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# Corporate Social Responsibility Proposals and Firm Valuation

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Abstract: Corporate social responsibility (CSR) is a topic which has recently been attracting an increasing amount of attention with respect to corporate operations, and shareholder proposals on CSR are also one of the main types of proposals at firms' annual shareholder meetings. However, even though the frequency of CSR proposals at annual meetings is comparable to other types of shareholder proposals, the approval rate of CSR proposals is significantly lower than that of other types of proposals, meaning that most CSR proposals are not recommended by the annual meeting to the board of directors for further approval. Motivated by this stylized fact, this study investigates the value of the submission of CSR shareholder proposals. Using a regression discontinuity design with shareholder proposal data of US public companies between 2006 and 2019, this study examines the importance of shareholders' interest in CSR for firm valuation. Interestingly, while the CSR proposals themselves are typically not approved, the submission of CSR proposals by shareholders at annual meetings matters for the value impact of other types of shareholder proposals. More specifically, the causal effect of approving a corporate governance proposal on shareholder value is significantly positive only if the corporate governance proposal is voted together with a CSR proposal at the same meeting, i.e., the presence of CSR proposals is important for firm value through its interrelations with corporate governance proposals. This shows that the submission of CSR shareholder proposals has significant value implications, even if the CSR proposals themselves are not approved at annual meetings.

Keywords: corporate social responsibility; shareholder proposals; firm valuation



Citation: Chu, Pyung Kun. 2021. Corporate Social Responsibility Proposals and Firm Valuation. International Journal of Financial Studies 9: 45. https://doi.org/ 10.3390/ijfs9030045

Academic Editor: Sabri Boubaker

Received: 23 June 2021 Accepted: 24 August 2021 Published: 26 August 2021

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## 1. Introduction

Corporate social responsibility (CSR) and corporate governance (CG) are integral aspects of corporate operations, and they are therefore naturally two major topics for shareholder proposals at firms' annual shareholder meetings. Public attention to these topics has also been heightened through increasing news media coverage of corporate scandals related to CSR and CG. Provisions on CSR and CG could potentially be important for firm valuation, and the approval of shareholder proposals on CSR and CG have in fact been found to have a positive causal effect on shareholder value in the literature. However, if the approval rates of these two groups of proposals at annual meetings are compared, the approval rate of CSR proposals is, in general, significantly lower than that of CG proposals. For example, Cuñat et al. (2012) report an average approval percentage of CG proposals of 27.35% during the period of 1997 to 2007, while Flammer (2015) finds an average percentage of approved CSR proposals of only 1.87% over the period between 1997 and 2012. In light of this evidence that only a tiny fraction of CSR proposals are eventually approved, a natural question is why shareholders continue submitting CSR proposals. What is the benefit—to shareholders—of submitting CSR proposals? Flammer (2015) conjectures that most of CSR shareholder proposals could be just symbolic. For instance, shareholders might submit CSR proposals to draw the attention of management to social issues (Loss and Seligman 2004). The main goal of this study is to test this conjecture by investigating whether there exists a value of the presence of CSR proposals at annual meetings even if they are typically not approved, i.e., whether CSR proposals are important determinants of firm valuation through other channels than a direct effect of their approval.

This study examines heterogeneity in the value impact of CG proposals in order to understand the value relevance of CSR proposals, and provide new evidence on the importance of the presence of CSR proposals for the significance of the effect of approving a CG proposal on shareholder value. This paper is akin to Cuñat et al. (2012) and Flammer (2015) in that it investigates the effects of shareholder proposals on firm value using a regression discontinuity design. However, this study explores the interrelation between CSR and CG proposals, while Cuñat et al. (2012) and Flammer (2015) focus on separate effects of CSR and CG proposals. The main contribution of this paper to the literature is therefore to provide empirical evidence on the new dimension of the understanding of the value impact of CSR proposals.

Using shareholder proposal data of the 250 largest US public companies at annual meetings between 2006 and 2019, this study finds that the submission of CSR proposals by shareholders at annual meetings is important in establishing a positive causal effect of approving a CG proposal on shareholder value. To estimate a causal relationship between approving a proposal and shareholder value, this study takes advantage of a regression discontinuity design based on the property that there is a discontinuous jump in the adoption probability of a shareholder proposal at the majority voting threshold. By comparing two subsamples of CG proposals, which are constructed on the basis of the existence of CSR proposals at the same meeting, this study finds that a significantly positive impact of approving a CG proposal on firms' abnormal returns occurs only if CSR proposals are voted at the same meeting. The approval of a CG proposal at annual meetings increases shareholder value by 1.75% if CSR proposals are voted at the same meeting, while it effectively has no effect (0.01%) on shareholder value without the presence of CSR proposals at the same meeting. The presence of CSR proposals therefore has important effect on firm value even if CSR proposals themselves are typically not approved at the meetings. In particular, the existence of CSR proposals at annual meetings has a role in securing a value effect of CG proposals.

The rest of the paper is organized as follows. Section 2 reviews related literature. Section 3 describes data, variable construction, and summary statistics, and Section 4 explains empirical methods used for this study. Section 5 presents empirical results, while Section 6 discusses the findings. Finally, Section 7 contains concluding remarks.

## 2. Literature Review

The relationship between CSR and shareholder value has long been studied in the literature. Bragdon and Marlin (1972) empirically show a positive relation between pollution control and firm profit in the pulp and paper industry. Alexander and Buchholz (1978) examine the relationship between corporate social performance and stock market performance in the early 1970s. Aupperle et al. (1985) empirically investigate the relationship between CSR and profitability. Waddock and Graves (1997) find a positive association between CSR and financial performance. Blacconiere and Northcut (1997) show the value relevance of environmental disclosures in financial statements. Dowell et al. (2000) find a positive relation between environmental standards and market value of firm. Konar and Cohen (2001) provide evidence of a positive correlation between environmental performance and the intangible asset value of firms. Al-Tuwaijri et al. (2004) find a significantly positive association between environmental and economic performance using simultaneous equations models. Barnett and Salomon (2006) explore the relation between CSR and financial performance by measuring the financial-social performance link within socially responsible investing funds. Campbell (2006) examines the determinants of CSR using institutional theory. Deng et al. (2013) show a significant effect of acquirers' CSR performance on merger performance. Flammer (2015) finds a positive effect of the adoption of CSR proposals on announcement returns and accounting performance. Lins et al. (2017) investigate the relation between CSR and firm performance during the financial crisis. Nadanyiova and Durana (2019) suggest a role of CSR as a brand value-enhancing tool. Boubaker et al. (2020) examine the effect of CSR on distress and default risks, while Hunjra et al. (2021) inves-

tigate the mediating impacts of CSR on the association between religiosity, culture, and firm performance.

Furthermore, the effect of CG provisions on shareholder value has been widely examined in the academic literature. Comment and Schwert (1995) find the association of poison pills and control share laws with takeover premiums. Shleifer and Vishny (1997) explore the important factors in CG systems. Carter et al. (2003) examine the association between board diversity and firm valuation. Gompers et al. (2003) show a positive relation between shareholder rights and firm value. Core et al. (2006) find a positive relation between shareholder rights and operating performance. Bebchuk et al. (2008) provide evidence of a negative relation between the governance index level and firm valuations. Kadyrzhanova and Rhodes-Kropf (2011) show that takeover delay provisions are positively related to shareholder value in concentrated industries. Cuñat et al. (2012) find a positive effect of the approval of a CG proposal on abnormal returns.

Finally, the regression discontinuity design method has been applied in the literature to examine a causal effect of a certain corporate event on corporate policy or valuation. Chava and Roberts (2008) investigate the impact of financing frictions on corporate investment using financial covenant thresholds in bank loans. Keys et al. (2010) empirically examine the effect of securitization on lending standards using a credit score threshold. Roberts and Sufi (2009) look into the impact of debt covenant violations on corporate debt policy. Cuñat et al. (2012) and Flammer (2015) also utilize a regression discontinuity design to test a causal effect of shareholder proposals on firm valuation. Chang et al. (2015) examine how the stock market indexing affects stock prices using the events of additions into and deletions from stock market indices.

#### 3. Materials

## 3.1. Data

Shareholder proposal data are obtained from the Proxy Monitor database, which is maintained by the Manhattan Institute, a non-profit US think tank established in 1977. The database contains a record of all shareholder proposals of the 250 largest US publicly traded companies for annual shareholder meetings starting in 2006. There are three main categories of shareholder proposals in this database: CG, CSR (which is recorded as social policy in the database), and executive compensation. This study focuses on the voting results of CG proposals and the presence of CSR proposals at annual meetings between 2006 and 2019. Table 1 presents descriptive statistics for the CG proposals in the sample period. The total number of CG proposals in the sample is 1879, out of which 376 proposals were approved at shareholder meetings so that the percentage of approved proposals is 20.01%. This average approval ratio in my sample is comparable to that reported by Cuñat et al. (2012) as 27.35%, which is based on the period of 1997 to 2007.

**Table 1.** Corporate Governance (CG) Proposals. This table reports the frequency, approval rate, and average vote share of CG proposals. Data are collected from the Proxy Monitor database on all CG shareholder proposals of the 250 largest US publicly traded companies for annual shareholder meetings between 2006 and 2019.

Year	Total Proposals	Approved Proposals	Approval Rate	Average Vote Share
2006	177	56	31.64%	40.82%
2007	138	35	25.36%	35.95%
2008	113	28	24.78%	36.66%
2009	161	45	27.95%	39.91%
2010	149	39	26.17%	38.50%
2011	123	24	19.51%	38.82%
2012	140	32	22.86%	37.67%
2013	121	21	17.36%	33.64%

Year	Total Proposals	Approved Proposals	Approval Rate	Average Vote Share
2014	110	8	7.27%	30.01%
2015	142	32	22.54%	37.38%
2016	129	21	16.28%	32.56%
2017	109	12	11.01%	32.78%
2018	140	10	7.14%	32.67%
2019	127	13	10.24%	31.16%
Total	1879	376	20.01%	35.94%

Table 1. Cont.

To assess the impact on shareholder value, daily stock return data are collected from Yahoo Finance and asset pricing factor return data from the Kenneth French's data library. These return data are used in order to calculate abnormal returns of the stocks of the firms with the voting results of shareholder proposals.

## 3.2. Variables

A main variable of interest in this study is the vote share in favor of each shareholder proposal. The regression discontinuity design, which is the analytical method used for this study, relies on the voting threshold determining the probability of the adoption of a shareholder proposal. The excess vote share above the majority threshold is denoted as  $\boldsymbol{v}$  such that

$$v = V - V^*, \tag{1}$$

where V and  $V^*$  are vote share and majority threshold, respectively. An indicator variable for whether v is greater than 0 or not, which refers to whether a shareholder proposal is approved or not at an annual meeting, is denoted as D as follows:

$$D = \begin{cases} 1 & \text{if } v > 0, \\ 0 & \text{if } v \le 0. \end{cases}$$
 (2)

Another variable of interest for this study is the abnormal stock return on the day of a shareholder meeting, which is used in order to evaluate the impact on shareholder value. A baseline measure of abnormal returns is based on the Fama-French 5-factor model (Fama and French 2015) of the following form:

$$r_{it} = \alpha_i + \beta_{MKT,i}MKT_t + \beta_{SMB,i}SMB_t + \beta_{HML,i}HML_t + \beta_{RMW,i}RMW_t + \beta_{CMA,i}CMA_t + \epsilon_{i,t},$$
(3)

where  $r_{it}$  is firm i's excess return over the risk-free rate at time t,  $MKT_t$  the market excess return over the risk-free rate at time t,  $SMB_t$  the size factor return at time t,  $HML_t$  the book-to-market factor return at time t,  $RMW_t$  the profitability factor return at time t, and  $CMA_t$  the investment factor return at time t. The coefficients of Equation (3) for firm i's shareholder meeting at time  $t_n$  are estimated by running daily time-series regressions with an estimation period of  $t_n - 220 < t \le t_n - 20$ , requiring at least 100 available observations. Abnormal returns  $AR_{it}$  for firm i at time t are then calculated as the difference between actual returns and the expected returns from the estimated five-factor model as follows:

$$AR_{it} = r_{it} - E[r_{it}]$$

$$= r_{it} - (\hat{\alpha}_i + \hat{\beta}_{MKT,i}MKT_t + \hat{\beta}_{SMB,i}SMB_t + \hat{\beta}_{HML,i}HML_t + \hat{\beta}_{RMW,i}RMW_t + \hat{\beta}_{CMA,i}CMA_t).$$
(4)

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As a robustness check, two additional asset pricing models are also considered. One is the Fama-French 3-factor model (Fama and French 1993) of the following form:

$$r_{it} = \alpha_i + \beta_{MKT,i}MKT_t + \beta_{SMB,i}SMB_t + \beta_{HML,i}HML_t + \epsilon_{i,t}, \tag{5}$$

and the other is the capital asset pricing model (Lintner1965a, 1965b; Mossin1966; Sharpe1964) of the following form:

$$r_{it} = \alpha_i + \beta_{MKT,i}MKT_t + \epsilon_{i,t}. \tag{6}$$

## 3.3. Summary Statistics

Table 2 presents summary statistics of the main variables at meeting dates. The average excess vote share over the majority threshold (v) is -14.25, reflecting that there are more rejected proposals than approved proposals, which can also be noticed from the average value of the indicator (D) for a positive v. Abnormal returns (AR) at meeting dates have an average of -0.0001 and a standard deviation of 0.0164. Average factor returns at meeting dates are all negative except for the profitability factor return (RMW), which has an average of 0.0003 with a standard deviation of 0.0035.

**Table 2.** Summary Statistics. This table reports summary statistics of the main variables at meeting dates for the sample. v refers to the excess vote share over the majority threshold, D the indicator variable for whether v is greater than 0, AR the abnormal return based on the Fama-French 5-factor model. MKT, SMB, HML, RMW, and CMA correspond to the market excess return over the risk-free rate, the size factor return, the book-to-market factor return, the profitability factor return, and the investment factor return of the Fama-French 5-factor model, respectively. Std. Dev., P25, P50, and P75 represent the standard deviation, 25th percentile, 50th percentile, and 75th percentile, respectively.

Variable	Obs	Mean	Std. Dev.	P25	P50	P75
$\overline{v}$	1683	-14.25	20.43	-27.68	-14.14	-3.58
D	1683	0.19	0.39	0	0	0
AR	1683	-0.0001	0.0164	-0.0067	-0.0004	0.0061
MKT	1683	-0.0001	0.0100	-0.0043	0.0005	0.0051
SMB	1683	-0.0002	0.0054	-0.0036	-0.0002	0.0034
HML	1683	-0.0001	0.0065	-0.003	-0.0002	0.0026
RMW	1683	0.0003	0.0035	-0.0019	0.0002	0.0023
CMA	1683	-0.0001	0.0029	-0.0021	-0.0003	0.0016

#### 4. Methods

## 4.1. Regression Discontinuity Design in Vote Shares

The method of empirical analysis for this study is a regression discontinuity framework in vote shares following Cuñat et al. (2012). This is a quasi-experimental research technique and requires a known threshold which determines the probability of treatment. The treatment in this case is to approve a shareholder proposal at an annual meeting, and the majority threshold for the voting at the meeting corresponds to a threshold which affects the likelihood of the approval of a shareholder proposal. The key identifying assumption of this research design is a discontinuity in the approval probability at the majority voting threshold. A proposal which crosses over the majority threshold indeed leads to a discontinuous jump in the approval probability of the proposal. Proposals close enough to the threshold can be treated as randomly assigned to either side around the threshold, so that the causal effect can be estimated as the difference in average outcomes between proposals above and below the threshold.

This study implements the regression discontinuity design by following the standard approach (Lee and Lemieux 2010). Specifically, let  $y_{it}$  be the outcome variable y of interest for firm i at time t. Furthermore, let  $D_{it}$  be an indicator variable equal to one for proposals

that resulted in an excess vote share  $v_{it}$  greater than 0. In order to estimate the treatment effect  $\theta$  of approving a proposal, the following regression is run:

$$y_{it} = \theta D_{it} + P_1(v_{it}, \gamma_1) + P_r(v_{it}, \gamma_r) + u_{it}, \tag{7}$$

where  $P_l(v_{it}, \gamma_r)$  is a polynomial in the excess vote shares below 0, and  $P_r(v_{it}, \gamma_l)$  is the corresponding polynomial for the excess vote shares above 0.  $\gamma_l$  and  $\gamma_r$  refer to the coefficients on the polynomial variables. These polynomials are included in order to control for the continuous underlying relationship between the excess vote share and the outcome variable, so that the estimate of  $\theta$  can capture only the discontinuous effects at the threshold.

## 4.2. Multiple Votes and Dynamic Effects

There are two potential issues in implementing the model of Equation (7). One is the dynamic effects of the votes, that is, the voting result at time t can affect outcomes at times later than t. The other is the possibility of multiple votes for a given firm and meeting date.

To deal with the first issue, this study follows Cellini et al. (2010) to set up the following equation:

$$y_{i,t+\tau} = \theta_{\tau} D_{it} + P_l(v_{it}, \gamma_{l\tau}) + P_r(v_{it}, \gamma_{r\tau}) + \alpha_{\tau} + \eta_c + \lambda_{it} + e_{it\tau}, \tag{8}$$

where  $\alpha_{\tau}$ ,  $\eta_c$ , and  $\lambda_{it}$  refer to fixed effects for time periods relative to the meeting date, calendar years, and firm-meetings, respectively.  $\theta_{\tau}$ ,  $\gamma_{l\tau}$ , and  $\gamma_{r\tau}$  can vary for  $\tau \geq 0$ , whereas they are fixed at 0 for  $\tau < 0$ .  $\theta_{\tau}$  corresponds to the effect of approving a proposal at time t on outcome at time  $t + \tau$ .

The second issue can be handled by aggregating all votes for a given firm and meeting date as follows:

$$y_{it} = \theta \sum_{n=1}^{N_{it}} D_{itn} + \left[ P_l \left( \sum_{n=1}^{N_{it}} v_{itn}, \gamma_l \right) + P_r \left( \sum_{n=1}^{N_{it}} v_{itn}, \gamma_r \right) \right] + e_{it}, \tag{9}$$

where  $N_{it}$  refers to the total number of votes for a given firm i and meeting date t.

By combining Equations (8) and (9), the following equation can be finally obtained as shown by Cuñat et al. (2012):

$$y_{i,t+\tau} = \theta_{\tau} \sum_{n=1}^{N_{it}} D_{itn} + \left[ P_l \left( \sum_{n=1}^{N_{it}} v_{itn}, \gamma_{l\tau} \right) + P_r \left( \sum_{n=1}^{N_{it}} v_{itn}, \gamma_{r\tau} \right) \right] + \alpha_{\tau} + \eta_c + \lambda_{it} + e_{it\tau},$$
 (10)

which takes into account both multiple votes and dynamic effects.

#### 5. Results

## 5.1. Effects of Shareholder Proposals on Firm Valuation

This study first examines the effect of approving a CG proposal on firm valuation, which is measured by abnormal returns. Panel A of Table 3 presents regression results of the abnormal returns for the day of the meeting on whether the proposal is approved, using vote shares within each specified interval around the majority voting threshold. Column (1), which is based on all votes in the sample, shows that there is no significant effect of approving a CG proposal on abnormal returns. The result in column (2) for the vote shares, more than 10 percentage points away from the threshold, is the driving force for the insignificant result in column (1). However, the identification of a causal effect in a regression discontinuity design comes from the observations close to the threshold. If the focus is restricted to a narrow range of vote shares around the threshold, a significant effect on abnormal returns is found as shown in columns (3)–(6). As the range of vote shares around the threshold is further narrowed down, the magnitude of the effect on abnormal returns gets larger. For example, the effect of approving a CG proposal on

abnormal returns is 0.24% with vote shares less than 10 percentage points away from the threshold as reported in column (3), and the effect becomes stronger to 0.34%, 0.74%, and 0.90% when the range around the threshold is narrowed down by decreasing the maximum distance from the threshold into 5, 2, and 1 percentage points, respectively. The significant effect on abnormal returns with a narrow range around the threshold implies the causal effect of approving a CG proposal on abnormal returns because observations close to the threshold can be regarded as randomly assigned to either side of the threshold. However, when the range around the threshold is restricted, the number of observations within the range decreases so that the estimation efficiency falls down. To improve the efficiency by using all votes in the sample while controlling for any other continuous effects than the discontinuous effects at the threshold, Equation (7), which includes two polynomials of order four in the excess vote share, can be estimated. According to the estimation results of this model, which is reported in column (7), the effect of approving a CG proposal on abnormal returns is 0.48%. These results are consistent with those of Cuñat et al. (2012), who document a significant causal effect of approving a CG proposal on abnormal returns during the period between 1997 and 2007.

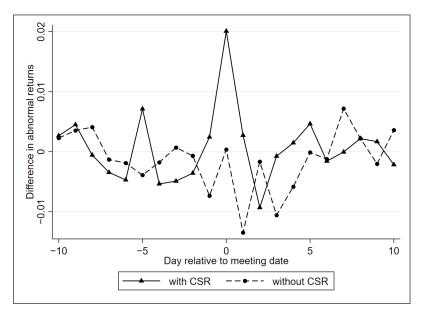
**Table 3.** Abnormal Returns around the Majority Voting Threshold. This table presents regression results of the abnormal returns for the day of the meeting on whether the proposal is approved. Panel A is for all CG proposals, Panel B for CG proposals voted with corporate social responsibility (CSR) proposals, and Panel C for CG proposals voted without CSR proposals. Abnormal returns are calculated using the Fama-French 5-factor model. The estimates based on all votes in the sample are reported in column (1). Column (2) is based on non-close vote shares, which refer to vote shares more than 10 percentage points away from the threshold. Columns (3)–(6) are based on vote shares less than 10, 5, 2, and 1 percentage points away from the threshold, respectively. Column (7) reports the estimation results, based on the full sample, after including fourth-order polynomials in the excess vote share for each side of the threshold. Standard errors are clustered by firm. *t*-statistics are reported in parentheses. \*\*\*, \*\*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: All CG Proposals								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	All Votes	Non-close	±10%	±5%	±2%	±1%	Full Model	
D	-0.0006 $(-0.67)$	-0.0026 (-1.61)	0.0024 * (1.77)	0.0034 * (1.68)	0.0074 ** (2.42)	0.0090 ** (2.37)	0.0048 * (1.73)	
Observations $R^2$	1683	1205	478	221	79	48	1683	
	0.0002	0.0033	0.0046	0.0101	0.0511	0.0683	0.006	
Panel B: CG P	roposals Vo	ted with CSI	R Proposals					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	All Votes	Non-close	±10%	±5%	±2%	±1%	Full Model	
D	0.0006	-0.0039 **	0.0046 ***	0.0065 ***	0.0201 ***	0.0210 ***	0.0129 ***	
	(0.47)	(-2.24)	(2.83)	(2.72)	(3.70)	(4.22)	(2.83)	
Observations $R^2$	869	638	231	104	33	23	869	
	0.0003	0.0066	0.0268	0.0519	0.2757	0.2857	0.0179	
Panel C: CG P	roposals Vo	ted without	CSR Propos	als				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	All Votes	Non-close	±10%	±5%	±2%	±1%	Full Model	
D	-0.0015 $(-0.94)$	-0.0021 (-0.97)	0.00003 (0.02)	0.0007 (0.24)	0.0004 (0.10)	0.0005 (0.11)	-0.00003 $(-0.01)$	
Observations $R^2$	814	567	247	117	46	25	814	
	0.0011	0.0023	0.0000	0.0003	0.0001	0.0002	0.0051	

In order to examine the value of the presence of CSR proposals at annual meetings, the sample of CG proposals is split into two subsamples based on the existence of CSR proposals at the same meeting. Panel B of Table 3 shows the results for the subsample of

CG proposals voted with CSR proposals, while Panel C of Table 3 is for the subsample voted without CSR proposals. According to column (7) of Panel B, which corresponds to the estimation results of Equation (7), approving a CG proposal increases abnormal returns by 1.29%, which is significant at the 1% level, if the CG proposal is voted together with CSR proposals at the same meeting. On the other hand, the results in Panel C show that the effect of approving a CG proposal on abnormal returns is insignificant if CSR proposals are not voted at the same meeting. That is, the significant effect of approving a CG proposal on abnormal returns can be found only in the subsample of CG proposals voted together with CSR proposals, but not in the other subsample. This suggests that the existence of CSR proposals at the same meeting is important for the significance of the effect of a CG proposal on shareholder value, which in turn supports the argument that there is a value in the presence of CSR proposals even if they are not approved at annual meetings.

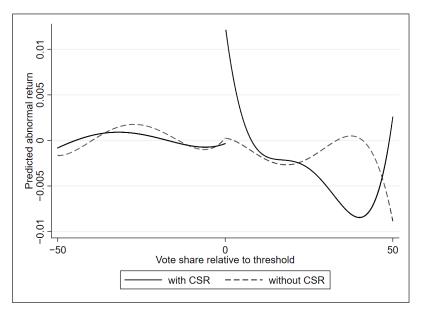
To provide a clearer picture of the value of the presence of CSR proposals, Figure 1 shows the difference in average abnormal returns between proposals approved with less than 2 percentage points margin and those rejected with less than 2 percentage points margin for each of the two subsamples. The solid line refers to the subsample of CG proposals voted together with CSR, and the dash line is for the subsample voted without CSR proposals. The difference in abnormal returns on the day 0 relative to the meeting date in Figure 1 corresponds to column (5) in Panels (B,C) of Table 3. The figure shows a big upward jump in the difference in abnormal returns at the meeting date for the subsample voted with CSR proposals, but no such a large change in the other subsample. This highlights the importance of being voted together with CSR proposals at the same meeting in order to have a significant effect of approving a CG proposal on the abnormal return of the meeting date.



**Figure 1.** Difference in Average Abnormal Returns for Vote Shares with Less Than 2% Margin around the Threshold. The vertical axis refers the difference in daily average abnormal returns between proposals approved with less than 2 percentage points margin and those rejected with less than 2 percentage points margin, where abnormal returns are calculated using the Fama-French 5-factor model. The horizontal axis corresponds to the day relative to the meeting date, where day 0 is the meeting date. The solid line is for corporate governance (CG) proposals voted with corporate social responsibility (CSR) proposals, and the dash line is for CG proposals voted without CSR proposals.

Figure 2 presents abnormal returns on the meeting date predicted by Equation (7) with fourth-order polynomials, which controls for any other continuous effects except the discontinuous effects at the threshold. The solid line is for the subsample of CG proposals voted with CSR proposals, and the dash line is for the other subsample voted without CSR

proposals. Here, a large discontinuous increase in predicted abnormal returns can be found at the majority threshold when CG proposals are voted together with CSR proposals at the same meeting. However, there is no such a discontinuity of predicted abnormal returns at the threshold when CG proposals are voted without CSR proposals. This further illustrates the value of the existence of CSR proposals.



**Figure 2.** Predicted Abnormal Returns for the Meeting Date. The vertical axis refers to the predicted abnormal return for the meeting date, where abnormal returns are calculated using the Fama-French 5-factor model. The predicted abnormal returns are from the regression of the abnormal returns for the day of the meeting on whether the proposal is approved, which includes fourth-order polynomials in the excess vote share for each side of the threshold. The horizontal axis corresponds to the vote share relative to the majority threshold. The solid line is for CG proposals voted with CSR proposals, and the dash line is for CG proposals voted without CSR proposals.

## 5.2. Aggregation of Multiple Votes and Consideration of Dynamic Effects

The analysis in Section 5.1 regards each individual shareholder proposal as a separate observation. However, there are cases where multiple CG proposals are voted at the same meeting. Furthermore, the voting result at time t can affect outcomes not only at time t but also at times later than t. To take into account these potential issues related to multiple votes and dynamic effects, Equation (10) is estimated with  $-2 \le \tau \le 7$ .

Panel (A) of Table 4 reports the estimation results of Equation (10) using abnormal returns based on three different asset pricing models. Column (1), which is based on the abnormal returns from the Fama-French 5-factor model (Fama and French 2015) of Equation (3), shows that approving a CG proposal increases abnormal returns on the meeting date by 0.66%. This is comparable to 0.48% in column (7) of Panel (A) of Table 3, which is an estimate of Equation (7). The results in Panel (A) of Table 4 suggest that there still exists a significant effect of approving a CG proposal on abnormal returns even after accounting for the multiple votes and dynamic effects. Furthermore, it can be noticed from columns (2) and (3) that the effects on abnormal returns are robust to the asset pricing models used to calculate the abnormal returns.

Panels (B,C) of Table 4 present the estimation results of Equation (10) for each of the two subsamples: a subsample of CG proposals voted with CSR proposals and the other subsample voted without CSR proposals. According to column (1) of Panels (B,C), approving a CG proposal increases abnormal returns by 1.75% if it is voted together with CSR proposals, while abnormal returns increase by only 0.01% when a CG proposal is approved without the presence of CSR proposals at the same meeting. These results are consistent with those based on Equation (7), which is reported in Panels (B,C) of Table 3.

That is, the causal effect of approving a CG proposal on abnormal returns is significant only if it is voted together with CSR proposals at the same meeting. This confirms that the results reported in Panels B and C of Table 3 are not affected by the multiple votes and dynamic effects.

**Table 4.** Abnormal Returns around the Majority Voting Threshold: Aggregation of Multiple Votes and Consideration of Dynamic Effects. This table presents the effect of approving a CG proposal on abnormal returns on the meeting date (t) and on the day after (t + 1), and the sum of the effects on t + 2 to t + 7. Panel A is for all CG proposals, Panel B for CG proposals voted with CSR proposals, and Panel C for CG proposals voted without CSR proposals. Abnormal returns in columns (1)–(3) are calculated using the Fama–French 5-factor model (FF5F), the Fama–French 3-factor model (FF3F), and the Capital Asset Pricing Model (CAPM), respectively. The regression specification accounts for the dynamic effects and multiple votes. Standard errors are clustered by firm. t-statistics are reported in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

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Panel A: All CG F	Proposals		
	(1)	(2)	(3)
	FF5F	FF3F	CAPM
			0.0088 **
t	0.0066 *	0.0055 *	
1	(1.94)	(1.68)	(2.39)
t+1	0.0008	0.0004	-0.0008
	(0.18)	(0.08)	(-0.18)
t + 2 to $t + 7$	0.0133	0.0155	0.0298
	(0.89)	(0.96)	(1.15)
Observations	11,868	11,868	11,868
$R^2$	0.1074	0.1078	0.1116
Panel B: CG Prop	osals Voted with CSR I	Proposals	
	(1)	(2)	(3)
	FF5F	FF3F	CAPM
t	0.0175 ***	0.0155 ***	0.0200 ***
	(3.05)	(2.65)	(3.20)
t+1	0.0086	0.0073	0.0036
	(1.20)	(1.00)	(0.43)
t + 2 to $t + 7$	0.0291	0.0299	0.0587
	(1.14)	(1.07)	(1.01)
Observations	5460	5460	5460
$R^2$	0.1112	0.1133	0.1241
Panel C: CG Prop	osals Voted without CS	SR Proposals	
			(2)
	(1) FF5F	(2)	(3) CAPM
	7677	FF3F	CAPM
t	0.0001	-0.0002	0.0019
	(0.03)	(-0.05)	(0.43)
t + 1	-0.0048	-0.0042	-0.0041
	(-0.97)	(-0.84)	(-0.79)
t + 2 to $t + 7$	0.0031	0.0059	0.0094
	(0.17)	(0.31)	(0.50)
Observations	6408	6408	6408
$R^2$	0.1164	0.1156	0.1166

## 5.3. Falsification Tests

In this section, two falsification tests are conducted to investigate whether the estimated effect in Section 5.1 is just a coincidental effect. The first test is under a counterfactual assumption that the majority threshold is 25%. Table 5 presents regression results of the abnormal returns for the meeting date on whether the proposal is approved with a hypo-

thetical majority threshold at 25%. The regression specification in this table is exactly same as in Table 3 except that hypothetical thresholds are used instead of actual thresholds. Here, any significant effect of approving a CG proposal on abnormal returns cannot be found irrespective of whether it is voted with or without CSR proposals at the same meeting. This result implies that there exists a real effect at the actual majority threshold.

**Table 5.** Abnormal Returns around a Hypothetical Majority Voting Threshold. This table presents regression results of the abnormal returns for the day of the meeting on whether the proposal is approved with a hypothetical majority threshold set as 25%. Panel A is for all CG proposals, Panel B for CG proposals voted with CSR proposals, and Panel C for CG proposals voted without CSR proposals. Abnormal returns are calculated using the Fama-French 5-factor model. The estimates based on all votes in the sample are reported in column (1). Column (2) is based on non-close vote shares, which refer to vote shares more than 10 percentage points away from the threshold. Columns (3)–(6) are based on vote shares less than 10, 5, 2, and 1 percentage points away from the threshold, respectively. Column (7) reports the estimation results, based on the full sample, after including fourth-order polynomials in the excess vote share for each side of the threshold. Standard errors are clustered by firm. *t*-statistics are reported in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: All CG Proposals							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Votes	Non-close	±10%	±5%	±2%	±1%	Full Model
D	-0.0008	0.0001	-0.0017	-0.0009	-0.0021	-0.0021	0.0008
	(-0.73)	(0.08)	(-1.22)	(-0.49)	(-0.92)	(-0.62)	(0.27)
Observations	1683	1147	536	258	106	49	1683
$R^2$	0.0005	0.0000	0.0034	0.0009	0.0083	0.0106	0.004
Panel B: CG P	roposals Vo	ted with CS	R Proposal	s			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Votes	Non-close	$\pm 10\%$	$\pm 5\%$	$\pm 2\%$	$\pm 1\%$	Full Model
D	-0.0008	0.0008	-0.0032	-0.0013	0.0005	-0.0031	0.0035
	(-0.53)	(0.56)	(-1.37)	(-0.57)	(0.25)	(-0.71)	(1.38)
Observations	869	572	297	142	65	31	869
$R^2$	0.0007	0.0007	0.0105	0.0021	0.0007	0.0219	0.0132
Panel C: CG P	roposals Vo	ted without	CSR Propo	sals			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Votes	Non-close	±10%	±5%	$\pm 2\%$	±1%	Full Model
D	-0.0008	-0.0005	0.0001	-0.0002	-0.0066	-0.0012	-0.0031
	(-0.48)	(-0.17)	(0.08)	(-0.06)	(-1.43)	(-0.23)	(-0.48)
Observations	814	575	239	116	41	18	814
$R^2$	0.0004	0.0001	0.0000	0.0000	0.0591	0.0032	0.0042

The second falsification test considered is with another counterfactual assumption that the meetings occur 7 days earlier than the actual meeting dates. Table 6 reports the regression results under this assumption with the same regression specification as in Table 3. Here, again, there is no significant relation between CG proposal approval and abnormal returns, which shows that the estimated effect in Table 3 is for the voting results occurred at the actual meeting dates. The falsification tests in this section confirm the validity of the research design for this study in that there is a discontinuous jump in abnormal returns on the actual meeting date at the actual threshold. Overall, the empirical analysis in this study provides new evidence on the value effect of the presence of CSR proposals at annual meetings.

**Table 6.** Abnormal Returns around the Majority Voting Threshold with a Hypothetical Meeting Date. This table presents regression results of the abnormal returns for a hypothetical meeting date, which is set as 7 days earlier than the actual meeting date, on whether the proposal is approved. Panel A is for all CG proposals, Panel B for CG proposals voted with CSR proposals, and Panel C for CG proposals voted without CSR proposals. Abnormal returns are calculated using the Fama-French 5-factor model. The estimates based on all votes in the sample are reported in column (1). Column (2) is based on non-close vote shares, which refer to vote shares more than 10 percentage points away from the threshold. Columns (3)–(6) are based on vote shares less than 10, 5, 2, and 1 percentage points away from the threshold, respectively. Column (7) reports the estimation results, based on the full sample, after including fourth-order polynomials in the excess vote share for each side of the threshold. Standard errors are clustered by firm. *t*-statistics are reported in parentheses. \*\*\*, \*\*, and \* indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: All CG Proposals							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Votes	Non-close	±10%	±5%	±2%	±1%	Full Model
D	-0.0003	0.0002	-0.0011	-0.0022	-0.0015	0.0005	-0.0039
	(-0.28)	(0.21)	(-0.82)	(-1.14)	(-0.53)	(0.15)	(-1.39)
Observations	1683	1205	478	221	79	48	1683
$R^2$	0.0001	0.0000	0.0010	0.0044	0.0028	0.0003	0.0069
Panel B: CG P	roposals Vo	ted with CS	R Proposal	s			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Votes	Non-close	$\pm 10\%$	±5%	$\pm 2\%$	±1%	Full Model
D	-0.0018	-0.0006	-0.0023	-0.0032	-0.0034	-0.0031	-0.0055
	(-1.37)	(-0.31)	(-0.99)	(-0.94)	(-0.67)	(-0.61)	(-1.06)
Observations	869	638	231	104	33	23	869
$R^2$	0.0021	0.0002	0.0036	0.0078	0.0125	0.0087	0.0094
Panel C: CG P	roposals Vo	ted without	CSR Propo	sals			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Votes	Non-close	±10%	±5%	±2%	±1%	Full Model
D	0.0003	0.0002	0.0005	-0.0013	-0.0013	0.0019	-0.0033
	(0.26)	(0.16)	(0.24)	(-0.56)	(-0.36)	(0.39)	(-0.94)
Observations	814	567	247	117	46	25	814
$R^2$	0.0001	0.0000	0.0002	0.0020	0.0025	0.0054	0.0114

## 6. Discussion

Section 5 shows that there is a positive causal effect of approving a CG proposal on firm value, confirming the results of Cuñat et al. (2012), although the sample period of this study (2006–2019) is different from that of Cuñat et al. (2012) (1997–2007). Based on this baseline result for the effect of CG proposals on firm valuation, this study goes one step further by investigating heterogeneity in the value impact of CG proposals. In particular, in order to understand the value relevance of CSR proposals, the sample of CG proposals is split into two subsamples depending on whether a CG proposal is voted together with a CSR proposal at the same meeting. The subsample analysis finds that approving a CG proposal makes a positive effect on firm value only when the CG proposal is voted with a CSR proposal at the same meeting. This result provides empirical evidence which supports the value of the presence of CSR proposals at annual meetings. Even if CSR proposals are typically not approved at annual meetings, there still exists value impact of the presence of CSR proposals, especially by securing a positive causal effect of CG proposals on firm value. This value impact of the presence of CSR proposals at annual meetings is robust not only to the consideration of the potential issues related to multiple votes and dynamic effects, but also to the asset pricing models used to measure the impact on firm valuation. Moreover, falsification tests based on counterfactual assumptions about majority thresholds and meeting dates also confirm that the value impact from the presence of CSR proposals is

not a coincidental effect but a real effect properly captured by the regression discontinuity design framework.

## 7. Conclusions

This study investigates the value of the submission of CSR proposals by shareholders at firms' annual shareholder meetings. The causal effect of approving a CG proposal on shareholder value is significantly positive only if the CG proposal is voted together with a CSR proposal at the same meeting. The presence of CSR proposals at annual meetings is therefore important in establishing a positive causal effect of approving a CG proposal on shareholder value. This result shows that there is a value in the submission itself of CSR shareholder proposals even if they are typically not approved at annual meetings. This new empirical finding can also explain why shareholders continue submitting CSR proposals at annual meetings despite the high associated rejection rate. An implication of the results from this study is that the active expression of shareholders' interest in CSR by submitting CSR proposals is important for the effective impact of CG provisions on firm valuation.

The analysis in this study is based on large US public companies, and the generalization of the results from this study into other types of firms is not guaranteed. Therefore, further investigation into the value impact of the presence of CSR proposals in other settings could be a potential future research direction. For example, comparative studies between large and small firms, or firms in developed and developing countries, could be interesting research topics for future studies.

Funding: This research received no external funding.

Data Availability Statement: The data analyzed in this study can be found here: Proxy Monitor (https://www.proxymonitor.org/, accessed on 26 May 2021), Yahoo Finance (https://finance.yahoo.com/, accessed on 28 May 2021), and Kenneth French's data library (https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\_library.html, accessed on 30 May 2021).

Conflicts of Interest: The author declares no conflict of interest.

## Abbreviations

The following abbreviations are used in this manuscript:

CSR Corporate Social Responsibility
CG Corporate Governance
FF5F Fama-French 5-factor Model
FF3F Fama-French 3-factor Model
CAPM Capital Asset Pricing Model

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