Management Science

Publication details, including instructions for authors and subscription information:
http://pubsonline.informs.org

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To cite this article:
Caroline Flammer (2015) Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach. Management Science

Published online in Articles in Advance 19 Feb 2015

. http://dx.doi.org/10.1287/mnsc.2014.2038

MANAGEMENT SCIENCE
Articles in Advance, pp. 1–20
ISSN 0025-1909 (print) | ISSN 1526-5501 (online)

http://dx.doi.org/10.1287/mnsc.2014.2038

Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach

Caroline Flammer
Ivey Business School, University of Western Ontario, London, Ontario N6G 0N1, Canada, cflammer@ivey.uwo.ca

This study examines the effect of shareholder proposals related to corporate social responsibility (CSR) on financial performance. Specifically, I focus on CSR proposals that pass or fail by a small margin of votes. The passage of such "close call" proposals is akin to a random assignment of CSR to companies and hence provides a quasi-experiment to study the effect of CSR on performance. I find that the adoption of close call CSR proposals leads to positive announcement returns and superior accounting performance, implying that these proposals are value enhancing. When I examine the channels through which companies benefit from CSR, I find that labor productivity and sales growth increase after the vote. Finally, I document that close call CSR proposals differ from non-close proposals along several dimensions. Accordingly, although my results imply that adopting close call CSR proposals is beneficial to companies, they do not necessarily imply that CSR proposals are beneficial in general.

Data, as supplemental material, are available at http://dx.doi.org/10.1287/mnsc.2014.2038.

Keywords: corporate social responsibility; financial performance; regression discontinuity; shareholder proposals
History: Received January 4, 2013; accepted July 11, 2014, by Wei Jiang, finance. Published online in *Articles in Advance*.

1. Introduction

Does corporate social responsibility (CSR) lead to superior corporate financial performance (CFP)? Anecdotal evidence points toward a positive relationship between the two. For instance, the UK retailer Marks & Spencer implemented an ambitious CSR program in 2007 "with the ultimate goal of becoming the world's most sustainable major retailer" (Brokaw 2012). Five years later, this program turned out to be very profitable. In particular, chief executive officer (CEO) Marc Bolland qualifies the outcome as "a strong business case for sustainability, with £185 million in net benefits" (Brokaw 2012). More generally, recent surveys indicate that a large majority of CEOs believe that CSR can improve a firm's competitiveness and is critical to its future success (see, e.g., Lacy et al. 2010, Haanaes et al. 2012).

Understanding the relationship between CSR and CFP has spurred a large academic literature. In their review, Margolis et al. (2007) report that 167 studies have examined the CSR–CFP link between 1972 and 2007. These studies have been surveyed in no fewer than 16 review articles. The typical approach in this literature is to regress measures of CFP (Tobin's Q, return on assets, etc.) on measures of CSR (e.g., the Kinder, Lydenberg, and Domini index of social performance). In their meta-analysis of these studies, Margolis et al. conclude that the overall correlation between CSR and CFP—more precisely, the coefficient of CSR in the above regression—is positive but small.

A limitation of this literature is that CSR is endogenous with respect to CFP, i.e., a company's decision to engage in CSR activities likely correlates with unobservable firm characteristics that may also affect CFP. For example, it could be that companies engage in CSR *because* they are more profitable or expect their future profitability to be higher. Or it could be that CEOs who implement long-term CSR strategies are also those who are more likely to perform well (e.g., since they are more talented). In sum, the positive correlation between CSR and CFP that emerges from the literature, albeit interesting, does not warrant a causal interpretation.[1]

Going beyond such a correlation is difficult. From an empirical perspective, the ideal experiment would be to randomly assign firms into a "high CSR group"

[1] Similarly, Margolis et al. (2007) conclude their meta-analysis by highlighting the need to move beyond the "simple correlation between CSP and CFP" (p. 33).

and a "low CSR group" and compare their financial performance following this "treatment." Obviously, such an ideal experiment would be difficult and unreasonably costly to implement in the field.

In this paper, I consider a quasi-natural experiment that is very close in spirit to this ideal experiment. Specifically, I compare the effect of shareholder-sponsored CSR proposals that pass or fail by a small margin of votes in annual meetings. The passage of such "close call" proposals is akin to a random assignment of CSR to companies and hence is uncorrelated with firm characteristics. Intuitively, there is no reason to expect any systematic difference between a company for which a CSR proposal passes with 50.1% of the votes and a company for which a similar proposal fails with 49.9% of the votes. Accordingly, close call CSR proposals provide a source of random variation in CSR that can be used to estimate the causal effect of CSR on CFP. The general approach of comparing outcomes just above and below a discontinuous threshold is known as *regression discontinuity design* (RDD) in the economic literature. In this paper, the discontinuity arises because, around the 50% majority threshold, a minor difference in vote shares leads to a discrete change (i.e., a discontinuity) in the adoption of CSR policies.[2]

The data on CSR proposals are obtained from RiskMetrics and SharkRepellent, which compile information on shareholder proposals of U.S. publicly traded companies that came to a vote from 1997 to 2012. The proposals are classified into two broad categories: social issues (e.g., the implementation of nondiscrimination policies) and environmental issues (e.g., the reduction of CO_2 emissions).[3]

My main finding is that the passage of close call CSR proposals significantly increases shareholder value. On the day of the shareholder meeting, a CSR proposal that passes by a narrow margin of votes yields an abnormal return of 0.92% compared with a CSR proposal that fails marginally. Since shareholder proposals are not binding, this estimate measures only the effect of approving a CSR proposal as opposed to the effect of implementing a CSR proposal. The latter can be approximated by rescaling the estimated coefficient by the probability of implementing the proposal. I find that CSR proposals have a 52% probability of being implemented. Accordingly, my results imply that implementing a close call CSR proposal leads to an increase in shareholder value by about 1.77%. This finding is consistent with the view that CSR is a valuable resource, which is in line with, e.g., the resource-based view of the firm (e.g., Hart 1995, Russo and Fouts 1997), instrumental stakeholder theory (e.g., Jones 1995), and Porter and Kramer's (2006, 2011) shared value argument.

I then examine whether the increase in shareholder value depends on the level of CSR prior to the vote. I find that the value gains are larger for companies with relatively low levels of CSR. This suggests that CSR is a resource with decreasing marginal returns; i.e., the CSR–CFP relationship is concave. Intuitively, initial efforts to improve CSR may yield substantial benefits (the "low-hanging fruits" of CSR). However, as companies keep increasing their social performance, the returns from an additional CSR initiative may decrease.

Next, I examine the channels through which CSR increases shareholder value. I find that the passing of close call CSR proposals has a positive impact on operating performance in the years following the vote. When I further examine what explains the increase in operating performance, I find that the adoption of close call CSR proposals leads to an increase in labor productivity and sales growth. This evidence suggests that these proposals improve job satisfaction and help companies cater to customers that are responsive to sustainable practices.

Although my results imply that close call CSR proposals are beneficial to companies, they do not necessarily imply that CSR proposals are beneficial *in general*. The vast majority of CSR proposals receive little support at shareholder meetings (the average vote outcome is merely 13.5%), suggesting that shareholders may not find them desirable. Hence, it seems plausible that close call proposals may not be representative of the average CSR proposal. When I characterize the subset of close call proposals, I indeed find that they differ from non-close proposals along several dimensions. First, they are more likely to address employee satisfaction and the mitigation of environmental hazards. Second, a textual analysis of their support statement shows that they more frequently contain arguments linking CSR to performance. Third, close call proposals are more frequently found among companies operating in "stakeholder-sensitive" industries, i.e., industries in which performance depends greatly on the relationship with employees and customers. Overall, this suggests that close call CSR proposals are more likely to be related to performance in some way. Accordingly, one must be cautious in extrapolating my results to non-close proposals.

The remainder of this paper is organized as follows. Section 2 describes the competing hypotheses

[2] See Lee and Lemieux (2010) and Roberts and Whited (2013) for surveys of RDD applications in the economics and finance literature. For a formal treatment of the RDD methodology as well as practical advice, see Imbens and Lemieux (2008).

[3] Some scholars use a broader definition of CSR that also encompasses corporate governance—i.e., "ESG" (environmental, social, and governance). The definition of CSR used in this paper does not include corporate governance. For a study of governance proposals, see Cuñat et al. (2012).

on the CSR–CFP relationship. Section 3 describes the data and empirical methodology. Section 4 presents the results. Section 5 discusses the external validity. Section 6 concludes.

2. Background: The Relationship Between Social and Financial Performance

The relationship between social and financial performance has received considerable attention in the theory literature. The early literature, in the spirit of shareholder theory (e.g., Friedman 1962, 1970), views social responsibility as a "donation" from shareholders to stakeholders that reduces profits. Similarly, CSR may be the outcome of an agency conflict between shareholders and managers (Jensen and Meckling 1976): companies' social engagement may be driven by managers' own social preferences or their desire to establish overly friendly relationships with specific stakeholders.

Whereas the early literature predicts a negative relationship between CSR and financial performance, subsequent research emphasizes the potential value of CSR. For example, Freeman's (1984) stakeholder theory argues that companies should consider the interests of everyone who can substantially affect, or be affected by, the welfare of the company. This theory has been extended in various ways (for a review, see Agle et al. 2008). For instance, instrumental stakeholder theory argues that CSR efforts are actions taken to benefit stakeholders with the ultimate goal of benefiting shareholders; i.e., CSR is "instrumental" to firm performance (e.g., Jones 1995). Similarly, in line with the literature on sustainability in business and the resource-based view of the firm, companies may engage in CSR to improve their efficiency and enhance, e.g., their reputation, brand, and trust (e.g., Barney 1991; Hart 1995; Porter 1991; Porter and Kramer 2006, 2011; Russo and Fouts 1997). In turn, such actions may attract new customers (socially conscious customers, "green" consumers, etc.), increase the companies' profitability, and enhance their competitiveness (e.g., Flammer 2014).

A large set of anecdotal evidence suggests that a growing number of multinational companies—including, e.g., General Electric (GE), Google, IBM, Intel, Johnson & Johnson, Marks & Spencer, Nestle, Unilever, and Walmart—see the benefits of creating "shared value" (Porter and Kramer 2011) and, in particular, expect to gain a competitive advantage from CSR initiatives. For example, GE's CEO Jeffrey Immelt, discussing GE's "ecomagination" program, stated, "We did it from a business standpoint from Day 1, [...], it was never about corporate social responsibility" (Lohr 2011).

In sum, both the recent literature and anecdotal evidence suggest that CSR may be a *causal* determinant of financial performance. In this study, I examine whether such a causal link is supported by the data.

3. Data and Methodology

3.1. Shareholder Proposals

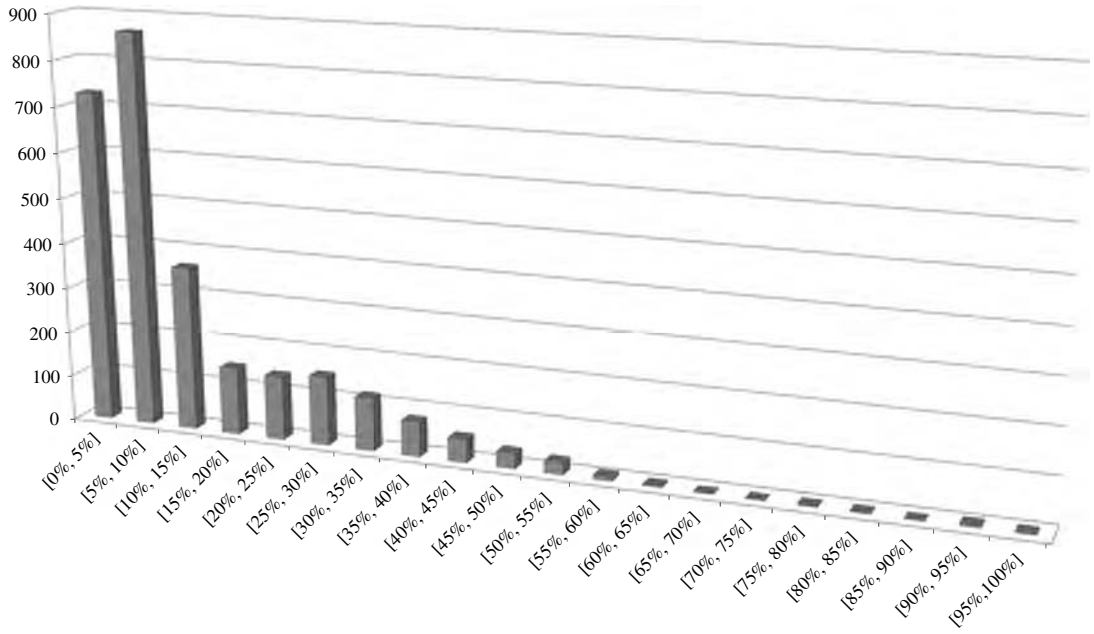
The data on shareholder proposals are obtained from two databases: RiskMetrics and SharkRepellent. RiskMetrics covers shareholder proposals that came to a vote from 1997 to 2011 at S&P 1500 companies as well as approximately 400–500 additional widely held companies. SharkRepellent's proxy voting database includes shareholder proposals from a broad universe of about 4,000 companies in the Russell 3000 index from 2005 to 2012. Both databases include firm identifiers, a description of the proposal, the date of the annual meeting, the proposal's sponsor, the voting requirement, and the outcome of the vote.

I merge both databases to obtain a comprehensive data set of shareholder proposals that came to a vote between 1997 and 2012. I then restrict the sample to shareholder proposals that are related to CSR. In RiskMetrics, such proposals are identified by the resolution type "SRI" (social responsible initiative); in SharkRepellent, they are identified by the proposal category "Social/Environmental Issues." The final sample consists of 2,729 CSR proposals. Two specific examples are provided in Table 1.

Table 1 Examples of CSR Proposals

Panel A: Example of CSR proposal that was closely rejected	
Company:	Lear Corporation
Meeting date:	May 11, 2006
Proposal:	"[T]he shareholders request that the company commit itself to the implementation of a code of conduct based on the aforementioned ILO human rights standards and United Nations' Norms on the Responsibilities of Transnational Corporations with Regard to Human Rights, by its international suppliers and in its own international production facilities, and commit to a program of outside, independent monitoring of compliance with these standards."
Voting result:	Rejected (49.8% of the votes)
Source:	SharkRepellent
Panel B: Example of CSR proposal that was closely approved	
Company:	HCC Insurance Holdings, Inc.
Meeting date:	May 10, 2007
Proposal:	"The Shareholders request that management implement equal employment opportunity policies based on the aforementioned principles prohibiting discrimination based on sexual orientation and gender identity."
Voting result:	Passed (52.2% of the votes)
Source:	SharkRepellent

Figure 1 Distribution of Votes for Shareholder CSR Proposals



Notes. This figure presents the histogram of the vote shares in favor of the CSR proposals. The horizontal axis indicates the vote share in 5% intervals. The vertical axis indicates the frequency of proposals. The sample consists of all CSR proposals in the RiskMetrics and SharkRepellent databases from 1997 to 2012.

CSR proposals typically do not fare well at annual meetings. Figure 1 provides the histogram of the vote outcome of the 2,729 CSR proposals. As is shown, most proposals receive very little support: about 75% of the proposals receive less than 20% of favorable votes. Only a small fraction of proposals make it close to the majority threshold. This pattern suggests that most CSR proposals may be "symbolic" in nature. Shareholders submit them not so much because they expect the proposals to pass but rather to bring social issues to the attention of management and the public (Loss and Seligman 2004).

My identification strategy relies on proposals with a close call outcome. Fortunately, although the number of close call proposals is small relative to the total number of proposals, it is sufficiently large in absolute terms: 61 proposals received a vote share within the $\pm 5\%$ interval around the majority threshold and 122 within the $\pm 10\%$ interval. This lends sufficient power to the identification.

Table 2 provides more details about the 2,729 CSR proposals. Panel A reports the frequency of shareholder proposals by year as well as summary statistics on the vote outcomes. As can be seen, both the number of proposals and the proportion of favorable votes have increased over time. In particular, although the average percentage of votes in favor was merely 9% in the first half of the sample (1997–2004), it increased to 17% in the second half (2005–2012). This evolution is consistent with previous evidence documenting an increase in shareholders' awareness for CSR issues over time (e.g., Flammer 2013).

Panel B in Table 2 further reports the breakdown of the proposals according to the different types of CSR. The classification is obtained from the SharkRepellent database, where CSR proposals are partitioned into two broad categories and nine subcategories. The precise definition of each subcategory is provided in the appendix. RiskMetrics does not provide a classification of CSR proposals but does include a one-sentence description of the proposal's content. I use this description to manually assign each proposal to a SharkRepellent category. As can be seen, the proposals that are most likely to be approved are those pertaining to labor issues (5.27% are approved).

Panel C in Table 2 further provides a breakdown according to the type of proposal sponsor. The most common sponsors are religious groups, yet they are also the least likely to succeed. The most successful activists are public pension funds and SRI funds, who see 3.89% and 3.36%, respectively, of their proposals being approved.

3.2. Methodology

Cuñat et al. (2012; henceforth CGG) develop a methodology that adapts the regression discontinuity framework so as to estimate the effect of shareholder proposals on shareholder returns and other outcome variables. This paper uses the same methodology, except that CSR proposals are used instead of governance proposals. In the following, I provide a brief

Table 2 Shareholder CSR Proposals

Panel A: Summary statistics by year

Year	Shareholder proposals	Approved proposals	Approved proposals (%)	Average vote outcome (%)	SD vote outcome (%)	Vote outcome ±5%	Vote outcome ±10%
1997	111	0	0.00	7.05	3.72	0	0
1998	119	0	0.00	7.83	5.39	0	0
1999	126	1	0.79	7.82	7.61	0	0
2000	144	0	0.00	7.42	4.75	0	0
2001	159	1	0.63	9.23	7.60	0	0
2002	162	2	1.23	10.01	8.77	1	2
2003	142	1	0.70	11.84	11.13	0	2
2004	187	4	2.14	11.36	13.10	0	1
2005	195	2	1.03	9.97	9.14	0	3
2006	206	5	2.43	14.08	12.98	5	7
2007	215	7	3.26	17.23	15.73	15	20
2008	212	6	2.83	15.32	14.58	8	12
2009	196	8	4.08	18.01	14.88	10	19
2010	197	4	2.03	18.66	14.77	6	20
2011	179	7	3.91	20.15	16.33	8	19
2012	179	3	1.68	19.69	14.26	8	17
Total	2,729	51	1.87	13.48	12.97	61	122

Panel B: Summary statistics by type of CSR proposal

Proposal type	Shareholder proposals	Approved proposals	Approved proposals (%)	Average vote outcome (%)	SD vote outcome (%)	Vote outcome ±5%	Vote outcome ±10%
Environment issues	648	8	1.23	15.13	13.16	17	38
Environmental issues	504	5	0.99	13.08	11.58	7	19
Sustainability report	144	3	2.08	22.29	15.67	10	19
Social issues	2,081	43	2.07	12.97	12.86	44	84
Add minorities/women to board	79	2	2.53	18.29	12.60	2	4
Animal rights	130	0	0.00	4.99	3.19	0	0
Health issues	391	1	0.26	7.54	7.60	0	1
Human rights	227	1	0.44	11.90	11.12	0	4
Labor issues	455	24	5.27	16.42	14.69	23	36
Other social issues related	355	9	2.54	9.29	11.64	7	9
Political issues	444	6	1.35	19.11	13.84	12	30

Panel C: Summary statistics by sponsor

Proposal sponsor	Shareholder proposals	Approved proposals	Approved proposals (%)	Average vote outcome (%)	SD vote outcome (%)	Vote outcome ±5%	Vote outcome ±10%
Individual	449	6	1.34	8.88	9.77	5	7
Public pension fund	437	17	3.89	21.28	14.71	27	49
Religious	834	5	0.60	10.55	10.31	5	14
SRI fund	506	17	3.36	16.94	15.16	13	33
Union	201	4	1.99	15.48	12.15	7	13
Other	302	2	0.66	10.06	10.58	4	6

Notes. This table displays the frequency of shareholder proposals, the frequency and percentage of approved proposals, the mean and standard deviation of the percentage of favorable votes, and the frequency of proposals whose vote share is within 5% and 10% of the majority threshold. The sample consists of all CSR proposals in the RiskMetrics and SharkRepellent databases from 1997 to 2012. In panel A, proposals are classified by year; in panel B, by type of CSR; and in panel C, by the proposal's sponsor.

summary of this methodology. For more details, see Section II of CGG.

3.2.1. Regression Discontinuity in Shareholder Votes. The objective is to estimate the effect of passing a CSR proposal on an outcome variable for firm i at time t, denoted by y_{it} (e.g., the stock market reaction on the day of the shareholder meeting). The proposal receives a vote share v_{it}. Whether the proposal is approved is denoted by the indicator variable $pass_{it} = 1(v_{it} \geq v^*)$, where v^* is the majority threshold.[4] To estimate the effect of CSR proposals on y_{it}, I would ideally need a randomized assignment

[4] For most companies, the threshold is 50% of the votes. In the rare cases when companies have a stricter majority requirement

of the *pass* indicator. The RDD is helpful in approximating this ideal setting, since it relies on proposals that pass or fail by a narrow margin of votes. Arguably, whether a proposal passes by 50.1% of the votes or whether it fails by 49.9% is as good as random. Accordingly, such close call CSR proposals provide a source of random variation in the adoption of CSR proposals that can be used to estimate the causal effect of passing a CSR proposal on y_{it}.

The RDD can be implemented by estimating the difference in average y_{it} between CSR proposals that pass or fail by a small margin of votes. Although this difference does provide an unbiased estimate of the effect of passing a CSR proposal on y_{it}, it comes at the cost of discarding all non-close proposals. A more efficient estimate can be obtained by using all CSR proposals and approximating the continuous relationship between y_{it} and v_{it} with a polynomial in v_{it}, allowing for a discontinuous jump at the majority threshold v^*. Following CGG, I allow for a different polynomial for observations on the left-hand side of the threshold $P_l(v_{it}, \gamma_l)$ and on the right-hand side of the threshold $P_r(v_{it}, \gamma_r)$. The RDD specification can be written as follows:

$$y_{it} = \beta \times pass_{it} + P_l(v_{it}, \gamma_l) + P_r(v_{it}, \gamma_r) + \varepsilon_{it}. \quad (1)$$

The estimate of β captures the discontinuity at the majority threshold and hence provides a consistent estimate of the causal effect of passing a CSR proposal on y_{it}.[5] To account for within-firm dependence across observations, I cluster standard errors at the firm level. Throughout the paper, I use polynomials of order 3. The results are similar if I use second- or fourth-order polynomials instead.

3.2.2. Multiple Periods and Multiple Votes. As CGG emphasize, the specification in Equation (1) is subject to two potential caveats. First, the shareholder vote at time t may have an impact on outcomes at $t+1$, $t+2$, etc. Second, for each firm and meeting date, shareholders may have to vote on more than one CSR proposal.

To address these two caveats, CGG propose a multiperiod version of specification (1) in which multiple CSR proposals in a given meeting are "aggregated." In a nutshell, this procedure can be implemented as follows. First, the multiple periods are accounted for by using a panel data set in which, for each firm-meeting (i,t), observations at time $t+\tau$ are pooled for multiple τ, including $\tau < 0$. Specifically, I use observations in periods $t-2$ to $t+T$ (as in CGG, T is up to seven days for abnormal returns and up to four years for annual variables such as the return on assets). The coefficient on the dummy for whether the proposal has passed β_τ is then τ-specific and is constrained to zero for $\tau < 0$. Similarly, the parameters of the polynomials $\gamma_{l,\tau}$ and $\gamma_{r,\tau}$ are allowed to vary for $\tau \geq 0$. Since observations before and after the event are pooled together, an advantage of this specification is that I can include firm-meeting fixed effects in the regression α_{it}. Doing so accounts for any unobservable firm characteristics that are constant during the event window. Following CGG, I further include fixed effects for the time period relative to the meeting date α_τ ("distance-to-the-election" fixed effects) and fixed effects for the calendar year α_c.

Second, CGG propose an aggregation procedure that accounts for the possibility of multiple proposals in the same shareholder meeting. Implementing this procedure is straightforward. Essentially, the *pass* dummy in Equation (1) is replaced by the sum of the *pass* dummies for all n proposals that are voted on in the same meeting (i.e., the "aggregated *pass* dummy" becomes a count variable for the number of CSR proposals that are passed in the meeting). The polynomials in vote share are adjusted accordingly. A formal treatment of this aggregation procedure is provided in CGG.

The multiperiod version of Equation (1) that accounts for the possibility of multiple proposals can be expressed as follows:

$$y_{i,t+\tau} = \beta_\tau \sum_{k=1}^{n} pass_{it}^k + \left[P_l\left(\sum_{k=1}^{n} v_{it}^k, \gamma_{l,\tau}^k \right) + P_r\left(\sum_{k=1}^{n} v_{it}^k, \gamma_{r,\tau}^k \right) \right] + \alpha_{it} + \alpha_\tau + \alpha_c + \varepsilon_{i,t+\tau}. \quad (2)$$

This specification is essentially Equation (7) in CGG (p. 1958). As in specification (1), standard errors are clustered at the firm level and third-order polynomials are used throughout.

3.3. Variable Definitions and Sample Characteristics

3.3.1. Abnormal Returns. The main dependent variable used in this paper is the abnormal return on the day of the shareholder meeting ($t = 0$). Using abnormal returns is appealing because they provide an estimate of the effect of passing a CSR proposal on firm value, thus capturing all potential channels through which CSR may benefit shareholders. Another advantage of using stock returns is the high signal-to-noise ratio: the stock market reaction on the day of the vote is most likely attributable to the vote itself. In contrast, accounting measures of performance—e.g., the return on assets in the following year—may capture other events that have occurred during the year.

(e.g., a "supermajority" requirement of two-thirds of the votes), I adjust v^* accordingly.

[5] Since shareholder proposals are not binding, β only measures the effect of approving a CSR proposal as opposed to the effect of implementing a CSR proposal. The latter can be approximated by rescaling the estimate of β by the probability of implementation; see §4.2.

Following CGG, I compute abnormal returns using the four-factor model of Carhart (1997). The four factors are the market return (the return on the market portfolio minus the risk-free rate), the size factor ("small minus big"), the book-to-market factor ("high minus low"), and the momentum factor ("up minus down"). In robustness checks, I show that my results are similar if I use the market model instead.

Daily stock return data are obtained from the Center for Research in Security Prices. The four factors are obtained from Kenneth French's website (http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html, accessed January 31, 2015). The coefficients of the four-factor model are estimated by ordinary least squares using an estimation period of 200 trading days that starts 20 trading days prior to the shareholder meeting. To be included in the sample, a stock needs to have at least 15 days with nonmissing returns during the 200-day estimation period.

3.3.2. Summary Statistics. The 2,729 CSR proposals used in this study correspond to 1,845 firm-year observations. Table 3 provides summary statistics for the abnormal return on the day of the shareholder meeting (first row) as well as several other characteristics, which are constructed from various data sources.

The companies' financials are computed from Standard & Poor's Compustat in the fiscal year that ends prior to the shareholder meeting. *Market value* is the number of shares outstanding multiplied by the stock price at the end of the fiscal year. *Total assets* is the book value of assets. Return on assets (*ROA*) is the ratio of operating income before depreciation to the book value of assets. Return on equity (*ROE*) and net profit margin (*NPM*) are defined similarly except that the denominator is the book value of equity plus deferred taxes and investment tax credit for *ROE* and sales for *NPM*. *Tobin's Q* is the ratio of the market value of total assets (book value of assets plus the

Table 3 Summary Statistics

Characteristic	*N*	Mean	Median	SD	10th %ile	90th %ile
Abnormal return on meeting day	1,845	0.001	0.001	0.023	−0.019	0.024
Market value ($ million)	1,845	37,881	12,673	62,748	1,286	108,424
Total assets ($ million)	1,838	77,365	16,539	238,890	1,441	138,354
ROA	1,810	0.137	0.137	0.083	0.037	0.251
ROE	1,561	0.362	0.333	0.270	0.161	0.721
NPM	1,810	0.194	0.173	0.140	0.065	0.377
Tobin's Q	1,588	1.890	1.493	1.102	0.985	3.500
KLD index	1,687	4.06	3.00	3.82	0.00	9.00
G-index	1,666	9.23	9.00	2.62	6.00	13.00
Institutional ownership (%)	1,750	63.27	68.40	26.99	8.38	91.34
Inside ownership (%)	1,761	0.64	0.00	4.14	0.00	0.97
Labor productivity	1,824	437	332	328	128	1,090
Capital expenditures	1,788	0.051	0.042	0.042	0.005	0.106
Sales growth	1,781	0.071	0.062	0.132	−0.102	0.255
Leverage	1,836	0.264	0.254	0.158	0.049	0.474
Cash	1,833	0.101	0.057	0.120	0.008	0.252
Labor intensity (industry-level)	1,845	0.321	0.282	0.183	0.126	0.586
B2C industry	1,845	0.425	0.000	0.495	0.000	1.000

Notes. The 2,729 CSR proposals considered in this study correspond to 1,845 firm-year observations. Abnormal returns on the day of the vote are computed using the four-factor model of Carhart (1997). All Compustat variables are computed in the fiscal year that ends prior to the date of the vote. *Market value* is the number of shares outstanding (Compustat item "CSHO") multiplied by the stock price at the end of the fiscal year ("PRCC_F"). *Total assets* is the book value of total assets ("AT"). *ROA* (return on assets) is the ratio of operating income before depreciation ("OIBDP") to the book value of total assets. *ROE* (return on equity) and *NPM* (net profit margin) are defined similarly except that the denominator for *ROE* is the book value of equity ("CEQ") plus deferred taxes and investment tax credit ("TXDITC") and for *NPM* is sales ("SALE"). *Tobin's Q* is the ratio of the market value of total assets to the book value of total assets. The market value of total assets is the book value of total assets plus the market value of equity (CSHO × PRCC_F) minus the sum of the book value of equity (CEQ) plus deferred taxes and investment tax credit (TXDITC). *Labor productivity* is the ratio of sales (SALE) to the number of employees ("EMP"). *Capital expenditures* is the ratio of capital expenditures ("CAPX") to total assets. *Sales growth* is the growth in sales (SALE) compared with the previous fiscal year. *Leverage* is the ratio of debt in current liabilities ("DLC") and long-term debt ("DLTT") to total assets. *Cash* is the ratio of cash and short-term investments ("CHE") to total assets. The *KLD index* is the number of CSR strengths (from the Kinder, Lydenberg, and Domini database). The *G-index* is the governance index of Gompers et al. (2003), obtained from RiskMetrics. The *KLD index* and *G-index* are measured in the calendar year prior to the vote. *Institutional ownership* is the percentage of shares owned by institutional investors in the quarter that ends prior to the date of the vote (from the Thomson-Reuters Institutional Holdings database). *Inside ownership* is the percentage of shares owned by all executives of the firm in the fiscal year prior to the date of the vote (from ExecuComp). *Labor intensity* is the median ratio of the sum of staff expense ("XLR") and pension and retirement expense ("XPR") to sales (SALE) in the company's two-digit SIC industry in the year preceding the vote. *B2C industry* is a dummy variable equal to 1 if the company operates in the B2C sector according to the classification of Lev et al. (2010, p. 188) based on four-digit SIC codes. All ratios are winsorized at the 5th and 95th percentiles of their empirical distribution. Note that the number of observations may change as a result of missing values. %ile, percentile.

market value of equity minus the sum of the book value of equity plus deferred taxes and investment tax credit) to the book value of assets. *Labor productivity* is the ratio of sales to the number of employees. *Capital expenditures* is the ratio of capital expenditures to total assets. *Sales growth* is the growth in sales compared with the previous fiscal year. *Leverage* is the ratio of debt in current liabilities and long-term debt to total assets. Finally, *cash* is the ratio of cash and short-term investments to total assets. To mitigate the impact of outliers, all ratios are winsorized at the 5th and 95th percentiles of their empirical distribution.

In addition to accounting variables, Table 3 also includes governance variables. *G-index* is the governance index of Gompers et al. (2003) in the calendar year that ends before the shareholder meeting. It adds one index point for each of 24 (anti)governance provisions. *G-index* is obtained from RiskMetrics. It is available for the years 1990, 1993, 1995, 1998, 2000, 2002, 2004, and 2006. To fill in the missing years, I use the latest available value of the index. *Institutional ownership* is the percentage of shares owned by institutional investors in the quarter that ends prior to the date of the shareholder meeting. The data on institutional ownership are obtained from the Thomson-Reuters Institutional Holdings database. Finally, *inside ownership* is the percentage of shares owned by all executives of the firm, which is obtained from ExecuComp in the fiscal year that ends prior to the shareholder meeting.

Table 3 also includes a measure of CSR: *KLD index*. This index is obtained from the Kinder, Lydenberg, and Domini (KLD) database. KLD is a social choice investment advisory firm that relies on independent rating experts to assess how well companies address the needs of their stakeholders based on multiple data sources including annual questionnaires sent to companies' investor relations offices, firms' financial statements, annual and quarterly reports, general press releases, government surveys, and academic publications. The composite *KLD index* is constructed by summing up the number of CSR strengths along the following dimensions: employees, customers, the natural environment, and society at large (community and minorities).[6] *KLD index* is computed in the calendar year that ends prior to the shareholder meeting. As can be seen, the average *KLD index* is 4.06, which indicates that the average company in my sample has about four CSR strengths.

Finally, Table 3 also includes two industry-level measures of "stakeholder sensitivity," i.e., the extent to which performance is sensitive to the relationship with employees and customers, respectively. Following Agrawal and Matsa (2013), I define *labor intensity* as the median wages-to-sales ratio in the company's two-digit Standard Industrial Classification (SIC) industry in the year preceding the vote. The wages-to-sales ratio is computed as the ratio of labor and pension expenses to sales using Compustat data. Since companies in labor-intensive industries rely more heavily on human capital, their performance is likely more sensitive to their relationship with employees. The second measure, *B2C industry*, is an indicator variable equal to 1 if the company operates in a business-to-consumer (B2C) industry, where individual consumers are the predominant customers. Lev et al. (2010) show that individual consumers are more sensitive to companies' social engagement than industrial buyers, which reflects inherent differences in the purchasing decision-making process (Corey 1991).[7] To identify the set of B2C industries, I use the classification of Lev et al. (2010, p. 188) based on four-digit SIC codes.

3.4. Tests for Quasi-Randomized Assignment

The identifying assumption of the RDD is that, around the majority threshold, passing a CSR proposal is as good as randomly assigned. This assumption has testable implications, akin to the tests of effective randomization in experimental data. In this section, I provide two standard tests of this assumption.

3.4.1. Continuity in the Distribution of Shareholder Votes. The first test evaluates whether the distribution of shareholder votes is continuous around the majority threshold. Any discontinuity would be symptomatic of a nonrandom assignment of "pass" versus "fail" around the threshold.

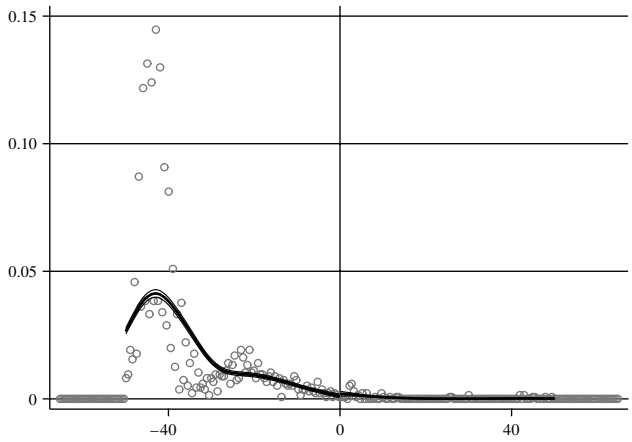
A visual inspection of the histogram in Figure 1 suggests that the distribution is indeed smooth and continuous around the majority threshold. A more formal approach is provided in Figure 2, which implements the McCrary (2008) test for smoothness of the density function around the threshold. As is shown, there is no evidence for a discontinuous jump. The null of continuity of the density function at the threshold cannot be rejected (p-value $= 0.974$).[8]

[6] The KLD database also compiles strengths pertaining to corporate governance. Since the definition of CSR underlying this study does not encompass corporate governance, governance strengths are not included in the calculation of *KLD index*.

[7] More precisely, "[t]he purchasing decision of an individual consumer is affected not only by product attributes, but also by social group forces, psychological factors, and the consumer's situational forces. In contrast, in industrial purchasing, the decision-making process is highly formalized, using defined procurement procedures, and subject to economic (cost/value) analysis" (Lev et al. 2010, p. 186; adapted from Corey 1991).

[8] Finding a smooth distribution around the majority threshold is typical of shareholder-sponsored proposals (e.g., CGG, Cuñat

Figure 2 Visualization of the McCrary (2008) Test



Notes. This figure presents a visualization of the McCrary (2008) test for the continuity of the vote share distribution around the majority threshold. The horizontal axis indicates the victory margin (i.e., the vote share minus the majority threshold). The vertical axis indicates the logarithm of the estimated density.

3.4.2. Preexisting Differences. The second testable implication of the randomness assumption is that companies whose voting share is immediately below or above the majority threshold should be very similar on the basis of ex ante characteristics. Intuitively, if the outcome of close call proposals is as good as randomized, it should be orthogonal to firm characteristics prior to the vote.

In Table 4, I examine whether there are any preexisting differences between companies that pass and reject CSR proposals. I consider all characteristics listed in Table 3. In columns (1) and (2), I examine these characteristics in the year preceding the shareholder meeting ($t-1$). In columns (3) and (4), I examine the change in these characteristics between years $t-2$ and $t-1$. The exception is the abnormal return in the first row of the table, where $t-1$ is the day prior to the meeting and the change from $t-2$ to $t-1$ refers to the difference in abnormal returns in the two days preceding the meeting. Columns (1) and (3) report the differences among all firms in my sample, whereas columns (2) and (4) report the differences at the majority threshold by including third-order polynomials on both sides of the threshold.[9]

As can be seen in columns (1) and (3), companies that pass a CSR proposal differ significantly from companies that reject it. Importantly, however,

Table 4 Preexisting Differences as a Function of the Vote Outcome

	Before meeting ($t-1$)		Change from ($t-2$) to ($t-1$)	
	(1)	(2)	(3)	(4)
Abnormal return	−0.000	−0.002	0.001	0.003
	(0.006)	(0.006)	(0.008)	(0.009)
Market value (log)	−1.519***	−0.264	0.064	0.000
	(0.391)	(0.642)	(0.075)	(0.161)
Total assets (log)	−1.579***	−0.375	0.003	0.009
	(0.346)	(0.588)	(0.031)	(0.061)
ROA	−0.045**	−0.004	0.001	−0.008
	(0.020)	(0.030)	(0.006)	(0.010)
ROE	−0.088**	0.037	0.039	0.038
	(0.038)	(0.063)	(0.045)	(0.071)
NPM	−0.046	−0.026	0.005	−0.024
	(0.043)	(0.099)	(0.004)	(0.036)
Tobin's Q	−0.027	0.005	0.026	0.009
	(0.064)	(0.084)	(0.022)	(0.031)
KLD index	−2.709***	−0.059	0.092	0.291
	(0.543)	(0.879)	(0.280)	(0.437)
G-index	0.276	−1.057	−0.067	0.046
	(0.470)	(0.733)	(0.063)	(0.060)
Institutional ownership (%)	8.388*	−0.817	−2.567**	−1.188
	(4.924)	(8.420)	(1.241)	(2.473)
Inside ownership (%)	−0.355*	0.072	0.570	0.011
	(0.208)	(0.128)	(0.782)	(0.718)
Labor productivity (log)	−0.015	−0.006	−0.003	−0.017
	(0.179)	(0.316)	(0.032)	(0.052)
Capital expenditures	−0.009	0.004	−0.007**	−0.007
	(0.008)	(0.013)	(0.003)	(0.008)
Sales growth	0.005	−0.004	0.027	−0.018
	(0.028)	(0.051)	(0.033)	(0.059)
Leverage	−0.053	−0.093*	−0.001	0.020
	(0.033)	(0.053)	(0.016)	(0.028)
Cash	0.051**	−0.004	−0.007	0.000
	(0.025)	(0.039)	(0.006)	(0.010)
Labor intensity (industry-level)	0.021	0.000	0.023	0.006
	(0.037)	(0.049)	(0.016)	(0.022)
B2C industry	0.044	0.006	—	—
	(0.096)	(0.152)	—	—
Polynomial in vote share	No	Yes	No	Yes

Notes. This table tests whether the adoption of CSR proposals is systematically related to firm characteristics prior to the meeting. All characteristics are defined in Table 3. In columns (1) and (2), these characteristics are measured in the year preceding the shareholder meeting ($t-1$). Columns (3) and (4) consider the change in these characteristics between years $t-2$ and $t-1$. The exception is the abnormal return in the first row of the table, where t refers to days instead of years (e.g., $t-1$ is the day prior to the meeting). Each row corresponds to a different characteristic and each entry comes from a separate regression. Columns (1) and (3) report the differences among all firms, whereas columns (2) and (4) report the differences at the majority threshold by controlling for a third-order polynomial in the vote share on both sides of the threshold. Standard errors (in parentheses) are clustered at the firm level.

*, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

et al. 2013, Listokin 2008). This is in stark contrast to *management*-sponsored proposals (which are excluded from my analysis). As Listokin (2008, p. 161) shows, for management-sponsored proposals, the distribution of votes exhibits a sharp discontinuity at the majority threshold. Essentially, these proposals rarely fail as management strategically withdraws those proposals that are expected to fail.

[9] See CGG (pp. 1959–1961) for a similar test.

columns (2) and (4) show that these differences disappear at the majority threshold.[10] Overall, this evidence suggests that there is no significant difference between companies that pass and reject CSR proposals around the majority threshold, which lends support to my identification strategy.

4. Results

4.1. Main Results

4.1.1. Graphical Analysis. To measure the impact of passing a CSR proposal on shareholder value, I examine the stock market reaction on the day of the shareholder meeting. Figure 3 provides a visualization of the data. Specifically, the figure plots abnormal returns against the victory margin (i.e., the vote share minus the majority threshold). Each dot in the figure represents the average abnormal return in 2% bins of vote share. The solid line plots predicted values of abnormal returns from third-order polynomials in vote share estimated separately to the left and right of the majority threshold.

As can be seen from the figure, abnormal returns appear to be a continuous and smooth function of the vote share everywhere except at the winning threshold, where there is a discontinuous jump. This evidence suggests that proposals that are approved by a small margin of votes lead to an increase in firm value compared with proposals that fail by a small margin of votes. Interestingly, abnormal returns seem to converge to zero as we move further to the left or right of the majority threshold. This pattern suggests that the outcome of non-close votes is anticipated by the market, and hence any value implication is already impounded in stock prices.[11]

4.1.2. Regression Analysis. The graphical analysis in Figure 3 suggests that the adoption of close call CSR proposals leads to an increase in shareholder value. A more formal test of this hypothesis is provided in Table 5, which reports estimates of the difference in abnormal returns between CSR proposals that pass and CSR proposals that fail for increasingly small intervals around the majority threshold.

Column (1) of Table 5 estimates this difference in the full sample of 2,729 proposals and shows that it is insignificant. The lack of significance is driven by the non-close proposals (i.e., those proposals whose vote share is more than 10% above or below the majority threshold). As is shown in column (2), restricting the sample to non-close proposals yields a difference in abnormal returns that is virtually zero. This finding likely reflects the fact that the outcome of non-close proposals is highly predictable, and hence their effect is already incorporated in stock prices prior to the vote.

Column (3) restricts the sample to the 122 CSR proposals whose vote share is within 10% of the majority threshold. The difference in abnormal returns is 1.07%, which is significant at the 5% level. This difference is somewhat larger in columns (4)–(6), where the sample is restricted to proposals whose vote share is within 5%, 2.5%, and 1.5%, respectively, of the majority threshold (the difference in abnormal returns lies between 1.09% and 1.36%). It is significant in columns (4) and (5) and marginally insignificant ($t = 1.58$) in column (6). The weaker significance in column (6) is likely due to the small number of observations (only nine proposals have vote shares within 1.5% of the threshold). Overall, the evidence in columns (3)–(6) indicates that CSR proposals that are approved by a small margin of votes lead to a significant increase in shareholder value compared to CSR proposals that are marginally rejected.

In column (7), I estimate the specification given by Equation (1). This specification controls for two polynomials of order 3 in the vote share on both sides of the majority threshold. Unlike the nonparametric estimates in columns (3)–(6), this approach makes use of all 2,729 CSR proposals and hence provides a more efficient estimate of the causal effect of CSR proposals on abnormal returns. As is shown, the coefficient on the *pass* dummy is 1.18% and is significant at the 5% level. This coefficient is very similar to the estimate in column (6) that relies on proposals whose outcome is closest to the threshold.[12]

Finally, in column (8), I reestimate the regression in column (7) with control variables. The controls include all variables listed in Table 3 measured prior to the vote, as well as year dummies. If the outcome of the vote is truly random, including these controls should not affect the coefficient on the pass dummy—as in randomized experiments—since all predetermined characteristics should be orthogonal to the assignment of pass versus fail. Indeed, I find that the coefficient is very similar to the one in column (7).

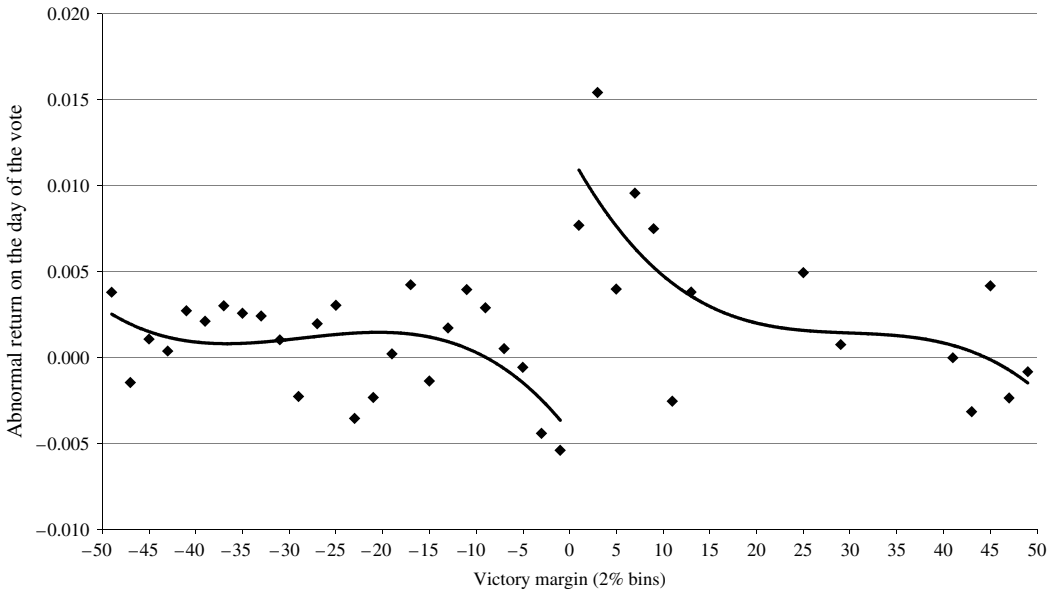
4.1.3. Multiple Votes and Multiperiod Analysis. As discussed in §3.2, the analysis in Table 5 does not account for the possibility that shareholders may have to vote on more than one CSR proposal in a given

[10] Leverage in $t-1$ is significantly different at the 10% level. However, given the large number of characteristics considered in Table 4, it is expected that some of them would appear significantly different even if the two groups of firms are drawn from the same distribution.

[11] This pattern is in line with the theoretical prediction of CGG (see their Figure 1 on p. 1951).

[12] The coefficient on the *pass* dummy is very similar if instead of third-order polynomials in the vote share, I use second- or fourth-order polynomials. The corresponding coefficients are 1.20% ($t = 2.28$) and 1.12% ($t = 1.89$), respectively.

Figure 3 Abnormal Returns on the Day of the Vote



Notes. The vertical axis indicates abnormal returns on the day of the vote. Abnormal returns are computed using the four-factor model of Carhart (1997). The horizontal axis indicates the victory margin (i.e., the vote share minus the majority threshold). Each dot in the figure represents the average abnormal return in 2% bins of victory margin. The solid line plots predicted values of abnormal returns from third-order polynomials in victory margin estimated separately to the left and right of the majority threshold.

meeting. Nor does it account for the possibility that the effect of the shareholder vote may affect returns beyond the day of the meeting.

To address these caveats, I estimate the specification given by Equation (2), i.e., the multiperiod specification in which multiple CSR proposals in a given meeting are "aggregated." This regression estimates the effect of passing a CSR proposal on abnormal returns on the meeting date (t), the day after ($t+1$), and over the period from $t+2$ to $t+7$ (the cumulative abnormal returns over this period). The results are presented in column (1) of Table 6. As is shown, I only find a significant effect on the day of the meeting (0.92% abnormal returns, $t = 2.56$), and the magnitude of this effect is similar to the full model estimates in Table 5. In the days following the meeting, the abnormal returns are small and insignificant. This pattern indicates that shareholders react on the day of the vote, when the surprise around the threshold occurs. In the remainder of this paper, I will refer to the specification used in column (1) of Table 6 as my *baseline specification* since it is more conservative than the specifications used in Table 5.

Table 5 Abnormal Returns Around the Majority Threshold

			Vote share					
	All votes (1)	Non-close (2)	±10% (3)	±5% (4)	±2.5% (5)	±1.5% (6)	Full model (7)	Full model with controls (8)
Pass	0.0064	−0.0008	0.0107**	0.0136**	0.0109***	0.0117	0.0118**	0.0107**
	(0.0040)	(0.0044)	(0.0046)	(0.0058)	(0.0038)	(0.0074)	(0.0053)	(0.0052)
R-squared	0.001	0.000	0.056	0.099	0.255	0.204	0.007	0.044
Observations	2,729	2,607	122	61	23	9	2,729	1,780

Notes. This table presents regressions of the abnormal returns on the day of the vote on the *pass* dummy, i.e., a dummy variable that equals 1 if the proposal is adopted and 0 otherwise. Abnormal returns are computed using the four-factor model of Carhart (1997). In column (1), the sample consists of all 2,729 CSR proposals. Column (2) restricts the sample to non-close CSR proposals (i.e., those proposals whose vote share is more than 10% above or below the majority threshold). Columns (3)–(6) restrict the sample to CSR proposals whose vote share is within 10%, 5%, 2.5%, and 1.5%, respectively, of the majority threshold. Column (7) estimates the specification given by Equation (1) in the full sample (see §3.2). This specification controls for two polynomials of order 3 in the vote share on both sides of the majority threshold. Column (8) is a variant of the specification in column (7), except that the regression also includes control variables. The control variables include all variables listed in Table 3 measured prior to the vote, as well as year dummies. Standard errors (in parentheses) are clustered at the firm level.

*, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Table 6 Abnormal Returns of Passing CSR Proposals

		Robustness		Confounding effect of governance proposals?		Companies with low vs. high CSR	
	(1)	Market model (2)	Positive returns (3)	No governance proposal ±10% (4)	No governance proposal ±20% (5)	Low KLD index (6)	High KLD index (7)
Day of vote (t)	0.0092**	0.0093**	0.2685***	0.0101**	0.0109***	0.0102**	0.0054*
	(0.0036)	(0.0037)	(0.0871)	(0.0041)	(0.0046)	(0.0047)	(0.0031)
One day later ($t+1$)	−0.0009	−0.0004	0.0973	0.0005	0.0004	0.0011	−0.0039
	(0.0023)	(0.0025)	(0.0635)	(0.0027)	(0.0027)	(0.0031)	(0.0029)
Days $t+2$ to $t+7$	−0.0043	−0.0019	0.0540	−0.0050	−0.0044	−0.0061	−0.0004
	(0.0092)	(0.0099)	(0.0741)	(0.0102)	(0.0104)	(0.012)	(0.0092)
R-squared	0.043	0.042	0.016	0.009	0.007	0.021	0.088
Observations	9,225	9,225	9,225	7,615	6,640	4,215	4,220
Number of firm-meetings	1,845	1,845	1,845	1,523	1,328	843	844

Notes. The regression in column (1) estimates the effect of passing a CSR proposal on the four-factor abnormal returns on the day of the vote (t), the following day ($t+1$), and over the period from $t+2$ to $t+7$ (the cumulative abnormal returns over this period). Columns (2)–(7) present variants of the regression in column (1). In column (2), abnormal returns are computed using the market model instead of the four-factor model. In column (3), the dependent variable is a dummy variable that equals 1 if the (four-factor) abnormal return is positive and 0 otherwise. In columns (4) and (5), the sample excludes all shareholder meetings in which a governance proposal received a vote share within 10% and 20%, respectively, of the majority threshold. In columns (6) and (7), the sample is restricted to companies whose KLD index in the year preceding the vote lies below and above, respectively, the median across all firms in the same two-digit SIC industry. The regression specification used in all columns is the multiperiod specification given by Equation (2), in which multiple CSR proposals in a given meeting are aggregated (see §3.2). All regressions include firm-meeting fixed effects, distance-to-the-election fixed effects, as well as year fixed effects. Standard errors (in parentheses) are clustered at the firm level.

*, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

4.1.4. Robustness. Columns (2) and (3) of Table 6 present two robustness checks. These robustness checks are variants of the baseline specification used in column (1).

In column (2), I compute abnormal returns using the market model instead of the four-factor model. As can be seen, all coefficients are very similar to before: the effect on the day of the vote is 0.93%, whereas there is no significant effect in the following days.

Given the small number of close call CSR proposals, a potential concern is that my results may be driven by a few large abnormal returns around the majority threshold. To address this concern, I reestimate my baseline specification replacing the abnormal returns by a dummy variable that equals 1 if the abnormal return is positive and 0 otherwise. Since this dummy ignores the magnitude of the abnormal return, it is not sensitive to outliers. (See CGG for a similar robustness check.) As is shown in column (3), the pattern is similar to before. In particular, on the day of the vote, CSR proposals that pass by a small margin of votes are 27% more likely to have positive abnormal returns compared with CSR proposals that fail marginally.

4.1.5. Confounding Effect of Governance Proposals? Another potential concern is that shareholders may not only vote on CSR proposals but also on governance proposals during the same meeting. As CGG show, governance proposals are very frequent, and the adoption of close call governance proposals generates substantial abnormal returns. If, for some reason, shareholders tend to vote in a similar way on all proposals, it could be that CSR proposals that pass by a small margin of votes tend to occur in meetings in which governance proposals also pass by a small margin. In this case, my results may be capturing some of the effect of governance proposals. To address this concern, I reestimate my baseline specification after excluding all shareholder meetings in which a governance proposal received a vote share within 10% of the majority threshold. Arguably, a governance vote that easily passes or is easily defeated has little uncertainty surrounding it, and hence it should not affect the stock price reaction. By contrast, close call governance proposals are likely to affect stock prices. As is shown in column (4) of Table 6, my results are robust to this exclusion. In column (5), I further verify that my results hold if I exclude shareholder meetings in which a governance proposal received a vote within 20% of the majority threshold.

4.1.6. Level of CSR. The results presented so far suggest that the passing of close call CSR proposals improves CFP, which is consistent with the view that CSR is a valuable resource for firms. That being said, the "stock" of CSR resources that is already in place may influence the benefits from implementing an additional CSR program; i.e., the CSR–CFP relationship may not be linear. Arguments can be made for either a concave or convex relationship.

An argument in the spirit of neoclassical economic theory can motivate a concave relationship. Neoclassical models of the firm typically assume decreasing marginal returns of the production factors (e.g., capital and labor). By the same reasoning, CSR as a resource may exhibit decreasing marginal returns. Intuitively, in early stages of designing CSR policies, it may be fairly easy and inexpensive for companies to implement social programs that yield substantial monetary benefits. However, once the low-hanging fruits of CSR have been harvested, it may become increasingly difficult to adopt social policies that further improve the company's financial performance (for a related argument in the context of green initiatives, see Flammer 2013).

On the other hand, it could also be that CSR only affects CFP once a "critical mass" of CSR resources is in place, in which case the relationship is convex. Edmans (2011, 2012) provides evidence along these lines: he shows that there are benefits to being in the very top level of employee satisfaction (the top 100, rather than merely above average).

Accordingly, establishing the precise shape of the CSR–CFP relationship is an empirical question. The empirical framework used in this paper is helpful in addressing this question. Specifically, in columns (6) and (7) of Table 6, I reestimate my baseline specification separately for companies whose KLD index is below or above the median across all firms in the same two-digit SIC industry (in the year that ends prior to the vote). As is shown, the effect is about twice as strong for companies with a lower KLD index. This implies that companies with stronger social performance benefit less from the passing of an additional CSR resolution, thus pointing at a concave relationship between CSR and CFP.

4.2. Magnitude of the Effect

In my baseline specification, the abnormal return of passing a close call CSR proposal is 0.92%. Since shareholder proposals are not binding, this estimate only measures the effect of approving a CSR proposal as opposed to the effect of *implementing* a CSR proposal. The latter can be approximated by rescaling the estimated coefficient by the probability of implementing the proposal. In §4.3.1, I show that CSR proposals have a 52% probability of being implemented. Accordingly, the approximate effect of implementing a close call CSR proposal is $0.92/0.52 = 1.77\%$ in abnormal returns.[13]

[13] CGG propose an alternative way of computing the (implementation-adjusted) effect of a close call proposal on abnormal returns that takes into account not only the probability of the proposal being implemented (p^I) but also the additional effect on the submission and implementation of future proposals. Specifically, instead of computing the ratio β/p^I, one would compute $\beta/(p^I + \sum_{i=1}^{\infty} \delta^i p^p_{t+i})$, where δ is the discount rate and p^p_{t+i} is the change in the probability of passing and subsequently implementing another CSR proposal i periods from now. Using a discount rate of 5% and the forward-looking implementation probabilities provided in column (1) of Table 7, I find that the corresponding abnormal return is 1.76%, which is almost identical to the 1.77% estimate provided above (see pp. 1969–1970 of CGG for a similar calculation).

It is helpful to compare this effect with the effect of other shareholder proposals that have been studied in the literature. In their study of governance proposals, CGG find that adopting close call governance proposals leads to an increase in shareholder value by 2.8%. In a related study, Cuñat et al. (2013) show that the adoption of close call "say-on-pay" proposals increases shareholder value by 4.6%. This comparison indicates that, although CSR proposals are beneficial to shareholders, the benefits are not as substantial as those from governance-type proposals.

Although the value gains from CSR proposals may seem small compared with other proposals, they are nevertheless economically significant. This can be seen by benchmarking my results against the findings from other CSR studies. In particular, Klassen and McLaughlin (1996) find abnormal returns of 0.82% around the announcement of environmental awards. Similarly, Flammer (2013) finds abnormal returns of 0.84% around the announcement of green initiatives. Finally, Edmans (2012) shows that companies listed in the "100 Best Companies to Work For in America" generated 2.3% to 3.8% higher abnormal returns per year from 1984 through 2011. Overall, my estimate of 1.77% lies within the ballpark of what these studies have found.

4.3. Long-Run Effects of CSR

In this section, I evaluate the effect of adopting a close call CSR proposal on long-term firm outcomes (as opposed to the short-term stock market reaction). The specification used throughout is the specification given by Equation (2) at annual frequency. This specification estimates the effect of passing a close call CSR proposal on a given outcome variable in the year of the proposal (t), the following year ($t+1$), and the subsequent three years (the average of the outcome variable from $t+2$ to $t+4$). All results are presented in Table 7.

4.3.1. Implementation. As mentioned in §4.2, shareholder proposals are not binding. Although data on whether each proposal was implemented are not publicly available, I do observe whether the KLD index (i.e., the number of CSR strengths) has

Table 7 Long-Run Effects of CSR Proposals

	Implementation	Governance	Performance				Mechanism		
	KLD index (1)	*Proposal passed* (2)	*ROA* (3)	*NPM* (4)	*ROE* (5)	*Tobin's Q* (6)	*Sales growth* (7)	*Labor productivity* (8)	Capital *expenditures* (9)
Year of the meeting (t)	0.521**	0.0326	0.0018	0.0017	0.0052	0.0195**	0.0089	0.0141	−0.0002
	(0.213)	(0.0238)	(0.0019)	(0.0026)	(0.0069)	(0.0079)	(0.0083)	(0.0176)	(0.0025)
One year later ($t+1$)	0.541**	−0.0023	0.0043*	0.0046*	0.0091	0.0215**	0.0155*	0.0437***	0.0008
	(0.220)	(0.0187)	(0.0023)	(0.0026)	(0.0077)	(0.0085)	(0.0089)	(0.0156)	(0.0026)
Years $t+2$ to $t+4$	0.429**	−0.0007	0.0050**	0.0052*	0.0115	0.0158**	0.0132*	0.0373*	0.0001
	(0.207)	(0.0541)	(0.0024)	(0.0030)	(0.0082)	(0.0078)	(0.0080)	(0.0194)	(0.0024)
R-squared	0.413	0.429	0.845	0.915	0.559	0.859	0.360	0.948	0.849
Observations	7,653	9,225	8,291	8,291	7,322	7,283	8,388	8,364	8,266
Number of firm-meetings	1,689	1,845	1,815	1,815	1,651	1,675	1,803	1,837	1,819

Notes. The regressions presented in this table estimate the effect of passing a CSR proposal on several firm outcomes in the year of the vote (t), the following year ($t+1$), and the subsequent three years (average of the outcome variable from $t+2$ to $t+4$). The dependent variables in columns (1)–(9) are *KLD index*, a dummy variable equal to 1 if a shareholder proposal on governance is passed (*proposal passed*), *ROA*, *NPM*, *ROE*, *Tobin's Q*, *sales growth*, *labor productivity* (in logarithm), and *capital expenditures*, respectively. All variables are defined in Table 3. The regression specification used in all columns is the multiperiod specification given by Equation (2). All regressions include firm-meeting fixed effects, distance-to-the-election fixed effects, as well as year fixed effects. Standard errors (in parentheses) are clustered at the firm level.

*, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

increased after the shareholder meeting. Thus, studying the changes in the KLD index provides a rough estimate of the implementation probability.[14]

The results with the KLD index as dependent variable are presented in column (1). As is shown, the KLD index increases by 0.52 CSR strengths in the year of the proposal (i.e., the year that ends after the meeting date), which can be interpreted as a 52% implementation likelihood. The KLD index remains around that level in the subsequent years.[15]

4.3.2. Corporate Governance. An alternative interpretation of my findings is that the passing of CSR proposals may encourage the adoption of subsequent governance proposals, and it is these proposals that lead to improvements in financial performance. To address this alternative interpretation, I examine whether the passage of CSR proposals affects the likelihood of adopting governance proposals. Specifically, I use as the dependent variable an indicator variable equal to 1 if a governance resolution is adopted. As is shown in column (2), the likelihood of passing a governance proposal does not increase significantly in the four years following the passage of close call CSR proposals.[16]

4.3.3. Operating Performance and Firm Value. Next, I examine the effect of passing a close call CSR proposal on operating performance. I consider three measures of operating performance: *ROA*, *NPM*, and *ROE*.

The results for *ROA* are provided in column (3). As can be seen, *ROA* increases in the year of the meeting. However, the increase is small and insignificant. In the first year after the meeting, the increase in *ROA* is larger and statistically significant. It is also economically significant: the reported coefficient of 0.0043 corresponds to an increase in *ROA* by 3.1%, which represents 5% of the standard deviation of *ROA* (mean and standard deviation of *ROA* are 0.137 and 0.083, respectively; see Table 3). In years $t+2$ to $t+4$, the effect remains stable. Overall, the dynamic pattern indicates that it takes 12–24 months for the CSR program to materialize into higher profitability, and this effect appears to be long-lasting. The pattern is qualitatively similar when I look at *NPM* and *ROE* in columns (4) and (5), although the coefficients in the *ROE* regression are not significant.

Finding a long-lasting improvement in operating performance indicates that the increase in shareholder value—which represents the sum of all discounted future cash flows—may be permanent as well. To examine whether this is the case, I use *Tobin's Q* as

[14] See CGG (p. 1968) for a similar approach. In their analysis of governance proposals, CGG look at changes in the *G*-index of Gompers et al. (2003)—the number of antitakeover provisions in place—to evaluate whether a governance proposal was implemented or not.

[15] The 52% implementation likelihood is in the ballpark of what prior studies have found for other types of shareholder proposals. CGG and Ertimur et al. (2010) find that governance proposals that pass have an implementation likelihood of 31.3% and 31.1%, respectively. Cuñat et al. (2013) find that say-on-pay proposals that are approved have a 52.5% probability of being implemented.

[16] Ideally, I would use the *G*-index as the dependent variable since it reflects actual changes in governance. However, the latest available year of the *G*-index is 2006, and most close call CSR proposals occur as of that year (see panel A of Table 2).

the dependent variable in column (6). As is shown, *Tobin's Q* increases already in the year of the meeting (which is likely driven by the stock market reaction around the day of the vote). In the subsequent years, it remains at a similar level. This pattern indicates that the value gains from close call CSR proposals are long-lasting.

4.3.4. How Does CSR Benefit Companies? The evidence reported so far suggests that CSR benefits shareholder value through an increase in operating performance. In the following, I discuss several plausible channels through which CSR may improve operating performance.

First, implementing CSR programs may be a way to cater to customers that are responsive to sustainable practices (e.g., Baron 2008, McWilliams and Siegel 2001, Reinhardt 1998). In this case, one might expect an increase in sales growth following the adoption of CSR proposals, as they would allow companies to extend their customer base.

Second, it could be that CSR programs increase employee satisfaction. Several articles in the management literature argue that by nurturing the relationship to its employees, a company can attract, motivate, and retain the most talented employees in the industry (e.g., Albinger and Freeman 2000, Greening and Turban 2000, Peterson 2004, Pfeffer 1994, Turban and Greening 1996, Vogel 2005). Relatedly, Edmans (2011, 2012) shows that companies with higher job satisfaction earn higher abnormal returns compared with their peers. Accordingly, if employee satisfaction is the underlying mechanism behind the increase in profitability, I should observe an increase in labor productivity following the passage of close call CSR proposals.

Third, CSR initiatives may foster the use of more efficient technologies or production processes (e.g., environment-friendly technologies). In particular, Porter (1991) views pollution as a waste of resources (e.g., energy and material) and argues that efforts to reduce pollution might not only reduce a company's environmental footprint but also strengthen its competitiveness. A growing literature extends Porter's view (for reviews, see Ambec and Lanoie 2008, Berchicci and King 2007, Etzion 2007). For instance, the literature on sustainability in business examines ways in which companies can become more environmentally friendly and how these greening initiatives influence financial performance. In particular, companies can become more sustainable by leveraging the low-hanging fruits of efficiency and waste management and hence achieve significant financial benefits (e.g., Clelland et al. 2000, Rusinko 2007, Russo and Harrison 2005). Accordingly, if the increase in performance comes from improved production processes and technologies, I should observe an increase in capital investment after the passing of close call CSR proposals.

I examine these three channels in Table 7, columns (7)–(9). As is shown in column (7), *sales growth* increases after the adoption of close call CSR proposals, which is consistent with the demand channel. As for the supply-side mechanisms, the estimates in column (8) show that *labor productivity* increases significantly in the years following the vote, which lends support to the employee satisfaction channel. By contrast, the estimates in column (9) show no evidence for a significant increase in physical investment. The latter finding does not necessarily reject the investment channel. For example, it could be that companies' efforts to reduce emissions translate in a decrease in investment (e.g., the closure of polluting facilities) so that the net effect is ambiguous. A more thorough analysis of this mechanism would require detailed facility-level data.[17]

5. External Validity

5.1. How Representative Is the Sample?

Are the companies in my sample representative of the average public firm in the U.S. economy? To assess whether this is the case, I benchmark my sample with the Compustat universe. The comparison is provided in panel A of Table 8. The column under the heading "Mean CSR proposals" restates the means from Table 3, and the column under the heading "Mean Compustat" provides the corresponding means based on all firm-year observations in Compustat during the sample period (1997–2012). The column next to it reports the *p*-value of the difference-in-means test.

As can be seen, the two samples differ on the basis of several characteristics. Two main differences are worth emphasizing. First, companies in my sample are significantly larger.[18] This pattern is similar to the Cuñat et al. (2013) finding that companies whose shareholders submit say-on-pay proposals are on average larger than S&P 1500 companies. Second, companies in my sample display higher levels of CSR: their number of KLD strengths is about four

[17] In untabulated regressions, I also examine whether companies increase their marketing expenses after the passage of close call CSR proposals, e.g., as a way to communicate their CSR efforts to their customer base. Specifically, I consider advertising expenses (defined as the ratio of advertising expenses to total assets from Compustat) as the dependent variable. I find no significant change in this variable after the vote.

[18] To the extent that the main sampling frame of SharkRepellent and RiskMetrics are the Russell 3000 and the S&P 1500 indices, respectively, this difference is partly mechanical. However, it does subsist if instead of the Compustat universe I use the Russell 3000 universe as the benchmark.

Table 8 External Validity

	CSR proposals	Compustat vs. CSR proposals		Close call CSR proposals vs. CSR proposals	
	Mean CSR proposals	Mean Compustat	*p*-value	Mean close call	*p*-value
		Panel A: Firm characteristics			
Market value ($ million)	37,881	3,266	0.000	28,639	0.126
Total assets ($ million)	77,365	8,868	0.000	63,686	0.267
ROA	0.137	0.049	0.000	0.128	0.147
ROE	0.362	0.144	0.000	0.346	0.596
NPM	0.194	0.045	0.000	0.182	0.522
Tobin's Q	1.890	1.905	0.904	1.801	0.363
KLD index	4.06	1.26	0.000	3.65	0.373
G-index	9.23	8.99	0.159	9.91	0.294
Institutional ownership (%)	63.27	36.49	0.000	75.61	0.016
Inside ownership (%)	0.64	1.39	0.000	0.81	0.589
Labor productivity	437	323	0.000	526	0.424
Capital expenditures	0.051	0.133	0.000	0.050	0.826
Sales growth	0.071	0.022	0.000	0.091	0.441
Leverage	0.264	0.214	0.000	0.246	0.757
Cash	0.101	0.181	0.000	0.109	0.697
Labor intensity (industry level)	0.321	0.258	0.000	0.399	0.036
B2C industry	0.425	0.347	0.000	0.541	0.047
		Panel B: Proposal characteristics			
Labor and environment issues	0.404	—	—	0.656	0.000
Related to performance	0.224	—	—	0.557	0.000

Notes. This table compares the sample of CSR proposals ("CSR proposals") with the Compustat universe ("Compustat") and the subset of CSR proposals whose vote outcome is within 5% of the majority threshold ("Close call CSR proposals"). Means for the CSR proposal sample are restated from Table 3. Means for the Compustat sample are computed across all available firm-year observations during the sample period (1997–2012). Means for the close call CSR proposal sample are computed as in Table 3, but with respect to the close call CSR proposals. The *p*-values refer to the difference-in-means test. The variables in panel A are defined in Table 3. *Labor and environment issues* is an indicator variable equal to 1 if the proposal is on labor or environment issues (see panel B of Table 2). *Related to performance* is an indicator variable equal to 1 if the proposal's support statement contains performance keywords (see §5.2).

times higher. This difference is intuitive: companies whose shareholders are more inclined toward CSR have higher levels of CSR and at the same time are more likely to submit CSR proposals. Although these differences do not bias my estimate of the treatment effect, they do indicate that my findings may not necessarily apply to the average U.S. public firm.

5.2. How Representative Are Close Call CSR Proposals?

A limitation of my research design is that the effect is identified by the subset of CSR proposals whose vote outcome is close to the majority threshold. Although this limitation is inherent to any RDD, it is especially important in my setting given the relatively small number of close call CSR proposals. As discussed in §3.1, only 61 out of the 2,729 proposals have vote outcomes within 5% of the majority threshold; i.e., about 2.2% of the proposals identify the effect at work.[19] Moreover, the vast majority of CSR proposals receive little support at shareholder meetings (the average vote outcome is merely 13.5%; see §3.1). This is in sharp contrast to close call proposals, which garner sufficient support to achieve a vote outcome close to 50%. Hence, close call CSR proposals appear to be "special" and hence may not be representative of the average CSR proposal. In the following, I characterize the set of close call CSR proposals and discuss how they differ from non-close proposals.

First, I examine which types of proposals (based on the nine CSR subcategories listed in panel B of Table 2) are more frequently found among the 61 close call proposals. The subcategory that is most frequently represented is labor issues (23 proposals). The two subcategories pertaining to environment issues (environmental issues and sustainability report) account for 17 proposals. The remaining 21 proposals are scattered among the other six subcategories (add minorities/women to board, animal rights, health

[19] As discussed in §4.2, shareholder proposals are typically not binding; i.e., even if a proposal is formally approved, it may not be implemented. Accordingly, another potential caveat is that only those proposals that are eventually implemented (the "compliers," using the terminology of Imbens and Lemieux 2008) may contribute to the identification. This caveat is mitigated in my main analysis, since I focus on the stock market reaction on the day of the vote. On that day, shareholders do not know with certainty whether an approved proposal will be implemented or not. Accordingly, as long as the implementation probability is strictly positive, even the (eventual) "noncompliers" contribute to the stock market reaction (see Section I.B of CGG for a similar argument).

issues, human rights, other social issues related, and political issues). Accordingly, about two-thirds (65.6%) of the close call proposals concentrate among three subcategories pertaining to labor and environment issues. To further zoom into these three subcategories, I review the proposal description in the proxy statements (SEC Form DEF 14A). Virtually all proposals on labor issues are employee satisfaction initiatives in the form of nondiscrimination and fairness policies. As for the proposals on environment issues, most of them pertain to the mitigation of environmental hazards.

That 65.6% of the close call CSR proposals cluster among labor and environment issues is not a typical feature of CSR proposals. Across all CSR proposals, the share of labor and environment proposals is only 40.4%. As can be seen from panel B of Table 8, this difference is highly significant (p-value $= 0.000$).

Next, I examine whether close call CSR proposals are more likely to be perceived as value-enhancing by shareholders. To address this question, I conduct a textual analysis of the support statement provided in the proxy statement of the proposals.[20] A caveat of this analysis is that it is inherently subjective, yet it helps shed some light on shareholders' motives behind these proposals. Specifically, I search for keywords related to performance. These keywords include "profits," "performance," "productivity," "value," and "competitive" as well as variations thereof (e.g., for the word "profits," I also search for "profitability," "profitable," etc.). To ensure that each keyword is used in the (financial) performance context, I review each match manually. As can be seen in panel B of Table 8, I find that 55.7% of the close call proposals contain performance keywords. (This percentage is very similar on either side of the majority threshold.) In contrast, only 22.4% of all CSR proposals include such keywords. The difference is highly significant (p-value $= 0.000$). This analysis indicates that close call CSR proposals are more likely to have performance implications than are non-close proposals.[21]

To further characterize the set of close call CSR proposals, I examine whether companies around the discontinuity differ systematically from companies far from the discontinuity. This comparison is provided in panel A of Table 8. As can be seen, companies close to the threshold are significantly more likely to operate in labor-intensive and B2C industries (p-values of 0.036 and 0.047, respectively)—that is, in industries where performance is likely more sensitive to the relationship with employees and customers, respectively. This echoes the previous finding that close call CSR proposals are tied more closely to financial performance than are non-close proposals.[22]

In sum, the analysis presented in this section suggests that close call CSR proposals are not representative of the average CSR proposal. Accordingly, one must be careful with extrapolation—my results do not necessarily generalize to CSR proposals far from the discontinuity. In particular, the link to performance, which appears to be more prevalent among close call CSR proposals, may explain why these proposals (1) receive larger shareholder support and (2) lead to positive announcement returns and superior accounting performance when adopted.

6. Conclusion

In this paper, I present evidence on the causal effect of CSR on financial performance. To obtain exogenous variation in CSR, I exploit the passage of shareholder proposals on CSR that pass or fail by a small margin of votes. The outcome of such close call proposals is as good as random and hence provides a randomized assignment of CSR to companies. Using an RDD methodology, I find that the adoption of close call CSR proposals leads to a significant increase in shareholder value by 1.77%. This finding is consistent with the view that CSR is a valuable resource, which is in line with, e.g., the resource-based view of the firm (e.g., Hart 1995, Russo and Fouts 1997),

[20] For example, in the support statement of a proposal to implement a nondiscrimination policy, shareholders of Gardner Denver, Inc., argue as follows: "Employment discrimination on the basis of sexual orientation and gender identity diminishes employee morale and productivity. Because state and local laws are inconsistent with respect to employment discrimination, our company would benefit from a consistent, corporate-wide policy to enhance efforts to prevent discrimination, resolve complaints internally, access employees from the broadest talent pool, and ensure a respectful and supportive atmosphere for all employees. Gardner Denver will enhance its competitive edge by joining the growing ranks of companies guaranteeing equal opportunity for all employees" (Gardner Denver 2010, p. 27). The expressions "productivity" and "competitive edge" point at the performance implications of this proposal.

[21] Performance keywords are found more frequently in proposals on labor and environment issues, which may explain why close call CSR proposals cluster among these categories. Specifically, performance keywords appear in 59% of all labor proposals, 33% of all environment proposals, and 8% of all other proposals; for close call proposals, these ratios increase to 91%, 65%, and 9%, respectively. Given this pattern, one may expect my results to be stronger for labor and environment proposals. When I reestimate my baseline specification separately for the three different groups, I find that the stock market reaction is indeed larger for proposals on labor and environment issues. Given the relatively small number of close call proposals in each group, such an analysis is only suggestive, though.

[22] There is no significant difference along the other characteristics considered in Table 8, with the exception of institutional ownership, which is higher for companies close to the threshold. This difference is related to the Karpoff et al. (1996) finding that institutional ownership affects the submission of shareholder proposals.

instrumental stakeholder theory (e.g., Jones 1995), and Porter and Kramer's (2006, 2011) shared value argument. I also find that the value gains are stronger for firms with relatively low levels of CSR prior to the vote. This suggests that CSR is a resource with decreasing marginal returns; i.e., the CSR–CFP relationship is concave.

I then examine the mechanisms through which CSR increases shareholder value. I find that the passing of close call CSR proposals has a positive impact on operating performance (return on assets, net profit margin, and return on equity). When I further examine what explains the increase in operating performance, I find that the adoption of close call CSR proposals has a positive impact on labor productivity and sales growth. This evidence suggests that these proposals improve employee satisfaction and help companies cater to customers that are sensitive to sustainable practices.

To the best of my knowledge, this study is the first to provide empirical evidence on the causal effect of CSR on CFP. Although a large empirical literature points toward a positive correlation between CSR and CFP (for detailed reviews of this literature, see Margolis and Walsh 2001, 2003; Margolis et al. 2007; Orlitzky et al. 2003; Roman et al. 1999), this correlation does not warrant a causal interpretation. The papers that are closest to making causal statements are Dowell et al. (2000), Lev et al. (2010), Preston and O'Bannon (1997), Waddock and Graves (1997), and Edmans (2011, 2012). The first four articles rely on so-called Granger causality tests (i.e., the comparison of leads and lags of CSR and CFP). However, as Lev et al. emphasize, although this methodology has its merits, it does not establish causality.[23] Accordingly, it does not substitute for the need to look for (quasi-)natural experiments such as the one I consider in this study. Edmans (2011, 2012) uses a different approach. He constructs a value-weighted portfolio of the "100 Best Companies to Work For in America" and shows that this portfolio significantly outperforms industry benchmarks. An appealing feature of his approach is that the effect of observable variables that are correlated with employee satisfaction is likely to be already impounded into the stock prices, which helps address causality. That being said, employee satisfaction may correlate with unobservable firm characteristics that investors have not fully incorporated into stock prices.

Finally, a limitation of my research design is that the identifying variation comes from a relatively small number of proposals—the ones close to the threshold—and those proposals may not be representative of the average CSR proposal. In particular, the large majority of CSR proposals receive little support at annual meetings, suggesting that shareholders see little value in them. By contrast, the subset of CSR proposals that make it close to the 50% threshold receive an unusually high support. This indicates that close call CSR proposals are somewhat special.

When I characterize close call CSR proposals, I find that—compared with proposals away from the threshold—they are more likely to address employee satisfaction and the mitigation of environmental hazards. Also, a textual analysis of their support statement shows that they more frequently contain performance-related arguments. Finally, close call proposals are more frequently found among companies operating in "stakeholder-sensitive" industries, i.e., industries in which performance depends greatly on the relationship with employees and customers. These differences indicate that close call CSR proposals are more closely tied to performance, which may explain why they are value-enhancing. Accordingly, one has to be careful in extrapolating my results—although the value gains documented in this paper apply to close call CSR proposals, they may not apply to CSR proposals in general. Extending the external validity of this study by identifying natural experiments that apply to a broader universe of firms and CSR initiatives is an exciting and challenging avenue for future research.

[23] As Leamer (1985) points out, Granger causality does not imply "causality" but rather "precedence" in a lead–lag relationship. In the CSR–CFP context, finding that CSR precedes (i.e., predicts future values of) CFP does not necessarily imply that CSR causes CFP. For example, it could be that companies engage in CSR because they expect their future profitability to be higher. In this scenario, CSR predicts future CFP, yet there is no causal relationship between the two.

Supplemental Material

Supplemental material to this paper is available at http://dx.doi.org/10.1287/mnsc.2014.2038.

Acknowledgments

The author thanks Wei Jiang (the department editor), an anonymous associate editor, two anonymous reviewers, Alex Edmans, Xavier Giroud, Maria Guadalupe, Andrew Hoffman, Aleksandra Kacperczyk, Lloyd Kurtz, James Naughton, Felix Oberholzer-Gee, and Brian Richter; as well as seminar participants at Ivey Business School, the Alliance for Research on Corporate Sustainability Conference at the University of California at Berkeley (2013), and the SRI Conference on Sustainable, Responsible, Impact Investing (Colorado Springs, Colorado) for helpful comments and suggestions. The author also thanks Hannarae Annie Nam for excellent research assistance. Financial support from MIT's Undergraduate Research Opportunities Program is gratefully acknowledged.

Appendix. Types of CSR Proposals

Proposal type	Proposal description
	Panel A: Environment issues
Environmental issues	Shareholder-sponsored proposals to request that the board issue a report detailing the company's impact on the environment or to request that the board adopt policies to minimize the company's negative impact on the environment. If a proposal combines health and environmental issues, SharkRepellent will generally classify it in the "health issues" category. If a proposal focuses on preparing a sustainability report regarding environmental practices, SharkRepellent will generally classify it in the "sustainability report" category.
Sustainability report	Shareholder-sponsored proposals to request that the board issue a report describing the company's strategies to ensure sustainability, usually focusing on actions to address greenhouse gas emissions and other environmental and social considerations.
	Panel B: Social issues
Add minorities/women to board	Shareholder-sponsored proposals to request that the board take steps to ensure that women and minority candidates are in the pool from which board nominees are chosen.
Animal rights	Shareholder-sponsored proposals to encourage the company to consider animal interests throughout its production and business processes or to request that the board adopt an animal welfare policy. People for the Ethical Treatment of Animals has submitted the majority of these proposals.
Health issues	Shareholder sponsored proposals to request that the board institute policies to protect human health or that the board issue a report regarding the company's stance on certain health-related issues.
Human rights	Shareholder-sponsored proposals to request that the board institute policies to protect and/or promote human rights. Such actions could include respecting human rights throughout the company's production process or refusing to do business with countries or businesses that contribute to human rights abuses.
Labor issues	Shareholder-sponsored proposal to request that the board institute certain labor-related policies. Such labor policies may include prohibiting discrimination based on sexual orientation and gender identity or abiding by certain fairness principles.
Other social issues related	Shareholder-sponsored proposal to request that the board provide a report regarding certain social issues. Common topics may include the examination of the company's effect on national security, the safety of the company's operations from terrorists attacks, and the company's lending practices.
Political issues	Shareholder-sponsored proposals to request that the board provide a report detailing the company's policies regarding political contributions.

Note. This table provides a description of the nine CSR subcategories from the SharkRepellent database (source: SharkRepellent).

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