

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

MS 2015.02

Caroline Flammer

汇报人：张璠

2021年5月12日





Caroline Flammer

### **Education,**

Post-doctoral researcher, MIT Sloan School of Management, 2013

PhD, University of St. Gallen, 2009

### **Academic Appointments**

Faculty at Ivey Business School, University of Western Ontario.

Associate Professor of Strategy and Innovation at Boston University's Questrom School of Business.

### **Research Interests**

Competitive strategy at the intersection of corporate governance, corporate social responsibility, impact investing, and innovation.



# Abstract

This study 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.

The adoption of close call CSR proposals leads to a significant increase innshareholder value and operating performance.

Finally, this paper find that close call CSR proposals differ from non-close proposals along several dimensions. Accordingly, although this results imply that adopting close call CSR proposals is beneficial to companies, they do not necessarily imply that CSR proposals are beneficial in general.



# 1.Introduction

## Introduction

Previous studies and deficiencies

How to address these deficiencies

Main finding

Limitations of this paper



## 2. Background

| The View of CSR  |   |
|--|---|
| <u>The Early Literature</u>                            | <u>The Recent Literature</u>  |
| agency conflict;<br>a “donation” that reduces profits. | the ultimate goal is benefiting shareholders; improve companies’ efficiency and enhance their reputation and trust. |
| <u>negative</u>  | <u>a causal determinant of financial performance</u>  |

However, a limitation is that CSR is endogenous with respect to CFP. For example, it could be that companies engage in CSR because they are more profitable or expect their future profitability to be higher. The positive correlation between CSR and CFP does not warrant a causal interpretation.



# 3.Data and Methodology

## 3.1. Data Sources & Characteristics

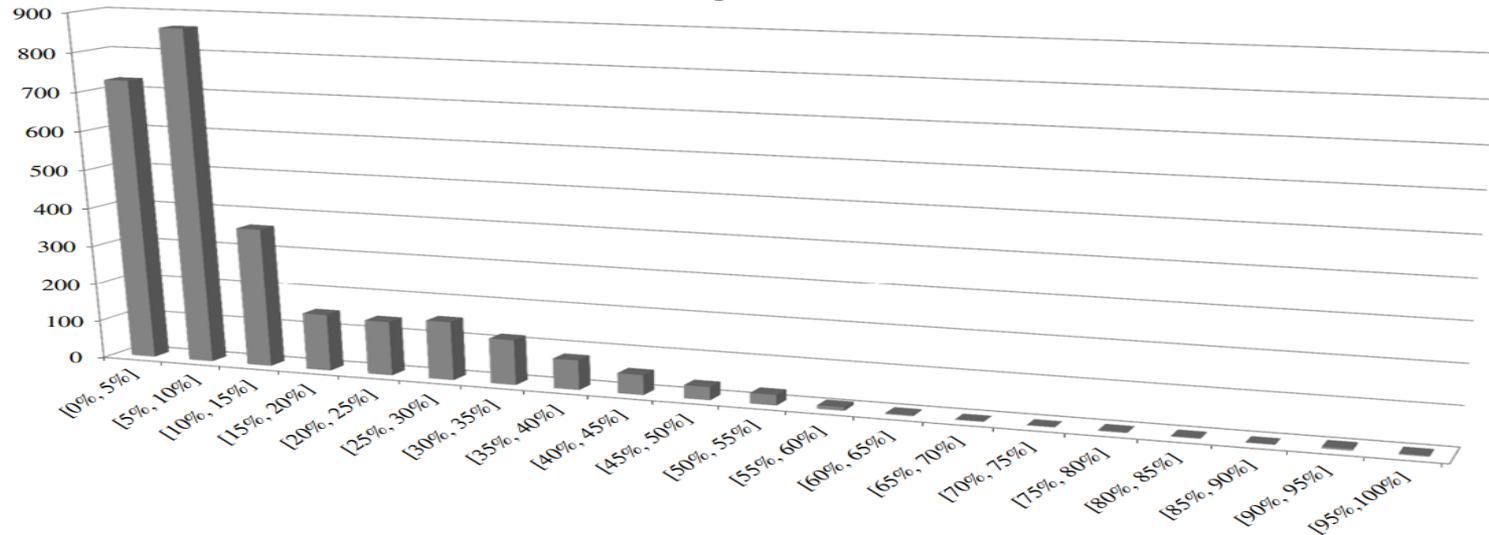
The data on shareholder proposals are obtained from two databases: RiskMetrics and SharkRepellent. RiskMetrics covers shareholder proposals that came to a vote from 1997 to 2011 at S&P 1500 companies as well as approximately 400–500 additional widely held companies. SharkRepellent's proxy voting database includes shareholder proposals from a broad universe of about 4,000 companies in the Russell 3000 index from 2005 to 2012. Both databases are merged to obtain a comprehensive data set of shareholder proposals that came to a vote between 1997 and 2012. Then the sample is restricted to shareholder proposals that are related to CSR. The final sample consists of 2,729 CSR proposals.



# 3.Data and Methodology

## 3.1. Data Sources & Characteristics

Distribution of Votes for Shareholder CSR Proposals Figure 1



As Figure 1 shows, most proposals receive very little support. Fortunately, the number of close call proposals 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.



# 3. Data and Methodology

## 3.1. Data Sources & Characteristics

Panel A: Summary statistics by year

| Year  | Shareholder proposals | Approved proposals | Approved proposals (%) | Average vote outcome (%) | SD vote outcome (%) | Vote outcome $\pm 5\%$ | Vote outcome $\pm 10\%$ |
|-------|-----------------------|--------------------|------------------------|--------------------------|---------------------|------------------------|-------------------------|
| 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                     |

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 documents an increase in shareholders' awareness for CSR issues over time.



# 3. Data and Methodology

## 3.1. Data Sources & Characteristics

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 $\pm 5\%$ | Vote outcome $\pm 10\%$ |
|-------------------------------|-----------------------|--------------------|------------------------|--------------------------|---------------------|------------------------|-------------------------|
| 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 B reports the breakdown of the proposals according to the different types of CSR. As can be seen, the proposals that are most likely to be approved are those pertaining to labor issues (5.27% are approved).



# 3. Data and Methodology

## 3.1. Data Sources & Characteristics

Panel C: Summary statistics by sponsor

| Proposal sponsor    | Shareholder proposals | Approved proposals | Approved proposals (%) | Average vote outcome (%) | SD vote outcome (%) | Vote outcome $\pm 5\%$ | Vote outcome $\pm 10\%$ |
|---------------------|-----------------------|--------------------|------------------------|--------------------------|---------------------|------------------------|-------------------------|
| 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                       |

Panel C 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. Data and Methodology

## 3.2. Methodology

This paper uses the methodology that adapts the regression discontinuity framework so as to estimate the effect of shareholder CSR proposals on outcome variables.

### 3.2.1. Regression Discontinuity in Shareholder Votes.

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

outcome variable for firm  $i$  at time  $t$ —— $y_{it}$ .

the proposal receives a vote share—— $v_{it}$ .

the proposal is approved —— $pass_{it} = 1(v_{it} \geq v^*$ , where  $v^*$  is the majority threshold.)

polynomial for observations on the left-hand side of the threshold—— $P_l(v_{it}, \gamma_l)$

polynomial for observations on the right-hand side of the threshold—— $P_r(v_{it}, \gamma_r)$

standard errors clustered at the firm level



# 3. Data and Methodology

## 3.2.2. Multiple Periods and Multiple Votes.

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.

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

firm-meeting fixed effects—— $\mathbf{a}_{it}$

fixed effects for the time period relative to the meeting date—— $\mathbf{a}_{\tau}$

fixed effects for the calendar year—— $\mathbf{a}_c$

observations at time  $t + \tau$  are pooled for multiple  $\tau$ . Specifically, observations used are in periods  $t - 2$  to  $t + T$  ( $T$  is up to seven days for abnormal returns and up to four years for annual variables such as the return on assets).



# 3.Data and Methodology

## 3.3. Variable Definitions and Sample Characteristics

### 3.3.1. Abnormal Returns.

The advantages of using abnormal returns.

First,they can capture all potential channels through which CSR may benefit shareholders.

Second, the stock market reaction on the day of the vote is most likely attributable to the vote itself.

Abnormal returns are computed by the four-factor model.Daily stock return data are obtained from the Center for Research in Security Prices. The four factors are obtained from Kenneth French's website.The coefficients of the four-factor model are estimated by OLS.



# 3.Data and Methodology

## 3.3.2. Summary Statistics.

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

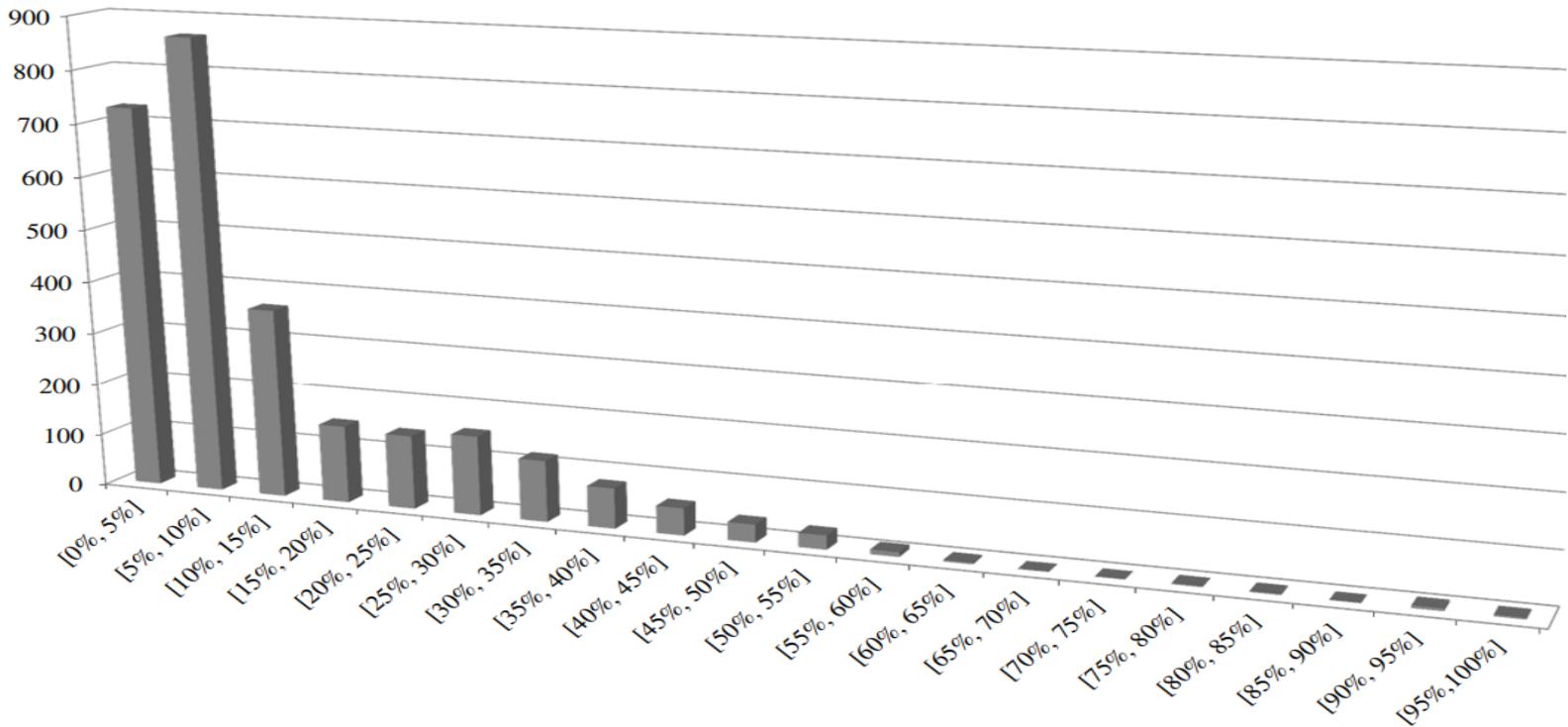


# 3.Data and Methodology

## 3.4. Tests for Quasi-Randomized Assignment

### 3.4.1. Continuity in the Distribution of Shareholder Votes.

Figure 1 Distribution of Votes for Shareholder CSR Proposals

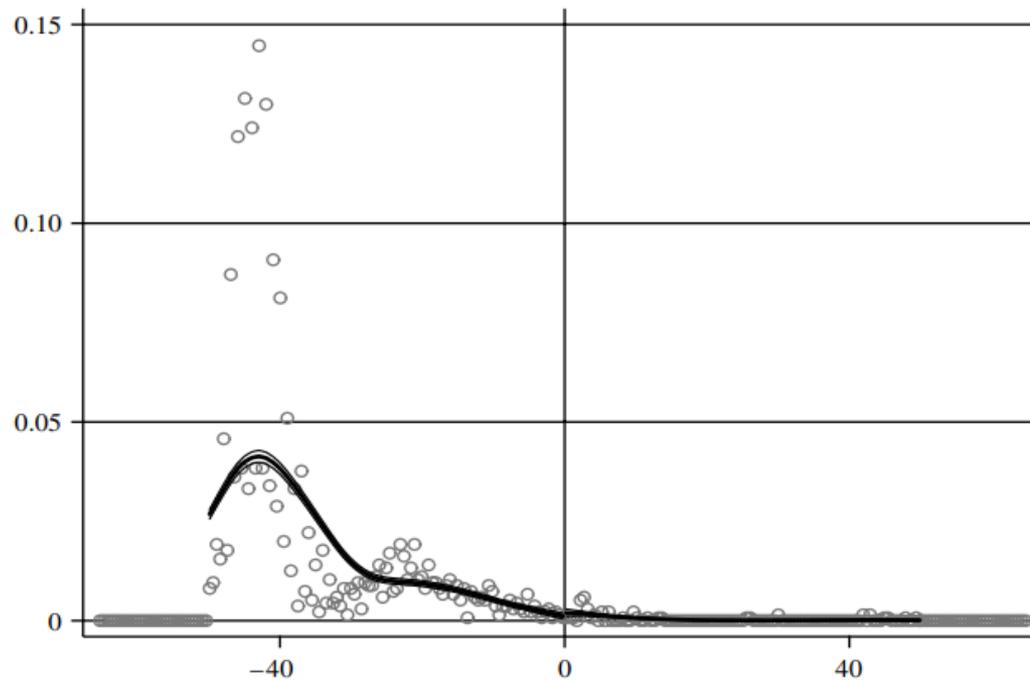


# 3.Data and Methodology

## 3.4. Tests for Quasi-Randomized Assignment

### 3.4.1. Continuity in the Distribution of Shareholder Votes.

Figure 2 Visualization of the McCrary (2008) Test



As is shown, there is no evidence for a discontinuous jump.



# 3. Data and Methodology

## 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.

Given the large number of characteristics considered in Table 4, it is expected that some of them would appear significantly different.

Table 4

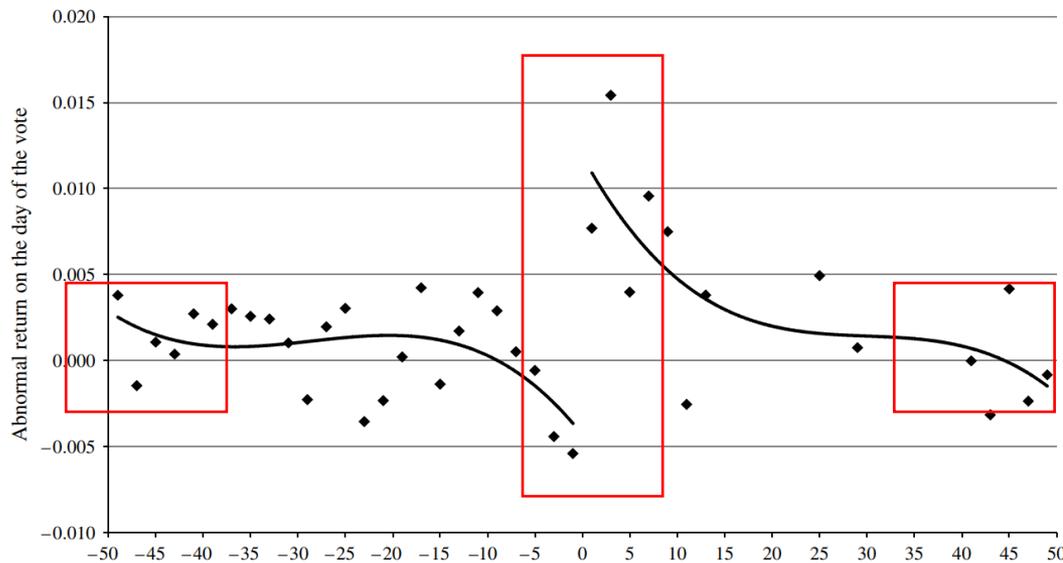
|   | Before meeting<br>( $t - 1$ ) |                    | Change from<br>( $t - 2$ ) to ( $t - 1$ ) |                   |
|---|-------------------------------|--------------------|---|-------------------|
|   | (1)                           | (2)                | (3)                                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



# 4. Results

## 4.1. Main Results

### 4.1.1. Graphical Analysis.



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.

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.



# 4. Results

## 4.1. Main Results

### 4.1.2. Regression Analysis.

|              | All votes<br>(1)   | Non-close<br>(2)    | Vote share           |                      |                       |                    | Full model<br>(7)    | Full model<br>with controls<br>(8) |
|--------------|--------------------|---------------------|----------------------|----------------------|-----------------------|--------------------|----------------------|------------------------------------|
|              |                    |                     | ±10%<br>(3)          | ±5%<br>(4)           | ±2.5%<br>(5)          | ±1.5%<br>(6)       |                      |                                    |
| Pass         | 0.0064<br>(0.0040) | -0.0008<br>(0.0044) | 0.0107**<br>(0.0046) | 0.0136**<br>(0.0058) | 0.0109***<br>(0.0038) | 0.0117<br>(0.0074) | 0.0118**<br>(0.0053) | 0.0107**<br>(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                              |

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



# 4. Results

## 4.1. Main Results

### 4.1.3. Multiple Votes and Multiperiod Analysis.

(1)

|                           |                      |
|---------------------------|----------------------|
| Day of vote ( $t$ )       | 0.0092**<br>(0.0036) |
| One day later ( $t + 1$ ) | -0.0009<br>(0.0023)  |
| Days $t + 2$ to $t + 7$   | -0.0043<br>(0.0092)  |
| $R$ -squared              | 0.043                |
| Observations              | 9,225                |
| Number of firm-meetings   | 1,845                |

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



# 4. Results

## 4.1. Main Results

### 4.1.4. Robustness.

|                           | Robustness           |                      |                       |
|---------------------------|----------------------|----------------------|-----------------------|
|                           | (1)                  | Market model (2)     | Positive returns (3)  |
| Day of vote ( $t$ )       | 0.0092**<br>(0.0036) | 0.0093**<br>(0.0037) | 0.2685***<br>(0.0871) |
| One day later ( $t + 1$ ) | -0.0009<br>(0.0023)  | -0.0004<br>(0.0025)  | 0.0973<br>(0.0635)    |
| Days $t + 2$ to $t + 7$   | -0.0043<br>(0.0092)  | -0.0019<br>(0.0099)  | 0.0540<br>(0.0741)    |
| <i>R</i> -squared         | 0.043                | 0.042                | 0.016                 |
| Observations              | 9,225                | 9,225                | 9,225                 |
| Number of firm-meetings   | 1,845                | 1,845                | 1,845                 |

The abnormal returns are replaced 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.



# 4. Results

## 4.1. Main Results

### 4.1.5. Confounding Effect of Governance Proposals?

Confounding effect of governance proposals?

| No governance proposal<br>±10%<br>(4) | No governance proposal<br>±20%<br>(5) |
|---------------------------------------|---------------------------------------|
| 0.0101**<br>(0.0041)                  | 0.0109***<br>(0.0046)                 |
| 0.0005<br>(0.0027)                    | 0.0004<br>(0.0027)                    |
| -0.0050<br>(0.0102)                   | -0.0044<br>(0.0104)                   |
| 0.009<br>7,615<br>1,523               | 0.007<br>6,640<br>1,328               |



# 4. Results

## 4.1. Main Results

### 4.1.6. Level of CSR.

Companies with low vs. high CSR

| Low<br>KLD index<br>(6) | High<br>KLD index<br>(7) |
|-------------------------|--------------------------|
| 0.0102**<br>(0.0047)    | 0.0054*<br>(0.0031)      |
| 0.0011<br>(0.0031)      | -0.0039<br>(0.0029)      |
| -0.0061<br>(0.012)      | -0.0004<br>(0.0092)      |
| 0.021<br>4,215<br>843   | 0.088<br>4,220<br>844    |



# 4. Results

## 4.2. Magnitude of the Effect

In 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. The latter can be approximated by rescaling the estimated coefficient by the probability of implementing the proposal. Accordingly, the approximate effect of implementing a close call CSR proposal is 1.77% in abnormal returns.

CGG find that adopting close call governance proposals leads to an increase in shareholder value by 2.8%. This comparison indicates the benefits from CSR proposals are less than these from governance proposals.



# 4. Results

## 4.3. Long-Run Effects of CSR

### 4.3.1. Implementation.

### 4.3.2. Corporate Governance.

|                             | <u>Implementation</u> | <u>Governance</u>      |
|-----------------------------|-----------------------|------------------------|
|                             | <i>KLD index</i>      | <i>Proposal passed</i> |
|                             | (1)                   | (2)                    |
| Year of the meeting ( $t$ ) | 0.521**<br>(0.213)    | 0.0326<br>(0.0238)     |
| One year later ( $t + 1$ )  | 0.541**<br>(0.220)    | -0.0023<br>(0.0187)    |
| Years $t + 2$ to $t + 4$    | 0.429**<br>(0.207)    | -0.0007<br>(0.0541)    |
| <i>R</i> -squared           | 0.413                 | 0.429                  |
| Observations                | 7,653                 | 9,225                  |
| Number of firm-meetings     | 1,689                 | 1,845                  |



# 4. Results

## 4.3.3. Operating Performance and Firm Value.

|                             | Performance          |                     |                    |                         |
|-----------------------------|----------------------|---------------------|--------------------|-------------------------|
|                             | <i>ROA</i><br>(3)    | <i>NPM</i><br>(4)   | <i>ROE</i><br>(5)  | <i>Tobin's Q</i><br>(6) |
| Year of the meeting ( $t$ ) | 0.0018<br>(0.0019)   | 0.0017<br>(0.0026)  | 0.0052<br>(0.0069) | 0.0195**<br>(0.0079)    |
| One year later ( $t + 1$ )  | 0.0043*<br>(0.0023)  | 0.0046*<br>(0.0026) | 0.0091<br>(0.0077) | 0.0215**<br>(0.0085)    |
| Years $t + 2$ to $t + 4$    | 0.0050**<br>(0.0024) | 0.0052*<br>(0.0030) | 0.0115<br>(0.0082) | 0.0158**<br>(0.0078)    |
| <i>R</i> -squared           | 0.845                | 0.915               | 0.559              | 0.859                   |
| Observations                | 8,291                | 8,291               | 7,322              | 7,283                   |
| Number of firm-meetings     | 1,815                | 1,815               | 1,651              | 1,675                   |



# 4. Results

## 4.3.4. How Does CSR Benefit Companies?

First, implementing CSR programs may be a way to cater to customers that are responsive to sustainable Practices. 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, CSR programs may increase employee satisfaction. Edmans shows that companies with higher job satisfaction earn higher abnormal.

Third, CSR initiatives may foster the use of more efficient technologies or production processes. Porter views pollution as a waste of resources and argues that efforts to reduce pollution might not only reduce a company's environmental footprint but also strengthen its competitiveness.



# 4. Results

## 4.3.4. How Does CSR Benefit Companies?

|                             | Mechanism                  |                                  |                                    |
|-----------------------------|----------------------------|----------------------------------|------------------------------------|
|                             | <i>Sales growth</i><br>(7) | <i>Labor productivity</i><br>(8) | <i>Capital expenditures</i><br>(9) |
| Year of the meeting ( $t$ ) | 0.0089<br>0.0083           | 0.0141<br>(0.0176)               | -0.0002<br>(0.0025)                |
| One year later ( $t + 1$ )  | 0.0155*<br>0.0089          | 0.0437***<br>(0.0156)            | 0.0008<br>(0.0026)                 |
| Years $t + 2$ to $t + 4$    | 0.0132*<br>0.0080          | 0.0373*<br>(0.0194)              | 0.0001<br>(0.0024)                 |
| <i>R</i> -squared           | 0.360                      | 0.948                            | 0.849                              |
| Observations                | 8,388                      | 8,364                            | 8,266                              |
| Number of firm-meetings     | 1,803                      | 1,837                            | 1,819                              |



# 5. External Validity

## 5.1. How Representative Is the Sample?

|  | CSR proposals      | Compustat vs. CSR proposals |                 |
|--|--------------------|-----------------------------|-----------------|
|  | Mean CSR proposals | Mean Compustat              | <i>p</i> -value |

Panel A: Firm characteristics

|   |        |       |       |
|---|--------|-------|-------|
| <i>Market value</i> (\$ million)        | 37,881 | 3,266 | 0.000 |
| <i>Total assets</i> (\$ million)        | 77,365 | 8,868 | 0.000 |
| <i>ROA</i>                              | 0.137  | 0.049 | 0.000 |
| <i>ROE</i>                              | 0.362  | 0.144 | 0.000 |
| <i>NPM</i>                              | 0.194  | 0.045 | 0.000 |
| <i>Tobin's Q</i>                        | 1.890  | 1.905 | 0.904 |
| <i>KLD index</i>                        | 4.06   | 1.26  | 0.000 |
| <i>G-index</i>                          | 9.23   | 8.99  | 0.159 |
| <i>Institutional ownership</i> (%)      | 63.27  | 36.49 | 0.000 |
| <i>Inside ownership</i> (%)             | 0.64   | 1.39  | 0.000 |
| <i>Labor productivity</i>               | 437    | 323   | 0.000 |
| <i>Capital expenditures</i>             | 0.051  | 0.133 | 0.000 |
| <i>Sales growth</i>                     | 0.071  | 0.022 | 0.000 |
| <i>Leverage</i>                         | 0.264  | 0.214 | 0.000 |
| <i>Cash</i>                             | 0.101  | 0.181 | 0.000 |
| <i>Labor intensity</i> (industry level) | 0.321  | 0.258 | 0.000 |
| <i>B2C industry</i>                     | 0.425  | 0.347 | 0.000 |



# 5. External Validity

## 5.2. How Representative Are Close Call CSR Proposals?

| Shareholder proposals | Approved proposals | Approved proposals (%) | Average vote outcome (%) | SD vote outcome (%) | Vote outcome $\pm 5\%$ |
|-----------------------|--------------------|------------------------|--------------------------|---------------------|------------------------|
| 111                   | 0                  | 0.00                   | 7.05                     | 3.72                | 0                      |
| 119                   | 0                  | 0.00                   | 7.83                     | 5.39                | 0                      |
| 126                   | 1                  | 0.79                   | 7.82                     | 7.61                | 0                      |
| 144                   | 0                  | 0.00                   | 7.42                     | 4.75                | 0                      |
| 159                   | 1                  | 0.63                   | 9.23                     | 7.60                | 0                      |
| 162                   | 2                  | 1.23                   | 10.01                    | 8.77                | 1                      |
| 142                   | 1                  | 0.70                   | 11.84                    | 11.13               | 0                      |
| 187                   | 4                  | 2.14                   | 11.36                    | 13.10               | 0                      |
| 195                   | 2                  | 1.03                   | 9.97                     | 9.14                | 0                      |
| 206                   | 5                  | 2.43                   | 14.08                    | 12.98               | 5                      |
| 215                   | 7                  | 3.26                   | 17.23                    | 15.73               | 15                     |
| 212                   | 6                  | 2.83                   | 15.32                    | 14.58               | 8                      |
| 196                   | 8                  | 4.08                   | 18.01                    | 14.88               | 10                     |
| 197                   | 4                  | 2.03                   | 18.66                    | 14.77               | 6                      |
| 179                   | 7                  | 3.91                   | 20.15                    | 16.33               | 8                      |
| 179                   | 3                  | 1.68                   | 19.69                    | 14.26               | 8                      |
| 2,729                 | 51                 | 1.87                   | 13.48                    | 12.97               | 61                     |



# 5. External Validity

## 5.2. How Representative Are Close Call CSR Proposals?

| Proposal type                 | Shareholder proposals | Approved proposals | Approved proposals (%) | Average vote outcome (%) | SD vote outcome (%) | Vote outcome $\pm 5\%$ | Vote outcome $\pm 10\%$ |
|-------------------------------|-----------------------|--------------------|------------------------|--------------------------|---------------------|------------------------|-------------------------|
| 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                      |

| Mean CSR proposals                  | Mean Compustat | <i>p</i> -value | Mean close call | <i>p</i> -value |
|-------------------------------------|----------------|-----------------|-----------------|-----------------|
| <i>Labor and environment issues</i> | 0.404          | —               | 0.656           | 0.000           |
| <i>Related to performance</i>       | 0.224          | —               | 0.557           | 0.000           |



# 5. External Validity

## 5.2. How Representative Are Close Call CSR Proposals?

|   | CSR proposals      | Close call CSR proposals vs. CSR proposals |                 |
|---|--------------------|--|-----------------|
|   | Mean CSR proposals | Mean close call                            | <i>p</i> -value |
| <i>Market value</i> (\$ million)        | 37,881             | 28,639                                     | 0.126           |
| <i>Total assets</i> (\$ million)        | 77,365             | 63,686                                     | 0.267           |
| <i>ROA</i>                              | 0.137              | 0.128                                      | 0.147           |
| <i>ROE</i>                              | 0.362              | 0.346                                      | 0.596           |
| <i>NPM</i>                              | 0.194              | 0.182                                      | 0.522           |
| <i>Tobin's Q</i>                        | 1.890              | 1.801                                      | 0.363           |
| <i>KLD index</i>                        | 4.06               | 3.65                                       | 0.373           |
| <i>G-index</i>                          | 9.23               | 9.91                                       | 0.294           |
| <i>Institutional ownership</i> (%)      | 63.27              | 75.61                                      | 0.016           |
| <i>Inside ownership</i> (%)             | 0.64               | 0.81                                       | 0.589           |
| <i>Labor productivity</i>               | 437                | 526  | 0.424           |
| <i>Capital expenditures</i>             | 0.051              | 0.050                                      | 0.826           |
| <i>Sales growth</i>                     | 0.071              | 0.091                                      | 0.441           |
| <i>Leverage</i>                         | 0.264              | 0.246                                      | 0.757           |
| <i>Cash</i>                             | 0.101              | 0.109                                      | 0.697           |
| <i>Labor intensity</i> (industry level) | 0.321              | 0.399                                      | 0.036           |
| <i>B2C industry</i>                     | 0.425              | 0.541                                      | 0.047           |



## 6. Conclusion

1. The adoption of close call CSR proposals leads to a significant increase in shareholder value by 1.77%.
2. The value gains are stronger for firms with relatively low levels of CSR prior to the vote.
3. The passing of close call CSR proposals has a positive impact on operating performance. Furthermore, the impact comes from labor productivity and sales growth.
4. This study is the first to provide empirical evidence on the causal effect of CSR on CFP.
5. Close call CSR proposals are more likely to address employee satisfaction and the mitigation of environmental hazards.
6. Close call CSR proposals more frequently contain performance-related arguments.
7. Close call proposals are more frequently found among companies in which performance depends greatly on the relationship with employees and , customers.

