0.1763*		
		(1.81)		
$\widehat{Local/Total}$				0.1242*
				(1.68)
Banding Control	Yes	Yes	Yes	Yes
Float Control	Yes	Yes	Yes	Yes
Control Variables	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
R-sq.	0.0985	0.0451	0.1437	0.0511
OBS.	323	323	323	323

This table reports the two-stage regressions of CCR on local mutual fund ownership, with the addition to the Russell 2000 as the instrumental variable. The first and second stages estimate the Eq. (3) and (4), respectively. The first stage estimates local ownership as a function of the Russell 2000 inclusion, and the second stage estimates CCR as a function of instrumented local ownership. *Local* is measured as the sum of local mutual fund ownership, and *Local/Total* is measured as the sum of local mutual fund ownership over total institutional ownership. All regressions control for year fixed effects. The results show estimates for a ±100 bandwidth around the thresholds. The t-statistics are reported in parentheses. ***, **, and * denote significance levels of 1%, 5%, and 10%, respectively.

Table 4. The Effects of Corporate Community Responsibility on Firm Performance

Panel A. All Industries

Variable	(1) Tobin's Q_t	(2) OCF_t	(3) Tobin's Q_t	(4) OCF_t
$STDCSR_{t-1}$	0.0796	0.0035		
	(7.35)***	(3.66)***		
$STDCCR_{t-1}$			0.0685	0.0021
			(5.88)***	(2.03)**
$Log(Size_{t-1})$	-0.1384	0.0057	-0.1332	0.0061
	(-16.53)***	(7.55)***	(-16.02)***	(8.19)***
BM_{t-1}	-1.1045	-0.0420	-1.1140	-0.0425
	(-41.70)***	(-17.72)***	(-42.13)***	(-18.00)***
$Leverage_{t-1}$	-1.5914	-0.0498	-1.5990	-0.0504
	(-25.75)***	(-9.00)***	(-25.86)***	(-9.12)***
$\|DACC\|_{t-1}$	1.4411	0.0935	1.4657	0.0947
	(13.21)***	(9.59)***	(13.43)***	(9.71)***
$CAPEX_{t-1}$	0.2186	0.0294	0.2317	0.0299
	(2.53)**	(3.80)***	(2.68)***	(3.88)***
$Liquidity_{t-1}$	0.1934	-0.0065	0.1943	-0.0065
	(10.51)***	(-3.92)***	(10.55)***	(-3.92)***
$Competition_{t-1}$	-0.9012	-0.0099	-0.9388	-0.0088
	(-1.02)	(-0.13)	(-1.06)	(-0.11)
$Litigation_{t-1}$	0.4380	-0.0174	0.4457	-0.0167
	(9.70)***	(-4.31)***	(9.87)***	(-4.15)***
FIN_{t-1}	0.8434	-0.1981	0.8311	-0.1989
	(7.36)***	(-19.32)***	(7.24)***	(-19.40)***
$Global_{t-1}$	-0.0718	-0.0025	-0.0728	-0.0026
	(-2.66)***	(-1.05)	(-2.70)***	(-1.08)
IO_{t-1}	0.0237	0.0593	0.0086	0.0584
	(0.45)	(12.46)***	(0.16)	(12.30)***
Cons	0.2768	0.0861	0.2768	0.0831
	(0.65)	(2.25)**	(0.65)	(2.17)**
Year Fixed Effects	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Number of observations	7,414	7,414	7,414	7,414
Adjusted R^2	0.4419	0.2419	0.4480	0.2410

Panel B. Consumer Oriented Industries

Variable	(1) Tobin's Q_t	(2) OCF_t	(3) Tobin's Q_t	(4) OCF_t
$STDCSR_{t-1}$	0.1042	0.0041		
	(6.24)***	(2.84)***		
$STDCCR_{t-1}$			0.0888	0.0041
			(4.88)***	(2.61)***
$Log(Size_{t-1})$	-0.1163	0.0101	-0.1092	0.0103
	(-8.87)***	(8.85)***	(-8.36)***	(9.02)***
BM_{t-1}	-1.2269	-0.0343	-1.2386	-0.0347
	(-29.22)***	(-9.35)***	(-29.51)***	(-9.47)***
$Leverage_{t-1}$	-1.2269	-0.0526	-1.7591	-0.0532
	(-19.05)***	(-6.59)***	(-19.27)***	(-6.67)***
$\|DACC\|_{t-1}$	1.8855	0.0647	1.9114	0.0655
	(10.77)***	(9.59)***	(10.90)***	(4.28)***
$CAPEX_{t-1}$	-0.0252	0.0154	-0.0058	0.0145
	(-0.14)	(-0.98)	(-0.03)	(-0.93)
$Liquidity_{t-1}$	0.1895	-0.0166	0.1878	-0.0167
	(6.69)***	(-6.70)***	(6.62)***	(-6.73)***
$Competition_{t-1}$	-1.4372	-0.0819	-1.5232	-0.0864
	(-0.99)	(-0.65)	(-1.05)	(-0.68)
$Litigation_{t-1}$	0.4245	-0.0073	0.4126	-0.0079
	(5.77)***	(-1.14)	(5.59)***	(-1.23)
FIN_{t-1}	1.0650	-0.2348	1.0501	-0.2352
	(6.48)***	(-16.32)***	(5.59)***	(-16.35)***
$Global_{t-1}$	-0.0364	0.0021	-0.0372	0.0021
	(-0.94)	(0.61)	(-0.96)	(0.61)
IO_{t-1}	0.0489	0.0790	-0.0379	0.0787
	(0.60)	(11.15)***	(-0.96)	(11.12)***
Cons	0.1980	0.1661	0.0377	0.1641
	(0.32)	(3.11)***	(0.46)	(3.07)***
Year Fixed Effects	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
Number of observations	3,717	3,717	3,717	3,717
Adjusted R^2	0.4438	0.2866	0.4415	0.2863

This table reports the multivariate regressions of firm performance measures on CCR. Control variables are defined in the Appendix. All regressions control for year and industry fixed effects. The number of observations in Panels A and B are 7,414 and 3,717, respectively due to missing lag CSR and CCR variables observed. Consumer-oriented industry is classified based on the Fama-French 48 industry and detailed industry classification as described in the main manuscript. ***, **, and * denote significance levels of 1%, 5%, and 10%, respectively.

Table 5. The Effects of Corporate Community Responsibility on Fund Flows

Variable	(1) Fund Flows	(2) Scaled Fund Flows	(3) Fund Flows	(4) Scaled Fund Flows
$STDCCR_{t-1}$	6.4688***	0.5039**	3.0076**	0.3803*
	(5.21)	(2.38)	(2.53)	(1.79)
Fund Controls	No	No	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
Adj R-sq.	0.0139	0.0124	0.1258	0.0277
OBS.	8,631	8,631	8,631	8,631

This table reports regressions of mutual fund flows on CCR. All regressions control for year fixed effects. *Fund Flows* is the sum of local mutual funds' annual fund flows, and *Scaled Fund Flows* is *Fund Flows* scaled by the total number of local mutual funds holding a sample firm. ***, **, and * denote significance levels of 1%, 5%, and 10%, respectively