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PLAY TO WIN OR DON’T PLAY AT ALL: 
THE FINANCIAL RETURNS TO MAKING THE CUT

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Abstract: Despite the proliferation of lists and rankings that recognize firms for superior performance, empirical studies have been limited in their ability to causally evaluate how inclusion for the marginal firm influences shareholder value. Using a regression discontinuity design, we address this limitation by examining how investors responded to firms that were just barely included or excluded from the 100 Best Corporate Citizens list. Our findings indicate that marginal firms that were included experience negative abnormal returns compared to marginal firms that were excluded. We highlight new areas of inquiry for scholarship on rankings and provide a more nuanced perspective on the relationship between CSR initiatives and firm value. We also discuss implications for managers that desire to compete for inclusion on these ranked lists.

INTRODUCTION

Corporate lists that rank and recognize firms for superior performance have proliferated in recent years (Sadowski, Whitaker, and Buckingham, 2010b; Tolbert, 2017). Consistent with this trend, an increasing number of CEOs and other top managers are prioritizing efforts to gain inclusion on such lists (Gunther, 2010; Sadowski, Whitaker, and Buckingham, 2010a). Indeed, a quick glance at annual reports of large public corporations reveals an intense competition amongst companies for inclusion on prestigious rankings such as the 100 Best Places to Work (Dineen and Allen, 2016), the Dow Jones Sustainability Index (Carlos and Lewis, 2017; Hawn, Chatterji, and Mitchell, 2017), or the 100 Best Corporate Citizens list (Brammer, Brooks, and Pavelin, 2009). Taken together, these trends suggest that managers believe that achieving ranked status is a valuable strategic asset. It thus should be of no surprise that companies invest significant resources and attention towards pursuing initial or continued inclusion on these rankings (Espeland and Sauder, 2007).

1 We use the terms “rankings” and “lists” interchangeably in this paper. Following Graffin and Ward (2010) we define a ranking as a relative rank ordering of actors against one another that confers award like status upon recipients. Although some rankings may include continuous measures of all firms under consideration, we focus exclusively on those that are finite in length (i.e. lists) and have a defined threshold for inclusion (e.g. Top 100, Top 50, etc.) (Rossman and Schilke, 2014). Furthermore, we distinguish rankings from ratings or accreditations where
Theoretically, the literature on rankings has assumed that rankings are bimodal in that they produce disproportionate benefits for ranked firms relative to the unranked (Azoulay, Stuart, and Wang, 2014; Merton, 1968; Podolny, 2010). These discontinuities in benefits represent an important strategic dilemma for firms that must weigh the potential rewards of being ranked against the costs of pursuing inclusion. This is a particularly relevant predicament for firms on the margin that gamble by devoting resources towards seeking inclusion in rankings only to later discover that they did not make the cut (Rossman and Schilke, 2014). Indeed, the consequences of just making or missing the cut for inclusion on a ranked list are assumed to be the most salient for firms at the margins, as exemplified by Merton’s (1968) description of the 41st chair phenomenon. As Merton’s analogy illustrates, despite generally indiscernible differences in talent and quality of research, scientists that occupy the 40th chair receive incommensurate career-propelling benefits compared with peers relegated to the 41st chair. Following this analogy, both scholars and practitioners have largely taken for granted the notion that actors that are recognized in the form of receiving an award or other distinction receive positive shocks compared to similar, but unrecognized peers and that these shocks produce compounding advantages that persist over time (Piezunka et al., 2017; Reschke, Azoulay, and Stuart, 2017).

Despite this assumption about the unequal benefits that accrue to otherwise similar firms at the margins, few empirical analyses have actually been conducted to rigorously examine this phenomenon. As noted by Dineen and Allen (2016: 92), “companies entering competitions—or continuing to enter yearly—do so without clearly knowing whether they will derive benefits” or “whether recognition has potential downsides.” Indeed, such statements raise an important

organizations are assessed relative to a general standard instead of being compared against other organizations under consideration.
empirical question: Are companies that are on the margin better off being included or excluded from a ranked list?

To address this question, we examine how investors respond to firms’ inclusion on a prestigious ranking. Although other studies have examined the average effect of being included on a ranked list (Brammer et al., 2009; Edmans, 2011; Klassen and McLaughlin, 1996; Lyon and Shimshack, 2015), most have been limited in their ability to draw causal inferences about firms on the margin due to inherent limitations in their data and methods, particularly because they often fail to or are unable to examine the unrecognized firms that were barely excluded (Hawn et al., 2017).

We address this methodological limitation by conducting a quasi-natural experiment. Specifically, we examine the effect of inclusion on shareholder value for marginal firms that barely make or barely miss the Best Corporate Citizens (100 BCC) list, a prestigious ranking that evaluates the corporate social performance of large public corporations. Because we are able to identify similar firms around the inclusion threshold, we can treat inclusion on the list as akin to a random assignment (Flammer, 2015a), a necessary element of causal inference. This approach of comparing outcomes for marginal firms around a discontinuous threshold is known as regression discontinuity (RD).²

Our primary result departs from prevailing theoretical expectations and suggests that inclusion on the 100 BCC list can actually decrease shareholder value for firms just above the threshold. On the day of announcement, we find that firms that barely make the list experience a

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² While RD has been popular within the field of economics for some time (Lee & Lemieux, 2010), this design has been more recently adopted within the management literature (Flammer, 2015a). RD is a quasi-experimental design that is noted for rigor and its ability to produce reliable estimates of a causal relationship. As noted by recent work, RD is “often seen as the sharpest tool of causal inference since it approximates very closely the ideal setting of a randomized control experiment” (Flammer and Bansal, 2017: 1828).
negative 1.4% abnormal return relative to firms that barely miss out. This finding, while similar in magnitude to prior work, is contrary to many recent studies that have found positive investor responses to CSR initiatives (Flammer, 2013, 2015a; Flammer and Bansal, 2017). Although seemingly contradictory, we explain how these results complement recent empirical work and provide a more nuanced understanding regarding the distinctions between implementation of CSR and recognition for CSR.

To better understand the mechanisms that may be driving our results, we also examine a number of factors that may moderate this main effect, including the incentives that companies have to engage in CSR, whether a company’s past CSR investments are focused or general, and the overall pattern or history of CSR investments. Each of these factors, we maintain, help to explain when and why marginal firms might be punished by investors for being ranked.

We conclude our study by discussing the theoretical and empirical implications of our findings. In particular, we consider whether our results are specific to a CSR context and whether they can be generalized across various types of rankings and explore several areas of inquiry for future research. Based on our results, we also provide a number of recommendations for managers contemplating strategic decisions regarding whether and when they should continue to devote resources towards “making the cut.”

BACKGROUND: THIRD-PARTY RECOGNITION AND SHAREHOLDER VALUE

Theoretically, research on the financial effects of third-party recognition paints a fairly consistent picture; receiving an award, making it on a prestigious list, or achieving a high rank are assumed to provide unequal benefits to winners, compared to firms that are not recognized (Elsbach and Kramer, 1996; Rindova et al., 2005; Rossman and Schilke, 2014; Waguespack and Sorenson, 2011). Empirically, research on the financial effects of receiving awards generally
supports these arguments. For example, studies indicate that investors respond positively to news about awards for diversity (Wright et al., 1995), quality (Hendricks and Singhal, 1996), and environmental performance (Klassen and McLaughlin, 1996). Similarly, scholars have also examined the financial benefits of being included on prestigious lists such as the 100 Best Companies for Working Mothers (Jones and Murrell, 2001), the 100 Best Corporate Citizens (Brammer et al., 2009), and the 100 Best Companies to Work For (Edmans, 2011; Fulmer, Gerhart, and Scott, 2003). In general, these studies show that being ranked on these prestigious lists can generate significant financial benefits in both the short and long-run, even after controlling for other observable characteristics. More recently, scholars have examined not only whether making a ranked list matters, but also whether a firm’s relative rank on the list makes a difference. Lyon and Shimshack (2015), for example, examined Newsweek’s inaugural Greenest Companies list and found that firms that were ranked higher generated significantly more value than firms that are ranked lower. Although, some recent work reports that the effects of rankings on financial performance may not be as pronounced as previously believed (Hawn et al., 2017), research generally suggests that there are significant benefits to receiving positive recognition from third-parties.

Given the purported positive benefits of third-party recognition, it should be of no surprise that companies and their executives increasingly strive to be recognized on such lists. Carlos and Lewis (2017), for example, noted how companies explicitly set goals in their annual reports to be included or remain on the Dow Jones Sustainability Index (DJSI), a prestigious list that signals sustainable leadership. Dineen and Allen (2016), likewise, found that companies will spend significant amounts of time and resources and make substantial changes to their employee benefits in order to compete for a spot on a list such as Fortune’s 100 Best Companies to Work
For. Highlighting this motivation to be recognized, one critic noted how companies will “put a lot of time into checking their data” and “do their best to hit the right data points” in order to game the list (Gunther, 2010).

Indeed, one outcome of this drive to be recognized can be seen in the annual reports of large public corporations. As an example, in Table 1 we display the awards and recognitions received by FedEx and UPS, two competitors in the Express Delivery Services industry (NAICS Code 492110), as noted in their most recently filed 10-Ks. While they each seem to emphasize different distinguishing attributes (e.g. FedEx touts its diversity and UPS its sustainability performance), both companies appear to be actively involved in managing their reputation by emphasizing their recent inclusion on various rankings and lists. Given the importance that executives seem to place on such achievements, we would expect to find similar communication patterns among many other large public corporations that compete for attention and resources from their stakeholders. Indeed, this phenomenon of competing for recognition raises questions about whether firms should continue to invest significant resources and attention towards making these various lists.

<Insert Table 1 here>

Although companies are attracted to such lists for their obvious appeal and marketing benefits, few rigorous empirical investigations have adequately addressed whether making the list is worth the effort (Dineen and Allen, 2016). To date, the primary research design employed to analyze the financial benefits of list inclusion has been an event study. While such studies can provide valuable information about the average effect of list inclusion, they typically do not evaluate the abnormal returns of similar companies that do not make the list (Hawn et al., 2017), likely because the information is not publicly available or privately controlled. By ignoring the
unranked or unlisted firms, researchers thus limit their ability to understand whether a firm that barely makes a list is actually better off than a firm that is barely excluded. Indeed, such knowledge could be extremely valuable for managers and CEOs who need to know whether they should enter, re-enter, or exit these competitions (Dineen and Allen, 2016).

DATA AND METHODS

100 Best Corporate Citizen’s List

To examine this oversight, we study investor response to rankings using membership data from the 100 Best Corporate Citizens (100 BCC) list. Established by the magazine *Business Ethics* in the year 2000, the 100 BCC list is a well-known ranking that seeks to “move corporations toward ever-better practices” by “pushing the envelope on what represents good citizenship” (Waddock, Graves, and Kelly, 2000: 17). Implicit in this objective is an assumption that being included on the list can generate substantial recognition and notoriety which can consequently spur imitation and improvement among the excluded firms (Fombrun, 1996; Lewis, 2017).

Although the 100 BCC list has been published annually since the year 2000, we focus our analysis on the initial year the list was published when reactions by investors are likely to be most potent (Brammer *et al.*, 2009). Using the initial year of rankings is attractive from an empirical design standpoint because it helps to isolate the effect of recognition bestowed by rankings from other information that may be available about firm performance. For example, before the US News law school rankings were established, law schools experienced freedom to craft narratives using information that strategically emphasized performance measures intended to enhance their reputation. However, the implementation of this new ranking system clarified
status orderings within the field and removed the ambiguity that had previously allowed schools
to make independent claims about their quality (Sauder, 2017).

The initial 100 BCC ranking was constructed using social ratings data from the Kinder,
Lydenberg, and Domini (KLD) Socrates database. At that time, KLD’s evaluation universe
included members of the S&P 500 and Domini 400 indices (approximately 650 firms). Eligible
firms were evaluated based on relations with communities, customers, employees, and
shareholders. An overall score was computed by averaging each category over a three-year
period in order to smooth year-to-year fluctuations. We display a snapshot of the 100 BCC list in
the year 2000 in Table 2.3

<K Insert Table 2 here>

KLD evaluated 658 firms in 1998, the final data year used to construct the ranking in 2000,
the inaugural year. Of these 658 firms, 103 were not considered eligible because they had been
evaluated by KLD less than the required three years. An additional 14 were dropped from
consideration because of recent events that would contradict the signal of superior corporate
citizenship (Waddock et al., 2000). These removals left 541 firms that were evaluated and
ranked by Business Ethics magazine. Of these remaining ranked firms, 28 had their stocks
delisted prior to the announcement date largely because they were acquired or went bankrupt. As
shown in Table 3, our final sample consists of these 513 firms that were (1) ranked by Business
Ethics and (2) had stocks that were actively being traded on the announcement day.

<K Insert Table 3 here>

Unlike prior research that has examined investor response to CSR rankings (Brammer et al.,
2009; Edmans, 2011; Fulmer et al., 2003; Lyon and Shimshack, 2015), our identification

3 For a more detailed explanation of ranking construction, see the notes below the table.
strategy relies on understanding the social performance of firms that were not only included on the 100 BCC list, but also those that fell just outside of the top 100. Although the total scores used to rank firms were not publicly available for firms that were excluded from the 100 BCC list, we were able to obtain these scores directly from Sandra Waddock and Samuel Graves (Waddock et al., 2000), the two-primary academic researchers who had performed the ranking analysis for the magazine. The receipt of these data was indeed necessary to understand which firms were similar to 100 BCC members but barely missed the cutoff.

We display a histogram of the 100 BCC scores in Figure 1. The scores are standardized and adjusted so that scores greater than or equal to zero indicate 100 BCC inclusion. The overall distribution appears relatively normal. We also display the composition of industries in our sample in Table 4. Of the 513 firms in our sample, nearly 20 percent (100/513) were included on the 100 BCC list. A comparison of included and excluded firms reveals that firms that operate in the Retail Trade (SIC codes 52-59) and Finance, Insurance, and Real Estate (SIC codes 60-67) appear to be over represented. This result should not be surprising given the strong incentives that consumer facing firms have to maintain socially responsible reputations (Brammer and Millington, 2008; Lev, Petrovits, and Radhakrishnan, 2010; Zhang and Luo, 2013). Other industries notably excluded from the list include metal mining (SIC Code 10), coal mining (SIC Code 12), and oil and gas extraction (SIC Code 13), likely due to their harmful environmental impacts.

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Method
To evaluate the effect of recognition of CSR on subsequent financial performance, we utilize a quasi-experimental design known as regression discontinuity (RD) (Lee and Lemieux, 2010). In this analysis, we closely follow the work of Flammer and others who estimate the effect of “close-call” shareholder proposals on firm value (Cuñat, Gine, and Guadalupe, 2012; Flammer, 2015a; Flammer and Bansal, 2017).

**Regression Discontinuity in the 100 BCC Ranking.** The primary objective of this study is to estimate the relative effect of 100 BCC inclusion on shareholder value on the announcement day for firm \( i \) at time \( t \). Each firm in the sample is rated using the KLD data and then ranked according to their overall score \( S_{it} \). By definition, firms that are ranked 1 through 100 are included on the 100 BCC list denoted by the indicator variable \( BCC_{it} = 1(S_{it} \geq S^*) \) where \( S^* \) is threshold for inclusion.

In an ideal world, the causal effect of \( BCC_{it} \) would be estimated by randomly assigning inclusion. Here we use a RD design to approximate this idealized experiment. Central to any RD design is an assumption that firms just above or below a threshold are essentially the same. This assumption allows the researcher to view the threshold for inclusion as a randomly assigned treatment. In this context, that threshold for treatment is a top 100 ranking. Assuming that firms that barely make the list (e.g. a ranking of 100) are similar to firms that were barely excluded (e.g. a ranking of 101), such inclusion is akin to random assignment and can thus be used to test the causal impact of being recognized for CSR on subsequent shareholder value.

Conceptually, the treatment effect of \( BCC_{it} \) can be estimated by finding the difference in the average \( y_{it} \) for firms just above or below the threshold. This simplified comparison of means is known as nonparametric or local estimation. While this computation does provide an unbiased estimate of 100 BCC inclusion on shareholder value (Flammer, 2015a), it nevertheless discards
firms with scores that are farther away from the threshold which may limit statistical power (Jacob et al., 2012). Fortunately, a more precise estimate can be calculated by evaluating all ranked firms and approximating the continuous relationship between $y_{it}$ and $S_{it}$, allowing for a discontinuity at the inclusion threshold $S^*$. This approach is known as parametric or global estimation. While this method of estimation is likely to be more precise (i.e. produce smaller standard errors), it can also produce biased estimates if the functional form between the outcome variable ($y_{it}$) and ranking variable ($S_{it}$) is misspecified. Both methods, nonparametric and parametric estimation, thus represent a tradeoff between bias and precision.

To address these concerns, RD scholars have suggested that researchers use and compare both estimation methods as a way to evaluate the robustness of their results (Jacob et al., 2012; Lee and Lemieux, 2010). We follow these recommendations closely. We first employ a nonparametric method that analyzes the difference in means between included and excluded firms in increasingly smaller bandwidths around the inclusion threshold. Following Flammer (2015a), we then use parametric estimation by employing the following RD specification to evaluate the causal effect of 100 BCC inclusion

$$y_{it} = \beta \times BCC_{it} + P_l(S_{it}, \gamma_l) + P_r(S_{it}, \gamma_r) + \varepsilon_{it}$$

where $y_{it}$ is outcome variable of firm $i$ at time $t$, $\beta$ is the treatment effect of 100 BCC inclusion, $P_l(S_{it}, \gamma_l)$ and $P_r(S_{it}, \gamma_r)$ are first-order polynomials on the left and right sides of the inclusion threshold used to control for differences among non-close firms.4

**Variable Definitions and Sample Characteristics**

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4 We find the first-order polynomial to be the best fit model using the Akaike information criterion (AIC) statistic (Jacob et al., 2012; Lee and Lemieux, 2010). As a robustness test, we also examine and find similar effects with second- and third-order polynomials, but the sake of parsimony we only show results using a first-order polynomial.
**Abnormal Return.** We evaluate investor response to inclusion on the 100 BCC list by computing the abnormal return on the announcement day (Flammer, 2015a).\(^5\) Using an abnormal return as the primary dependent variable of interest is appealing because it provides a direct estimate of the effect that 100 BCC inclusion might have on firm value. Long-term measures of performance (ROA, ROE, etc.), while readily available, are likely to be influenced by other factors throughout the course of a year, and thus may not provide reliable estimates of the financial impact of this specific event.

Following prior research (Madsen and Rodgers, 2015), we compute abnormal returns using the market model which calculates expected returns by regressing a firm’s daily stock return against a market portfolio over a period of time prior to the announcement day. As a robustness test, we also compute abnormal returns using the market-adjusted model and obtain substantively similar results. Consistent with prior work, we used a 255-day estimation window ending 46 days before the event and the CRSP value-weighted market portfolio.

<Insert Table 5 here>

**Summary Statistics.** Table 5 provides summary statistics for the abnormal return on the announcement day as well as other relevant firm characteristics commonly used to assess similarity between firms (Flammer, 2015a, 2015b). We construct an overall measure of corporate citizenship (*KLD Index*) by summing a firm’s strengths and concerns along the following dimensions: customers, communities, the natural environment, minorities, and employees (Waddock *et al.*, 2000). *Total assets* is the book value of assets. *Market value* is the number of shares outstanding multiplied by the stock price at the end of the fiscal year prior to announcement day. *Return on Assets (ROA)* is measured as the ratio of operating income before

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\(^5\) The precise announcement day was March 27, 2000.
depreciation to the book value of assets. Cash is the ratio of cash and short-term investments to total assets. Leverage is the ratio of debt in current liabilities and long-term debt to total assets. Finally, following Srinivasan et al. (2011), we use 4-digit SIC codes to identify firms whose customers are primarily other businesses. Specifically, we create B2B industry, an indicator variable equal to 1 if the company operates in a business-to-business (B2B) industry and 0 otherwise.

Tests for Quasi-Randomized Assignment

To test for quasi-random assignment, a key assumption of an RD design, we evaluate (1) the continuity of BCC scores around the inclusion threshold and (2) the similarity of firms immediately in the treatment and control groups based on ex-ante characteristics.

Continuity in the Distribution of BCC Scores. We first examine whether the distribution of the overall score $S_t$ is continuous around the inclusion threshold. Discontinuities around the threshold in the overall score likely provide evidence of ratings manipulation thus calling into question the assumption of random assignment around the inclusion threshold.

As shown in Figure 1, the distribution of BCC scores appears normal and continuous around the inclusion threshold. We evaluate this condition more formally using the rddensity command, a STATA command introduced by Cattaneo et al. (2017) that tests for evidence of manipulation (i.e. discontinuity in the BCC score at the inclusion threshold). As can be seen in Figure 2, we find no evidence to reject the null of a continuous distribution (p-value = 0.743) thus supporting our assumption of a quasi-randomized treatment.

<Insert Figure 2 here>
**Preexisting differences.** We also examine whether firms just above and below the inclusion threshold are similar on relevant ex ante characteristics. We expect to find no significant differences among these firms if inclusion on the 100 BCC list is indeed as good as random.

We test for significant differences among marginal firms using all of the variables listed in Table 5. We display the results of our tests in Table 6. In columns 1 and 2, we test for differences in the *level* of each variable at year $t-1$. In columns 3 and 4, we test for differences in the *trend* in each variable by computing the change from years $t-2$ to $t-1$.\(^6\)

<Insert Table 6 here>

We report averages differences between included and excluded firms in Columns 1 and 3. As one might expect, we find that firms that are included on the 100 BCC list differ significantly from companies that are excluded. Specifically, we find that 100 BCC firms tend to be larger, more profitable, and overall better corporate citizens. They also tend to be growing in size and improving their citizenship at a faster rate. Importantly, however, we find that these differences go away near the inclusion threshold. When we control for the distance from the threshold (see columns 2 and 4), we find no significant differences between the levels or trends of each variable. These results are consistent with our assumption that inclusion is approximately random and thus provide further support for our identification strategy.

**RESULTS**

**Main Results**

*Graphical Analysis.* To measure the impact of 100 BCC inclusion on shareholder value, we examine the stock market reaction on the day that the rankings were announced. Figure 3 provides a visualization of this impact. Specifically, the figure plots the abnormal returns against

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\(^6\) For the abnormal return variable, $t$ refers to days rather than years.
the overall BCC score. The solid vertical line represents the threshold for inclusion on the BCC list. Each dot represents the average abnormal return within an optimized bin-width on each side of the threshold.\(^7\) The solid lines plot predicted values of abnormal returns from first-order polynomials in the 100 BCC score to the left and right of the inclusion threshold.

<Insert Figure 3 here>

Looking at the predicted values to the left of the threshold, we see that excluded firms do not appear to garner any significant investor response as one would expect given that on average, no news is being publicized about these firms that would lead to a significant abnormal return. To the right of the threshold, however, we see a positively sloping line suggesting that returns, relatively speaking, increase with higher 100 BCC scores and thus higher rank. This result is entirely consistent with recent research that examines the relationship between rank and shareholder value (Lyon and Shimshack, 2015). The most interesting aspect of the graph, however, is the discontinuous drop at the inclusion threshold. Indeed, this drop suggests that firms that just barely make the list experience a decrease in firm value compared to firms that just miss the cutoff.

Regression Analysis. The graphical analysis in Figure 3 suggests that inclusion on the 100 BCC list leads to a decrease in shareholder value for marginal firms. We provide a formal test of this claim in Table 7 using both non-parametric and parametric estimation.

<Insert Table 7 here>

We first report our results using non-parametric estimation which computes estimates of the difference in abnormal returns between firms that are included and excluded for increasingly small intervals around the inclusion threshold. In column (1) of Table 7, we examine the full

\(^7\) The optimal bin-width was calculated using the STATA command, \textit{rdplot} (Calonico, Cattaneo, and Titiunik, 2015).
sample of 513 firms. Consistent with prior work, we find a negative but insignificant effect for 100 BCC inclusion (Brammer et al., 2009). Column (2) restricts the sample to non-close firms, that is, firms that were more than 50 ranks from the inclusion threshold. Again, the results show no discernable difference in abnormal returns between the included and excluded firms. This finding likely indicates that the outcome of inclusion or exclusion is highly predictable for firms with extremely high or low corporate citizenship and thus provides little to no new information to investors.

In columns (3) through (6), we restrict the sample to increasingly smaller bin-widths around the inclusion threshold. For firms within 50 ranks of the inclusion threshold, we find that the difference in abnormal returns is -1.1%, (p = 0.052). For firms within 15 ranks, the difference increases slightly in magnitude to -1.8% (p = 0.050). The magnitude stays consistent when narrowing the window to +/- 10 ranks, although the standard error increases likely to a loss of statistical power. Overall, the results displayed in columns (3) through (6) indicate that firms who barely make the 100 BCC list experience a significant decrease in shareholder value compared to firms that barely miss the cut.

We also report our results using parametric estimates in Table 7. In column (7), we run our primary RD regression that controls for the distance from the inclusion threshold using first-order polynomials. Unlike the nonparametric estimates listed in columns (3) through (6), this model incorporates the full sample of firms (N = 513) and thus provides a more efficient or precise estimate of the causal effect of list inclusion on abnormal returns. As before, we find a -1.3% difference between included and excluded firms, even after controlling for distance from the inclusion threshold. As an additional test, we add the control variables listed in Table 5 to our regression model in column (7). As shown in column (8), we find a significant difference of -
1.2% between firms that barely make and miss the cut. Together these results provide strong evidence that inclusion on the 100 BCC list leads to a decrease in firm value for marginal firms.

<Insert Table 8 here>

Robustness Tests. In Table 8, we examine several additional tests to evaluate the robustness of our findings. First, we consider whether 100 BCC inclusion has an effect on firm value beyond the announcement day. Following prior research (Cuñat et al., 2012; Flammer, 2015a), we account for multiple days by creating a panel data set in which, for each firm $i$ on announcement day $t$, observations at time $t + \tau$ are pooled for multiple $\tau$ ranging from $t - 2$ to $t + 7$. Because observations before and after the announcement are pooled together, we can include a firm fixed effect $\alpha_i$ to control for unobservable firm characteristics that are constant during the analysis window. The results for this modified specification are shown in column (1) of Table 8. Consistent with our main results, we continue to find a 1.4% decrease in firm value for marginal firms that are included on the list relative to marginal firms that are excluded. Following the announcement day, however, we find positive, but small and insignificant abnormal returns. Together these results suggest that investors react to the information contained in the rankings on the announcement day, when the “new” information is likely to be most salient.

Second, we evaluate whether our findings are robust to alternative models for computing abnormal returns. In column (2), we display the estimated abnormal return using the market adjusted model (Madsen and Rodgers, 2015). Similar to the market model, we find a significant -1.3% decline in firm value on the announcement day, but no significant decline thereafter. Coupled with our baseline findings in column (1), this result suggests that our main effect, a
decrease in firm value for marginal firms, is not sensitive to an alternative method of computing abnormal returns.

Third, we evaluate whether our main finding is driven by a few large abnormal returns near the inclusion threshold. To thus address the influence of potential outliers, we reestimate the model in column (1) after replacing the dependent variable equal to 1 if the abnormal return is positive and 0 otherwise. This specification is unlikely to be influenced by outliers given that the dummy variable ignores the magnitude of the coefficient. As shown in column (3), firms that barely make the list are 27.1% less likely to experience a positive return on the day of announcement compared to firms that barely miss the list.

Fourth, we consider whether our results can be explained by confounding events (McWilliams and Siegel, 1997). To address this concern, we exclude from our sample all firms (n = 45) that announced a dividend, earnings, or a merger or acquisition during the event window. As displayed in column (4), we find nearly identical results when we exclude these 45 firms. This finding suggests that confounding events do not seem to be driving our primary result.

**Mechanisms.** The results thus far suggest that barely making the 100 BCC list can be detrimental to firm value. Here we examine several moderating factors that may help shed light on the plausible mechanisms that might explain this phenomenon.

First, we expect investor response to 100 BCC inclusion to be moderated by the perceived incentives that firms have to engage in corporate citizenship. Critics of CSR, for example, have long argued that socially responsible investments constitute an agency cost (Friedman, 1970; Jensen, 2002; Karnani, 2010), particularly when the firm lacks a “business case” for making such investments (Vogel, 2005). Although recent research does suggest that shareholders may
support, or at the very least, permit CSR related investments if there is evidence that doing so will financially benefit the firm (Flammer, 2013; Flammer and Bansal, 2017; Margolis, Elfenbein, and Walsh, 2007) these investments are typically more effective for firms that operate in consumer facing industries. Lev and colleagues (2010), for example, found that companies that increased their philanthropic contributions experienced an increase in sales growth, but only if they operated in industries that are highly dependent on consumer perceptions. Given these results, one could expect that shareholders might be wary of investing in firms that appear to be competing for recognition as responsible citizens but are “not winning the game” and thus wasting company resources. Thus, being ranked towards the bottom of the 100 BCC list may actually be a negative signal to investors, particularly if the company operates in business-to-business (B2B) industries where incentives to engage in CSR are likely to be low (Lev et al., 2010; Zhang and Luo, 2013).

Second, we also expect that investor response might be influenced by the firm’s relative rank within its own primary industry. At first glance, marginal firms that are also highly ranked within their own industries could, at the very least, generate a neutral response from investors as these firms may appear to be winning the reputation game, at least among their own industry peers. On the other hand, being a marginal firm but also highly ranked within the industry may simply be a signal that the focal firm is in an industry that lacks strong incentives for corporate citizenship. Take, for example, two companies from our sample: (1) Crown Cork & Seal Company, ranked 86th and (2) the Washington Post Company, ranked 89th. Crown Cork & Seal was the only firm on the 100 BCC list from the Metal Cans and Shipping Containers industry group (SIC code: 341). The Washington Post, however was the fourth firm from the newspaper industry group (SIC code: 271), behind Times Mirror, the New York Times, and Knight Ridder. Again, one
could reason that Crown Cork & Seal would get a pass from investors because it is winning the reputation game for corporate citizenship amongst its industry peers while the Washington Post could be punished for being fourth. One, however, could also argue that the newspaper industry (a B2C industry) likely has stronger incentives to engage in corporate citizenship compared to the metal manufacturing industry (a B2B industry). In this case, being highly ranked within the metal manufacturing industry but near the bottom of the list, may simply indicate that the metal manufacturing industry is not an industry where reputation for corporate citizenship is important. Given these conflicting arguments, the influence of industry rank on investor response remains an empirical question.

Third, we anticipate that the degree to which CSR investments are specialized versus general may impact how investors respond to marginal firms. After all, firms that make investments within specific domains of corporate citizenship are more likely to be known for something than firms that spread their investments more broadly. Take, for example, the two firms Timberland (ranked 92nd) and TJX (ranked 95th). Although both companies had similar BCC scores (hence the similar ranks), it is clear from Figure 4 that Timberland’s investments in corporate citizenship were more focused on the community whereas TJX’s investments were more general. Indeed, prior research within the reputation literature suggests “being known for something” is an important dimension of corporate reputation (Lange, Lee, and Dai, 2011), an outcome valued by many investors (Fombrun, 1996; Pfarrer, Pollock, and Rindova, 2010). We thus expect that firms with focused investments within a particular sub-dimension of corporate citizenship are likely to generate strong domain-specific reputations (Carlos and Lewis, 2017; McDonnell and King, 2018) and may thus be less likely to be punished for barely making the list. Investors, after
all, may be more willing to accept a firm’s CSR investments, even for marginal firms, if the connection between the investment and some valued outcome is more salient.

Fourth, we also anticipate the firm’s prior history of CSR investments may moderate how investors respond. Godfrey (2005), for example, argued that firms with a history of consistent investment in CSR are more likely to be perceived as genuine and generate significantly higher levels of reputational capital. If that reputation is indeed valued by investors, we could thus expect that marginal firms with a strong history of corporate citizenship would be less likely to be punished by investors.

We examine each of these moderating effects in Table 9, columns (1) - (8). We first evaluate the impact of CSR incentives using a B2B/B2C classification scheme developed by Srinivasan et al. (2011). As shown in columns (1) and (2), the negative effect of inclusion for marginal firms only appears to affect those that operate in B2B industries. We find no significant decrease for marginal firms in B2C industries. This result implies that firms that lack strong incentives to engage in CSR may be punished more harshly by investors when making the list, likely because inclusion signals that the firm is actively competing for a socially responsible reputation but clearly not winning the game.

Next, we evaluate the impact of industry rank. We calculate industry rank using three-digit SIC codes.\(^8\) We find that 52 firms on the 100 BCC list were ranked number one within their industry and thus examine the difference in abnormal returns for those ranked number one and those whose rank was greater than one. As shown in columns (3) and (4), the negative effect of

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\(^8\) We use the three-digit SIC code following recommendations from Zuckerman (1999). Our results, however are not substantively changed if we rank firms within coarser- (2-digit SIC codes) or finer-grained (4-digit SIC codes) groups.
inclusion for marginal firms was significantly stronger when the focal firm was ranked number one. Given these results, it does not appear that being highly ranked within one’s own industry protects firms from a negative investor response. Rather, it appears that being a marginal firm that is simultaneously highly ranked within the industry is simply an indication that the firm operates in an industry that lacks strong incentives corporate citizenship.

We then evaluate the moderating impact of making focused or general investments in CSR. We first develop a focus index that specifies the degree to which a firm’s CSR investments are focused or general.\(^9\) We then split the full sample into two (Focused vs. General) based on a median split of the focus index for 100 BCC firms. As displayed in columns (5) and (6), the negative effect of inclusion appears to affect only firms whose CSR investments are general. Marginal firms that have focused CSR investments appear to be less likely to experience decreases in firm value, perhaps because they develop domain-specific reputations (Carlos and Lewis, 2017; McDonnell and King, 2018) which may be more salient to investors.

Finally, we examine the impact of a prior history of investments in CSR. To evaluate this history, we compute the change in the KLD index between 1999 (t-1) and 1996 (t-4). We then classify firms into two groups: (1) those whose change in the KLD index was greater than 0 (No History of CSR) and (2) those whose change in the KLD index was less than or equal to 0 (History of CSR). Firms with significantly positive differences are not likely to have a well-established history of CSR investments. For example, Lucent Technologies (ranked 68\(^{th}\)) increased its KLD index score (from 1 to 9) from 1996-1999 more than any firm in our sample.

\(^9\) We use the following formula (based on the Herfindahl-Hirschman Index (HHI)) to calculate the degree of focus: 
\[Focus = [(Community Score - Mean CSR Score)^2 + (Employee Score - Mean CSR Score)^2 + (Customer Score - Mean CSR Score)^2]^\frac{1}{2}\] where Mean CSR Score is the average of the Community Score, Employee Score, and Customer Score. Higher focus scores likely indicate a higher degree of investment in one particular domain of corporate citizenship (see Figure 4 for an example).
While such a sharp increase was enough to catapult Lucent onto the list, it is unlikely that investors perceived Lucent as having a strong history of making CSR investments. Based on the results from columns (7) and (8), it appears that the negative effect of inclusion for marginal firms does indeed only apply to those firms who lack a strong record of CSR investments. Conversely, marginal firms that do have a relatively strong history of CSR investments appear to be somewhat protected from the decrease in firm value, likely because their prior history generates more reputational capital (Godfrey, 2005) which investors may find appealing.

**External Validity**

Although the RD design employed in this study is advantageous for identifying the causal effect of being included on a reputable list, our analysis may be limited in its generalizability given that the effect is identified by a small subset of firms around the inclusion threshold that, while being similar to each other, may be very different from firms farther away from the threshold. To address this concern, we evaluate whether companies around the inclusion threshold differ systematically from companies that are farther away. We display the results of this comparison in Table 10.

<Insert Table 10 here>

We find that firms near the inclusion threshold have significantly higher levels of corporate citizenship as measured by the KLD index. This result, while interesting, is not all that surprising given that the ranking, by construction, selects nearly the top 20% performing firms in terms of corporate citizenship. Other variables of interest, such as size (assets), profitability (ROA), and organizational slack (cash and leverage) were not found to be significantly different between close and non-close firms. Taken together, these comparisons suggest that marginal firms near the inclusion threshold may not necessarily be representative of the broader population from
which they were selected (i.e. S&P 500 firms). They do, however, suggest that barely making the list can be detrimental to shareholder value, particularly when the company appears to be actively competing on the dimension of performance that is being ranked.

**DISCUSSION**

Are companies better off being included or excluded from prominent ranked lists? Although, prevailing theories and evidence from practice highlight the presumed unequal benefits that accrue to ranked organizations, prior research has not provided convincing evidence of this causal relationship. In order to address this empirical limitation, we conducted a quasi-natural experiment, whereby we examined the effect of inclusion on shareholder value for firms that were just above and just below the threshold for inclusion on the 100 BCC list. Our primary results indicate that firms that barely made the list experienced a 1.4% decrease in firm value compared to firms that just barely missed the cut. Given that the median marginal firm had a market value of $7.4 billion, this finding translates to an expected decrease of $104 million in market value. Contrary to prevailing assumptions, our results thus suggest that being included on a prestigious list may actually have negative consequences, specifically for those firms that are just on the margin. We discuss implications of these findings for scholarly research on rankings and CSR as well as strategic considerations for managers.

**Theoretical Implications for Scholarship on Rankings**

Prevailing theory generally assumes that ranking systems that include only a limited number of firms produce bimodal outcomes that create “sharp discontinuities” in the benefits that ranked firms receive relative to unranked firms (Rossman and Schilke, 2014). In contrast, our findings paint a more nuanced picture indicating that these effects may be reversed for firms just above and below the ranking threshold. Developing deeper theoretical explanations that clarify the
underlying mechanisms driving these results thus remains an important direction for future research. In developing theory, we anticipate that scholars may look to insights from other domains of organizational scholarship, such as research on categories.

From a categories perspective, being included in the rankings sends a clear signal that a firm is a member of a distinguished group of organizations (Zuckerman, 1999, 2000). Categories help audiences to evaluate organizations by providing a means to group and compare organizations (Waguespack and Sorenson, 2011). However, once firms are clearly recognized as a member of the category, they are then compared with the other ranked firms within the category. This produces a trade-off for firms ranked at the bottom of the list; on one hand they are recognized as members of a prestigious category, but on the other hand they may find it difficult to distinguish themselves from higher ranked peers within the category (Durand and Kremp, 2016). In this way, organizations are compared against a different set of similar firms (King and Whetten, 2008; Marquis and Tilcsik, 2016) that may result in less favorable evaluations by investors than if firms were able to exercise more freedom in crafting their own narrative about their identity and quality (Sauder, 2017). Furthermore, the recognition associated with being ranked is likely to attract attention from a broader set of investors who may have different tastes and expectations (Kovács and Sharkey, 2014). These differences may lead to devaluations of marginally ranked firms if investors anticipate that these firms are likely to devote increasing resources to maintaining their ranked status.

Another plausible explanation for why we find negative financial implications for firms at the bottom of the rankings is that firms at the top of the rankings may receive disproportionate recognition that may produce negative spillovers as evaluators narrow their attention on top performers (Reschke et al., 2017). The disparity between firms at the top and bottom of the
rankings may also lead to lower ranking firms attracting more investor scrutiny. The logic behind this reasoning is that higher ranked organizations are likely to be viewed as the prototypical category members, in that they represent the embodiment of prescribed category features and expectations. As such, the actual performance and strategies of these prototypical members is less likely to be questioned by evaluators, but these benefits are unlikely to extend to firms closer to the bottom of the rankings whose category membership is less secure (Espeland and Sauder, 2007; Waguespack and Sorenson, 2011; Zuckerman et al., 2003).

Taken together, our findings depart from prevailing expectations in the literature on rankings and categories that assume unequal benefits for ranked firms compared with similar firms that are not included in the ranked category. In doing so, we respond directly to calls for the need to revisit theories of categorization (Durand and Paolella, 2013; Zuckerman, 2017) including how organizations may act more strategically in their attempts to seek or avoid inclusion in categories (Lee, Hiatt, and Lounsbury, 2017; Vergne and Wry, 2014).

Although our study examined the impact of being ranked in the context of CSR, we anticipate that these results may vary in their generalizability to other ranking systems and contexts. Given that our focus was specifically on rankings that include only a limited number of firms and thus exhibit prize like features, we do expect that similar results may be found for other types of awards, certifications, or prizes where there is a distinct cut-off that results in comparable firms just barely making or missing the cut. We also expect that these results will only generalize to other rankings administered by legitimate and respected authorities. To the extent to which audiences do not perceive value in the rankings, or question their legitimacy, such rankings are unlikely to produce tangible benefits, thus making marginal inclusion or exclusion irrelevant.
One remaining question, however, is whether our findings would apply to other dimensions of performance outside the domain of corporate citizenship. CSR, for example, has historically been viewed as subordinate to the core functions of the business. Thus, rankings associated with activities more directly connected to core business operations, such as quality and innovation may produce different results compared with rankings that evaluate factors such as sustainability and philanthropy that may be viewed as secondary to the primary business. Future research should therefore examine whether our primary result generalizes to other contexts.

**Empirical Implications for Scholarship on Rankings**

From an empirical perspective, our study highlights a potential opportunity for scholars who study investor responses to rankings and lists. Indeed, many academics have sought to understand the financial consequences of being included on prestigious lists (Brammer *et al.*, 2009; Edmans, 2011; Fulmer *et al.*, 2003; Jones and Murrell, 2001; Lyon and Shimshack, 2015), typically relying on an event study as the research design of choice. Most of these studies, however “do not compare abnormal returns of similar firms that are not on the index” (Hawn *et al.*, 2017) and are thus limited in their ability to estimate the causal consequences of inclusion (Flammer, 2015a). Recent studies have sought to address this limitation by using matching methods to construct a comparable group of control firms (Hawn *et al.*, 2017) but are often limited in their ability to estimate a true causal relationship because they lack knowledge about which firms apply but are rejected due to proprietary concerns held by third-party agencies.

We address this limitation by collecting the underlying performance data for all ranked but unlisted firms evaluated for the 100 BCC. Indeed, this unique access to data is what enabled us to estimate the causal relationship of 100 BCC inclusion. While concerns about proprietary data will always be present, many ranking agencies (e.g. *Business Ethics*) base their evaluations on
public information that is already available (KLD). Often all that is needed to reconstruct the ranking for the full population of evaluated firms is a more in-depth explanation of the third-party’s ranking methodology. We thus encourage scholars that study rankings and lists, whenever possible, to seek out information on the ranked but unpublished organizations. Doing so will allow these scholars to utilize quasi-experimental designs to estimate true causal relationships, thus expanding our empirical knowledge about rankings and lists.

The Strategic Value of Corporate Social Responsibility

Our study also speaks to an emerging trend within the literature that calls for more rigorous and reliable research designs when examining questions regarding the strategic value of corporate social responsibility (Margolis et al., 2007). Lev et al. (2010), for example, suggested that scholars should utilize natural experiments in their quest to examine the causal link between CSR and financial performance. Hawn et al. (2017) likewise called for scholars to employ more rigorous research design in order to reach more reliable conclusions about the strategic value of CSR.

Recent work has addressed these calls and has generally found consistent evidence regarding the strategic value of CSR investments. Flammer (2015a), for instance, used a regression discontinuity (RD) design to establish a positive causal relationship between CSR and shareholder value. Employing the same research design, Flammer and Bansal (2017) later found a positive causal relationship between a firm’s long-term orientation and shareholder value. Together, these studies provide reliable and rigorous empirical evidence regarding the strategic value of CSR.

Similar to these studies, we also utilize a regression discontinuity design to establish a causal relationship between CSR and firm value. Contrary to these recent studies, however, we find a
negative causal relationship. At first glance, our results may seem to contradict these recent empirical findings. We, however, believe they highlight an important conceptual distinction between CSR implementation and CSR recognition and are thus complementary, not contradictory. We provide two justifications for this assertion below.

First, we believe these studies differ in their treatments. Flammer and colleagues (Flammer, 2015a; Flammer and Bansal, 2017), for example, examine investor response to the approval and implementation of CSR-related shareholder proposals (Flammer, 2015a; Flammer and Bansal, 2017). Our study, however, focuses on investor response to CSR recognition. Because we use similar research designs, the difference in our findings, we maintain, is likely be attributed to the treatment itself: implementation vs. recognition.

Second, we also note that the ratings used to construct the 100 BCC list in the inaugural year (2000) were based on KLD data that was already publicly available (1996-1998) (Brammer et al., 2009). Given this fact, if all investors cared about was the implementation of CSR initiatives, it would be unlikely that we would observe any substantive change in firms’ stock prices on the day of the 100 BCC announcement given that the performance information underlying the ranking was already available. The fact that we see any response at all is thus further evidence that the 100 BCC recognition changed investors’ perceptions about the present value of the firm independent of what had already been approved and implemented by the firm (Lyon and Shimshack, 2015).

Indeed, combining the results of these studies together, we maintain, provides a more nuanced picture regarding the value of CSR initiatives. Based on their findings, it appears that shareholders do, generally speaking, value the approval and implementation of CSR initiatives. Although shareholders may permit or even support such investments, it also appears, based on
our results, that they want firms that choose to compete within the CSR domain to be fully engaged. Firms that appear to be lukewarm in their efforts are likely to be perceived as wasting company resources and therefore punished by investors.

Our results also point to a potential unintended consequence for sponsors of CSR related rankings. Many CSR rankings intend to promote improvements in corporate social and environmental behavior by recognizing superior performance (Lewis, 2017). However, if firms recognize the potential liabilities of being ranked, they may in fact be less motivated to invest in criteria being evaluated or decline to participate all together. Such outcomes would represent an unintended consequence that departs from the goals of the rankings organizations to promote CSR activities.

These unintended consequences may also impact how organizations strategically communicate about their socially responsible practices. For example, a number of recent studies indicate that organizations may pursue membership in a category such B-Corps but do little to promote that membership (Gehman and Grimes, 2017), may be overly modest in disclosing their prosocial activities (Kim and Lyon, 2015), at times even electing not to publicize important forms of recognition (Carlos and Lewis, 2017). These studies represent provocative new insights into previously overlooked forms of decoupling whereby organizations substantively implement practices, but refrain from symbolically signaling such implementation. As our findings indicate, the distinction between actual performance and being recognized for such performance represent distinct constructs that differentially impact organizational outcomes. These differences and the ability of organizations to develop strategies relating to how they communicate about them are important questions for future research.
While we focused our analysis of the 100 BCC on investor responses during the establishment year, we did not examine how investors respond to companies that continue on the index year after year, or that get added or removed (Hawn et al., 2017). Future research could thus take a dynamic approach and examine the potential costs and benefits of being added or deleted, or continuing on the list. Indeed, such an approach could indicate whether the costs of inclusion decrease as perceptions of CSR become more favorable over time (Hawn et al., 2017; Ioannou and Serafeim, 2015).

Our analysis was also performed during a time period in which CSR was not yet institutionalized (Carlos and Lewis, 2017; Flammer, 2013; Ioannou and Serafeim, 2015). Consequently, our findings regarding the negative effects of marginal inclusion could be partially explained by lack of knowledge and understanding among investors regarding the economic benefits of CSR investments. Indeed, one could expect that decreases in firm value could very well be attenuated by increased acceptance of CSR as a legitimate strategic function. While we are unable to test this notion using the same context given that it is historically fixed in time, future research could examine how investors respond to other CSR rankings in more recent time periods when CSR was likely to be perceived as more legitimate by investors (Ioannou and Serafeim, 2015).

**Strategic Implications for Managers**

Our primary empirical result suggests that marginal firms that are barely included on a ranked list experience a decrease in firm value when the list is announced. Consistent with prior research (Lyon and Shimshack, 2015), we do, however, find that abnormal returns increase with rank. While we must be cautious about making causal inferences for firms not near the inclusion threshold (Lee and Lemieux, 2010), the results nevertheless suggest that being ranked near the
top of a list could indeed be beneficial, or at the very least, neutral. Given the growing strategic emphasis that executives place on pursuing inclusion in rankings, our results thus provide important lessons for executives and managers who are charged with managing their firm’s reputation.

Most important is the notion that if you aren’t “playing to win,” then perhaps you shouldn’t play at all. Chasing after a ranking is, after all, a reputation game that few firms can win (Vogel, 2005). Firms that do choose to compete on a particular dimension of performance that is being ranked should thus ensure that their investments are sufficiently adequate to help them “win the game.” Because firms appear to be penalized when they gain inclusion, but do not achieve a top-ranking, executives should carefully consider the risks and rewards of devoting resources to managing rankings. In particular, firms that are already on the margin could consider whether they should strategically decrease their investments to avoid being ranked or perhaps elect to not participate in the rankings altogether.

Our exploration into the moderating effects of this general finding also suggest a number of caveats or boundary conditions surrounding this general negative effect. First, we found that marginal B2C firms who arguably have a stronger case to engage in corporate citizenship seem to be protected from decreases in firm value. We also discovered that being ranked first within your industry did not seem to make a difference. In fact, it seemed to signal that the marginal firm was in an industry that likely lacked strong incentives for corporate citizenship. Given these findings, managers should therefore consider whether their firm has clear economic incentives to engage in the behavior that is being ranked.

Second, we found that marginal firms that had more focused CSR investments also seemed to be shielded from any negative consequences, presumably because investors perceive value in
being known for something unique. This finding suggests that there is indeed value in building a
domain-specific reputation (Carlos and Lewis, 2017; McDonnell and King, 2018) and that
“being known for something” may be more important than just “being known” (Lange et al.,
2011). For firms who do wish to compete for spot on a ranked list, this result suggests that
building a focused reputation may be a good strategy initially until the firm acquires sufficient
resources and capabilities to broaden the dimensions upon which their reputation is based.

Last but not least, we found that firms that had a strong history of corporate citizenship
seemed to also be immune to negative investor perceptions. Firms that display consistent
behaviors over time likely communicate to investors that their actions are not just responses to
recent management fads or fashions (Abrahamson, 1996) but rather enduring aspects of their
organization’s overall identity (Albert and Whetten, 1985). Such consistency in behavior and
identity is indeed a necessary condition to build the reputational capital that investors might find
appealing (Godfrey, 2005). Given this finding, managers who wish to compete for a spot on a
ranked list should, at the very least, ensure that their firm provides sufficient resources to sustain
investments over time, even if they cannot yet afford to “win the game.”

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Notes. This figure presents the distribution of 100 BCC scores in the year 2000. The horizontal axis indicates the standardized 100 BCC score with scores greater than or equal to zero indicating inclusion on the 100 BCC list. The vertical axis indicates the frequency of 100 BCC scores within in each bin. The sample consists of all firms evaluated by Business Ethics Magazine in the year 2000.
Notes: This figure presents a visualization of the \textit{rddensity} command in STATA developed by Cattaneo \textit{et al.} (2017). The horizontal axis indicates the 100 BCC score (standardized). The vertical axis indicates the logarithm of the estimated density.
Notes: The vertical axis indicates the abnormal returns on the day of the vote. Abnormal returns are computed using the market model. The horizontal axis indicates the 100 BCC Score with 0 indicating the inclusion threshold. Each dot in the figure represents the average abnormal return with a certain bin width determined by the `rdplot` command in STATA. The solid line plots predicted values of abnormal returns from first-order polynomials in 100 BCC score estimated separately to the left and right of the inclusion threshold.
Notes: The chart displays the Community Relations, Employee Relations, and Customer Relations sub-ratings for Timberland Co. and TJX Companies Inc. Sub-ratings range from a minimum value of 1 to maximum of 5. See the Notes in Table 2 for more information about how the sub-ratings were calculated.
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<th>United Parcel Service, Inc.**</th>
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<tr>
<td>Ranked 11th in FORTUNE magazine’s “World’s Most Admired Companies” list — the 17th consecutive year FedEx has ranked among the top 20 in the FORTUNE Most Admired Companies list</td>
<td>One of Corporate Responsibility’s “100 Best Corporate Citizens” for the 7th consecutive year</td>
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<td>Included on the Reputation Institute’s 2017 “Most Reputable Companies in the World” list</td>
<td>Recognized by Ethisphere Institute as one of the “World’s Most Ethical Companies” for the 10th consecutive year</td>
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<td>Listed on Corporate Responsibility Magazine’s “100 Best Corporate Citizens” list</td>
<td>Recognized as a constituent of the Dow Jones Sustainability North America Index for the 12th consecutive year</td>
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<tr>
<td>Named to FORTUNE magazine’s list of the “100 Best Companies to Work For”</td>
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<td>Recognized as a constituent of the NASDAQ OMX Global Sustainability Index for the 7th consecutive year</td>
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<td>Included for the 3rd consecutive time on Points of Light’s Civic 50</td>
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<td>Named one of “America’s Top Corporations for Women’s Business Enterprises” by the Women’s Business Enterprise National Council</td>
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Notes: *10-K, Fiscal Year ending May 31, 2017, **10-K, Fiscal Year ending December 21, 2016
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<th>Total return to shareholders</th>
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<td>36.84%</td>
<td>4.00</td>
<td>3.67</td>
<td>4.00</td>
</tr>
<tr>
<td>10</td>
<td>3.87000</td>
<td>Times Mirror Company</td>
<td>$3,029.2</td>
<td>$259.1</td>
<td>21.70%</td>
<td>4.33</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>11</td>
<td>3.86333</td>
<td>DeVry Incorporated</td>
<td>$419.4</td>
<td>$38.8</td>
<td>67.29%</td>
<td>3.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>12</td>
<td>3.84000</td>
<td>Pitney Bowes</td>
<td>$4,432.6</td>
<td>$636.2</td>
<td>45.73%</td>
<td>4.33</td>
<td>4.00</td>
<td>3.00</td>
</tr>
<tr>
<td>13</td>
<td>3.83833</td>
<td>Solectron</td>
<td>$8,391.4</td>
<td>$293.9</td>
<td>66.77%</td>
<td>3.00</td>
<td>4.17</td>
<td>4.00</td>
</tr>
<tr>
<td>14</td>
<td>3.83500</td>
<td>Southwest Airlines</td>
<td>$4,735.6</td>
<td>$474.4</td>
<td>34.14%</td>
<td>3.33</td>
<td>4.50</td>
<td>4.00</td>
</tr>
<tr>
<td>15</td>
<td>3.83167</td>
<td>Kroger Company</td>
<td>$45,352.0</td>
<td>$628.0</td>
<td>49.04%</td>
<td>3.83</td>
<td>4.33</td>
<td>3.00</td>
</tr>
<tr>
<td>16</td>
<td>3.79333</td>
<td>Compaq Computer</td>
<td>$38,525.0</td>
<td>$569.0</td>
<td>64.65%</td>
<td>3.17</td>
<td>3.50</td>
<td>4.00</td>
</tr>
<tr>
<td>17</td>
<td>3.79167</td>
<td>Walt Disney Company</td>
<td>$23,402.0</td>
<td>$1,300.0</td>
<td>17.80%</td>
<td>4.00</td>
<td>3.83</td>
<td>4.33</td>
</tr>
<tr>
<td>18</td>
<td>3.79000</td>
<td>Ben &amp; Jerry’s Homemade</td>
<td>$237.0</td>
<td>$3.4</td>
<td>20.20%</td>
<td>4.50</td>
<td>4.50</td>
<td>3.00</td>
</tr>
<tr>
<td>19</td>
<td>3.78000</td>
<td>Whole Foods Market</td>
<td>$1,567.9</td>
<td>$42.2</td>
<td>61.34%</td>
<td>4.17</td>
<td>4.17</td>
<td>3.00</td>
</tr>
<tr>
<td>20</td>
<td>3.77833</td>
<td>The Gap</td>
<td>$11,635.4</td>
<td>$1,127.1</td>
<td>87.00%</td>
<td>3.50</td>
<td>4.00</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Notes: This table lists the top 20 companies on the 100 BCC ranking in the year 2000. The community relations measure is a three-average (1996-1998) of the KLD community and environmental dimensions. The employee relations measure is a three-average (1996-1998) of the KLD employee and diversity dimensions. The consumer relations measure is a three-average (1996-1998) of the KLD product dimension. The total return to shareholders (1996-1998) is computed using data from Compustat and CRSP. To be consistent with KLD measures, this raw number is converted into quintiles (top 20 percent, next 20 percent, etc.). These four groups are then averaged to compute the overall rating. Financial data (revenues and net income) are obtained from the latest annual reports that precede the announcement date.
### Table 3. Sample Breakdown

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Sample</td>
<td>658</td>
</tr>
<tr>
<td>Unranked</td>
<td>103</td>
</tr>
<tr>
<td>Dropped</td>
<td>14</td>
</tr>
<tr>
<td>Ranked Firms</td>
<td>541</td>
</tr>
<tr>
<td>Delisted</td>
<td>28</td>
</tr>
<tr>
<td>Final Sample</td>
<td>513</td>
</tr>
</tbody>
</table>

Notes: The initial sample includes all firms evaluated by KLD in 1998. 103 firms were unranked because they had not yet been evaluated by KLD for the required three years (1996-1998). Additionally, 14 firms were dropped from the analysis due to recent scandals or events that would contradict the signal of superior corporate citizenship. Although 541 firms were ranked by Business Ethics, we removed an additional 28 firms from our analysis because their stocks were delisted primarily because they were acquired or went bankrupt prior to the announcement day.
Table 4. Industry composition by SIC divisions

<table>
<thead>
<tr>
<th>SIC codes</th>
<th>Division description</th>
<th>Number of firms</th>
<th>Included in the 100 BCC</th>
<th>Excluded from the 100 BCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-09</td>
<td>Agriculture, Forestry, And Fishing</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10-14</td>
<td>Mining</td>
<td>19</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>15-17</td>
<td>Construction</td>
<td>6</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>20-39</td>
<td>Manufacturing</td>
<td>279</td>
<td>54</td>
<td>225</td>
</tr>
<tr>
<td>40-49</td>
<td>Transportation, Communications, Electric, Gas, And Sanitary Services</td>
<td>64</td>
<td>10</td>
<td>54</td>
</tr>
<tr>
<td>50-51</td>
<td>Wholesale Trade</td>
<td>14</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>52-59</td>
<td>Retail Trade</td>
<td>41</td>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td>60-67</td>
<td>Finance, Insurance, And Real Estate</td>
<td>57</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>70-89</td>
<td>Services</td>
<td>33</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>91-97</td>
<td>Public Administration</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>513</strong></td>
<td><strong>100</strong></td>
<td><strong>413</strong></td>
</tr>
</tbody>
</table>

Notes: We display the industry composition by SIC divisions among firms evaluated by Business Ethics magazine in the year 2000. We also display subsamples for firms included and excluded for the 100 BCC list.
<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>10th %tile</th>
<th>90th %tile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal return on announcement day</td>
<td>513</td>
<td>-0.003</td>
<td>-0.005</td>
<td>0.029</td>
<td>-0.034</td>
<td>0.026</td>
</tr>
<tr>
<td>KLD index</td>
<td>513</td>
<td>0.893</td>
<td>1</td>
<td>2.616</td>
<td>-6</td>
<td>12</td>
</tr>
<tr>
<td>Total assets ($ million)</td>
<td>513</td>
<td>18,698</td>
<td>5,008</td>
<td>50,044</td>
<td>590</td>
<td>37,156</td>
</tr>
<tr>
<td>Market value ($ million)</td>
<td>513</td>
<td>17,471</td>
<td>4,689</td>
<td>43,588</td>
<td>507</td>
<td>39,024</td>
</tr>
<tr>
<td>ROA</td>
<td>513</td>
<td>0.152</td>
<td>0.144</td>
<td>0.085</td>
<td>0.047</td>
<td>0.260</td>
</tr>
<tr>
<td>Cash</td>
<td>513</td>
<td>0.078</td>
<td>0.033</td>
<td>0.108</td>
<td>0.006</td>
<td>0.209</td>
</tr>
<tr>
<td>Leverage</td>
<td>513</td>
<td>0.268</td>
<td>0.274</td>
<td>0.157</td>
<td>0.044</td>
<td>0.462</td>
</tr>
<tr>
<td>B2B industry</td>
<td>513</td>
<td>0.708</td>
<td>1</td>
<td>0.455</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: Abnormal returns on the announcement day are computed using the market model. KLD index is measure in the calendar year prior to the announcement date. All financial variables are obtained from Compustat and computed in the fiscal year that ends prior to the announcement day. Total assets is the book value of total assets (AT). Market value is the number of shares outstanding (CSHO) multiplied by the stock price at end of the fiscal year prior to announcement day (PRCC_F). Return on Assets (ROA) is measured as the ratio of operating income before depreciation (OIBDP) to the book value of assets (AT). Cash is the ratio of cash and short-term investments (CHE) to total assets (AT). Leverage is the ratio of debt in current liabilities (DLC) and long-term debt (DLTT) to total assets (AT). B2B industry is an indicator variable equal to 1 if the company operates in a business-to-business (B2B) industry and 0 otherwise.
Table 6. Preexisting Differences as a Function of the 100 BCC Score

<table>
<thead>
<tr>
<th></th>
<th>Before Announcement (t-1)</th>
<th>Change from (t-2) to (t-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Abnormal return</td>
<td>-0.002</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>KLD index</td>
<td>3.835</td>
<td>0.357</td>
</tr>
<tr>
<td></td>
<td>(0.249)</td>
<td>(0.338)</td>
</tr>
<tr>
<td>Total assets (log)</td>
<td>0.478</td>
<td>0.260</td>
</tr>
<tr>
<td></td>
<td>(0.192)</td>
<td>(0.299)</td>
</tr>
<tr>
<td>Market value (log)</td>
<td>0.984</td>
<td>-0.004</td>
</tr>
<tr>
<td></td>
<td>(0.197)</td>
<td>(0.288)</td>
</tr>
<tr>
<td>ROA</td>
<td>0.032</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.017)</td>
</tr>
<tr>
<td>Cash</td>
<td>0.030</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>(0.013)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.026</td>
<td>0.023</td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
<td>(0.030)</td>
</tr>
<tr>
<td>B2B industry</td>
<td>-0.084</td>
<td>-0.056</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.083)</td>
</tr>
</tbody>
</table>

Control for Distance from Inclusion Threshold

|                          | No   | Yes  | No   | Yes  |

Notes: This table tests whether 100 BCC inclusion is systematically related to firm characteristics prior to the announcement day. All variables are defined in Table 4. Columns (1) and (2) contain variables measured in the year preceding the announcement date (t-1). Columns (3) and (4) consider the changes (i.e. trends) in these variables between years (t-2) and (t-1). The exception is the abnormal return where t refers to days rather than years. Columns (1) and (3) report the differences among all firms, whereas columns (2) and (4) report the differences at the inclusion threshold by controlling for a first-order polynomial on both sides of the threshold. Standard errors (in parentheses) are clustered at the firm level.
### Table 7. Abnormal Returns Around the Inclusion Threshold

<table>
<thead>
<tr>
<th>All Rated</th>
<th>Non-close</th>
<th>+/-50</th>
<th>+/- -20</th>
<th>+/- -15</th>
<th>+/- -10</th>
<th>Full model</th>
<th>Full model with controls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 BCC Member</td>
<td>-0.0041</td>
<td>0.0024</td>
<td>-0.0111</td>
<td>-0.0167</td>
<td>-0.0180</td>
<td>-0.0180</td>
<td>-0.0127</td>
</tr>
<tr>
<td></td>
<td>(0.0107)</td>
<td>(0.0088)</td>
<td>(0.0058)</td>
<td>(0.0084)</td>
<td>(0.0089)</td>
<td>(0.0133)</td>
<td>(0.0045)</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.003</td>
<td>0.001</td>
<td>0.034</td>
<td>0.064</td>
<td>0.064</td>
<td>0.077</td>
<td>0.016</td>
</tr>
</tbody>
</table>

Notes. This table presents regressions of the abnormal returns on the day of the announcement of the 100 BCC list on the 100 BCC inclusion dummy, i.e. a dummy variable that equals 1 if the firm is recognized as a member of the list and 0 otherwise. Abnormal returns are computed using the market model. In column (1), the sample consists of all rated and ranked firms. Column (2) restricts the sample to firms that were more than 50 ranks away from the inclusion threshold. Columns (3)-(6) restrict the sample to firms within 50, 20, 15, and 10 ranks from the inclusion threshold. Column (7) estimates the specification given by our primary RD model. This specification controls for two first-order polynomials in the standardized 100 BCC score on both sides of the inclusion threshold. Column (8) is a variant of the specification in column (7), expect that the regression also includes control variables. The control variables include all variables listed in Table 5 prior to announcement of 100 BCC membership. Robust standard errors are shown in parentheses.
### Table 8. Robustness Tests

<table>
<thead>
<tr>
<th></th>
<th>Market Model</th>
<th>Market-Adjusted Model</th>
<th>Positive returns</th>
<th>Confounding Events</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>Day of Announcement (t)</td>
<td>-0.0141</td>
<td>-0.0134</td>
<td>-0.2705</td>
<td>-0.0145</td>
</tr>
<tr>
<td></td>
<td>(0.0068)</td>
<td>(0.0068)</td>
<td>(0.1091)</td>
<td>(0.0072)</td>
</tr>
<tr>
<td>One day later (t+1)</td>
<td>0.0003</td>
<td>0.0016</td>
<td>-0.0159</td>
<td>0.0014</td>
</tr>
<tr>
<td></td>
<td>(0.0057)</td>
<td>(0.0056)</td>
<td>(0.1088)</td>
<td>(0.0061)</td>
</tr>
<tr>
<td>Days t+2 to t+7</td>
<td>0.0050</td>
<td>0.0073</td>
<td>-0.0802</td>
<td>0.0144</td>
</tr>
<tr>
<td></td>
<td>(0.0168)</td>
<td>(0.0172)</td>
<td>(0.0903)</td>
<td>(0.0166)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.213</td>
<td>0.295</td>
<td>0.110</td>
<td>0.229</td>
</tr>
<tr>
<td>Observations</td>
<td>2,565</td>
<td>2,565</td>
<td>2,565</td>
<td>2,340</td>
</tr>
<tr>
<td>Number of firms</td>
<td>513</td>
<td>513</td>
<td>513</td>
<td>468</td>
</tr>
</tbody>
</table>

Notes: The regression in column (1) estimates the effect of 100 BCC inclusion on the day of announcement (t), the following day (t+1), and over the remaining 6 days (t+2 to t+7). Columns (2) through (4) present variants of the regression in column (1). In column (2), abnormal returns are computed using the market-adjusted model instead of the market model. In column (3), the dependent variable is a dummy variable that equals 1 if the abnormal return is positive and 0 otherwise. In column (4), we exclude firms who announced a dividend, earnings, or an acquisition or merger during the 8-day event window (t, t+7).
### Table 9. Moderating Effects

#### Panel A. Industry Effects

<table>
<thead>
<tr>
<th></th>
<th>High vs. low consumer sensitivity</th>
<th>Industry Rank (3-digit SIC)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B2B (1)</td>
<td>Rank = 1 (3)</td>
</tr>
<tr>
<td></td>
<td>B2C (2)</td>
<td>Rank &gt; 1 (4)</td>
</tr>
<tr>
<td>Day of Announcement (t)</td>
<td>-0.0172 (0.0087)</td>
<td>-0.0276 (0.0100)</td>
</tr>
<tr>
<td>One day later (t+1)</td>
<td>0.0002 (0.0072)</td>
<td>-0.0041 (0.0069)</td>
</tr>
<tr>
<td>Days t+2 to t+7</td>
<td>-0.0052 (0.0210)</td>
<td>-0.0033 (0.0209)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.147 (0.0210)</td>
<td>0.370 (0.0209)</td>
</tr>
<tr>
<td>Observations</td>
<td>1,815 750</td>
<td>820 1,745</td>
</tr>
<tr>
<td>Number of firms</td>
<td>363 150</td>
<td>164 349</td>
</tr>
</tbody>
</table>

#### Panel B. CSR Effects

<table>
<thead>
<tr>
<th></th>
<th>CSR Investments</th>
<th>History of CSR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General (5)</td>
<td>No (4)</td>
</tr>
<tr>
<td></td>
<td>Focused (6)</td>
<td>Yes (5)</td>
</tr>
<tr>
<td>Day of Announcement (t)</td>
<td>-0.0188 (0.0079)</td>
<td>-0.0253 (0.0084)</td>
</tr>
<tr>
<td>One day later (t+1)</td>
<td>-0.0055 (0.0063)</td>
<td>-0.0026 (0.0076)</td>
</tr>
<tr>
<td>Days t+2 to t+7</td>
<td>-0.0034 (0.0190)</td>
<td>0.0082 (0.0275)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.255 (0.0190)</td>
<td>0.201 (0.0275)</td>
</tr>
<tr>
<td>Observations</td>
<td>1,555 1,010</td>
<td>1,090 1,475</td>
</tr>
<tr>
<td>Number of firms</td>
<td>311 202</td>
<td>218 295</td>
</tr>
</tbody>
</table>

Notes: In Table 9, we explore plausible mechanisms by splitting the full sample into various subsamples. Panel A examines moderating effects related to the firm’s primary industry. In columns (1) and (2), we split the sample into companies that operate in B2B industries (low consumer sensitivity) and B2C industries (high consumer sensitivity) respectively. In columns (3) and (4), we examine the abnormal returns for firms that were ranked number one in their primary 3-digit SIC industry compared to those that were not. Panel B examines moderating effects related to the firm’s patterns of CSR investments. In columns (5) and (6), we explore the abnormal returns for marginal firms that have made focused vs. general CSR investments. In columns (7) and (8), we examine how investor response changes based on the firm’s history of CSR. Standard errors (in parentheses) are clustered at the firm level.
Table 10. Representativeness of Close Firms Among Non-Close Firms

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean Close</th>
<th>Mean Non-close</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal return on announcement day</td>
<td>-0.003</td>
<td>-0.002</td>
<td>0.850</td>
</tr>
<tr>
<td>KLD index</td>
<td>2.364</td>
<td>0.755</td>
<td>0.000</td>
</tr>
<tr>
<td>Total assets (log)</td>
<td>8.685</td>
<td>8.493</td>
<td>0.473</td>
</tr>
<tr>
<td>Market value (log)</td>
<td>8.802</td>
<td>8.384</td>
<td>0.102</td>
</tr>
<tr>
<td>ROA</td>
<td>0.170</td>
<td>0.150</td>
<td>0.165</td>
</tr>
<tr>
<td>Cash</td>
<td>0.084</td>
<td>0.077</td>
<td>0.645</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.254</td>
<td>0.270</td>
<td>0.528</td>
</tr>
<tr>
<td>B2B industry</td>
<td>0.682</td>
<td>0.710</td>
<td>0.705</td>
</tr>
</tbody>
</table>

Notes: This table compares the subsample of firms close to (within 15 ranks of) the inclusion threshold with a subsample of non-close firms (more than 15 ranks away). P-values were generated using a two-sample t-test with unequal variances.