

City University of New York (CUNY)

## CUNY Academic Works

---

Theses and Dissertations

Hunter College

---

Fall 1-3-2022

# The Effects of Environmental Corporate Social Responsibility on Financial Returns

Kevin Acevedo  
*CUNY Hunter College*

[How does access to this work benefit you? Let us know!](#)

More information about this work at: [https://academicworks.cuny.edu/hc\\_sas\\_etds/831](https://academicworks.cuny.edu/hc_sas_etds/831)

Discover additional works at: <https://academicworks.cuny.edu>

---

This work is made publicly available by the City University of New York (CUNY).  
Contact: [AcademicWorks@cuny.edu](mailto:AcademicWorks@cuny.edu)

The Effects of Environmental Corporate Social Responsibility on Financial Returns

by

Kevin Acevedo

Submitted in partial fulfillment  
of the requirements for the degree of  
Master of Arts Economics, Hunter College  
The City University of New York

2022

1/3/2022

Date

Ingmar Nyman

Thesis Sponsor

1/3/2022

Date

Devra Golbe

Second Reader

## Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>
<b>2</b>	<b>Literature Review</b>	<b>4</b>
<b>3</b>	<b>Methodology</b>	<b>7</b>
<b>4</b>	<b>Data</b>	<b>11</b>
<b>5</b>	<b>Results</b>	<b>22</b>
<b>6</b>	<b>Discussion</b>	<b>27</b>
<b>7</b>	<b>Bibliography</b>	<b>28</b>
<b>8</b>	<b>Appendix</b>	<b>30</b>

## **Abstract**

A major issue concerning companies is global warming and the impact that firms have on the environment. Companies are taking steps towards sustainability, but it is unclear if sustainable business practices are beneficial to companies' financial performance. This paper examines the effect of environmental corporate social responsibility (CSR) of Fortune 250 companies on financial performance. The analysis reveals significant effects on financial performance, but they are inconsistent and hard to interpret.

Keywords: Environment, Corporate Social Responsibility, Financial Performance

## **1 Introduction**

Companies often have business practices that are damaging to the environment. They extract raw materials, pollute the air, contaminate bodies of water, and damage natural habitats. As the threat of a global environmental crisis rises, businesses have transitioned to strategies that emphasize environmentally conscious practices and reduce their carbon footprint (Deloitte 2019). Governments and corporations have been moving towards more sustainable business practices. In 1990, the U.S. Environmental Protection Agency (EPA) enacted the Pollution Prevention Act with the purpose of reducing pollution. The EPA also enforces environmental laws through the judiciary system, and violators usually pay a penalty fine (US Environmental Protection Agency n.d.). EPA certified firms have shifted their behavior towards more responsible behavior. Corporate Social Responsibility (CSR) can improve firms' competitiveness and their future performance (Flammer 2015). For example, in 2007, Marks and Spencer started a CSR program with the goal of becoming "the world's most sustainable major retailer" (MIT Sloan School of Management 2012). Five years after starting the program, the company saw

significantly higher financial performance. As CSR becomes more common among companies, it raises questions about whether companies make environmentally conscious decisions solely for the sake of the environment or for financial gains.

This paper aims to answer whether firms' environmental strategies correlate with their financial performance. In this paper, I measure environmental social corporate responsibility by the vote share in favor of proxy proposals. Proxy proposals are put forward by and voted on by shareholders at annual shareholder meetings. The vote is nonbinding to company management. Voting support for proposals related to sustainability has consistently increased in the last few years (Tonello 2018). Financial performance is measured using abnormal returns, which are the returns that are different from expected returns. Abnormal returns are calculated using a theoretical model of expected returns and data from financial markets.

The results of the analysis show that environmental corporate social responsibility has a statistically significant effect on financial performance, though neither a consistent nor convincing effect. Though some years show a significant effect, those years are generally adjacent and with opposite signs, suggesting that these changes in financial performance may not be due to CSR, but rather to unusual economic conditions or other omitted factors. Overall, I find no consistent link between CSR and profitability.

## **2 Literature Review**

The relationship between CSR and financial performance has been a growing theme in research. The ideal study would evaluate the financial performance of two random and nearly identical portfolios with the only thing distinguishing them being their environmental performance (Flammer 2015). My design is closest to Flammer's (Flammer 2015). We both use the same proxy for CSR. However, she runs an event study using a regression discontinuity

design (RDD). Her key indicator variable is a binary, pass or fail, variable. Her dependent variable is abnormal returns. The effect of CSR on abnormal returns is shown by discontinuity at the “victory margin.” Her results show that votes that are non-close (have a greater than  $\pm 10\%$  victory margin) have abnormal returns that are “virtually zero.” This is likely a result of these votes being expected and thus already reflected in the markets.

Proxy proposals are nonbinding, in other words, a firm does not need to make any changes if a proposal receives higher than a 50% vote share. To establish randomness among her sample observations, Flammer argues that a proposal that receives 51% is no different than one that receives 49%. She finds that a proposal that passes the threshold by a narrow margin yields significant abnormal returns. Additionally, she estimates that proposals that pass and are implemented yield even higher abnormal returns (Flammer 2015). She finds that passing “CSR proposals have a 52% probability of being implemented,” telling us that even though they are nonbinding, they affect shareholder value (Flammer 2015).

Li Cai and Chaohua He analyze the relationship between environmental responsibility and long run stock returns (Cai and He 2014). They use the Kinder, Lydenberg, Domini & Co. (KLD) environmental rating to measure short-term and long-term environmental performance. The KLD score includes information on firms’ environmental strengths and concerns. It “provides an overall company [Environmental, Social and Governance] rating – a seven-point scale from ‘AAA’ to ‘CCC’” (MSCI 2021, p. 4). Additionally, it “provides scores and percentiles indicating how well a company manages each key issue relative to industry peers” (MSCI 2021, p. 4). It is updated every February, May, August, and November. Using a Carhart four factor model and Fama-Macbeth regression estimates, the authors measure abnormal returns

in various time intervals; the factors are market return minus the risk-free rate return, high minus low, small minus big, and momentum (Cai and He 2014, p. 617). They measure the correlation from 1992 to 2012, a total of 21 years. Though their results vary across time intervals, Cai and He find that an environmentally responsible portfolio has significantly higher abnormal returns after six years, but not over the shorter intervals more typical in these kinds of studies. (Cai and He 2014, p. 626). As a control group, they run the same analysis on a portfolio of environmentally irresponsible firms and find no significant abnormal returns. They test their results for robustness by analyzing different portfolio weighting schemes and winsorizing their data.

The strength of this analysis is that it tries to compare two nearly identical portfolios that differ in their environmental performance. However, it relies on the robustness of the KLD environmental rating. Variables used to create the KLD rating are binary. Applying KLD data, which is nonmetric, to a metric model such as theirs is not appropriate. Additionally, KLD ratings ignore industry differences (Hatten et al, 2020). Their results rely on efficient markets, which depends on smaller windows. Their results for smaller windows are insignificant. For my study, I use an independent variable that is a different measure of CSR and is not subjective.

Stephen Brammer and his coauthors analyze the relationship between firms' social performance and their financial performance using a portfolio approach. They use multiple social indicators, one of them being environmental performance, to categorize firms. They use the EIRIS Sustainability Rating to measure environmental performance (Brammer, Brooks, and Pavelin 2006). Using a Fama-Macbeth model, they run cross-sectional regressions on time-series for each of the social indicators to measure financial performance. A time-series cross-sectional study uses repeating units of observations that occur in a time series, where the units of

observation are measured and analyzed (Beck 2001). The study concludes that environmental performance is negatively correlated with returns. Firms with higher social performance have lower returns, and firms with the lowest possible social performance score outperform the market. The EIRIS Sustainability Rating is updated continuously rather than discretely, so their methodology cannot be designed as an event study. As their concluding statement, they encourage researchers to “conduct event studies to examine in a time-series context the impact on its share price of a change in corporate social policy by a firm” (Brammer, Brooks, and Pavelin 2006, p. 115). An event study is useful in this context because it can estimate any differences in financial performance that occur directly after a change in a firm’s environmental position.

Existing literature on this topic contains a mix of results. There may be theoretical reasons for this. Firms with high environmental performance may have a competitive advantage over other firms and they may have stronger leaders, which leads to stronger financial performance. On the other hand, firms with high environmental performance may invest money in such a way that does not prioritize shareholder value. Environmental responsibility is expensive and can cost the firm a lot of money. Moreover, identifying a link between CSR and financial performance also poses empirical challenges. It is possible that if environmental performance correlates with high financial performance, it takes years to come to fruition. Additionally, other economic factors could obscure the relationship.

### **3 Methodology**

This paper aims to analyze the effect of firms’ environmental CSR proposals on their financial performance. It will not try to answer why initiatives affect financial performance, but rather, will try to establish whether a correlation between the two exists. The main model,

equation 1, is a cross-sectional model of cumulative abnormal stock returns as a continuous linear function of the proxy proposal vote share (of the total votes cast), dummy variables for year fixed effects, and variables capturing interaction between year and vote share. The unit of observation is a firm-proxy proposal pair, which constitutes the event. Abnormal return is used as the measure of financial performance because it captures how the firm's return diverges from its expected return, thus accounting for other determinants of the firm's profitability. The abnormal return, which is the dependent variable,  $R_{\alpha}$ , is accumulated over the event window around the event. I use year fixed effects because they allow abnormal returns to vary over time and in hopes that they account at least partially for unobserved variables. The interaction dummies allow for the vote share to affect abnormal returns differently in each year, to account for the possibility that its effect on financial performance varies over time. For every proposal-year observation, there are 14 year dummy variables ( $year_t$ ) and 14 year dummy variables that interact with vote share. I use 2006 as the base year.

$$CAR_t = a + \beta_1 voteshare + \sum \delta_t year_t + \sum \gamma_t voteshare \times year_t + \varepsilon \quad (1)$$

$$\frac{\partial R_a}{\partial voteshare} = \beta_1 + \sum \gamma_t \times year_t \quad (2)$$

My primary concern is the marginal effect (equation 2) of vote share on abnormal return, given by the total derivative of abnormal return with respect to vote share. Taking the derivatives, we see that the marginal effect is given by the coefficients of vote share and the coefficients of the interaction terms times the year dummy. For example, for a proposal that was

voted on in 2010, the year dummies will be zero for each observation except for the one that represents the year 2010. For any given proposal, there is one year term and one interaction term that is non-zero.

Proxy proposals provide insight into risks that companies face due to climate change and their progress in mitigating those risks. When management is not acting on behalf a significant share of shareholders, those shareholders can voice their opinion in the form of a proxy proposal. A low vote share may indicate that voting shareholders feel that management is doing a sufficient job. Environmental proposals that receive a lot of votes may pose a risk to shareholders because they indicate a conflict between shareholders and management in addition to any business changes that the proposals entail. On the other hand, they may also give confidence to the shareholders who agree with the proposal. The explanatory variable is not a direct indicator of an environmentally conscious firm, rather, it indicates that a firm is facing pressure to change its business in an environmentally conscious manner.

This paper analyzes changes in abnormal returns using four prediction windows: one week past the event, one week past the event with a three-day information leak window preceding the event, one month past the event, and one month past the event with a one-week information leak window. The purpose of this is to reveal correlations that may occur across different periods. Business decisions such as environmental initiatives are expected to impact a firm's finances. If financial markets are efficient, any new information is immediately reflected in the share price. Relying on this assumption, Flammer measures its effect on financial performance on the day on which a proxy proposal is voted on (Flammer 2015). However, to the extent that the workings of financial markets deviate from the assumption of market efficiency, there may be a lag in the response. Therefore, I use two longer periods after the vote over which

to measure financial performance. To account for information leakage, I use a window preceding the event as shareholders may anticipate the outcome of a vote before the shareholder meeting is held and act accordingly. This window will capture any effect prior to the vote.

There are several theoretical asset pricing models that can be used to estimate expected returns, which in turn are used to calculate the dependent variable, cumulative abnormal returns. The Fama and French (FF) Three Factor Model is an expansion of the Capital Asset Pricing Model (Fama and French 1993). CAPM uses market risk as the only factor in pricing assets. Based on empirical evidence, the FF model adds two factors as determinants of asset pricing: size and book-to-market value. It models the return on an asset above and beyond the risk-free return as a linear function of three variables: the market risk premium, Small Minus Big, and High Minus Low (equation 3). The market risk premium is the market return minus the risk-free return. Investors risk a loss when investing in markets and this factor measures returns that are in excess of the risk-free rate. A diversified portfolio of small stocks outperforms a diversified portfolio of big stocks over time. The Small Minus Big factor captures excess returns that firms enjoy by being small rather than large. Book-to-market value is a firm's common shareholder equity relative to its market capitalization. Firms with higher book-to-market values, value stocks, outperform those with lower book-market value, growth stocks. The model uses the High Minus Low factor to capture the higher profitability of high book-to-market firms.

To estimate the coefficients of the Fama-French Three factor model for each firm-proposal pair, I use historical daily stock market price data and create a three-year long estimation window. The estimation window spans from three and a half years preceding the date of the proposal to six months preceding the date of the proposal. The left-hand side of Equation 3 is the actual return of a security minus the risk-free return ( $R_s - R_{rf}$ ). The right-hand side consists

of the three factors and their betas, market risk premium ( $R_m - R_{rf}$ ), Small Minus Big (SMB) and High Minus Low (HML). All in all, this time series analysis generates for each of the 304 firm-proposal pairs a set of four estimated parameters,  $\hat{\alpha}, \hat{\beta}_1, \hat{\beta}_2, \hat{\beta}_3$ , which I then use to predict the return around each proposal.

$$R_S - R_{rf} = \alpha + \beta_1(R_m - R_{rf}) + \beta_2 \text{SMB}_t + \beta_3 \text{HML}_t + \varepsilon \quad (3)$$

After estimating the Fama and French coefficients, which are represented by the alpha and betas in equation 3, I use them to calculate abnormal returns for each firm-proposal unit of observation accumulated over the event window. The daily predicted return  $\widehat{R}_p$  is calculated using the estimated coefficients and the FF factors in Equation 4.

$$\widehat{R}_p = \hat{\alpha} + \hat{\beta}_1(R_m - R_{rf}) + \hat{\beta}_2 \text{SMB}_t + \hat{\beta}_3 \text{HML}_t \quad (4)$$

Abnormal daily returns  $AR_t$  are calculated by subtracting predicted returns ( $\widehat{R}_p$ ) from actual returns ( $R_s$ ). Once abnormal returns are calculated for each firm-proposal, they are accumulated over the observation window to create the dependent variable, cumulative abnormal returns (CAR).

## 4 Data

Shareholders vote on proxy proposals at their annual shareholder meetings. Proxy proposals are published by the SEC under “Proxy (annual meeting) and information statements” and are typically available for five to ten years after publication (US Securities and Exchange Commission 2017). This statement is published separately from a firm’s 10-K or 10-Q quarterly reports. Shareholders have the right to express and vote on matters that impact companies in which they own shares. “The proxy voting process is a primary way for shareholders to learn

about matters to be decided at companies in which they have invested, make their views known to company management, and participate effectively at an annual or special meeting” (US Securities and Exchange Commission 2017, p. 1). A group of shareholders develops a statement about something they believe impacts shareholders and proposes an action that the company should take. Shareholders use qualitative and quantitative evidence to convince other shareholders to vote in favor of the proposal. Following the shareholders’ proposal, the board of directors provides a statement where they present their position on the proposal with evidence and the firm’s current standing and progress on the matter. Proposals are nonbinding, so companies are not required to act upon them.

Environmental proposals follow a recurring theme. Most proposals are shareholders requesting that the company publish a single report or an annual report about the current position, the risks involved, and their plans regarding a particular matter related to the environment. The second most prevalent proposal after reports is shareholders requesting that the company set certain targets with timelines regarding their environmental policies. The following is from a proposal that shareholders of Dominion Energy put forward, which received a relatively high vote share of 48% (US Securities and Exchange Commission 2017, p. 60 - 61).

*Shareholders request that Dominion Resources, with board oversight, publish an assessment (at reasonable cost and omitting proprietary information) of the long-term impacts on the company’s portfolio, of public policies and technological advances that are consistent with limiting global warming to no more than two degrees Celsius over pre-industrial levels.*

Shareholders proposed that the company publish a report about their current position on global warming and how that may affect shareholders. The high vote share tells us that share-

holders believe that they are not well informed on the risks that climate change poses on Dominion Energy, and it implies that the company is likely not well prepared for those risks. In the proposals that make up my sample, the board of directors for the respective firms recommend that shareholders vote against them. They argue that the company is doing everything in their power to address the issue while also optimizing shareholder value. The board of directors' responsibility to shareholders demands that they act in the best interest of their shareholders. The board of directors of Dominion Energy wrote the following in their counterstatement.

*Preparing a separate report as requested by the proponents, analyzing the potential public policy and technological changes that may occur over the next 25 years relating to a global initiative, would not only take additional time and corporate resources and substantially duplicate existing efforts, but result in some speculation with little value.*

Dominion Energy's board used the company's recent achievements, the information they already make available to shareholders regarding their climate change strategy, and current government policies to counter the proposal. Even with a strong counter argument, nearly half of the voting shareholders voted in favor of this proposal, agreeing that company resources should be used to address this issue.

Almost all proxy proposals take on a similar format as the example above. For more examples, refer to the appendix. Proxy proposals offer useful data to measure firms' environmental and social practices. Corporate Social Responsibility (CSR) proposal data, which includes company name, industry, proposal type, date of the proposal, and the title of the proposal, is downloaded from Proxy Monitor through the Manhattan Institute.<sup>1</sup> It tracks proposals from shareholder meetings from 2006 to 2019 from companies in the Fortune 250.

---

<sup>1</sup> <https://www.proxymonitor.org/>

There are a total of 1,080 proposals from 145 firms, 454 of which are environment related proposals and thus useful to this study. Some firms vote on more than one environmental proposal on the same date. When this is the case, I keep the proposal that received the highest share of votes at that meeting. Some meetings are held on weekends when markets are closed. These are treated as if they occurred on the following Monday when markets open. The data set includes 304 unique proposals, across 98 firms and 58 industries. Some of these proposals are repeating proposals from prior shareholder meetings. I will discuss this further below.

Shareholders can be categorized as individual investors or institutional investors. In 2020, across publicly traded companies in the U.S., institutional investors held 71% of shares, and their voting accounts for 92% of the shares they held. Individual investors held 29% of shares and their voting accounted for 28% of the shares they own (Broadridge Investor Communication Solutions 2020). “Only votes for and against a proposal are included in the calculation of the shareholder vote of that proposal” (Lesmes 2017, p.14). There is a clear disparity between institutional investors and individual investors in the share of votes that they cast.

Figure 1 shows the distribution of proposals across the years included in the sample. Of the 304 proposals, 24 received a vote share of 40% or higher, and 21 of those were in 2016 or later. The median vote share per year, shown in figure 2, steadily increases over time. This suggests that shareholders were recently considering the environment more than they were before.

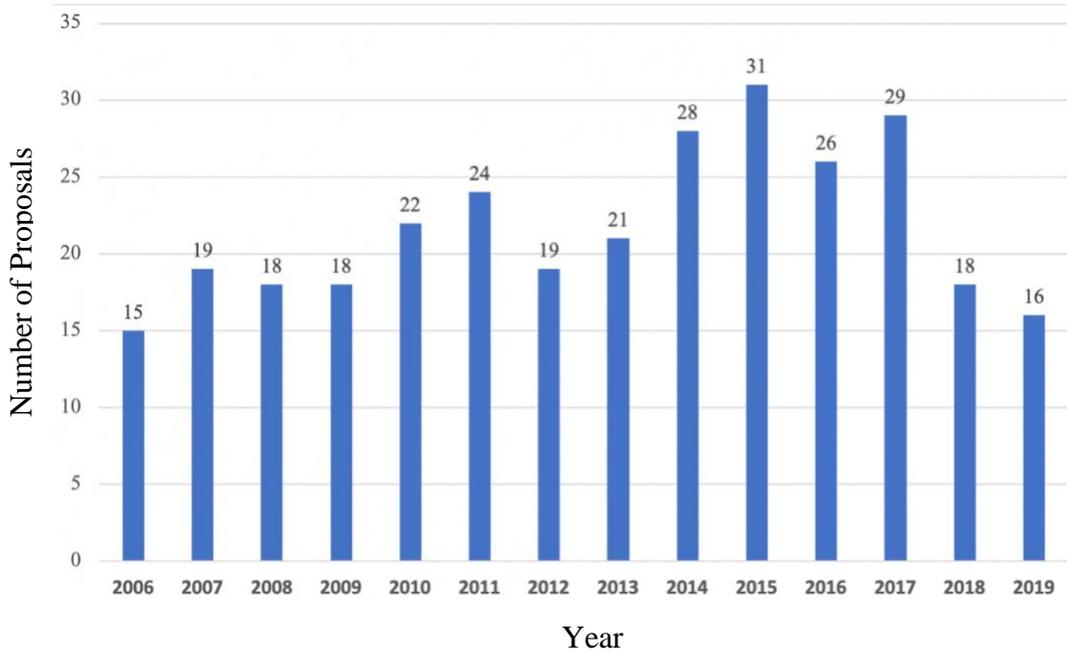
Vote share is the percent that a proposal receives out of the total votes cast. The median proposal’s vote share is 21%, and the mean vote share is 19%. Flammer has 2,729 CSR proposals in her sample; my sample has 304. She has more because she had access to larger databases, RiskMetrics and SharkRepellent (Flammer 2015, p. 2). Even though her study has a

larger sample size, the distribution of vote share is similar in both. The four most common industries in my sample are petroleum refining, electric services, retail eating places, and electronics, which have 46, 37, 14, and 13 proposals, respectively. These make up about a third of the data set. Figure 3 shows the distribution of votes for proposals. Most proposals, 76 out of 304, receive between a 5% vote share and 10% vote share. Only five proposals enjoy more than 50% support.

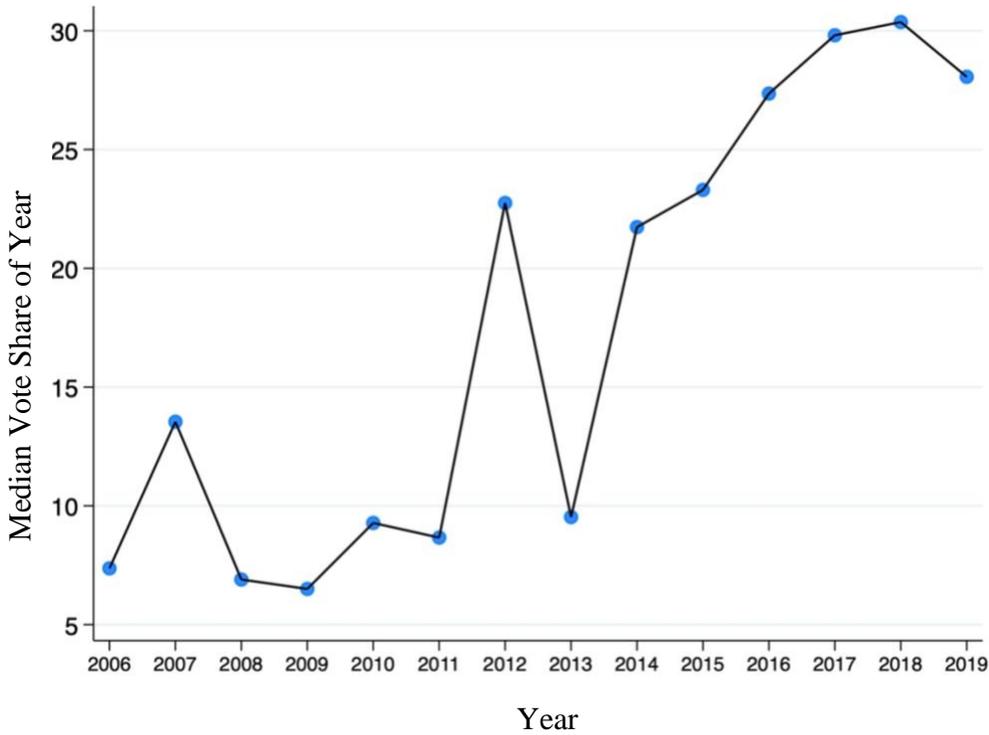
**Table 3. Summary Statistics**

	Environmental Proposals
# of Proposals	304
# of Firms	98
Mean Vote Share	19.31%
Minimum Vote Share	0.53%
Median Vote Share	21.06%
Maximum Vote Share	91.60%

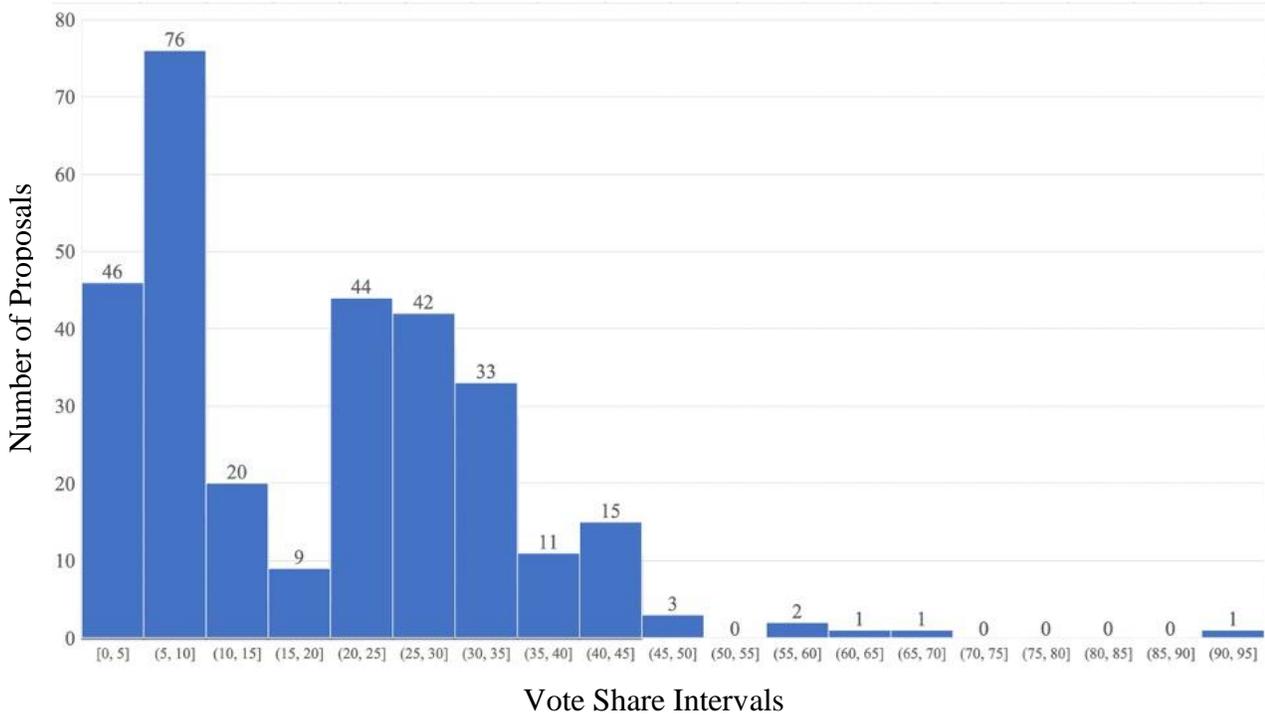
**Figure 1. Proposals Per Year**



**Figure 2. Median Vote Share by Year**



**Figure 3. Distribution of Vote Share**



Proposals often gain little traction among voting shareholders. Since proposals are non-binding, it does not matter whether they passed the 50% threshold. Rather, it is more important to shareholders and the board of directors how many votes they received relative to the total number of votes cast. A proposal that receives a higher vote share is more likely to require that time and resources be invested into the matter. Changes to the environmental measures may be costly for the firm and its shareholders; this likely explains why proposals seldom receive a high vote share.

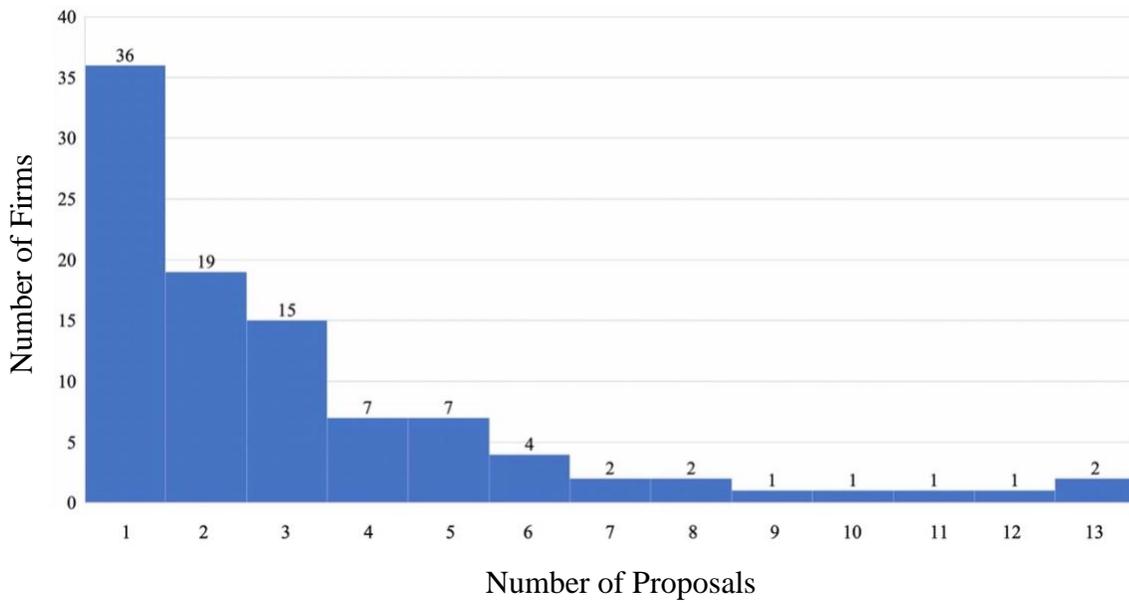
Shareholders often put forward the same or similar proposals that have been voted on in the past. 46 firms in my sample have at least one such repeating proposal. Across these firms there are 64 repeating proposals that make up 161 of the 304 observations. The titles of the proposals may slightly differ. For example, Amazon shareholders vote on the same proposal at

three different shareholder meetings. The first two are titled, “Report Concerning Climate Change”, and the third is titled, “Report on Climate Change Topics”.<sup>2</sup> The titles are not the same, but they mean the same thing. Repeat proposals often gain more traction each year. Shareholders may anticipate the outcome of these proposals before they are voted on and may act accordingly, which would reflect in the share price. Therefore, a window for information leakage is necessary. These observations are from the same firm and represent the same proposal year after year, meaning that they are not independent of each other. To address this issue, I cluster the standard errors by firm. Figure 4 shows the frequency of firms per number of proposals. Of the 98 firms in my sample, 36 vote on one proposal, 19 vote on two proposals, and so on. Figure 5 shows the frequency of proposals for the ten firms with the most proposals in my sample. These ten firms make up 98 proposal-observations, or about a third of my sample. Each of the six graphs in Figure 6 represents a company that voted on repeating proposals in at least two different shareholder meetings. These give a good picture of the companies in the sample with repeating proposals. Vote share trends upwards for most firm proposals.

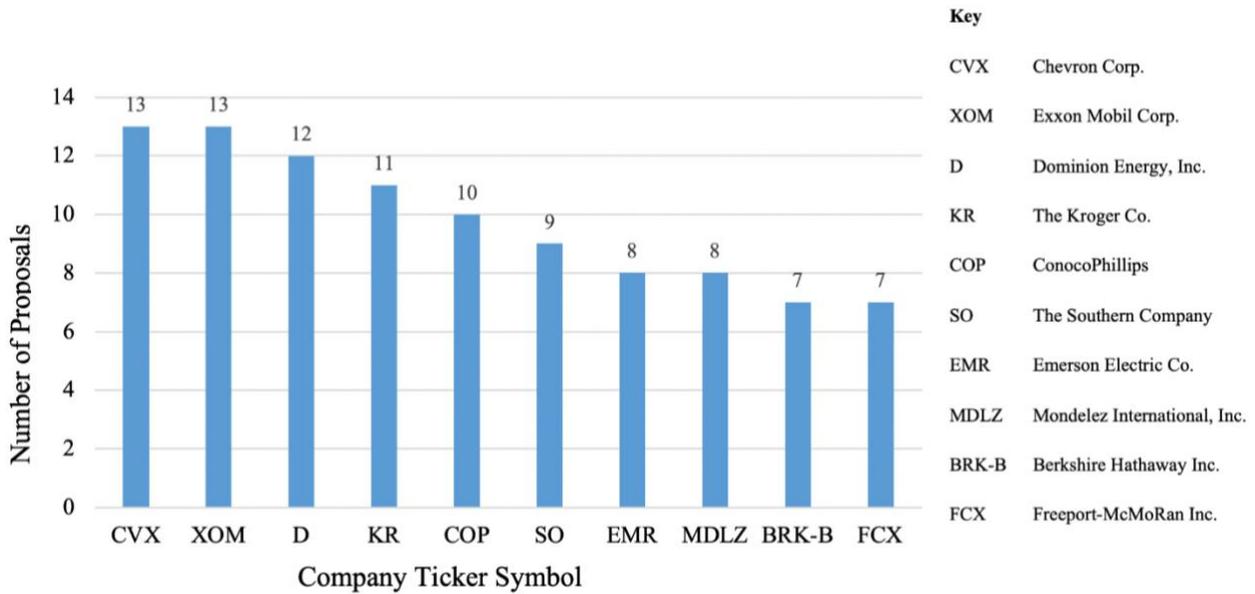
---

<sup>2 2</sup> <https://www.proxymonitor.org/>

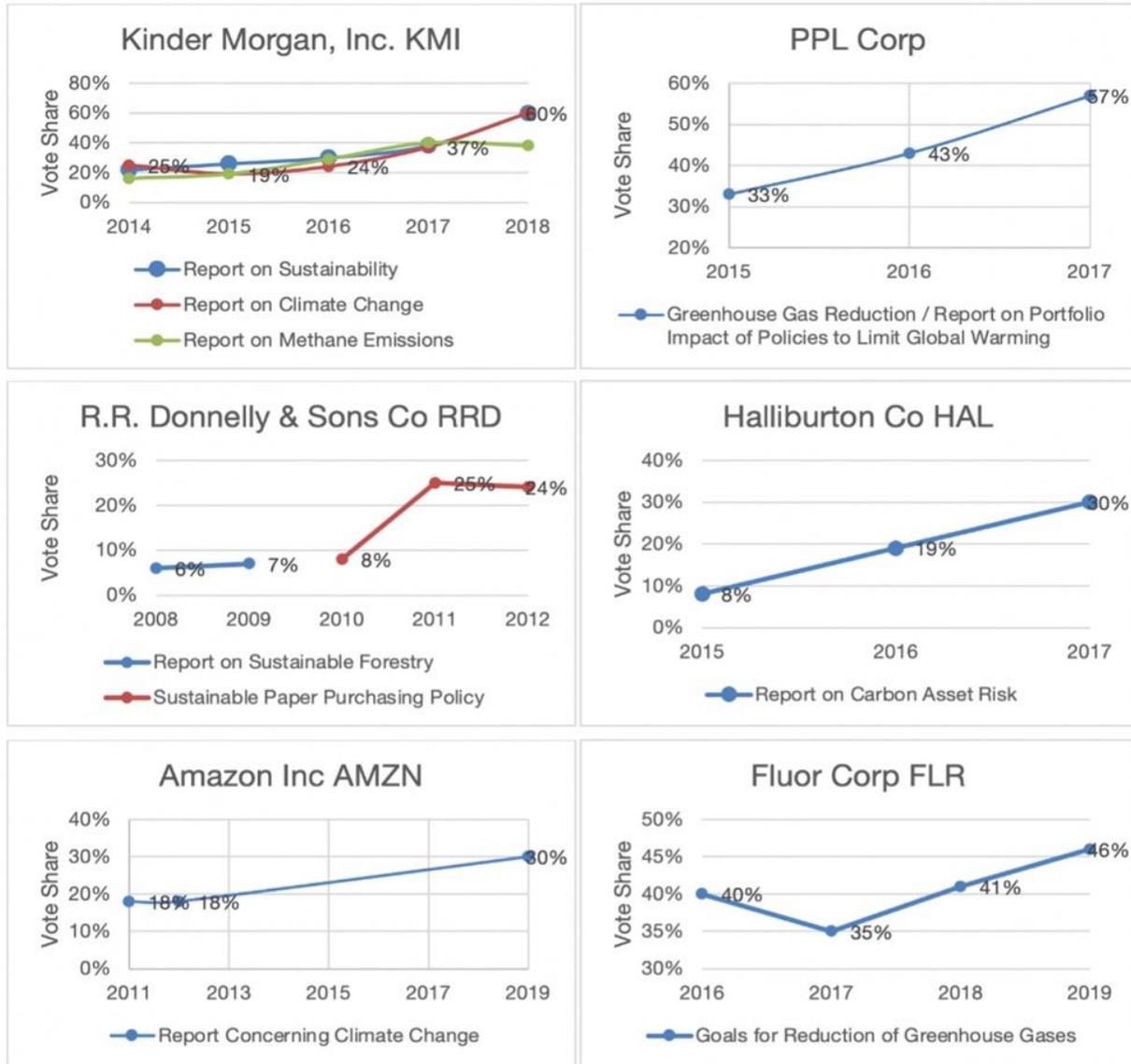
**Figure 4. Frequency of Firms per Number of Proposals.**



**Figure 5. Ten Firms with Most Proposals**



**Figure 6. Vote Shares of Firm Proposals Across Years**



I estimate CARs over two post-meeting prediction windows: 7 and 30 days after the event. Shareholders may anticipate a vote or may know information before the vote takes place that affects their shareholder position. For each prediction window, I run an additional analysis using a window for information leakage, that extends three and seven days prior to the vote for

the shorter and longer window, respectively. Prediction windows are shown in Table 2 with their corresponding CAR variable. I use calendar days to create the prediction windows. Since some calendar days do not have financial data, such as weekends, prediction windows may vary in size depending on which day of the week the shareholder meeting took place. For example, suppose we are using the event window with a week past the event and a three-day information leak window. If a shareholder meeting takes place on a Monday, the event window consists of the preceding Friday, Monday to Friday, and the following Monday. If the shareholder meeting was held on a Thursday, on the other hand, the event window would consist of that week's Monday to Friday, and the following week's Monday to Thursday. Table 3 shows the frequency of each day of the week that a proposal is held, the distribution of when proposals are held, and the mean vote share of each weekday. Most meetings are held on Wednesdays, followed by Thursdays, then Tuesdays. Very few meetings are held on Mondays or Fridays. This tells us that most observations will have market data immediately prior to and following the meeting during the same week it was held.

**Table 2. Cumulative Abnormal Return Prediction Windows.**

CAR	<i>Unit: days</i>	Prediction Window
CAR 1	$(t, t + 7)$	one week past the event
CAR 2	$(t - 3, t + 7)$	one week past the event with a three-day information leak window
CAR 3	$(t, t + 30)$	one month past the event
CAR 4	$(t - 7, t + 30)$	one month past the event with a one-week information leak window

**Table 3. Weekday Frequency of Proposals**

Weekday	Frequency	Percentage	Mean Vote Share
Monday	9	3%	8.6%
Tuesday	55	18%	19.5%
Wednesday	117	38%	22.5%
Thursday	81	27%	13.5%
Friday	35	12%	14.3%
Saturday	7	2%	9.2%

Daily stock prices are publicly available to download from Yahoo Finance. I downloaded daily stock prices for 98 publicly traded companies from January 3, 2000, to December 30, 2019. For my analyses, I use the adjusted close price, which adjusts for dividends. The total number of observations is about 475,000 daily stock prices across the 98 firms. The Fama and French daily factors are available on the Kenneth R. French data library.<sup>3</sup> It includes daily factors for abnormal returns, which is the “value-weight return of all CRSP firms incorporated in the US and listed on the NYSE” (French 2021). Additionally, it includes the small-minus-big factor, the high-minus-low factor, and the one-month Treasury bill rate.

## 5 Results

The analysis tells us that the effect of vote share on financial returns is statistically significant. Results are shown in Table 4. For every percent vote share of an environmental CSR proposal, cumulative abnormal returns for CAR 1, CAR 2, CAR 3, and CAR 4, decrease by – 0.185%, -0.221%, -0.16%, and -0.442%, respectively. The coefficients for CAR 1 and CAR 4

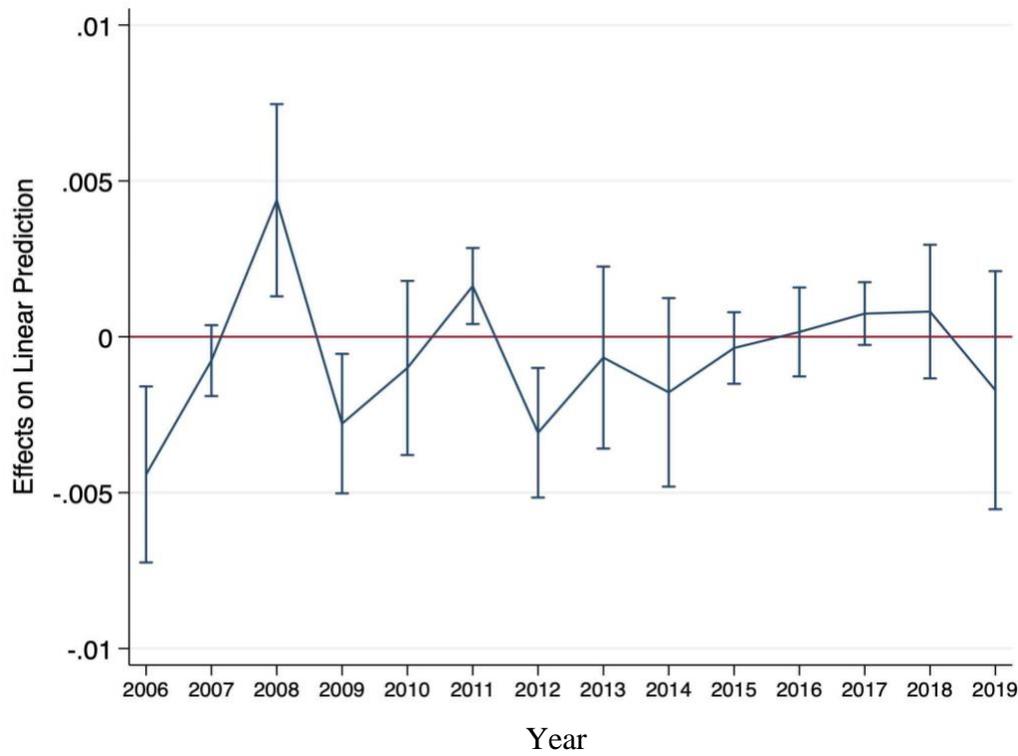
---

<sup>3</sup> [https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html)

are statistically significant at a 5% confidence level. For the models representing CAR 3 and CAR 4, I find that overall interaction between year effect and vote share is statistically significant. The significance level is close to zero for each year interaction variable, so I can reject the null hypothesis that there is no difference between the years. This does not indicate a stable relationship between vote share and abnormal returns. It indicates that the effect of vote share on abnormal returns varies over time.

Figure 7 shows the marginal effects for the prediction window for CAR 4, a month past the event with a seven-day information leak window. Given that it has the widest window, the model for CAR 4 gives the most opportunity to show significant results. The marginal effects of vote share reveal how cumulative abnormal returns are dependent on the year. It is the total derivative of the model function with respect to vote share, and it tells us the rate of change of the dependent variable. It is the sum of the coefficient on vote share and the coefficients on the interaction terms. While in most years, the effect of vote share on returns is insignificant, it is significant in the years 2006, 2008, 2009, 2011, and 2012. However, there is no sign of a stable relationship between vote share and abnormal returns: the direction of the effect reverses from year to year. Moreover, the financial crisis makes data from 2008 and 2009 exceptional. Overall, there is no convincing evidence of a link between CSR and financial performance.

**Figure 7. Average Marginal Effects of Vote Share with 95% Cis (Equation 2)**



Since my models resemble Flammer’s models the most, I expected to have results similar to hers. However, while she finds a positive relationship between vote share and abnormal returns--- proposals that pass the 50% threshold by a narrow margin have significantly higher returns--- I find none. A key difference between my study and hers is that she uses an RDD to cope with omitted firm characteristic and allow the estimation of causal effects. I use windows with information leakage, which accounts for shareholder expectations of a proposal’s vote share. Our data is also different; she has more observations in her sample, which allows for more dependable results.

Cai and He’s results are also different from mine (Cai and He 2014). Their model compares a portfolio with high environmental performance and a portfolio with low

environmental performance, to a control portfolio. They find a positive relationship between high environmental performance and abnormal returns at the six-year window, and no relationship between low environmental performance and abnormal returns. The differences in our results are due to our varying approaches to answer the question. They use the KLD environmental rating to create portfolios based on firms' ratings, whereas I use proxy proposals' vote shares. They use Carhart four factor model and Fama-Macbeth regression estimates to measure abnormal returns; I use the Fama and French Three Factor Model to measure abnormal returns. They find no significant effect for the shorter estimation windows. Similarly, I find no conclusive result.

Brammer and collaborators find that environmental performance is negatively correlated with financial returns (Brammer, Brooks, and Pavelin 2006). Though some of my coefficients are also negative, our methods and data have little in common. They use the EIRIS Sustainability Rating to measure environmental performance and run cross-sectional regressions. Furthermore, their study focuses on firms in the United Kingdom, not the US.

**Table 4. Regression Results with Interaction.** This table reports the results of the linear regression that interacts vote share with year. It tells us the effect that vote share has on cumulative abnormal returns for each year. Insignificant year dummies and interactions are omitted from the table. Standard errors are clustered by firm.

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Prediction Windows	CAR (0,7)	(-3,7)	(0,30)	(-7,30)
Included Days Before Vote	none	3	none	7
Included Days After Vote	7	7	30	30
Vote Share	-0.00185** (-2.86)	-0.00221 (-1.83)	-0.00160 (-0.96)	-0.00442** (-3.10)
2011	-0.0261* (-2.00)	-0.0372 (-1.87)	-0.0168 (-0.71)	-0.0460 (-1.80)
2015	-0.0251 (-1.93)	-0.0232 (-1.33)	-0.0287 (-1.27)	-0.0483* (-1.99)
2017	-0.0241 (-1.84)	-0.0296 (-1.65)	-0.0396 (-1.60)	-0.0844** (-2.93)
2018	-0.00998 (-0.44)	-0.0234 (-0.85)	-0.0199 (-0.65)	-0.0624* (-2.11)
2007 x vote share	0.00102 (1.04)	0.00142 (1.22)	0.000972 (0.39)	0.00415* (2.10)
2008 x vote share	0.000923 (0.68)	0.00311 (1.61)	0.00427 (1.19)	0.00839** (2.91)
2011 x vote share	0.00204* (2.10)	0.0032* (2.58)	0.00222 (0.89)	0.00626** (3.16)
2015 x vote share	0.00114 (1.15)	0.00104 (0.89)	0.000931 (0.38)	0.00400* (2.05)
2016 x vote share	0.000662 (0.60)	0.00135 (1.14)	0.00148 (0.58)	0.00514* (2.42)
2017 x vote share	0.00143 (1.54)	0.00174 (1.57)	0.00219 (0.91)	0.00566** (3.19)
2018 x vote share	0.000698 (0.48)	0.00111 (0.67)	0.00131 (0.51)	0.00477* (2.45)
<i>N</i>	304	304	304	304
<i>Number of Firms</i>	98	98	98	98

*t* statistics in parenthesis

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## **6 Discussion**

The results of this paper are inconclusive in establishing a relationship between environmental CSR and financial performance. It is possible that any effect is realized after a relatively long period and that financial markets fail to swiftly account for the long-term consequences of firms' environmental stance. Repeating proposals are a limitation of this study. More than half of the observations are repeating proposals. Repeating proposals of the same firm are not independent of each other. A larger sample size without repeating proposals would be a major improvement. Another limitation of the research study is that CSR is endogenous with respect to corporate financial performance. Strong corporate social responsibility may lead to stronger financial performance. Inversely, strong financial performance may lead to more corporate social responsibility. Similarly, quality managers may be more likely to partake in CSR practices while also leading their companies to better financial performance. By contrast, bad managers may fail to do either. For this reason, any correlation between environmental initiatives and financial performance should be interpreted with caution.

## 7 Bibliography

- Beck, Nathaniel. 2001. "Time-Series-Cross Section Data: What Have We Learned in the Past Few Years?" *Annual Review of Political Science*, 4: 271-293.  
<https://www.annualreviews.org/doi/pdf/10.1146/annurev.polisci.4.1.271>
- Brammer, Stephen J., Chris Brooks, and Stephen Pavelin. 2006. "Corporate Social Performance and Stock Returns: UK Evidence from Disaggregate Measures." *Financial Management*, 35 (3), 97-116. <https://doi.org/10.2139/ssrn.739587>
- Broadridge Investor Communication Solutions. 2020. "2020 Proxy Season Review."  
[https://www.broadridge.com/\\_assets/pdf/broadridge-proxypulse-2020-review.pdf](https://www.broadridge.com/_assets/pdf/broadridge-proxypulse-2020-review.pdf)
- Cai, Li., and Chaohua He. 2014. "Corporate Environmental Responsibility and Equity Prices." *Journal of Business Ethics*, 125 (4), 617-635.  
<https://doi.org/10.2139/ssrn.2222904>
- Deloitte. 2019. "Global Resources Study - Deloitte US."  
[https://www2.deloitte.com/content/dam/insights/us/articles/5065\\_Global-resources-study/DI\\_Global-resources-study.pdf](https://www2.deloitte.com/content/dam/insights/us/articles/5065_Global-resources-study/DI_Global-resources-study.pdf)
- Fama, Eugene F., and Kenneth R French. 1993. "Common Risk Factors in the Returns on Stocks and Bonds." *Journal of Financial Economics*, 33 (1), 3-56.  
<https://doi.org/10.1016/j.jfineco.2014.10.010>
- Flammer, Caroline. 2015. "Does Corporate Social Responsibility Lead to Superior Financial Performance? A Regression Discontinuity Approach." *Management Science*, 61 (11), 2549-2568. <https://doi.org/10.1287/mnsc.2014.2038>
- French, Kenneth R. 2021. "Description of Fama/French Factors."  
[https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data\\_Library/f-f\\_factors.html](https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/f-f_factors.html)
- Hatten, Kenneth J., James P. Keeler, James L. Williams, and Kyungho Kim. 2020. "Reflecting on the Methods Used in KLD Research." *The Journal of Business and Economic Studies*, 24 (1), 1 - 32.
- Lesmes, Scott. 2017. "Frequently Asked Questions about Shareholder Proposals and Proxy Access: Course Hero." *Media2*, Morrison & Foerster LLP.  
<https://www.coursehero.com/file/116960394/frequently-asked-questions-about-shareholder-proposals-and-proxy-accesspdf/>
- MSCI. 2021. "MSCI KLD 400 Social Index Methodology."  
[https://www.msci.com/eqb/methodology/meth\\_docs/MSCI\\_KLD\\_400\\_Social\\_Index\\_Methodology\\_Nov2021.pdf](https://www.msci.com/eqb/methodology/meth_docs/MSCI_KLD_400_Social_Index_Methodology_Nov2021.pdf)

MIT Sloan School of Management. 2012. "Marks and Spencer's Emerging Business Case for Sustainability." <https://sloanreview.mit.edu/article/marks-and-spencers-emerging-business-case-for-sustainability/>

Tonello, Matteo. 2018. "Shareholder Voting in the United States: Trends and Statistics on the 2015-2018 Proxy Season." *The Harvard Law School Forum on Corporate Governance*. <https://corpgov.law.harvard.edu/2018/11/26/shareholder-voting-in-the-united-states-trends-and-statistics-on-the-2015-2018-proxy-season/>

US Environmental Protection Agency, EPA. (n.d.) "Pollution Prevention Law and Policies." Access Date: January 1<sup>st</sup>, 2022. <https://www.epa.gov/p2/pollution-prevention-law-and-policies>

US Securities and Exchange Commission. 2017. "Dominion Resources, Inc. Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934. Notice and Proxy." <https://www.sec.gov/Archives/edgar/data/0000715957/000119312517089312/d340312ddf14a.htm>

US Securities and Exchange Commission. 2017. "Spotlight on Proxy Matters." <https://www.sec.gov/spotlight/proxymatters.shtml>

## 8 Appendix

This section provides a deeper look into what proxy proposals are like. I choose ten companies from my sample and provide information such as the title, date, vote share, URL link, and a brief summary for each.

### Proxy Proposals

#### 1. Apple AAPL

##### Proposal 1: Report on Risk to Co. of Regulations on Climate Change

Date: 3/10/2015

Vote Share: 1.58%

Link: [https://www.sec.gov/Archives/edgar/data/0000320193/000119312515017607/d774604dde\\_f14a.htm](https://www.sec.gov/Archives/edgar/data/0000320193/000119312515017607/d774604dde_f14a.htm)

Page: 62

This proposal entails a report to analyze the risks of government regulations, policies and legislations on business. It would consider risks to the company posed by potential changes of policies by federal, state, and local governments. The board voted against it because it would result in a “narrowly focused report that would yield an incomplete and therefore inaccurate analysis of the Company’s exposure to risks”.

##### Proposal 2: Net-Zero Greenhouse gas Emissions by 2030

Date: 2/26/2016

Vote share: 7.13%

Link: [https://www.sec.gov/Archives/edgar/data/0000320193/000119312516422528/d79474ddef14a.htm#toc79474\\_30](https://www.sec.gov/Archives/edgar/data/0000320193/000119312516422528/d79474ddef14a.htm#toc79474_30)

Page: 57

This is a proposal to report the expenses and feasibility of reaching net-zero greenhouse gas emissions by 2030. It was rejected because, according to Apple, the company is already making significant improvements in their carbon efficiency. By 2014, 100% of U.S. operations were powered by renewable energy, and 87% globally. Therefore, this report would be redundant.

## 2. **Amazon AMZN**

### Proposal 1: Sustainability Reporting

Date: 6/10/2015

Vote Share: 24.61%

Link: <https://www.sec.gov/Archives/edgar/data/0001018724/000119312515144712/d834161ddf14a.htm>

Page: 19

Shareholders requested report on the “company’s environmental, social and governance performance and goals, including greenhouse gas reduction goals” to be available on the company website. The proposal was rejected because the company already has practices in place to improve sustainability, and it has information regarding their relevant efforts available on the

company website. The board of directors felt that this proposal would not have been a good use of their time and resources.

### Proposal 2: Sustainability Reporting

Date: 5/17/2016

Vote share: 24.70%

Link: <https://www.sec.gov/Archives/edgar/data/0001018724/000119312516530747/d78603ddef14a.htm>

Page: 13

This proposal is identical to the previous year's sustainability report. Like the previous, the board of directors feel that the company's practices are environmentally conscious and that a report would not be a good use of their resources.

### Proposal 3: Annual Report on on Management of Food Waste

Date: 5/22/2019

Vote Share: 25.90%

Link: <https://www.sec.gov/Archives/edgar/data/0001018724/000119312519102995/d667736ddf14a.htm>

Page: 15

Shareholders propose that the company issue an annual report on the environmental and social impacts of food waste that is a byproduct of their operations. The report should include the

causes, quantities and destinations of the food waste, the potential reduction in greenhouse gas emissions if food waste were reduced, and the feasibility of food waste reduction goals.

Proposal 4: Report on Climate Change Topics

Date: 5/22/2019

Vote Share: 29.75%

Link: [https://www.sec.gov/Archives/edgar/data/0001018724/000119312519102995/d667736dde\\_f14a.htm](https://www.sec.gov/Archives/edgar/data/0001018724/000119312519102995/d667736dde_f14a.htm)

Page: 29

Shareholders propose that Amazon report how the company will handle disruptions from climate change and how the company is reducing its dependence on fossil fuels. Climate change affects the company's workers, customers, and infrastructure. Shareholders claim that Amazon is not a victim of climate change but contributes to it. The board of directors argue that the company is consistently reducing its carbon footprint and improving its sustainability practices. They also argue that there is a lot of information available on their website regarding their sustainability practices. In other words, the BOD agrees that Amazon is already doing this.

So far it seems like board of directors argue against proposals because they take up resources and because they believe that the company already has sufficiently improving sustainability business practices. These reports could also shed light on sustainability practices that the board may not want shareholders to know about and could lead to conversations and changes that take up further resources.

### 3. Exxon Mobil Cor XOM

#### Proposal 1: Report on Portfolio Impact of Policies to Limit Global Warming

Date: 5/25/2016

Vote Share: 38.10%

Link: [https://www.sec.gov/Archives/edgar/data/0000034088/000119312516539460/d14941ddef14a.htm#toc14941\\_24](https://www.sec.gov/Archives/edgar/data/0000034088/000119312516539460/d14941ddef14a.htm#toc14941_24)

Page: 67

Shareholders propose that the company “adopt a policy acknowledging the imperative to limit global average temperature increases to 2 degrees Celsius above pre-industrial levels”, which would commit the company to support this goal. The board of directors argue that while the company is obligated to invest in economical and environmentally responsible energy sources and is doing so, it is impractical to support this goal that has “many variables” and is out of the company’s control.

#### Proposal 2: Report on Portfolio Impact of Policies to Limit Global Warming

Date: 5/31/2017

Vote Share: 62.10%

Link: <https://www.sec.gov/Archives/edgar/data/0000034088/000119312517122538/d182248ddf14a.htm>

Page: 62

This proposal is almost identical to the last, except that it includes that the company publishes an annual report on the “long-term portfolio impacts of technological advances and global climate change policies.” It was also submitted by a different group of shareholders. Exxon had not published any reports of how its portfolio performs under a 2-degree scenario, where the company supports the global goal. The board of directors argue that the company is a leader in energy development and that its portfolio is analyzed annually for commercial viability. They also argue that the company complies with SEC definitions and requirements.

This proposal received a high number of votes, 62%. This shows that shareholders believe that Exxon is not doing enough to show how their portfolio would perform if they increased their efforts to limit global warming. Understandably, the board of directors argued against it because they understand the risks present in making an oil company more sustainable.

### Proposal 3: Report on Methane Emissions

Date: 5/31/2017

Vote Share: 38.70%

Link: <https://www.sec.gov/Archives/edgar/data/0000034088/000119312517122538/d182248ddf14a.htm>

Page: 64

Shareholders argue that Exxon does not provide information on methane leak detection and repair practices, compared to other companies in the sector. The proposal describes the

significance that methane leaks have on climate change, and the inaccuracy of reported leaks within the sector. The proposal claims that Exxon was the “second highest methane emitter from onshore production in 2014.” Shareholders request that the company create an annual report their methane leakage and actions to minimize them. The board argued that the company “meets the stated interest of the proposal.” Judging by the relatively high vote share (38% is on right side of the distribution) even despite the board recommending that shareholders vote against the proposal, many shareholders believe that Exxon is not providing enough information about methane leakage nor taking enough action to prevent it.

#### 4. **Chevron**

##### Proposal 1: Appoint Independent Director with Environmental Expertise

Date: 5/30/2012

Vote Share: 21.50%

Link: <https://www.sec.gov/Archives/edgar/data/0000093410/000119312512160701/d304761ddf14a.htm>

Page: 88

Shareholders proposed that Chevron appoints an environmental expert to their board due to its recent citations for harmful environmental practices. They argue that controversies may damage shareholder value, and it is in their best interest to address and deal with environmental challenges in an “effective, strategic and transparent manner”.

The board challenged this proposal by stating their commitment to their environmental practices. They also argued that board members have “environmental expertise” and that having a special purpose director is “not a good corporate governance practice”. Their arguments are weak though, stating that shareholders have voted against similar proposals in the past shareholder meetings as evidence. The citations listed in the proposal were all from the previous year, showing that Chevron is not taking enough action on the matter.

### Proposal 2: Investment Hazards of Offshore Oil Drilling

Date: 5/29/2013

Vote Share: 7.30%

Link: [https://www.sec.gov/Archives/edgar/data/0000093410/000130817913000196/lchevron\\_def14a.htm](https://www.sec.gov/Archives/edgar/data/0000093410/000130817913000196/lchevron_def14a.htm)

Page: 74

Shareholders proposed that a report be issued that includes information on all offshore oil wells, current and projected expenditure for maintenance and inspections, and cost of research to improve procedures following marine oil spills. The board unanimously recommends that shareholders vote against this proposal because the company fully addresses the concerns through recent disclosures. Being that only about 7% of shareholders voted in favor of this proposal, it seems that the board made a compelling argument and that the information available at the time was sufficient and a report would have been redundant.

Any shareholders can put forward a proposal at shareholder meetings, it is likely that some are not fully informed before making the proposal. This could partially explain why so many proposals receive a low number of votes. Proposals may receive a higher number of votes when there is not enough information regarding the matter available to shareholders. In this case, the board would have made a less compelling counter argument.

### Proposal 3: Targets for Reducing Greenhouse Gas Emissions

Date: 5/25/2016

Vote Share: 7.90%

Link: [https://www.sec.gov/Archives/edgar/data/0000093410/000119312516533382/d117593dde\\_f14a.htm](https://www.sec.gov/Archives/edgar/data/0000093410/000119312516533382/d117593dde_f14a.htm)

Page: 68

Shareholders proposed that the board adopt long-term targets for reducing greenhouse gas emissions that would embody the Cancun Agreement - to limit warming to 2 degrees Celsius. This proposal does not explicitly state the actions that the company should take to meet the targets, simply proposes that the company set short term benchmarks and long-term reduction goals.

In their response, the board argued that the world's energy demand is growing and that emission targets could "put the company at a competitive disadvantage." Both of these statements are true and most shareholders agreed. Setting these targets would have entailed adopting environmental practices that risk shareholder value. This proposal is a good example because it

is not a proposal to report on a matter. It shows us that while shareholders do value sound environmental practices, they value shareholder value more.

## 5. **ConocoPhillips COP**

### Proposal 1: Greenhouse Gas Reduction Goals

Date: 5/14/2013

Vote Share: 24.62%

Link: [https://www.sec.gov/Archives/edgar/data/0001163165/000130817913000118/lconocophillips\\_def14a.htm](https://www.sec.gov/Archives/edgar/data/0001163165/000130817913000118/lconocophillips_def14a.htm)

Page: 82

Shareholders requested that the board set goals to reduce greenhouse gas emissions. While the company acknowledges the importance of addressing climate change, there have been no targets or timeline for reducing emissions. The board argued against the proposal stating that the company has on-going efforts and that it is following regulations in countries of operation. They argue that it would be a poor use of resources.

### Proposal 2: Report on Executive Incentive Compensation Alignment with Low-Carbon

#### Scenarios

Date: 5/16/2017

Vote Share: 6.41%

Link: <https://www.sec.gov/Archives/edgar/data/0001163165/000104746917002284/a2230814zdef14a.htm#stockitem6>

Page: 85

Shareholders proposed that the company make an annual report on how much “incentive compensation programs for senior executives promote resilience to low-carbon scenarios associated with efforts to limit global temperature.” The report would show how financially accountable executives are for their efforts to improve the company’s carbon efficiency. The board urged shareholders to vote against the proposal because they feel that the company is already doing well in this matter. They speak on several items such as, their compensation programs, low carbon objectives, their improving reduction in emissions, and their nomination to the Dow Jones North America Leaders List with improvements in their Carbon Disclosure Project scoring. Shareholders seem to agree with the board. The low vote share tells us that most shareholders feel this report would either be redundant or a poor use of resources.

## 6. **Danaher DHR**

### Proposal 1: Goals for Reduction of Greenhouse Gases

Date: 5/9/2017

Vote Share: 29.41%

Link: <https://www.sec.gov/Archives/edgar/data/0000313616/000119312517105116/d346897ddf14a.htm>

Shareholders proposed that the company set goals for reducing greenhouse gas emissions in accordance with the Paris Climate Agreement, and report on its plans to achieve its goals. The board argued that this proposal would circumvent their decentralized operations business structure. Additionally, while the company is committed to corporate social responsibility, it is best if the company decides how to manage emissions in a way that best serves shareholders. This proposal received a relatively high number of votes likely because shareholders believe it is in their best interest that the company set targets to meet these goals and that they are not yet doing enough.

## 7. **Dominion Energy D**

### Proposal 1: Sustainability as a Performance Measure for Executive Compensation

Date: 5/6/2015

Vote Share: 4.93%

Link: <https://www.sec.gov/Archives/edgar/data/0000715957/000119312515101701/d862565ddef14a.htm>

Page: 72

Shareholders proposed that the company establish compensation and/or bonus incentives for executives based on “reductions in the tons of carbon dioxide emitted”. The board argued that an incentive plan is not necessary for long-term shareholder value growth. They believe that their

current compensation plan rewards sustainable performance goals and shareholder value. The vote share of 5% tells us that shareholders mostly agree with the board.

#### Proposal 2: Report on Portfolio Impact of Policies to Limit Global Warming

Date: 5/10/2017

Vote Share: 47.84%

Link: <https://www.sec.gov/Archives/edgar/data/0000715957/000119312517089312/d340312ddf14a.htm>

Page: 60

Shareholders proposed that the company publish a report on the “long-term impacts of the company’s portfolio, of public policies and technological advances that are consistent with limiting global warming to not more than two degrees Celsius over pre-industrial levels.” They request that the report include how the company can change its capital expenditure to align with a two degree scenario, and how the company plans to integrate new technology, regulation and business models. The board argued that the company has already implemented an environmental strategy to address the challenges that climate change has on the business. The 48% vote share tells us that shareholders disagreed with the board. Shareholders are interested in having more information about the effects that climate change has on the business, and how the company can mitigate those effects.

#### **8. McDonald's MCD**

#### Proposal 1: Report on Environmental Impact of Polystyrene Foam Cups

Date: 5/24/2017

Vote Share: 30.90%

Link: <https://www.sec.gov/Archives/edgar/data/0000063908/000120677417001192/mcdonalds3170981-def14a.htm>

Page: 73

Shareholders requested that the company report the number of foam cups that could reach the environment, and what the impact may be on the health of marine life and humans. They requested that the report include reputational, financial and operations risks and a timeline to phase out their use. The board argued against this proposal stating that the company has a strong track record of sustainability and considers the environmental impact of the foam cups in their packaging. This proposal received a significant number of votes: 31% vote share. Shareholders are concerned about the impact of foam cups and believe that it is in their best interest that the company address this issue. This proposal opens the door to more conversation that can eventually lead to changes in the company's packaging, posing a direct financial risk to shareholders.

## **9. PPL Corp PPL**

### Proposal 1: Climate Change: 2 Degree Scenario Analysis

Date: 5/17/2017

Vote Share: 56.80%

Link: <https://www.sec.gov/Archives/edgar/data/0000922224/000119312517111007/d334463ddf14a.htm>

Shareholders proposed that the company analyze and report the long-term impact of their “portfolio, public policies and technological advances that are consistent with limiting global warming to no more than two degrees Celsius over pre-industrial levels.” The board argued that this proposal would not be a good use of resources because of the lack of framework and uncertainty regarding the Paris Agreement. Shareholders voted in favor of this proposal with 57% yes votes, significantly more than the mean and median vote share. Shareholders feel that it is in their best interest that the company invest more resources into a climate change policy.

#### **10. The AES Corp AES**

##### Proposal 1 : Report on Company Policies to Limit Global Warming

Date: 4/20/2017

Vote Share: 37.41%

Link: [https://www.sec.gov/Archives/edgar/data/0000874761/000087476117000008/a2017proxys\\_tatement.htm](https://www.sec.gov/Archives/edgar/data/0000874761/000087476117000008/a2017proxys_tatement.htm)

Page: 64

Shareholders proposed that the company analyze and report the long-term impact of their “portfolio, public policies and technological advances that are consistent with limiting global warming to no more than two degrees Celsius over pre-industrial levels.” They argued that the company is carbon intensive compared to other companies in the U.S. They argued that risks and opportunities relevant to global warming are important to shareholders. The board argued against

the proposal, stating that the company has taken “significant steps” towards mitigating climate risks. They also gave a target for emissions reduction in the U.S. of 20%-30%, but no timeline. A significant number of shareholders voted in favor of this proposal, telling us that perhaps the company is not doing enough to address this issue.