FTI CONSULTING

Brent J. Fields

Secretary

U.S. Securities and Exchange Commission

100 F Street, N.E.

Washington, D.C.20549-1090

Re: File No. S7-22-19

Dear Mr. Fields,

Thank you for the opportunity to submit comments on the recent rulemaking proposed by the Securities and Exchange Commission.

Last summer, we, along with Kenneth W. Grant, Todd D. Kendall, PhD, and David Molin, PhD published research on the effect of shareholder proposals on a company's financial performance. The paper, '*Political, Social, and Environmental Shareholder Resolutions: Do They Create or destroy Shareholder Value?*' was supported by the National Association of Manufacturers.[1] Although our paper is on an adjacent subject, we feel that our research is nonetheless still relevant, and therefore we are again submitting it for consideration by the Commission.

The premise for the research is that numerous academics and other entities have highlighted the increased prevalence of politically charged resolutions in recent years. Data compiled by As You Sow, a nonprofit shareholder advocacy group, and published in Proxy Preview's yearly compendium of shareholder activist resolutions concerning environmental, social and sustainability issues, shows that the number of such proposals has doubled between 2005 and 2010.

Our research focused on the impact of these proposals on shareholder returns. As stated by the SEC, *"All shareholders, as the ultimate owners of the company, bear the costs associated with management's consideration of a proposal and its inclusion in the proxy statement."* Relatedly, the Commission also states, *"In the 2017 proxy season, retail shareholders voted approximately 29% of their shares, while institutional investors voted approximately 91% of their shares."*[2] We therefore sought to quantify the cost and potential value creation of proposals and whether the voices and interests of long-term retail investors are represented in the process.

Specifically, using the case of climate-change related proposals we statistically examined the reaction of companies' stock prices to both increased disclosure of climate-change-related information as well as shareholder proposals calling for such disclosure.

We found that the adoption of politically-charged shareholder resolutions has no statistically significant impact on company returns one way or the other. Unfortunately, this does not mean that such proposals are entirely without cost. The process of preparing, proposing, and campaigning for a shareholder proposal is often costly to the proposer (and often to the target company, who is responding to the proposal). Such proposals can often cost millions of dollars.[3]

These costs are particularly concerning in cases where the sponsoring investor is a public pension fund, given the obligation of fund managers to maintain returns to their pensioners and the current underfunded status of many funds across the U.S.

We note that many resolutions are sponsored by a handful of relatively active individuals or groups. Based on a breakdown of environmental resolutions that went to a vote at the largest 250 U.S. publicly-held firms from 2006 to 2017, we found 376 environmental resolutions where the sponsoring entity could be identified.

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[1] https://corpgov.law.harvard.edu/wp-content/uploads/2018/06/ESG-Paper-FINAL_reduced-size-002.pdf
[2] https://www.sec.gov/news/public-statement/statement-announcing-sec-staff-roundtable-proxy-process
[3] Nickoley M. Gantchev, "The Costs of Shareholder Activism: Evidence from a Sequential Decision Model", The Wharton School at the University of Pennsylvania working paper, November 2009.

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Nearly 40% were sponsored by socially responsible investing firms: As You Sow, a nonprofit shareholder group, filed 34 (or 9%) of the proposals, while Green Century Capital Management, a designated socially responsible investment firm and active shareholder advocate, and the New York State Common Retirement Fund, the nation's third largest pension fund, each sponsored 22 (or together nearly 12% of the total). Trillium Asset Management, a designated socially responsible investment firm, sponsored 19 resolutions, or about 5% of the total.

The Commission's new rulemaking on shareholder resolutions will address the heart of the issue, raising the ownership requirement to submit shareholder proposals from $2,000 or 1 percent, to a new tiered system. The amendment will also increase the amount of support needed to refile the same proposal from 3 percent support in its first year to 5 percent, and then 15 and 25 percent in its second and third years, respectively. Finally, the proposed shareholder resolution amendment clarifies that no singular person may submit multiple resolutions at the same company during the same year.

Our research suggests that these changes are warranted and will help deliver the Commission's stated objective of protecting retail investors, by making it more difficult for individuals and groups to perennially propose politically-motivated resolutions that have a net negative impact on shareholder value.

In addition, we note that proxy advisory firms, a second focus of the SEC's proposed rulemaking, have played an increasingly active role in supporting these resolutions. According to the law firm Sullivan & Cromwell the largest proxy advisor, Institutional Shareholder Services, supported 74% of social-policy shareholder proposals in 2018, including 94% of political-spending proposals and 87% of environmental proposals.[4]

The SEC's proposed rule on proxy advisors will help ensure that support is warranted, by making sure that any recommendations they provide are materially accurate and free from conflicts of interests and other failings that can diminish shareholder value.

In summary, a small number of institutions and proxy advisory firms are promoting the increased use and promotion of politically-driven resolutions. Our research finds these resolutions do little to create value while generating new costs. Environmental and social issues surrounding topics of global climate change, human trafficking, cybersecurity, and the like require urgent attention.

But solutions in these areas will require wise public policy measures to be taken across a wide swath of the world's nations. When it comes to these issues, efforts such as shareholder resolutions and proxy advisor recommendations are an inadequate substitute for sound policy making and are unlikely to be effective measures to activate real and lasting change.

We have attached the report to my comment letter and hope you will take it into consideration as you discuss the proxy process. We thank you for the opportunity to comment and would be happy to answer any questions on the comments or our research.

Sincerely,

Joseph P. Kalt

Senior Economist, Compass Lexecon

And

Ford Foundation Professor (Emeritus) of

Adel Turki

Senior Managing Director

Compass Lexecon

[4] Sullivan & Cromwell LLP, "2018 Proxy Season Review," July 2018.

International Political Economy

John F. Kennedy School of Government

POLITICAL, SOCIAL, AND ENVIRONMENTAL SHAREHOLDER RESOLUTIONS:

DO THEY CREATE OR DESTROY SHAREHOLDER VALUE?

MAY 2018

Joseph P. Kalt, PhD and L. Adel Turki, PhD
with
Kenneth W. Grant, Todd D. Kendall, PhD and David Molin, PhD
Compass Lexecon

NATIONAL ASSOCIATION OF Manufacturers

Commissioned by the National Association of Manufacturers

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EXECUTIVE SUMMARY

The increased use of politically-charged shareholder resolutions has garnered considerable attention in recent years, as shareholder meetings have become venues for discussion and debate regarding corporate positions and actions on issues of the day. Recent proxy seasons have seen corporate management being asked to address issues as diverse as deforestation, corporate clean energy goals, climate change, the uses of antibiotics and pesticides, political contributions, human rights risks through the supply chain, indigenous rights and human trafficking, cybersecurity, the development and reporting of sustainability metrics, and tax fairness. As we show, this change has both expanded the number of resolutions to which a given company may be required to respond and broadened the range of issues that boards and senior managers are being asked to address.

This study explores the impact of social and environmental shareholder proposals on shareholder returns. Specifically, using the case of climate-change-related proposals to test the economics, we examine statistically the reaction of companies' stock prices to both increased disclosure of climate-change-related information and shareholder proposals calling for such disclosure. We focus on climate change resolutions both because of the growing activism on the part of certain large institutional investors around climate change disclosure and because of the argument upon which that activism is predicated, i.e., that such additional disclosure provides meaningful information to the marketplace and therefore serves to benefit shareholders. Our analysis fails to find support for such assertions. Rather, we find that the evidence demonstrates that the adoption of such shareholder resolutions has no statistically significant impact on company returns one way or the other.

Notwithstanding the stridency of arguments surrounding politically charged shareholder proposals, our finding that such proposals do not enhance shareholder value is not surprising. The fundamental drivers of risk and the impact of an issue like climate change on the ability of management's decisions to enhance or detract from shareholder value are political. Specifically, whether a company should be doing more or different in responding to an issue like climate change turns overwhelmingly on political actors and factors: Will nation A adopt certain kinds of policies to deal with climate change? If so, when? Will adopted policies "stick", or will new political forces come along and change the direction of policy? How will other nations respond? And so forth…

In the face of such fundamentally political determinants of a company's fate, shareholder resolutions that would purport to enhance shareholder value by compelling management to undertake certain adaptive measures or analyses implicitly entail the proposition that corporate managers are better able to make predictions about the direction of national and world politics than the myriad other sources – from think tanks to governments – to which investors might turn for such forecasting. There is no basis for such a proposition.

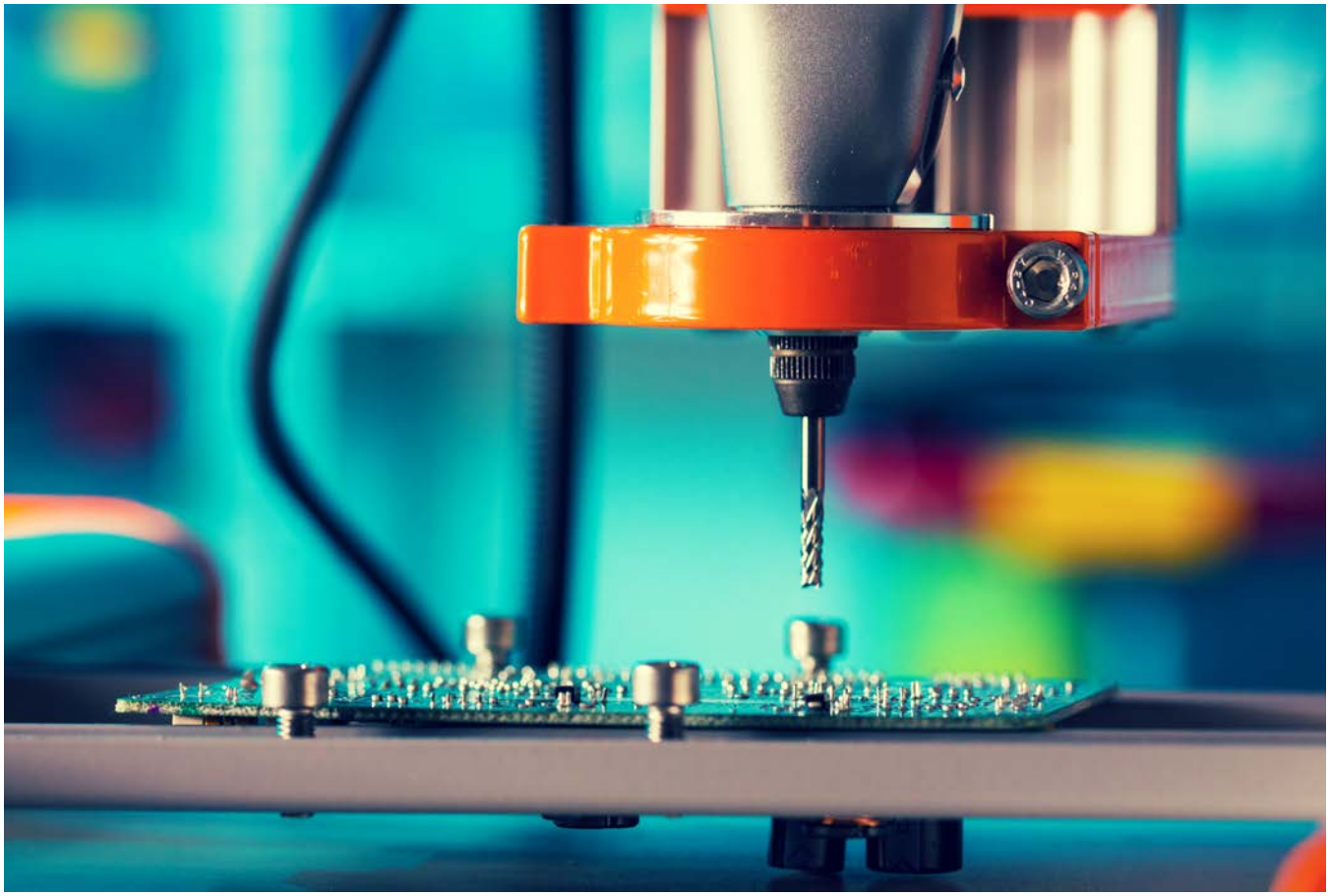
That is, there is no general expectation that corporate managers have special abilities in predicting tastes, preferences, voting behavior, and/or institutional capabilities across a wide and varied number of independent political actors operating within independently acting nations across the globe. Under such conditions, resolutions that, for example, compel disclosure of outcomes under particular political scenarios (e.g., the political paths that might put the world on a trajectory to achieve a goal such as the "not

more than 2 degrees temperature rise" goal that came out of the Paris climate accords in 2015) do not add materially to the information already available to investors from other sources. As such, they cannot be expected to add to shareholder value.

Our results should not be taken to mean, however, that such resolutions are harmless. First, such proposals can often cost millions of dollars. Second, and perhaps of greater importance, such activism may open the door to the diversion of resources towards goals besides shareholder returns, with consequent harm to good corporate governance. It raises the question, for example, of which issues are to be considered "significant" by whom and, thus, warrant the use of management resources and consumption of corporate assets.

Creating incentives for managers to act in ways that focus more on social objectives rather than shareholder wealth may license boards and corporate executives to seek what we could agree are less worthy outcomes, such as maximizing personal wealth or popularity. While there is a substantial literature on the role of "corporate social responsibility" in corporate governance, and not every instance of firm social engagement necessarily leads to a reduction in the quality of governance, the academic literature also finds that the long-run impact of social-issue shareholder proposal activism is negative.

None of this is to say that we should not be extremely concerned about such issues as global climate change, human trafficking, cybersecurity, and the like. Effectively dealing with such problems, however, will require that wise public policy measures be taken across a wide swath of the world's nations. While frustration with slow progress on this front is understandably accompanied by the desire to "do something", doing something effective in such arenas is the task of our political institutions. Shareholder resolutions targeted at prominent corporations is an ineffectual substitute for sound policy making via the political institutions of democracy.



I. INTRODUCTION

I. INTRODUCTION

American corporations in recent years have seen a sharp rise in the introduction of politically-charged shareholder resolutions targeted at social and environmental concerns. These resolutions have been aimed at issues as diverse as deforestation, corporate clean energy goals, climate change, the uses of antibiotics and pesticides, political contributions, human rights risks through the supply chain, indigenous rights and human trafficking, cybersecurity, the development and reporting of sustainability metrics, and tax fairness.

To be sure, any particular issue that any given resolution seeks to address may hold some worth to society as a whole. Yet, particularly when introduced and/or supported by large institutional investors, investors have argued that proffered proposals – be they greater disclosure on a particular issue, changes in corporate policy, or the development of new business strategies – are good business and will add to shareholder value.

In this study, we address the potential impacts of these types of shareholder actions. We ask, in particular, whether they raise or lower shareholder returns. The answers have significance for the expanding use of narrowly targeted proposals reflecting the interests of differing shareholder or special interest groups. On the one hand, shareholders need to be able hold corporate management accountable. On the other, forcing management to take these sorts of actions, perhaps solely for the purpose of making a political statement, may negatively impact company performance and, thus, shareholder value – without actually improving the social or environmental problem at issue. This is particularly true when, for example, activist shareholders seek to achieve political or social goals over which a given company may have little or no ultimate influence, or where other (and even the majority of) shareholders don't share those political or social objectives.

This possibility raises the question as to how it can come to pass that shareholders may seemingly act against their own self-interest in forcing firms to undertake non-productive activities. While economics tends to formally treat the shareholder as the direct holder of corporate equity (or "owner"), the reality is that most individual shareholders' corporate ownership rights, or equity holdings, are held through mutual funds and other investment vehicles that give the fund or asset manager the right and responsibility to vote stock held by the fund on behalf of its beneficiaries. In such situations, asset managers' objectives may not be aligned with those of their myriad individual investors.

In fact, institutional asset managers control a relatively large portion of most publicly-traded companies' outstanding equity and large numbers of smaller investors have little prospect of fully understanding, much less controlling, the decisions of fund managers. This creates conditions under which the private interests of asset management firms and their managers can readily differ from those of the individual equity holder. For example, the promotion of high-profile shareholder resolutions on politically "hot" topics like climate change can build an investment fund's overall brand name. This can be beneficial to that fund even if doing so comes at the expense of an individual company and

that company's specific shareholders.[1] Similarly, other groups appear to use the shareholder proposal process and major corporate brands as platforms to draw attention to their causes.[2]

Consider climate change resolutions, for example. These have increased in number significantly over the past 10 years. Their genesis is not hard to understand. Climate change is real and its costs are mounting. At the same time, taking the steps that would be needed to reverse, limit and/or mitigate the effects of climate change portend very high costs for the world. Moreover, it is clear that meaningful progress in reversing or limiting climate change will require governmental action arrived at through encompassing international cooperation by nation states and/or widespread sub-global government policies to give at least most of the world's nations (and their consumers and producers) carrot and/or stick incentives to undertake ameliorative actions and strategies on a systemic basis. Without enforceable regulatory measures with broad reach, we are likely to remain plagued by a "tragedy of the commons" in which the beneficial actions of one country or jurisdiction are offset by the non-cooperative gamesmanship of others.[3]

Under such conditions, it is important to ask what benefits might accrue to shareholders from resolutions aimed at the business strategies of individual publicly-traded companies, and whether the benefits would outweigh the costs. Thus, in this study, we utilize an empirical examination of, specifically, recent climate change resolutions in order to further understanding of the costs and benefits of using the shareholder proxy system to address social and environmental concerns.

In short, even if we set aside the question of whether individual company shareholder climate change resolutions of the type currently prevalent can materially contribute to the alleviation of climate change or its costs, might they, as their advocates argue, nevertheless be able to improve shareholders' financial returns—e.g., by compelling management to manage risks and take advantage of opportunities that may arise from the consequences of the changing climate and policies that may be adopted to address it? To consider this possibility, we analyze the effect of climate change-related disclosure on firm equity value in two ways: First, we examine stock price reactions to a series of recent shareholder proposals seeking disclosure of climate risks. Then, second, we examine the effect on equity value of the release of voluntary disclosure of climate-related information through the CDP (formerly known as the "Carbon Disclosure Project").

The rest of this study is structured as follows: Section II provides background on the shareholder resolution process, the role and importance of institutional investors, and a brief discussion of the trends in recent corporate governance-related shareholder proposals. Section III examines in a closer fashion climate-related and human rights resolutions, including an investigation of the assumptions embedded within them and the implications that flow from those assumptions. Section IV discusses the results of our statistical analyses of the impact of the environmental proposals on shareholder value, including the broader implications of these results. In Section V, we offer conclusions

1 For example, Jana Partners recently launched a campaign that seeks to force Apple to take further action to curb smartphone use among children (in partnership the California State Teachers' Retirement System and Sting, the musician and activist). One analyst noted that investing in the campaign will help Jana Partners as it "seeks capital allocations from public pension funds for [its] traditional activist fund and its more aggressive, less friendly agitations. For example, the campaign is likely to help Jana maintain a strong relationship with CalSTRS, its partner in the Apple effort." Richard Orol, "With Apple Campaign, Activist Jana Partners Polishes Its Brand", TheStreet, 12 January 2018, accessed at: https://www.thestreet.com/story/14446299/1/with-apple-campaign-jana-partners-burnishes-its-brand.html.

2 For example, As You Sow CEO Andrew Behar wrote, "Shareholder resolutions are about bringing an idea to the public consciousness, associating it with a brand and encouraging corporate management to take action." Andrew Behar, "Adjectives for shareholder advocates? How about strategic, impactful", Greenbiz, 13 January 2016, accessed at: https://www.greenbiz.com/article/adjectives-shareholder-advocate,s-how-about-strategic-impactful.

3 For a useful summary of global and sub-global governmental actions re: climate change, see Kirsten H. Engel and Scott R. Saleska, "Subglobal Regulation of the Global Commons: The Case of Climate Change", Ecology Law Quarterly, vol. 32, 2005, at pp. 183-233. See also, Council on Foreign Relations, The Global Climate Change Regime, 19 June 2013, accessed at: https://www.cfr.org/report/global-climate-change-regime.

II. BACKGROUND ON SHAREHOLDER RESOLUTIONS

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A. THE CORPORATE OWNERSHIP SYSTEM

A shareholder resolution is a recommendation to the board of directors of a public corporation from a shareholder or group of shareholders requesting some action on the part of the board or the company's managers.[4] Subject to certain conditions discussed further below, they are presented and typically voted upon at the corporation's annual meeting by shareholders and through the annual proxy vote. In this regard, they represent one mechanism in a broader set of processes, rules, and laws that speak to the allocation of authority between shareholders and corporate managers over the conduct of the company's affairs.[5]

The design of the public corporation results in a separation of ownership and control. The resulting potential for conflicts of interest between corporate managers and shareholders is well-known to economists, legal scholars and investors.[6] Under U.S. law, corporate managers have a fiduciary duty to act in the best interests of shareholders. Within this framework, it is generally accepted that corporate directors are the ultimate managers of the business, having a great deal of discretion over the undertakings of the corporation provided they follow the appropriate rules.[7]

Shareholders, however, are not without their own authority related to the corporation's affairs. Specifically, in return for their investment in the corporation, shareholders are afforded certain rights. These rights, while subject to certain legal limitations, writ large include selling all or part of their interest in the corporation, electing corporate directors, the right to vote on certain fundamental matters relating to the business (such as merging with another business), as well as the proposing of resolutions for shareholder votes.[8] The fundamental purpose of these rights is to provide shareholders with mechanisms by which to hold corporate directors accountable.

We focus here on shareholders' access to a corporation's proxy materials and its potential impact on shareholder value. Under United States Securities and Exchange Commission ("SEC") Rule 14a-8 shareholders may, subject to certain restrictions, propose initiatives for shareholder vote, which a corporation must include in its proxy statement so long as the shareholder and the proposal satisfy the necessary conditions. As a general proposition, any shareholder owning a relatively small amount of a company's securities is eligible to have a proposal placed alongside management's proposals in the company's proxy material.

Specifically, a shareholder seeking to submit a proposal must have held at least $2,000 in market value, or

4 Shareholder resolutions have typically been framed as non-binding to stay clear of states' laws prohibiting shareholders from requiring action on the part of the board.

5 Adolfe Berle, Jr. & Gardiner C. Means, The Modern Corporation and Private Property, 1932; Tirole, Jean. The Theory of Corporate Finance. Princeton University Press, 2010, Chapter 1; Leo E. Strine, Jr., "Can We Do Better by Ordinary Investors; A Pragmatic Reaction to the Dueling Ideological Mythologists of Corporate Law", Columbia Law Review, vol. 114, 2014, at pp. 449-502.

6 Ibid.

7 See, for example, Adolfe Berle, Jr. & Gardiner C. Means, The Modern Corporation and Private Property, 1932. For purposes of analysis presented here, we need not distinguish between executive officers, corporate directors, and corporate managers. See also, Mythologists of Corporate Law", Columbia Law Review, vol. 114, 2014, at pp. 449-502.

8 Other rights include the receiving of distributions of the company's profits where such distributions are declared by corporate managers, and the ability to sue the corporation and inspect corporate financial records under certain circumstances. See, e.g., Lawrence E. Mitchell, "The Legitimate Rights of Public Shareholders", Washington & Lee Law Review, vol. 66:4, 2009, at pp. 1635-1682.

at least 1% of the company's outstanding equity (whichever is lower), for at least one year as of the date the shareholder submits the proposal and must continue to hold those securities through the date of the meeting.[9] Resolutions are limited to matters of corporate governance and issues that have a material impact on corporate performance, where material has been defined in practice as impacting five percent or more of revenue or assets.[10] Where the shareholder and the proposal have met the eligibility and procedural requirements and the company or the proponent have not withdrawn the proposal[11], the resolution and supporting materials are included in the proxy forms that the company sends to every shareholder prior to their annual meeting. The proposal is then available to be voted on at the annual meeting by all shareholders of record.

We note here that the term "shareholder" is used in today's financial marketplace to include both institutional investors (including asset management firms, pension funds, activist hedge funds, and insurance companies), as well as the more traditional notion of a small retail investor. Nevertheless, institutional investors are the dominant force in today's financial markets.[12] Thus, while the data indicate that more than half of American households have invested in equities, much of that investment occurs through asset management firms via defined contribution plans, individual retirement accounts, or the purchase of shares in mutual funds.[13]

To this point, the SEC recently noted that the proportion of "U.S. public equities managed by institutions has risen steadily over the past six decades from about 7 or 8% of market capitalization in 1950, to about 67% in 2010", the change being driven in large part by the aforementioned investments on the part of "small investors" through asset management firms' pooled-investment vehicles such as mutual funds.[14] The SEC goes on to state that institutional ownership has become "an even more significant factor in the largest corporations: In 2009, institutional investors owned in the aggregate 73% of the outstanding equity in the 1,000 largest U.S. corporations."[15]

9 In addition, the proposal must be submitted for at least 120 days before the proxy statement is mailed to shareholders prior to the business' annual meeting and must be of a limited word count. For a complete review of the rules see https://www.law.cornell.edu/cfr/text/17/240.14a-8. Over the last 16 years the SEC Corporate Finance Staff has released a series of legal bulletins containing the corporate finance division's evolving view of Rule 14a-8. See United States Securities and Exchange Commission, Division of Corporation Finance, Staff Legal Bulletin No. 14, 13 July 2001, accessed at: https://www.sec.gov/interps/legal/cfslb14.htm and United States Securities and Exchange Commission, Division of Corporation Finance, Staff Legal Bulletin No. 14I, 1 November 2017, accessed at: https://www.sec.gov/interps/legal/cfslb14i.htm. As with other executive agencies, SEC interpretation of its enabling statues is subject to judicial review.

10. Specifically, the resolution must not fall within one of the thirteen delineated bases for exclusion. These bases include but not are not limited to violating or causing the company to violate existing laws; relating to the redress of personal claims; relating to operations that account for a significantly small portion of the company's affairs; substantially duplicating other proposals being put forth or those proposals having been recently offered and received less than some percentage of shareholder votes; or dealing with a matter relating to the company's ordinary business operations. See, for example, United States Securities and Exchange Commission, Division of Corporation Finance, Staff Legal Bulletin No. 14, 13 July 2001, accessed at: https://www.sec.gov/interps/legal/cfslb14.htm.

11 To the extent management believes that the shareholder or the proposal fails to meet the eligibility or process requirements, it can petition the SEC to exclude the shareholder proposal from the company's proxy materials under what is termed a "no action" request. The company must identify the specific bases for its proposed exclusion. To the extent that the SEC agrees with the company's position, it is, in effect, stating that it will not take action against the company for omitting the proposal from the proxy materials (i.e., "no action"). To the extent that the SEC disagrees with the company's position, it typically informs the parties that it does not believe the company may omit the proposal from the proxy materials pursuant to the rules stated by the company. Each party may subsequently seek redress through the proper legal channels. See, for example, United States Securities and Exchange Commission, Division of Corporation Finance, Staff Legal Bulletin No. 14, 13 July 2001, accessed at: https://www.sec.gov/interps/legal/cfslb14.htm; and United States Securities and Exchange Commission, Division of Corporation Finance, Shareholder Proposal No-Action Letters Issued Under Exchange Act Rule 14a-8, accessed at: https://www.sec.gov/divisions/corpfin/cf-noaction/2010_14a-8.shtml. Alternatively, the company may persuade the proponent to withdraw the proposal by either agreeing to it or by reaching agreement on the conditions under which the proposal is withdrawn.

12 See, e.g., Adolfe Berle, Jr. & Gardiner C. Means, The Modern Corporation and Private Property, 1932. See also, "Protecting the Retail Investor", speech of Mary Jo White, Chair of the United States Securities and Exchange Commission to the Consumer Federation of America, 21 March 2014; and Leo E. Strine, Jr., "Can We Do Better by Ordinary Investors; A Pragmatic Reaction to the Dueling Ideological Mythologists of Corporate Law", Columbia Law Review, vol. 114, 2014, at pp. 449-502.

13 "Protecting the Retail Investor", speech of Mary Jo White, Chair of the United States Securities and Exchange Commission, to the Consumer Federation of America, 21 March 2014. "Over half of Americans…report that they own a stock directly or through investment vehicles, like a self-directed 401(k) or IRA. And over 44 percent of Americans – including most retail investors – invest in a mutual fund…" See also, Steven M. Rosenthal and Lydia S. Austin, "The Dwindling Taxable Share of U.S. Corporate Stock", Tax Notes, 16 May 2016.

14 "Institutional Investors: Power and Responsibility", speech by Luis A. Aguilar, United States Securities and Exchange Commissioner, to the J. Mack College of Business, Georgia State University, 19 April 2013.

15 Ibid.

B. SHAREHOLDER RESOLUTIONS

Publicly-traded companies' shareholder resolutions have historically focused largely on the alignment of interests between the shareholders as "owners", the board of directors as their fiduciaries, and senior officials as managers of the business' affairs. This includes resolutions related to chairman independence, executive compensation, board qualifications, declassifying the board, shareholder rights, auditing, voting rules, and proxy access. More recently, the marketplace has seen the increased use of shareholder resolutions by activist shareholders seeking to "align[] investing and values".[16] These activist resolutions are commonly divided into three broad areas: environmental, social policy and governance ("ESG"):

- **Environmental** resolutions commonly seek to expand corporate reporting or the establishment of corporate-wide policies or targets on such matters as deforestation and environmental restoration, genetically modified organisms, pollution and waste, community impacts, extraction and consumption of fossil fuels, greenhouse gas emissions, and risks associated with climate change.

- **Social policy** resolutions, in contrast, speak to corporate actions ranging from additional disclosure to the development and/or implementation of policies and strategies related to various social issues such as animal rights, political spending and lobbying, human rights, rights of indigenous peoples, workplace diversity, gender equality, employment rights, and charitable giving.

- **Governance** resolutions focus on the structure and shareholder oversight of the board and senior corporate management. Within the ESG framework, such resolutions not infrequently aim at the incorporation of social issues into the structure, expertise, and oversight obligations of the board. This entails, for example, proposals requesting the creation of a board committee or designation of a board member to address issues such as diversity and diversity policies, climate change and sustainability, human rights, and product safety.[17]

The increased employment of socially-focused shareholder resolutions has been well documented as certain shareholder types have turned to the access to proxy materials in an effort to persuade or compel corporate managers to take certain actions on various social and environmental matters or what is often called more generally "social responsibility" issues. While estimates of the precise number of proposals vary depending on the selection criteria employed, one corporate advisory firm recently summarized the change by noting the "huge increase" in social responsibility resolutions over the last ten years, with the "high-water mark" being the total of 490 such resolutions filed in 2014.[18]

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16 Heidi Welsh and Michael Passoff, "Proxy Preview 2018", As You Sow, at p. 4 ("2018 Proxy Preview").

17 See, for example, Heidi Welsh and Michael Passoff, "Proxy Preview 2017", As You Sow, at pp. 61-62 ("2017 Proxy Preview").

18 Alexandra Walsh, "Shareholder Proposals on the Rise", IR Update, September 2017, at pp. 10-11.

Figure 1: Activist Shareholder Proposals Filed, 2005-2018

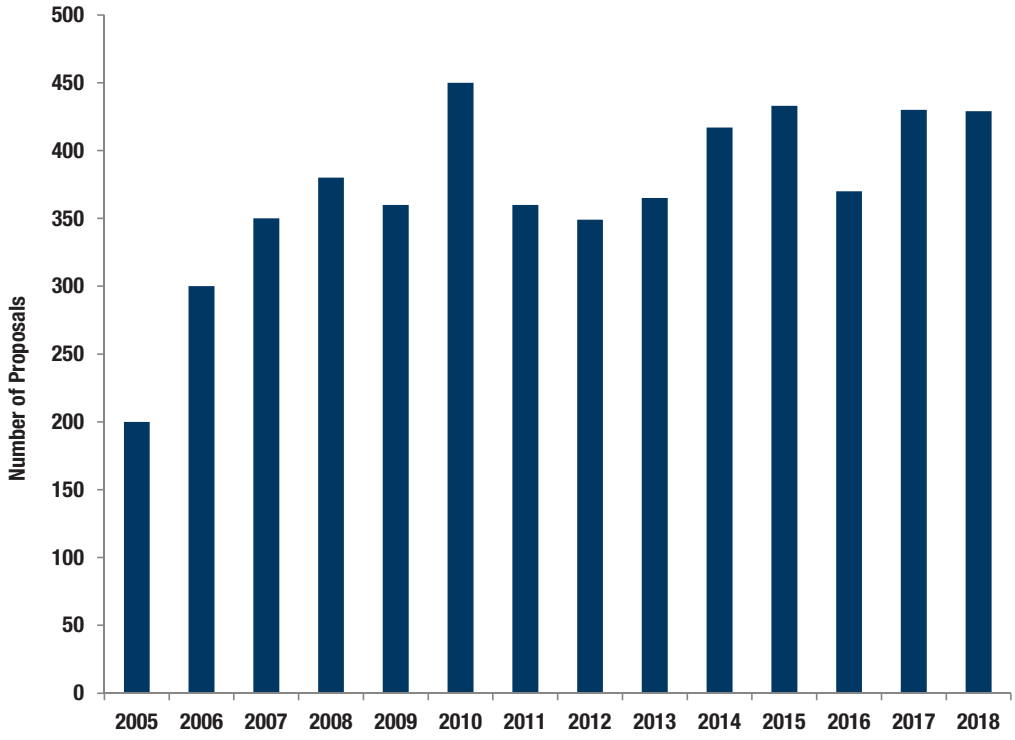


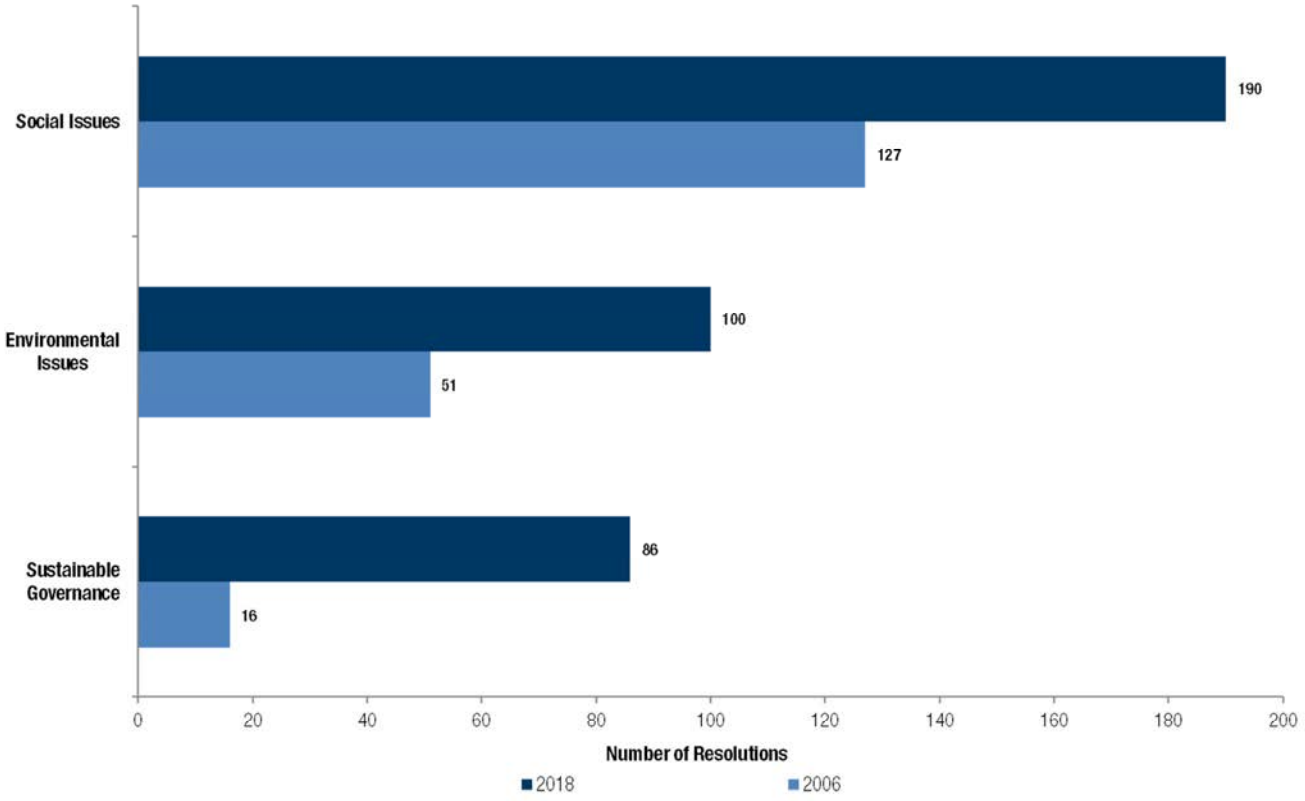
Figure 1 utilizes data compiled by As You Sow, a non-profit shareholder advocacy group, and published in Proxy Preview's yearly compendium of shareholder activist resolutions concerning environmental, social and sustainability issues. The figure shows the number of filings by year for the period 2005 to 2018. The data show a more than doubling of the filing of activist resolutions between 2005 and 2010.

These proposals are commonly divided into three subject areas: social issues, environmental issues and what activist shareholders refer to as "sustainable governance." Figure 2, on the following page, shows the number of shareholder resolutions filed in 2006 and 2018 across these three subject areas.[19] As shown by the figure, the number of proposals has increased sharply across all three categories.[20] As noted below, however, the specific issues being addressed within each category have not remained static. Instead, activist shareholders' concerns have evolved over time, resulting in changes in the issues corporate managers are being asked to address and the manner in which they are being asked to address them.

19 We note that the 2018 Proxy Preview reports that 429 proposals were filed by 16 February 2018; however, it individually identifies only 394 proposals. It is the individually identified proposals that are utilized in Figure 2 and Tables 1-3. Appendix A lists the individual resolution identified in the two reports.

20 Many of these environmental and social proposals do not go to a shareholder vote. For example, research states that 40% of the 474 social and environmental proposals filed in 2015 were withdrawn before going to a vote. (Sarah C. Haan, "Shareholder Proposal Settlements and the Private Ordering of Public Elections", Yale Law Journal, vol. 126, 2016, at p. 266.) The 2018 Proxy Preview indicates that 250 of the 494 proposals filed in 2017 were withdrawn or omitted. (2018 Proxy Preview, at p. 5)

Figure 2: Activist Proposals by Subject Matter, 2006 vs. 2018



C. SOCIAL SHAREHOLDER RESOLUTIONS

Table 1A ranks the number of social activist resolutions for the years 2006 and 2018 by subcategory, based on the taxonomy and descriptions employed by As You Sow. The table offers insight into how the intensity (or popularity) of a given issue or area of concern amongst activist investors can and does change over time.

Whereas most of the political proposals in 2006 only called for the disclosure of political donations, many of the 2018 proposals also ask for the disclosure of resources expended on and policies related to lobbying. According to Proxy Preview, this change emanates, in large part, from a campaign started in 2012 by Walden Asset Management (a fund emphasizing "environmental, social and governance (ESG) research and shareholder advocacy"[21]) and the American Federation of State, County, and Municipal Employees.[22] And while, disclosure of corporate political activity remained a focus of activist shareholders over the period, the absolute number of proposals follows the broader trend in the increase of activist shareholder resolutions.

21 "Walden Asset Management", accessed at: http://waldenasset-mgmt.com/.

22 "2017 Proxy Preview" at p. 32.

Table 1A: Social Topics, 2006 vs. 2018

2006		2018	
Political Contributions	33	Lobbying	49
Anti-Bias and Labor Standards	29	Anti-Bias and Discrimination	29
Animal Welfare	15	Human Rights	29
Health	12	Benefits and Fair Pay	27
Sexual Orientation	10	Political Contributions	26
Toxics	10	Health	10
Charitable Contributions	7	Animal Welfare	8
Human Rights	5	Other	7
Other	5	Media & Cybersecurity	5
Lending Practices	1	Ethical Finance	3

Notes: Data include omitted and withdrawn resolutions. Resolutions listed in 2006 were categorized according to the taxonomy employed in 2007-2018 reports. In 2006, "Health" includes proposals regarding tobacco, HIV and prescription drugs; "Toxics" includes proposals related to a number of social issues, including environmental health concerns, but are all classified as social proposals for consistency; "Other" includes proposals related to military sales, privacy, stock options and violent video sales. In 2018, proposals by "Conservative Groups" are excluded from calculations.

Sources: Michael Passoff, "Proxy Season Preview 2006 ", *As You Sow*, Spring 2006; Heidi Welsh and Michael Passoff, "Proxy Season Preview 2018 ", *As You Sow*, Spring 2018.

Over time, ESG proposals appear to have become much more focused. In 2006, Proxy Preview listed 15 resolutions related to animal welfare, 11 of which focused on alternatives to animal testing at pharmaceutical and manufacturing companies.[23] The 2018 compendium documents only eight resolutions categorized as animal related, five of which were filed by PETA including: a proposal asking the company to cease making charitable contributions to Texas A&M; a proposal asking the company to stop selling glue traps for rodents; and a proposal requesting the end of captive orca breeding.[24] Employment focused resolutions have also expanded from their traditional focus on the adoption of or adherence to international labor standards and non-discrimination policies to now include proposals addressing income and pay disparity and human rights. For example, of the 27 proposals related to Benefits and Fair Pay filed in 2018, 23 concerned gender and minority pay disparity and three concerned paid family leave policy.[25] In addition, nine human rights proposals filed in 2018 concerned employment practices.[26]

D. SUSTAINABLE GOVERNANCE SHAREHOLDER RESOLUTIONS

Table 1B provides similar data for sustainable governance. This category appears to encompass two

23 Michael Passoff, "Proxy Season Preview 2006", As You Sow, Spring 2006, at p. 7 ("Proxy Season Preview 2006"). The report states that the animal rights group People for the Ethical Treatment of Animals filed 26 proposals that year. It appears that many were withdrawn prior to the publication of the report.

24 "2018 Proxy Preview" at pp. 34-35.

25 Ibid. at p. 44.

26 Ibid. at p. 53.

Table 1B: Sustainable Governance Topics, 2006 vs. 2018

2006		2018	
Board Diversity	**8**	**Board Diversity**	**28**
Executive Pay	**8**	**Sustainability Disclosure**	**26**
		Executive Pay - ESG Metrics	**19**
		Board Structure and Expertise	**10**
		Proxy Voting	**3**

Notes: Data include omitted and withdrawn resolutions. Resolutions listed in 2006 were categorized according to the taxonomy employed in 2007-2018 reports.

Sources: Michael Passoff, "Proxy Season Preview 2006 ", *As You Sow*, Spring 2006; Heidi Welsh and Michael Passoff, "Proxy Season Preview 2018 ", *As You Sow*, Spring 2018.

distinct efforts: The first relates to increasing the diversity of board membership, while the second addresses the broader array of socially-oriented objectives boards are being asked to address. The latter area thus tends to reflect current—or then current—issues.

As shown by the table, activist investors' focus on board diversity has remained consistent over the past decade. In contrast, the focus of other sustainable governance proposals has shifted over time. In 2006 many sustainable governance proposals related to executive pay tended to address pay inequality as much as seeking to link executive pay to sustainability criteria, whereas many resolutions submitted in 2018 seek to more closely link board composition and corporate oversight function to social objectives, principally but not exclusively to sustainability.[27] This includes resolutions that would serve to link executive pay to sustainability metrics and the establishment of committees focused on social objectives such as sustainability, in addition to mandated reporting of companies' efforts related to sustainability.

E. ENVIRONMENTAL SHAREHOLDER RESOLUTIONS

Within the environmental category, resolutions focused on climate change have been on the rise, particularly those requesting disclosure of information related to a corporation's mitigation of risks associated with potential future regulatory regimes intended to limit the emissions of greenhouse gases. According to a recent Forbes article, Russell 3000 companies realized an average increase in support for climate change-related shareholder resolutions of 9.4% between 2016 and 2017, while the number of climate change-related proposals increased from 20 to 24.[28] The article concluded that "[r]ecent trends in shareholder proposals indicate that 2018 will likely have increasing support for proposals addressing climate change & greenhouse gas emissions."[29] Similarly, the Wall Street Journal recently noted that such proposals are "not only becoming more frequent but also increasingly sophisticated," as environmental resolutions are "evolving from requests for greenhouse gas emissions cuts to demands for disclosure of strategies to manage climate risks and for linking executive pay with sustainability performance."[30]

These observations are consistent with the publicly reported data on shareholder resolutions. Table 1C compares the specific topics embodied in the environmental resolutions that Proxy Preview listed in 2006 and 2018. The data show not only the considerable growth in climate-related shareholder resolutions, but also the movement from "global warming" and the impact company operations (e.g., community impacts) to the targeting of operational performance related to

27 "Proxy Season Preview 2006" at p. 8; "2018 Proxy Preview", at p. 11.

28 Christopher P. Skroupa, "Emerging Trends in Shareholder Proposals", Forbes, 30 November 2017, accessed at: https://www.forbes.com/sites/christopherskroupa/2017/11/30/emerging-trends-in-shareholder-proposals/#e8eb06579e11.

29 Ibid.

30 Mara Lemos Stein, "Environmental Proxy Proposals are Making More Demands", Wall Street Journal, 28 November 2016.

Table 1C: Environmental Topics, 2006 vs. 2018

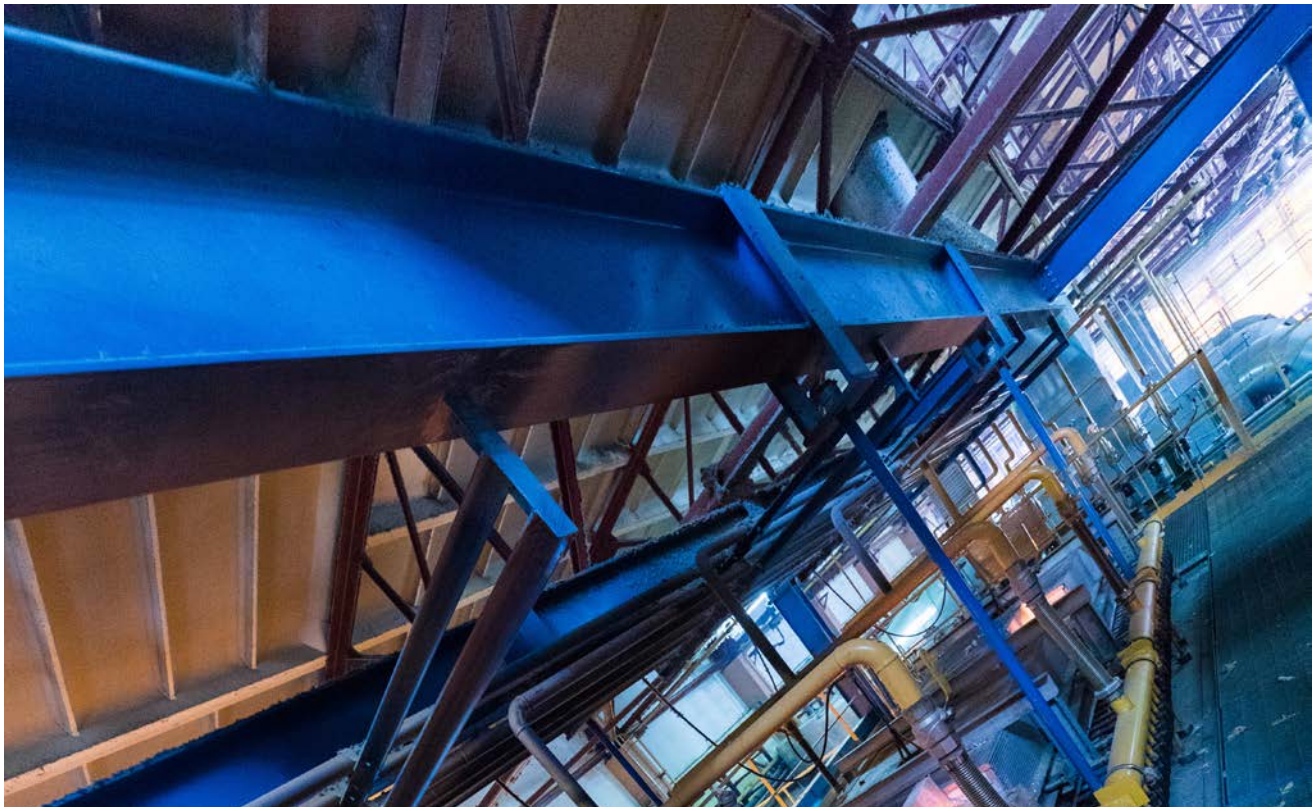
2006		2018	
Natural Resources	15	Climate Change	76
Global Warming	14	Recycling and Waste	7
Sustainability Report	10	Pesticides and Antibiotics	6
Genetic Engineering	6	Water	5
Nuclear Waste	4	Deforestation	3
Recycling	2	Nuclear Power	3

Notes: Data include omitted and withdrawn resolutions. Resolutions listed in 2006 were categorized according to the taxonomy employed in 2007-2018 reports. In 2018, "Climate Change" includes proposals regarding Carbon Asset Risk, Energy Solutions, Greenhouse Gas Emissions Management and Unconventional Fossil Energy.

Sources: Michael Passoff, "Proxy Season Preview 2006 ", *As You Sow*, Spring 2006; Heidi Welsh and Michael Passoff, "Proxy Season Preview 2018 ", *As You Sow*, Spring 2018.

the emissions of greenhouse gases and the disclosure of risks and policies related to climate change.

This is not to diminish the general increase in environmental resolutions. The data show, for example, the increase in resolutions requesting action on corporate recycling efforts and what is classified as industrial agriculture (ranging from a report on cage free eggs to an assessment of the impact on company operations from the increasing numbers of individuals forgoing the consumption of meat products). That said, the data clearly show that climate change-related actions account for the vast majority of proposals filed in 2018.



III. INSTITUTIONAL ASSET MANAGERS: CLIMATE CHANGE VERSUS HUMAN RIGHTS PROPOSALS

III. INSTITUTIONAL ASSET MANAGERS: CLIMATE CHANGE VERSUS HUMAN RIGHTS PROPOSALS

We now turn to a closer review of those activist shareholder resolutions that focus on climate change and human rights. We do so because climate change and human rights embody similar attributes as regards the challenges posed in their amelioration—and the implications of those challenges for shareholder value—but the two areas have found significantly different receptivity on the part of large asset management firms. Vanguard, for example, recently explained that its opposition to a human rights proposal rested on the fact that investors "are not well poised to influence matters that extend well beyond the operations of their portfolio companies", as "meaningful, long-term solutions to these issues require diplomatic and political resources to come together to implement change."[31] Those same conditions would reasonably apply to climate change-related activist proposals. Yet, as discussed further below, Vanguard recently changed its approach—and, thus, voting behavior—as regards climate-related activist proposals.[32]

Similarly, several major asset managers have opposed human rights proposals on the grounds that they could reduce shareholder returns or create a conflict of interest across differing funds offered by the asset manager. The potential for diminution of shareholder returns and/or inter-fund conflicts also exist as regards climate change-related proposals. Yet, these issues have not caused key institutional asset managers to disregard or reject such resolutions.

A. INSTITUTIONAL ASSET MANAGERS: CHANGING APPROACH?

Of relevance here is the recent change in the approach to ESG resolutions on the part of certain large asset management firms. A review of the 2017 proxy season by Kingsdale Advisors, a shareholder services and advisory firm, noted that while a few ESG-related proposals receive a majority of shareholder votes, "it is how institutional investors vote that indicates that ESG is becoming a growing concern among investors and an increased risk to boards. We have seen more and more large institutional investors changing voting policies to address ESG-related risks."[33] As Kingsdale Advisors explain, "[w]hile the governance aspect is nothing new, an emerging laser focus on environmental and social issues has been observed."[34] In the same vein, The Conference Board, a not-for-profit business research organization, recently released a study regarding "institutional investors deepen[ing] engagement with companies on ESG concerns."[35]

These trends are further exemplified by the altering of voting policies on the part of very large institutional investors such as BlackRock, State Street Global Advisors ("SSgA"), Fidelity and Vanguard. BlackRock, for example, has identified climate risk as one of its key engagement themes, noting that it may vote against the election of directors where it believes that a company

31 "Answers to questions about Vanguard's proxy", Vanguard, 2017, at p. 25.

32 Randi Val Morrison, "Vanguard Clarifies Environmental & Social Proxy Voting Guidelines", Society for Corporate Governance, 24 April 2017, accessed at: https://connect.societycorpgov.org/blogs/randi-morrison/2017/04/24/vanguard-clarifies-environmental-social-proxy-voting-guidelines.

33 Proxy Season Review 2017: Succeeding in The New Paradigm of Corporate Governance", Kingsdale Advisors, November 2017, at p. 16.

34 Ibid. at p. 13.

35 Virginia Harper Ho, "Sustainability in the Mainstream: Why Investors Care and What It Means for Corporate Boards", DN-V8N6, The Conference Board, November 2017, at p. 1.

may not be dealing with such issues appropriately and support relevant shareholder proposals.[36]

In the same vein, in January 2017, Fidelity added a reference to environmental and social issues in its Proxy Voting Guidelines. The guidelines note that while Fidelity will generally vote in a manner consistent with management's recommendation, it "may support shareholder proposals that request additional disclosures from companies regarding environmental or social issues, where it believes that the proposed disclosures could provide meaningful information to the investment management process without unduly burdening the company."[37]

SSgA similarly updated its proxy rules in 2010 as regards economic and social issues by moving away from a default policy of voting against shareholder resolutions on environmental and social issues.[38] Vanguard altered its policy as regards economic and social issues from one of reliance on abstentions to voting for or against based on its updated guidelines. In so doing, it acknowledged that it no longer considered that "oversight and judgments on these sorts of issues generally remained within the purview of the [company's] board."[39]

The size of the portfolios of asset managers and the weight of their holdings in a particular company have obviously significant implications as to the effect that such resolutions can have on corporate boards' and other senior managers' behavior.[40] The aforementioned asset fund managers, for example, have approximately $15.9 trillion in assets under management, representing the top four such firms in the U.S. and 4 of the top 5 globally.[41]

Funds directed by asset managers represent a significant fraction of the global and domestic equity markets. BlackRock, for example, has estimated that asset-managed funds, including both index and active mutual funds, owned approximately 43% of the value of global publicly-traded company stocks in 2013.[42] Actively managed mutual funds, index mutual funds, and EFTs, specifically, were estimated to hold over 29% of the value of the U.S. equity market and 21% of the market value of European, Middle Eastern, and African equities.[43] Other research employing data put forth by the Board of Governors of the Federal Reserve System estimates that as of 2013 institutional investors held over 60% of outstanding public corporate equity.[44]

The evidence indicates that the noted change in focus and proliferation of environmental and social resolutions has been motivated in substantial part by activist shareholders placing pressure via proxy materials on asset management firms. The trade literature reports that Walden Asset Management (noted above) and Trillium Asset Management filed resolutions with BlackRock, JP Morgan, T. Rowe Price, and two Vanguard funds seeking greater disclosure on the firms' climate-related proxy voting and urging them to support such resolutions.[45]

In keeping with this request, BlackRock's recent vote on an ExxonMobil climate exposure-related resolution appears

36 "Proxy Season Review 2017: Succeeding in The New Paradigm of Corporate Governance", Kingsdale Advisors, November 2017, at p. 18; "Proxy Voting Guidelines for U.S. Securities", BlackRock, February 2018, at pp. 12-13; and "How BlackRock Investment Stewardship Engages on Climate Risk", BlackRock, March 2017, at p. 2.

37 "Fidelity Funds' Proxy Voting Guidelines", January 2017, at p. 8.

38 James McRitchie, "Major Shift in Proxy Voting Policy at State Street", Corporate Governance, 20 January 2010.

39 Randi Val Morrison, "Vanguard Clarifies Environmental & Social Proxy Voting Guidelines", Society for Corporate Governance, 24 April 2017, accessed at: https://connect.societycorpgov.org/blogs/randi-morrison/2017/04/24/vanguard-clarifies-environmental-social-proxy-voting-guidelines.

40 See, for example, Lucian A. Bebchuk, Alma Cohen, and Scott Hirst, "The Agency Problems of Institutional Investors", Journal of Economic Perspectives, vol. 31:3, Summer 2017, at p. 91.

41 BlackRock, Form 8-K, filed 12 January 2018; State Street Corporation, 4Q Supplemental Information Package, 2017; "Vanguard. Fast Facts about Vanguard", The Vanguard Group, accessed at: https://about.vanguard.com/who-we-are/fast-facts/; "Fidelity. Fidelity by the Numbers: Corporate Statistics", Fidelity Investments, accessed at: https://www.fidelity.com/about-fidelity/fidelity-by-numbers/corporate-statistics; "Top Asset Management Firms 2017", Banks Around the World, accessed at: https://www.relbanks.com/rankings/largest-asset-managers.

42 "Indexing Investing Supports Vibrant Capital Markets", BlackRock, October 2017, at p. 6.

43 Ibid.

44 Lucian A. Bebchuk, Alma Cohen, and Scott Hirst, "The Agency Problems of Institutional Investors", Journal of Economic Perspectives, vol. 31:3, Summer 2017, at p. 91.

45 Virginia Harper Ho, "Sustainability in the Mainstream: Why Investors Care and What It Means for Corporate Boards", DN-V8N6, The Conference Board, November 2017, at p. 10. See also, "2017 Proxy Preview" at p. 9.

to have been due, in part, to pressure on BlackRock's corporate management from its activist shareholders.[46] Similarly, SSgA's 2010 changes regarding proxy votes were driven in part by Walden Management's and other activist shareholders' resolutions seeking a proxy review of SSgA's voting on environmental and social issues.[47] In sum, asset management firms' behavior has changed, in part, due to pressure from more traditional socially responsible investment firms and other activist shareholders.

The trend toward greater use of ESG measures by asset managers has been bolstered further by governmental authorities' greater acceptance of ESG issues within the bounds of a fiduciary's obligations. While an extensive discussion of those obligations as regards environmental and social disclosure requirements is beyond the scope of this paper, what is clear is that certain regulatory bodies are now treating climate change as a systemic risk that permits fiduciaries to consider environmental and social risks in investment analyses and voting practices.

The U.S. Department of Labor, for example, revised its guidelines interpreting the prudent investor standard for Employment Retirement Income Security Act ("ERISA") fiduciaries in 2015 by allowing for the inclusion of ESG factors. The revised guidelines noted that while ERISA does not allow fiduciaries to sacrifice the economic interests of their beneficiaries to promote economic or social benefits, the guidelines do permit fiduciaries to "incorporat[e] ESG factors in investment policy statements or integrat[e] ESG-related tools, metrics, and analyses to evaluate an investment's risk or return or choose among otherwise equivalent investments."[48] It subsequently clarified its policy noting that "[F]iduciaries must not too readily treat ESG factors as economically relevant" and emphasizing that the consideration of ESG issues cannot be put before "the economic interests of the plan in providing retirement benefits."[49]

Recent SEC rule clarifications also appear to provide greater opportunity for the inclusion of such materials in companies' proxy material. For example, the SEC recently clarified that its rules prohibit a corporation from excluding social policy proposals from their proxy statements when the proposal focuses on a significant policy issue and "the company conducted business, no matter how small, related to the issue raised in the proposal."[50]

As to climate change-focused resolutions, the SEC appears to have reversed its position regarding a company's ability to exclude such proposals. A recent high-profile "no action" request concerned a climate change-related resolution submitted to Goldman Sachs by the National Legal and Policy Center in December 2010 for inclusion in Goldman Sachs' proxy materials.[51] The resolution requested that the company's Board of Directors issue a "global warming report" that would discuss the scientific data relied upon by Goldman Sachs in establishing its Environmental Policy Framework and the extent to which the company believes human activity will significantly alter global climate as well as an estimate of the costs and benefits to the company of its climate policy.[52] The SEC disagreed with the company's position that the proposal could properly be excluded from its proxy materials under the "normal course of business" carve out, finding that "the proposal focuses

46 Virginia Harper Ho, "Sustainability in the Mainstream: Why Investors Care and What It Means for Corporate Boards", DN-V8N6, The Conference Board, November 2017, at p. 2.

47 James McRitchie, "Major Shift in Proxy Voting Policy at State Street", Corporate Governance, 20 January 2010.

48 "Fact Sheet: Economically Targeted Investments (ETIs) and Investment Strategies that Consider Environmental, Social and Governance (ESG) Factors", U.S. Department of Labor, Employee Benefits Security Administration, 22 October 2015; and "Interpretive Bulletin Relating to the Fiduciary Standard under ERISA in considering Economically Targeted Investments", 29 C.F.R. § 2509.15-01, 26 October 2015.

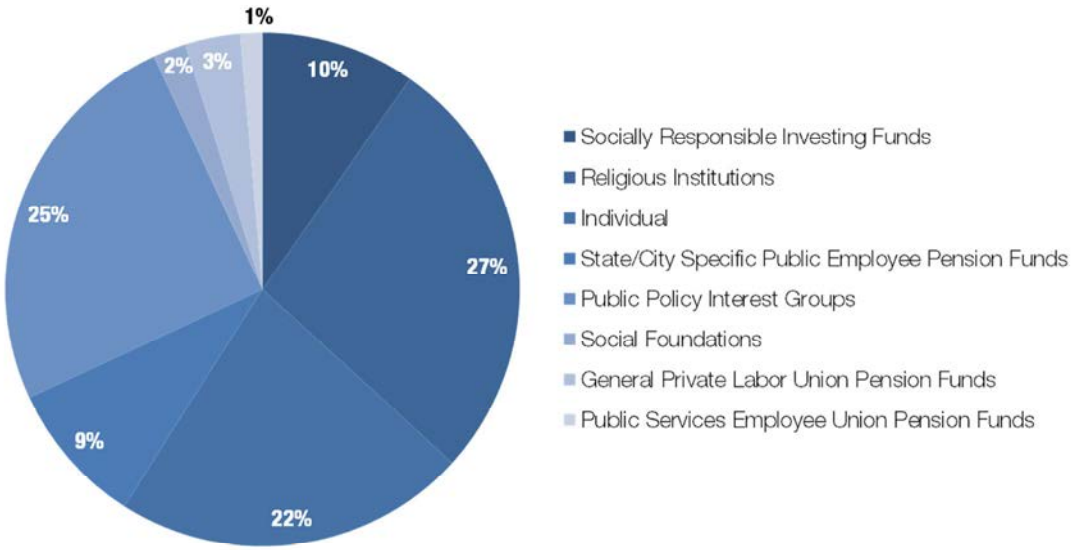
49 Field Assistance Bulletin No. 2018-01 U.S. Department of Labor Releases Field Assistance Bulletin Clarifying Issues Regarding Proxy Voting, Shareholder Engagement, and Economically Targeted Investments. It also clarified that plan fiduciaries are precluded from initiating or actively sponsoring proxy fights on such issues, or incurring significant costs or expenses on such resolutions. See also, EBSA News Release: U.S. Department of Labor, released 23 April 2018, accessed at https://www.dol.gov/agencies/ebsa/employers-and-advisers/guidance/field-assistance-bulletins/2018-01 and https://www.dol.gov/newsroom/releases/ebsa/ ebsa20180423.

50 SEC Division of Corporate Finance Staff Legal Bulletins No. 14I, released 1 November 2017. SEC Staff recently indicated proposals may be excludable "[w]here a proposal's significance to a company's business is not apparent on its face" and the proponent has not submitted information "demonstrating that the proposal 'may have a significant impact'".

51 "Response of the Office of the Chief Counsel, Division of Corporate Finance Re: The Goldman Sachs Group, Inc. Incoming Letter date January 5, 2011," U.S. Securities and Exchange Commission, 1 March 2011, and attached materials.

52 Ibid.

Figure 3: Human Rights Proposals at Fortune 250 Firms by Type of Sponsor, 2006-2017



Notes: The total number of proposals is 144, which excludes proposals with proponent listed as "undisclosed" and includes proposals regarding "Holy Land Principles."

Source: Fortune 250 Shareholders Proposals 2016-17, *ProxyMonitor*, 2017, accessed at: http://proxymonitor.org/.

on the significant policy issue of global warming."[53] The decision followed on heels of the issuance of the SEC's 2010 guidance on climate-change related disclosure requirements.[54]

Interestingly, these changes seem to have had disparate voter impacts on climate change and human rights proposals.

B. HUMAN RIGHTS SHAREHOLDER RESOLUTIONS

Broadly speaking, social responsibility proposals can be divided between those that primarily address internal operations—e.g., proposals addressing board diversity and pay equality—and proposals that primarily address issues of broad social concern, such as human rights. In this manner, human rights and climate change proposals raise similar concerns. In addition, proponents of other environmental and social proposals often raise support for human rights as a reason for supporting their proposals.[55]

Figure 3 breaks out by type of sponsor those human rights resolutions that went to a vote at the largest 250 U.S. publicly-held firms over 2006-2017.[56] The data contain 140 such proposals for which Proxy Monitor identifies the resolution's sponsor. Religious institutions represented the single largest type of sponsor of human rights resolutions, sponsoring over 27% of the proposals. Together with individuals (of which there are many) and public policy interest organizations, this group represents almost 75% of the sponsored human rights proposals that went to a vote. In contrast, socially responsible asset management funds sponsored just

53 Ibid.

54 "Commission Guidance Regarding Disclosure Related to Climate Change", U.S. Securities and Exchange Commission, Release Nos. 33-9106; 34-61469; FR-82, 8 February 2010. Note that SEC Staff's position appears to have evolved further, as indicated in a no-action letter in which Staff indicated that EOG could exclude a shareholder proposal seeking the adoption of "company-wide, quantitative, time-bound targets for reducing greenhouse gas emissions" on the grounds that it constituted micromanaging. "Response of the Office of the Chief Counsel, Division of Corporate Finance Re: EOG Resources, Inc. Incoming letter dated December 20, 2017," U.S. Securities and Exchange Commission 26 February 26 2018.

55 For example, environmental proposals addressing deforestation driven by palm oil production typically raise human rights concerns. See "2018 Proxy Preview" at p. 27. Similarly, shareholder proposals addressing water stewardship often address both environmental and human rights concerns. See, Fortune 250 Shareholders Proposals 2016-17, 2017, accessed at: http://proxymonitor.org/.

56 The data is compiled by Proxy Monitor, a website sponsored by the Manhattan Institute's Center for Legal Policy that tracks shareholder proposals at publicly traded corporations (Fortune 250 Shareholders Proposals 2016-17, 2017, accessed at: http://proxymonitor.org/). We note that Proxy Monitor imposes stricter criterion that Proxy Preview, i.e., resolutions that went to vote at the 250 largest publicly-held firms. According to Institutional Shareholder Services, a large proxy advisory firm, 40% of the 474 social and environmental proposals filed in 2015 were withdrawn before going to a vote. See, Sarah C. Haan, "Shareholder Proposal Settlements and the Private Ordering of Public Elections", Yale Law Journal, 126: 262, 2016, at p. 266.

10% of these resolutions.

Despite the efforts of these activist shareholder groups, however, human rights proposals have not received the same level of support as climate change proposals (discussed further below) even as new initiatives have been launched. For example, EY reported that human rights proposals going to a vote in the first half of 2017 only received 8% of the vote on average.[57] While that represented a small increase (of approximately 1%) from 2016, the total still represents a small fraction of shareholder votes.[58] In sum, none of the 173 human rights proposals in the Proxy Monitor database (including those where the sponsor was not identified) passed.

The generally low level of support for human rights proposals coincides with the lack of support from major asset managers, several of whom have opposed human rights proposals on the grounds that they could reduce returns or create a conflict of interest. In opposing a recent human rights proposal focused on genocide, for example, Blackrock explained that it believed "the provision of dedicated ESG investment strategies … is the right approach for the Company and its stockholders" because conditioning its investment decisions on portfolio firms' human rights performance "would create a conflict of interest for [its] investment advisor subsidiaries … between their fiduciary duty to their clients" and the human rights objectives of the proposal.[59]

Fidelity has made the same argument when opposing a similar human rights proposal at one of its funds, pointing out the potential conflict between its duty "to achieve the best investment results for each Fund" and the fact that the "proposal would limit investments by the Fund that would be lawful under the laws of the United States."[60] And, as noted above, Vanguard has averred that its opposition to a similar human rights proposal focused on genocide rested, in part, on the inability of investors to influence outcomes beyond the affairs of those companies in which their funds hold equity due to the fact that "meaningful, long-term solutions" to such issues require diplomatic and political resources (i.e., in the governmental policy arena).[61]

Of course, the lack of support by funds for human rights-focused shareholder resolutions may reflect other factors, as well. In any particular instance, it can readily be the case that a particular initiative is not broadly accepted even within the activist community. For example, half of the human rights proposals filed in 2017 were related to the Israeli-Palestinian conflict.[62] The most common resolution – referred to as the Holy Land Principles – focused on standards of corporate respect for human and labor rights as regards businesses operating in Israel/Palestine. The American Friends Service Committee publicly came out against the proposal, recommending that shareholders abstain from voting on these proposals, arguing that such standards were "too limited in scope and too vague to support a change of corporate policies."[63] In sum, a lack of consensus within the activist community can serve to diminish support for a particular issue.

It can also be the case that lack of support for a given human rights shareholder proposal may reflect shareholders' judgement that the human rights concerns being raised are not material to either the company's operations or its brand. A 2016 proposal filed with JM Smucker—the producer of Smucker's Fruit Spreads and other food products—called attention to the "potential negative moral, legal, financial and reputational impacts" of sourcing seafood-based pet food from Thailand, while a 2017 proposal filed with Goldman Sachs claimed that the company's business with companies involved in the development and construction of the Dakota Access Pipeline "threatened negative impacts on banks' customer loyalty and shareholder value, and harmed project companies' [sic] with reputational damage,

57 "2017 Proxy Season Review", EY Center for Board Matters, at p. 5.

58 "Four takeaways from proxy season 2016", EY Center for Board Matters, at p. 3.

59 BlackRock, 2015 Proxy Statement, SEC Form Def 14A, 17 April 2015, at pp. 74-75.

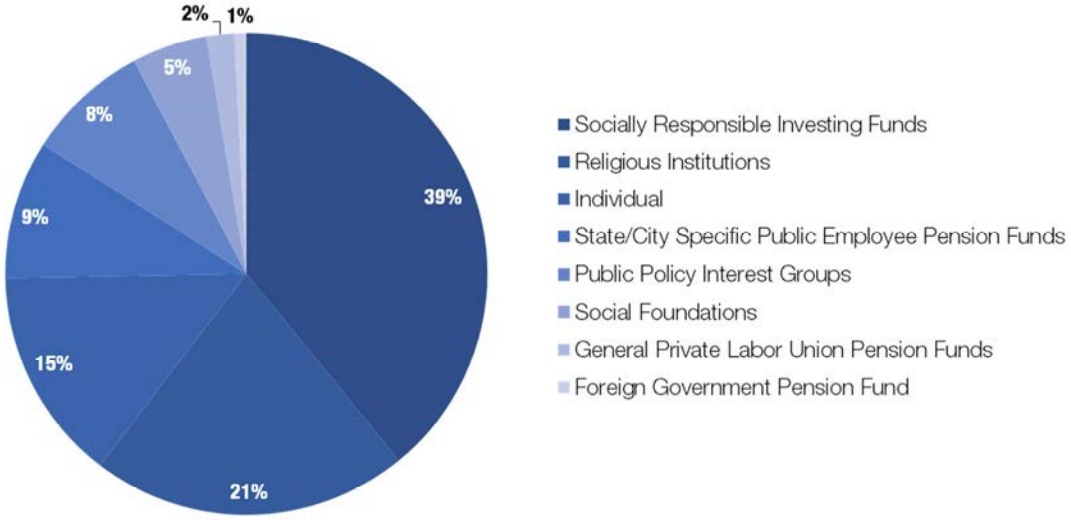
60 Fidelity, Proxy Statement, SEC Form Def 14A, 29 November 2016, at pp. 22.

61 "Answers to questions about Vanguard's proxy", Vanguard, 2017, at pp. 25-26.

62 "2017 Proxy Preview", at p. 50.

63 "The Holy Land Principles: Lowering the Bar on Human Rights", American Friends Service Committee, 25 March 2015, accessed at: https://www.afsc.org/hlp.

Figure 4: Environmental Proposals at Fortune 250 Firms by Type of Sponsor, 2006-2017



Note: The total number of proposals is 376, which excludes proposals with proponent listed as "undisclosed."

Source: Fortune 250 Shareholders Proposals 2016-17, *ProxyMonitor*, 2017, accessed at: http://proxymonitor.org/.

delays, disruption and litigation."[64] Shareholders also filed human rights proposals related to the Dakota Access Pipeline at Morgan Stanley, Wells Fargo, Marathon Petroleum and Phillips 66.[65] None of these resolutions garnered significant support.

C. RECENT CLIMATE CHANGE SHAREHOLDER PROPOSALS

The issues of climate change and human rights share similar attributes as regards the underlying political and economic challenges they present for efforts to effectively address these problems. In contrast to human rights resolutions, however, climate change proposals have begun to receive the approval of large institutional asset managers. As we show below, this change has carried significant implications for the likelihood of such resolutions receiving a majority of shareholder votes.

We again start with an examination of data compiled by Proxy Monitor. Figure 4 breaks out environmental resolutions by type of sponsor that went to a vote at the largest 250 U.S. publicly-held firms from 2006 to 2017. The figure shows that over that period there were 376 environmental resolutions voted on by shareholders of U.S. Fortune 250 companies where the sponsoring entity could be identified. Compared to support for human rights resolutions, socially responsible investing funds were far more likely to be the identified sponsor, submitting nearly 40% of such resolutions. And while religious institutions were active sponsors of environmental resolutions (21%)—in keeping with the notion that environmental issues are often framed in terms of human rights—individuals and public policy interest groups, in contrast, were less likely to be identified as the sponsor.

The data show that most resolutions are sponsored by a handful of relatively active groups. Figure 5 identifies the number of proposals filed by sponsor over this time period. As shown by the figure, As You Sow,[66] a nonprofit shareholder group, filed 34 (or 9%) of the proposals. Green Century Capital Management,[67] a designated socially responsible investment firm and

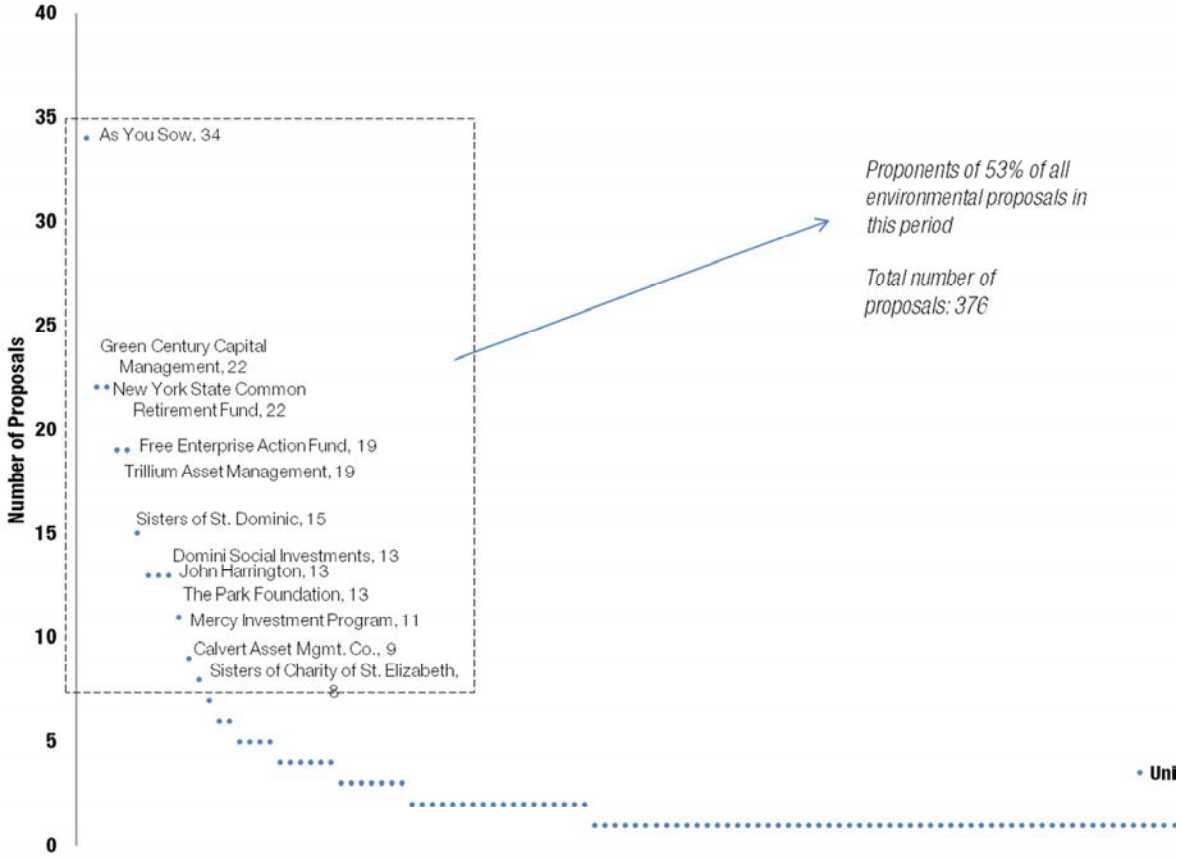
64 "JM Smucker Company – Human Rights Risk Assessment (2016)", Trillium Asset Management, accessed at: http://www.trilliuminvest.com/shareholder-proposal/jm-smucker-company-human-rights-risk-assessment-2016/; "2018 Shareholder Resolution The Goldman Sachs Group", Request: Adopt Board Oversight of Human and Indigenous Rights, As You Sow, accessed at: https://www.asyousow.org/resolutions/2018/01/31/goldman-sachs-request-for-report-on-review-of-adopting-board-oversight-of-human-and-indigenous-rights.

65 "2017 Proxy Preview", at pp. 52-53.

66 See https://www.asyousow.org/.

67 See https://greencentury.com/.

Figure 5: Filers of Environmental Shareholder Proposals, 2006 – 2017



Note: Excludes proposals with proponent listed as "undisclosed."

Source: Fortune 250 Shareholders Proposals 2016-17, *ProxyMonitor*, 2017, accessed at: http://proxymonitor.org/.

active shareholder advocate, and the New York State Common Retirement Fund,[68] the nation's third largest pension fund, each sponsored 22 proposals (or together nearly 12% of the total). Trillium Asset Management,[69] a designated socially responsible investment firm, sponsored 19 resolutions, or about 5% of the total.[70] Taken together, these four groups alone accounted for over one quarter of all such resolutions. Over half of the resolutions were introduced by just 11 entities.

Data compiled by both Proxy Monitor and Proxy Preview show the transformation of climate-related resolutions. While requests related to sustainability or global warming are prevalent through the period covered by the data, resolutions in the period prior to 2010 more commonly focused on requests concerned with corporate policies related to these topics, e.g., a study on sustainability, the public affirmation of the science of climate change, or the adoption of a sustainability policy. Resolutions requesting corporate managers to provide an evaluation of risk associated with climate change, however, begin to appear after that date, with greater focus on impacts to company operations of potential regulatory-imposed on limits greenhouse gas emissions, e.g., "policies to limit global warming", "report on carbon risk", or "report on strategy for [a no more than] 2o [temperature rise] scenario".[71]

While climate-related resolutions have not historically received a majority of shareholder votes, support for these resolutions appears to be increasing. Shareholder support for environmental resolutions averaged

68 See http://www.osc.state.ny.us/pension/.

69 See http://www.trilliuminvest.com/.

70 The Free Enterprise Action Fund, a self-described "activist mutual fund … that seeks long-term capital appreciation while aggressively challenging CEOs who use shareholder assets to advance the liberal political agenda which threatens long-term shareholder value, the free enterprise system and individual liberty" sponsored 19 or 5% of the total, all prior to 2010. See http://www.freeenterpriseactionfund.com/about.html.

71 Fortune 250 Shareholders Proposals 2016-17, 2017, accessed at: http://proxymonitor.org/.

Table 2: 2017 Climate-Related Proposals Tracked by *Proxy Monitor*

Company	Resolution	Major Proponent	Supporters	Votes For %
Occidental Petroleum	"...outline the impacts of multiple, fluctuating demand and price scenarios on the company's existing reserves and resource portfolio — including the International Energy Agency's "450 Scenario," which sets out an energy pathway consistent with the internationally recognized goal of limiting the global increase in temperature to 2 degrees Celsius."	CalPERS	BlackRock Vanguard SSgA	65.7
ExxonMobil	"...analyze the impacts on ExxonMobil's oil and gas reserves and resources under a scenario in which reduction in demand results from carbon restrictions and related rules or commitments adopted by governments consistent with the globally agreed upon 2 degree target."	New York State Common Retirement Fund	BlackRock Vanguard SSgA	62.1
PPL	"...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."	New York State Common Retirement Fund	SSgA	56.8
Devon Energy	"... analyze the impacts on Devon's portfolio of oil and gas reserves and resources in a scenario in which reduction in demand results from technological innovation, carbon restrictions and related rules or commitments adopted by governments consistent with the globally agreed upon 2 degree target."	George Gund Foundation	SSgA	40.88
Fluor	"...adopt time bound quantitative, company-wide goals for the reduction of greenhouse gas (GHG) emissions, taking into consideration the most recent Intergovernmental Panel on Climate Change (IPCC) guidance for reducing total GHG emissions..."	New York State Common Retirement Fund		34.49
Nucor	"…adopt time-bound, quantitative, company-wide, science-based goals for reducing total greenhouse gas (GHG) emissions, taking into account the goals of the Paris Climate Agreement, and report, at reasonable cost and omitting proprietary information, on its plans to achieve these goals."	Calvert Asset Management		33.06

Notes: In the *Stewardship Activity Report for Q2 2017,* SSgA reports that they voted in favor of 36% the 14 GHG Emissions proposals made in 2017; while Nuor and Fluor are two companies with such proposals, it is unknown if these proposals were part of the 36% that SSgA voted in favor of, and therefore do not have SSgA listed as a supporter.
Sources: Fortune 250 Shareholders Proposals 2016-17, *ProxyMonitor*, 2017, accessed at: http://proxymonitor.org/; 2017 Proxy Statements for ExxonMobil, Occidental, PPL, Devon Energy, Fluor and Nucor; "Stewardship Activity Report", *SSgA*, Q2 2017; "Investment Stewardship 2017 Annual Report", *Vanguard*, 2017; "Investment Stewardship Report, Americas", *BlackRock*, Q2 2017.

approximately 20% in 2016 and 25% in 2017.[72] And while Proxy Monitor data show that since 2006 only four climate change-related proposals received a majority of shareholder votes, three of those four occurred in 2017. Notwithstanding these recent changes, the fact that environmental shareholder proposals have historically not passed means there is as yet little direct evidence as to the extent to which corporate managers effectively implement such proposals. Research indicates, however, that there is a correlation between the strength of shareholder support and the implementation of a proposed resolution.[73]

Table 2 summarizes six climate change-related resolutions tracked by Proxy Monitor, including the three proposals that received majority support. Each row contains the name of the corporation at which the proposal was made, text from the proposal describing the proposed action, the proponent, and which among BlackRock, Vanguard, and SSgA voted in favor of the proposal. We focus on these firms, collectively referred to as the Big Three, because of their relative size. It has been estimated that the combined holdings of these three asset managers represents "the single largest shareholder of at least 40 percent of all public companies in the United States" and the "largest owner of nearly 90 percent of public companies in the S&P 500, up from 25 percent in 2000."[74]

72 Including all resolutions related to sustainability and climate change, i.e., 2 degree scenarios, financial impacts of climate change, global warming reporting, GHGs, carbon asset risk, and appointing environmental experts; and excluding those related to food waste, deforestation, medicine, hydraulic fracking, packaging, GMOs, and recyclables. (Fortune 250 Shareholders Proposals 2016-17, 2017, accessed at: http://proxymonitor.org/).

73 See, for example, Scott Hirst, "Social Responsibility Resolutions", Harvard Law School Program on Corporate Governance, Discussion Paper No. 2016-06, August 2016, at p. 20, footnote 32.

74 Eric A. Posner, Fiona M. Scott Morton, and E. Glen Weyl, "A Proposal to Limit the Anticompetitive Power of Institutional Investors", Antitrust Law Journal, vol. 81:3, 2017, at p. 674.

Table 3: Voting Shares of the "Big Three"

	ExxonMobil	Occidental	PPL	Devon	Fluor	Nucor
% of Shares Voting in Favor	62.1%	67.3%	56.8%	41.4%	36.7%	33.9%
Big Three % of Total Shares	20.3%	22.5%	21.4%	25.5%	22.4%	21.8%
% of Shares Voting	74.2%	86.5%	78.1%	87.9%	83.1%	86.2%
Big Three % of Shares Voting	27.4%	26.0%	27.5%	29.0%	26.9%	25.3%
% of Shares Voting in Favor if Big Three Switch Vote	34.8%	41.3%	49.6%	63.4%	63.6%	59.2%

Notes: SSgA voted in favor of the proposals at PPL and Devon. For PPL, "% of Shares Voting in Favor if Big Three Switch Vote" reflects the effect of SSgA switching its vote. For Devon, "% of Shares Voting in Favor if Big Three Switch" reflects the effect of Vanguard and BlackRock switching their votes.

Sources: ExxonMobil, Form 8-K, filed 31 May 2017; Occidental Petroleum Corp., Form 8-K, filed 12 May 2017; PPL Corp., Form 8-K, filed 17 May 2017; Devon Energy Corp., Form 8-K, filed 7 June 2017; Fluor Corp., Form 8-K, filed 4 May 2017; Nucor Corp. Form 8-K, filed 11 May 2017; ExxonMobil, "Notice of 2017 Annual Meeting and Proxy Statement", SEC Form DEF 14A, 2017 April 13; Occidental Petroleum Corp., "2017 Proxy Statement", SEC Form DEF 14A, 2017 May 24; PPL Corp., "2017 Notice of Annual Meeting and Proxy Statement", SEC Form DEF 14A, 2017 April 5; Devon Energy Corp., "2017 Notice of Annual Meeting and Proxy Statement", SEC Form DEF 14A, 2017 April 26; Fluor Corp., "Notice of Annual Meeting of Stockholders", SEC Form DEF 14A, 2017 March 9; Nucor Corp., "Notice of 2017 Annual Meeting of Stockholders and Proxy Statement", SEC Form DEF 14A, 2017 March 23; State Street Corp, SEC Form 13F, Report for the Calendar Year or Quarter Ended 31 December 2016.

While there is some variation across the resolutions, each of the proposals seeks information as to the impact on the company's operations that would result from future potential regulatory actions imposing a limit on greenhouse gas emissions. All six resolutions ask that the requested disclosures be based on analysis performed "at reasonable cost and without disclosing proprietary information." Each of the proposals was put forward by a public pension fund, socially responsible asset manager or non-profit.

This is typical of environmental proposals. While major asset managers almost never make environmental shareholder proposals—or shareholder proposals of any kind for that matter—their support of these proposals has been increasing in recent years. Support from major asset managers, and the Big Three in particular, tends to be pivotal in determining whether these proposals pass.

In December 2016 the Big Three controlled 738 million shares of ExxonMobil, which represented 20% of the 3.6 billion shares outstanding.[75] However, because only 74% of shares voted on the climate change proposal, this figure understates their impact.[76] The Big Three controlled 27% of ExxonMobil shares that cast a vote on the climate change proposal shown in Table 3, and they each voted 100% of the shares in every one of their funds in favor of it. In contrast, 52% of ExxonMobil shares not controlled by the Big Three voted against the proposal. If the Big Three had opposed the proposal—or even abstained—the resolution would not have passed. Rather, it would have drawn only 35% of shareholder support.

Similarly, the Big Three controlled 22% of Occidental shares outstanding on September 29, 2017, which accounted for 26% of shares voting on the climate change proposal shown in Table 3. If the Big Three had opposed the climate change proposal made at Occidental, the resolution would have lost with just 41% in favor. The exercise isn't academic: both BlackRock and Vanguard opposed the climate-related resolution put to Devon Energy's shareholders.[77]

Table 3 demonstrates the impact of the size of the Big Three's holdings by asking a simple question: What would have been the consequence for each of the aforementioned six 2017 climate-related resolutions had Vanguard, SSgA, and BlackRock each switched their votes? As noted above—and as can be seen in Table 3—the Big Three's voting share was instrumental in approving resolutions put to ExxonMobil's and Occidental's shareholders. They were also pivotal in defeating climate change proposals at Devon Energy, Fluor and Nucor. In each case, the Big Three controlled

75 ExxonMobil, "Notice of 2017 Annual Meeting and Proxy Statement", SEC Form DEF 14A, 2017 April 13; ExxonMobil, Form 8-K, filed 31 May 2017; and State Street Corp, SEC Form 13F, Report for the Calendar Year or Quarter Ended 31 December 2016.

76 ExxonMobil, Form 8-K, filed 31 May 2017, at p. 4.

77 Proxy Voting Results – BlackRock: Devon Energy, accessed at http://vds.issproxy.com/SearchPage.php?CustomerID=1615; Vanguard Index Funds Form N-PX, Annual Report of Proxy Record of Registered Management Investment Company, for reporting period 1 July 2016 – 30 June 2017, accessed at: https://about.vanguard.com/investment-stewardship/supporting-files/proxy-vote1647.pdf?v=1506522482539; State Street Master Funds Form N-PX, Annual Report of Proxy Record of Registered Management Investment Company, for reporting period 1 July 2016 – 30 June 2017, accessed at: https://www.sec.gov/Archives/edgar/data/1094885/000119312517273099/d428232dnpx.txt.

over 20% of shares outstanding and over 25% shares voting on the proposal. All three of the defeated proposals would have passed had the Big Three supported them. As to the PPL shareholder proposal, both BlackRock and Vanguard opposed the proposal, whereas SSgA was a supporter. Had that support been withheld, the PPL proposal would have failed to receive a majority of the shares voting in favor.

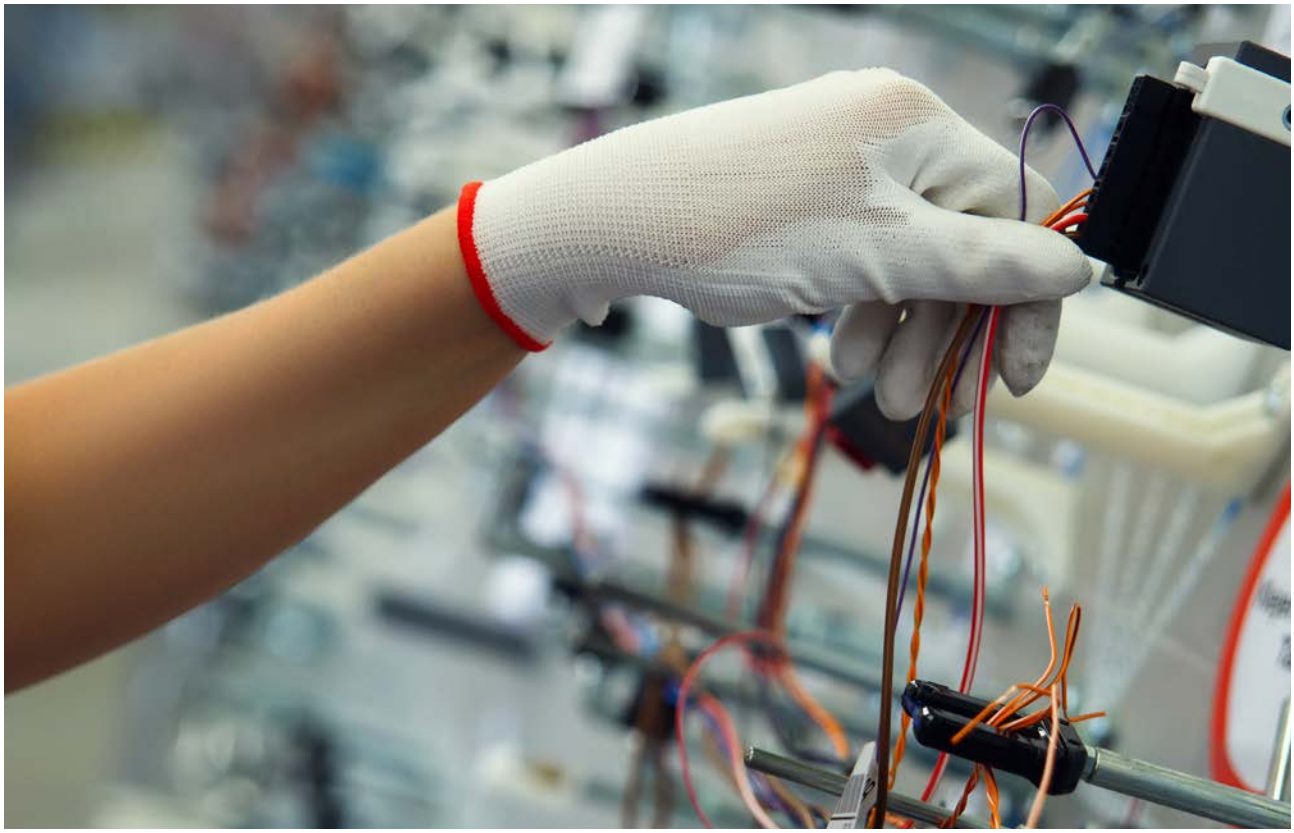
In sum, institutional investors are a dominant force in determining the outcome of votes on climate-related ESG shareholder proposals. This force is compounded by the fact that most retail investors do not vote their shares and most of those that do vote oppose climate change and other types of environmental shareholder proposals. In 2017, only 29% of retail investors' shares voted on ESG proposals, while institutional investors voted 91% of their shares.[78] Thus, whereas institutional investors control over 60% of U.S. equity,[79] they account for roughly 82% of shares voting on ESG proposals.

In this regard, an analysis of the seven climate change proposals that received at least 40% shareholder support in 2017 found that only 13% of retail investors' shares were voted in favor of climate change proposals, while the remaining 87% of shares were owned by individuals who opposed, abstained or didn't otherwise vote on the proposals. Institutional investors voted in favor of climate change proposals at five times the rate of retail investors, with 66% of their shares voting in support.[80] Support for environmental shareholder proposals was similarly divided in 2017, as retail investors voted only 10% of their shares in favor of environmental proposals while institutional shareholders voted 32% of their shares in favor of environmental proposals—or three times the rate of support from retail investors

78 "2017 Proxy Season Review", ProxyPulse, September 2017, at p. 2.

79 "Index Investing Supports Vibrant Capital Markets", BlackRock, October 2017, at p. 6. This includes assets actively managed by an external manager, defined benefit and defined contribution plans, and assets under the control of other institutions.

80 "2017 Proxy Season Review", ProxyPulse, September 2017, at p. 3.



IV. IMPACT OF CLIMATE CHANGE PROPOSALS ON SHAREHOLDER VALUE

IV. IMPACT OF CLIMATE CHANGE PROPOSALS ON SHAREHOLDER VALUE

Recent climate-focused shareholder resolutions commonly mandate that companies undertake an array of actions, ranging from the publishing of sustainability reports to the disclosing of the financial consequences of, e.g., a world in which unspecified regulatory measures needed to avoid a "2 degrees Celsius" scenario (2 degree scenario) are enacted and the describing how a company would adapt its business model to align with such a scenario. This section begins with a review of the claims made by the proponents of such measures. We then turn to an assessment of these claims and their impact on shareholder value.

A. PROPONENTS' CLAIMS AND ARGUMENTS

Embedded within the aforementioned climate change-related proposals is the proposition that the market is somehow failing to incorporate the systemic (regulatory and competitive) risks arising from the growing awareness of the impacts of climate change and, thus, the failure on the part of energy and energy-intensive industries to effectively plan for such potential outcomes. While their supporters are united in believing that the market fails to account for the potential consequences of climate change, they make different claims regarding the impact of increased disclosure on shareholder value.

One group, which includes asset management firms such as the Big Three, posits that requests for improvements in a firm's climate change-related disclosures will compel the firm's management to enhance its own understanding of the climate-change related risks and opportunities that the firm will face. This argument suggests that additional disclosures would have a positive effect on share price as they would serve to improve management's ability to mitigate these risks and take advantage of the opportunities.

Another group, which includes nonprofit sustainability and environmental advocates and some public pension funds, claims that firms in energy and energy-intensive industries are overvalued because the climate change risk they face is underappreciated by the market. This line of reasoning suggests that the market is overvaluing those assets and that further disclosure would have a negative effect on share price.

Fundamentally, asset management firms argue that future to-be-determined regulations will have significant consequences for the use of fossil fuels. These future states present investment opportunities that emanate from those risks. In September 2016, BlackRock claimed that "[a] tide of new regulations to combat climate change is rising. The risks are underappreciated, yet … [they] present large investment risks and opportunities." [81] According to its 2017 Stewardship Report, Vanguard also believes "changes in global regulation, energy consumption, and consumer preferences will have a significant economic impact on companies, particularly in the energy, industrial, and utilities sectors" and that climate risk disclosure is needed so that "the market is able to reflect risk and opportunity." [82]

81 "Adapting Portfolios to Climate Change", BlackRock Investment Institute, September 2016, at p. 3.

82 "Investment Stewardship 2017 Annual Report", Vanguard, 2017, at p. 11.

Further, each of the Big Three has also endorsed the use of a scenario consistent with limiting global warming to no more than 2 degrees to evaluate this risk.[83] As discussed further below, such a scenario by definition rests on a number of strong assumptions as to the effectiveness of international cooperation on the global reduction in greenhouse gases.

At the heart of these arguments is the claim that climate change risk is undervalued by the market, i.e., that share prices do not fully reflect the risks and opportunities of coming changes in regulations, business models, and technology—and that increased disclosure reduces the risk associated with these changes and, thus, leads to an increase in shareholder value. The implication of this type of claim is that the disclosure of information such as long-term scenario analysis and emissions reduction goals allows market participants to more accurately predict operational and, hence, financial performance. It may therefore be summarized as a "risk reduction" claim, wherein increased climate risk disclosure benefits investors by reducing share price volatility.

As explained more fully below, this argument rests upon two flawed assumptions: (1) that sophisticated investors are incapable of finding and assessing risks that any given company may confront as a consequence of its climate-related business activities, and (2) that management is withholding material information not otherwise available to such investors on the form, timing and effectiveness of future global political and regulatory actions that address climate change.

In contrast to the Big Three (which typically stress that climate change and its results present a mix of risk and opportunity), the non-profit advocacy groups, socially responsible investment firms, and public pension funds that put forward most climate change proposals effectively assume or assert that global regulatory action capable of limiting climate change to 2 degrees is inevitable. The corollary proposition is that firms in carbon intensive industries are overvalued due to an underappreciation of the potential impact of climate risk and/or associated yet-to-be adopted regulations on asset values.

In particular, many activist advocates of increased climate disclosure have argued that companies in energy and energy-intensive industries are making investments that will be unable to earn a commensurate economic rate of return as a result of changes in the marketplace resulting from climate change regulation. Such a claim may be described as one of directional bias: Increased disclosure of the information generally sought through such proposals will serve to demonstrate to investors the uneconomic assets and otherwise squandered capital expenditures; this, in turn, will lead to a decrease in (and an allegedly more accurate representation of) shareholder value.

Many members of this group commonly assert that climate change and future climate change regulation represent an unprecedented, if not existential, risk for corporations in a variety of sectors, and investments undertaken by relatively high carbon industries that are not predicated on a 2 degree scenario waste capital. For example, Ceres, a nonprofit that advocates for increased disclosure of climate risk, views its goal as working to "prevent companies from wasting investor capital by demonstrating how carbon asset risk poses an existential threat to their business models, accrues increasing levels of stranded assets, and puts trillions in capital expenditures at risk."[84] Ceres' board of directors includes representatives of the pension funds that have been the most active in filing shareholder proposals, including CalPERS, the NY State and City retirement funds, the AFL-CIO and CalSTRS.[85] The NY State Comptroller – and sole trustee of the NY State Common Retirement Fund – argues that "[c]limate change is an

83 SSgA defines a 2 degree scenario as a scenario that is consistent with "the global consensus to limit the global average temperature increase to under 2 degrees Celsius and the alignment of company strategy to this global commitment. ("SSgA's Perspectives on Effective Climate Change Disclosure", State Street Global Advisors, 14 August 2017.) In explaining its vote on the climate change disclosure proposal at ExxonMobil Blackrock noted that climate risk disclosure was one of its "five engagement priorities for 2017-18" and that "climate-related scenario analysis, including but not limited to a 2-degree scenario" is a key aspect of climate risk disclosure. (Press Release on "Impact of Climate Change Policies Proposal" by Exxon Mobile Corporation to BlackRock, BlackRock, 31 May 2017, accessed at: https://www.blackrock.com/corporate/literature/press-release/blk-vote-bulletin-exxon-may-2017.pdf.) In its annual open letter Vanguard expressed its support for the Sustainability Accounting Standard Board's ("SASB") approach to climate risk disclosure. ("An open letter to director of public companies worldwide" sent from F. William McNabb, Chairman and Chief executive Officer, Vanguard Group, 31 August 2017, accessed at: https://about.vanguard.com/investment-stewardship/governance-letter-to-companies.pdf. The SASB endorses the use of multiple scenarios including a 2 degree scenario. (Response of the Sustainability Accounting Standards Board, Re: The Task Force on Climate-Related Financial Disclosure, Incoming Letter date 9 February 2017, accessed at: https://www.sasb.org/wp-content/uploads/2017/02/SASB_TCFD_comment-letter_021217-withAnnex.pdf.

84 "Carbon Asset Risk", Ceres, accessed at: https://www.ceres.org/our-work/carbon-asset-risk.

85 "Board of Directors", Ceres, accessed at: https://www.ceres.org/about-us/board-directors.

unprecedented material risk that affects our portfolio across virtually all asset classes."[86] CarbonTracker argues that "[i]mproved transparency and risk management are essential to the maintenance of orderly markets, avoiding wasted capital and catastrophic climate impacts."[87]

This group's basic argument takes the form: "If climate change regulation dramatically reduces demand for X, then investments related to the production of X waste capital and firms in the X industry will be overvalued." As You Sow offers an example of this reasoning when it implies that companies carry reserves in excess of total future demand for such reserves.[88] Similar arguments have been made regarding midstream and downstream energy sector investments, fossil-fuel fired generation, combustion engines and a variety of other industries.[89]

This group's argument rests upon two assumptions: (1) Corporate managers and directors are willfully ignoring or ignorant of the available evidence regarding climate change's potential impact on companies' operations; and (2) that the market values of these companies do not (for unspecified reasons) reflect these risks. The fundamental challenge confronting such arguments is, as explained further below, that the information needed to assess such claims is readily available to sophisticated investors because it resides within the public domain.

Simply put, it is in the self-interest of activist fund managers, for example, to assess such claims and, where they hold, to punish corporate managers through, for example, the selling of their ownings or the replacing of senior management. More broadly, economics has long-recognized that the market tends to discipline corporate management and serves to curb inefficient behavior.[90] While it may be the case that a given company is mismanaging its assets, proponents' arguments require that investors who currently hold shares be unwilling to sell and other investors be unwilling to sell-short shares in overvalued industries.

The "risk reduction" and "directional bias" claims carry within them a common set of strong assumptions as to the future state of the world. In particular, the reliance on a 2 degree scenario (whether explicit or implicit) requires the strong assumptions regarding international coordination in the agreement, adoption, implementation, and enforcement of greenhouse gas reduction policies sufficient to achieve the goals of, for example, the Paris Agreement. The agreement was adopted in 2015 by consensus of the 195 states that negotiated the agreement under the auspices of the United Nations. The goal of the agreement is to limit global temperature rise this century below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.[91]

Pursuant to this objective, the Paris Agreement requires all parties to the agreement to set a Nationally Determined Contribution ("NDC")—i.e., a national emissions limit or reduction target.[92] After setting an NDC, each state then implements a regulatory regime that is the result of its own internal political and legal processes and may or may not be sufficient to meet the target. Under the Paris Agreement signatories are free to revise their NDCs at any time and the Agreement does not specify a punishment for nations that fail to meet their NDCs or a

86 "Personality of the Year 2017: Thomas DiNapoli," Environmental Finance, 30 June 2017.

87 "Unburnable Carbon 2013: Wasted Capital and Stranded Assets", Carbon Tracker Initiative, 2013, at p. 5 ("Unburnable Carbon").

88 "If fossil fuel reserves cannot be burned, companies holding these reserves will be overvalued, and the resulting 'carbon bubble' created by overvalued reserves puts investors at risk." See "Carbon Asset Risk", As You Sow, accessed at: https://archive.asyousow.org/our-work/energy/climate-change/carbon-asset-risk/.

89 See, e.g., "Margin Call: Refining Capacity in a 2°C World", Carbon Tracker Initiative, November 2017, p. 22: "the longer-term risks to earnings lie to the downside. Our analysis suggests the scope for a material decline in margins leading to value destruction in this scenario … we believe the risk of wasting capital extends to all new investments, including expansions or upgrades to existing facilities." See also, "Stranded Assets: The Transition to a Low Carbon Economy - Overview for the Insurance Industry", Lloyd's, February 2017, at p. 9, suggesting that, as a result of climate change regulation, "[c]ombustion engine infrastructure could be left unusable". See also, Ben Caldecott and Jeremy McDaniels, "Stranded generation assets: Implications for European capacity mechanisms, energy markets and climate policy", Working Paper, Smith School of Enterprise and the Environmental and University of Oxford, January 2014, accessed at: http://www.smithschool.ox.ac.uk/research/sustainable-finance/publications/Stranded-Generation-Assets.pdf.

90 As Henry Manne noted in 1965: "The lower the stock price, relative to what it could be with more efficient management, the more attractive the takeover becomes to those who believe that they can manage the company more efficiently." Henry G. Manne, "Mergers and the Market for Corporate Control", Journal of Political Economy, vol. 73:2, 1965, at pp.110-120.

91 The Paris Agreement does not provide any quantification of the term "well below 2 degrees Celsius." The requirements of the Paris Agreement are typically assumed to require a scenario that provides a 50% chance of limiting global warming to below 2 degrees. See "World Energy Outlook", International Energy Agency, 2017, Chapter 1, at p. 38 footnote 2.

92 "Paris Agreement", United Nations, 12 December 2015, accessed at: http://unfccc.int/files/home/application/pdf/paris_agreement.pdf.

reward for nations that meet or exceed theirs.

Given this framework, success in meeting the goals of the agreement requires that: (1) signatories collectively set through their own individual actions a worldwide target of NDCs that will restrict global emissions to a level that limits climate change to 2 degrees; (2) signatories develop and enact a global regulatory and enforcement regime capable of achieving their NDCs (at least on average), including punishing of defectors or otherwise compensating actions on the part of the remaining signatories for any such violations; and (3) the economic, social and distributional impact of meeting the NDC be acceptable to the populace of each country, otherwise, they will take action to change their government's policy—e.g., by electing new leaders willing to reverse the objectionable policies. If one or more of these conditions fails to hold, global emissions and demand for fossil fuels and other relatively carbon-intensive products will be higher than they would be under a 2 degree scenario.

As increased emissions principally result from increased demand for fossil fuels, 2 degree scenarios would, all else equal, significantly under-predict fossil fuel demand. For example, the November 2017 UN Emissions Gap report finds that under the current policy scenario global emissions will be 16% higher than under a 2 degree scenario in 2025 and 41% higher in 2030.[93] The same report indicates that, even if every party to the Paris Agreement—including the United States—were to take additional regulatory action sufficient to reduce emissions to levels consistent with their NDCs, emissions will still be 9.4% higher than under a 2 degree scenario in 2025 and 26.3% higher in 2030.[94] As stated by the report, "[t]he overarching conclusions … are that there is an urgent need for accelerated short-term action and enhanced longer-term national ambition, if the goals of the Paris Agreement are to remain achievable." [95] That is, in the absence of additional regulatory action, fossil fuel consumption and emissions will remain above the levels consistent with a 2 degree scenario.

There is considerable consensus among governmental, advocacy, and industry representatives as to the likely consequences of adopting policies consistent with existing policy, as well as the types of policies that would be necessary to limit global warming to 2 degrees. For example, the International Energy Agency ("IEA") has explained that its New Policies Scenario "incorporates not just the policies and measures that governments around the world have already put in place, but also the likely effects of announced policies, as expressed in official targets or plans. The Nationally Determined Contributions (NDCs) made for the Paris Agreement provide important guidance as to these policy intentions in many countries, although in some cases these are now supplemented or superseded by more recent announcements – including the decision by the U.S. administration to withdraw from the Agreement."[96] The public availability of such modeling and scenarios is inconsistent with activist shareholders' arguments (discussed above), which are predicated on the market lacking the ability to form such perspectives and outlooks.

Figure 6 plots the difference in the global demand for oil between the present and approximately 25 years hence for the benchmark (or "central") scenarios and the 2 degree scenarios recently put forth by ExxonMobil, the IEA, and CarbonTracker. While each entity's scenario may reflect differing assumptions regarding economic growth, technological changes, impact of current policies, and so forth, the scenarios created by the international oil companies, the IEA and non-profit climate activists all generally agree that, under current policies, global demand for liquid fuels such as gasoline and diesel will realize modest growth through 2040.

The 2 degree scenarios are also quite consistent in their conclusions, showing a relative decline in global consumption of oil over the relevant time period. Because of the large number of assumptions required to perform this kind of long-term scenario analysis, it is possible for the scenario-builder's pre-existing biases to affect the outcome of the exercise. Yet, despite the fact that the three entities could reasonably be expected to have very different positions regarding the risks of climate change regulation, they arrive at similar conclusions regarding the likely consequence of a 2 degree scenario on oil demand in coming decades.

Given the general agreement regarding the likely impact on the physical demand for the underlying resource

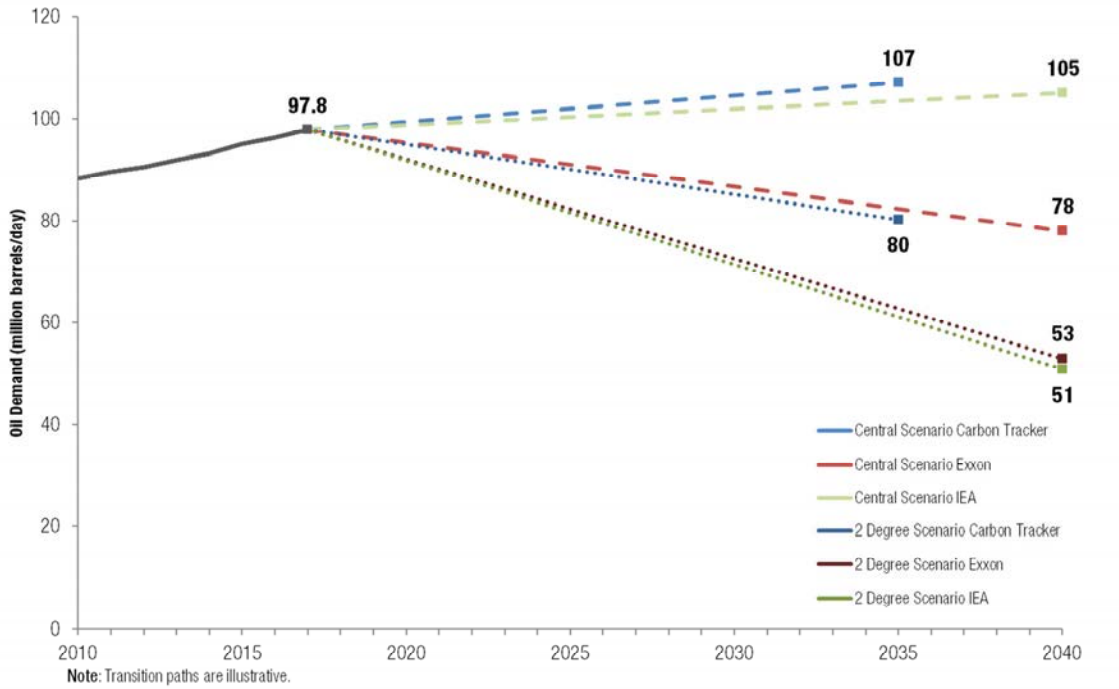
93 "The Emissions Gap Report 2017", United Nations Environment Programme, November 2017, at p. 13.

94 Ibid.

95 Ibid. at p. xiv.

96 "World Energy Outlook", International Energy Agency, 2017, Chapter 1 at p. 37.

Figure 6: Oil Demand under Benchmark and 2 Degree Scenarios



Note: Transition paths are illustrative.

Sources: ExxonMobil, *2018 Energy & Carbon Summary*, 2018; Andrew Grant, "Margin Call: Refining Capacity in a 2°C World", *Carbon Tracker Initiative*, November 2017; International Energy Agency, "World Energy Outlook 2017", November 2017, accessed at: https://www.iea.org/weo2017/; "Perspectives for the Energy Transition: Investment Needs for a Low-Carbon Energy Systems", *International Energy Agency and International Renewable Energy Agency*, 2017; International Energy Agency, "Oil Market Reports", for years 2011, 2014, 2017, and 2018.

under a scenario of intense regulatory constraints, the principal source of uncertainty for companies operating in carbon-intensive sectors would be the timing and strength of the plethora of greenhouse gas-limiting regulatory efforts required to be enacted across the multitude of international, national, and regional actors to meet those standards. In this regard, what the disclosure of climate change risk such as that put forth in the aforementioned resolutions effectively requires is a prediction of a political nature. That is, for such predictions to have any meaning more than can be otherwise gathered from existing sources of information, they require that corporate managers have particular insights as to the tastes, preferences, voting behavior, and/or institutional capabilities across a wide and varied number of independent political actors operating within independently acting states across the globe.

Consequently, in order for these disclosures to provide material information to investors, i.e., information that isn't otherwise readily available to sophisticated investors, it must be the case that corporate managers have a comparative advantage (relative to governmental institutions, think tanks, sophisticated investors, etc.) in predicting future political outcomes. Yet, this is not an area in which corporate managers would be expected to have any particular specialized ability, i.e., at predicting, for example, the political outcomes that will determine whether and when, if at all, specific international agreements will be reached and local jurisdictions will implement, enforce and stick to a specific, coordinated set of regulatory policies required to achieve a specific climate target such as the 2 degree standard.

This was effectively the point made by Vanguard in its decision to not vote in the affirmative on the human rights resolution discussed above. Rather, we might more reasonably expect specialist foreign affairs researchers, think tanks and organizations to yield more reliable forecasts of international political outcomes – and such institutions routinely make their forecasts available publicly. There is no reason to expect that an energy company's forecasts of requisite political scenarios will outperform and improve the ability of investors to assess the value of energy assets.

Indeed, the information needed for the forecasting of policy change around the world that is available to energy companies is the same information generally available to investors. Publicly available information comes from a variety of entities that, unlike energy and manufacturing companies, have a comparative advantage in this area. This includes governmental and non-profit entities, such as the International Energy Association, the United States Energy Information Administration, The Royal Institute of International Affairs' Chatham House, Rice University's Baker Institute for Public Policy's Center for Energy Studies, to name but a few. It includes private forecasting and research entities such as IHS Markit and Verisk Analytics.[97]

Moreover, there exists a variety of public institutions not primarily concerned with energy or climate change that also publish reports, perform studies and make data available, including the Organisation for Economic Cooperation and Development, the European Commission, the U.S. Congressional Budget Office, and the U.S. Government Accountability Office.[98] Furthermore, many firms operating in the energy sector make data available through regulatory filings, investor presentations, and annual reports. In short, there is a plethora of entities providing relevant data and analyses to which an investor may turn to inform her decision.

It thus should not be surprising that the estimates put forth by each entity follow similar paths or, stated alternatively, that ExxonMobil's estimation of the future under differing scenarios (with their differing assumptions) looks similar to the IEA's and Carbon Trackers' estimation. The market of investors as a whole and non-market actors understand that if certain regulatory policies were to somehow be enacted, the demand for fossil fuels, such as oil, could reasonably be expected to fall. The question then becomes the probability of such policies being enacted (and stuck to), when, by whom, and with what enforcement mechanisms.

While we test the extent to which such shareholder resolutions impact shareholder value in the next section, we note here that the implications of the suggestion embedded within activists' arguments that the market is incapable of properly assessing the risks associated with climate change can be demonstrated through prior analysis of divestment in response to climate-related and similar kinds of shareholder activist proposals. One of the key tenets of modern portfolio theory is that diversification can improve risk-adjusted returns. Because divestment necessarily limits diversification, economic theory predicts that divestment reduces risk-adjusted returns, and several recent research papers have found results consistent with the theory.[99]

Even more generally, such findings are not surprising. Whether it is divestment or less draconian measures such as compelling certain kinds of studies and reporting, the introduction of objectives that turn attention away from, or introduce alternatives to, value maximization for shareholders should be expected to adversely impact shareholder value. To test this prediction of basic economics, we now turn to examination of the impacts of climate-related resolutions on shareholder value.

B. CLIMATE CHANGE RESOLUTIONS: ANALYSIS AND FINDINGS

As discussed above, the rationales given for climate change-related shareholder proposals are often inconsistent with each other. Some activists expect that

97 IHS Markit has been a leading provider of oil and gas data, software and forecasting since its acquisition of Cambridge Energy Research Associates in 2004. "IHS Energy Acquires Cambridge Energy Research Associates (CERA)", IHS Markit, 1 September 2004, accessed at: http://news.ihsmarkit.com/press-release/corporate/ihs-energy-acquires-cambridge-energy-research-associates-cera. Verisk acquired Wood Mackenzie in 2015. Woods Mackenzie leverages "predictive models and robust proprietary data gathered over the past century to describe and value assets, forecast their future productivity and value" for clients in the energy, chemicals, metals and mining industries. "Verisk Analytics to Acquire Wood Mackenzie," Verisk Analytics, 10 March 2015, accessed at: https://www.verisk.com/archived/2015/march/verisk-to-acquire-wood-mackenzie/.

98 For example, the OECD makes its climate change research available at http://www.oecd.org/environment/cc/; the EC makes its climate change research available at https://ec.europa.eu/research/environment/index.cfm?pg=climate; the CBO makes its climate change related reports and analysis available at https://www.cbo.gov/taxonomy/term/1550/latest; and the GAO publishes climate change related reports and information on its website at https://www.gao.gov/key_issues/climate_change_response/issue_summary and https://www.gao.gov/key_issues/climate_change_funding_management/issue_summary.

99 See, e.g., Daniel R. Fischel, Christopher R. Fiore, and Todd D. Kendall, "Fossil Fuel Divestment and Public Pension Funds", June 2017, at p. 5. (Studying 11 major public pension funds and finding a weighted average reduction in risk-adjusted returns of between 0.15 percent and 0.20 percent per year due to reduced diversification). See also Bradford Cornell, "The Divestment Penalty: Estimating the Costs of Fossil Fuel Divestment to Select University Endowments", 2015, at p. 4 ("The mean risk-adjusted shortfall due to divestment for a weighted average across the five universities is approximately 0.23 percent per year, each year.")

proposals requiring climate change-related disclosures will raise equity prices, and other activist rationales predict the opposite, a reduction in equity prices as investors better understand the risks climate change poses for firm profitability. A third hypothesis is that investors already have access to sufficient climate change-related information and that such information is reflected in current stock prices. Under this hypothesis, additional disclosure, however motivated, will have little or no effect on stock prices.

To consider these hypotheses, we analyze the effect of climate change-related disclosure on firm equity value in two ways. First, we use the standard technique of event studies to examine how stock prices reacted to a series of recent shareholder proposals seeking disclosure of climate risks. Second, we examine the effect on equity value of the release of reports by the CDP, a coordinated effort of certain investors seeking voluntary disclosure of climate change-related information from major companies. CDP reports reveal which companies disclose this information and which do not.

C. EVENT STUDIES ON SHAREHOLDER PROPOSALS PROVIDE NO EVIDENCE THAT THESE PROPOSALS INCREASE SHAREHOLDER VALUE

An event study is a statistical method used frequently in financial economics to measure the impact of events on stock returns.[100] The goal of an event study is to isolate the impact of the event of interest on the price of a stock by controlling for the effects of other changes in the marketplace. In practice, this is achieved by taking the difference between the actual stock return and the predicted return, the latter of which is based on the historical relationship between the returns on that stock, returns on comparable stocks and the average market return. In this case, the events in question are shareholder proposals demanding that particular firms release reports disclosing climate change-related information.

More specifically, for a series of recent shareholder proposals, we examine stock returns on both the day a proxy statement containing the proposal was filed and the day of the vote on the proposal.[101] We examine both proposals that passed and those that failed. To identify proposals, we first screened Proxy Monitor's database of shareholder proposals at Fortune 500 companies, focusing on successful proposals that were opposed by management. We then identified through review of trade press additional examples in other industries outside energy that have also been targeted by such proposals, such as pharmaceuticals and biotech.

Table 4 lists the ten proposals we identified, and the shareholder vote on each one. Four of these proposals

100 See, e.g., A.C. MacKinlay, "Event Studies in Economics and Finance", Journal of Economic Literature, vol. 35:1, March 1997, at pp. 13-39.

101 In cases where a proxy statement of results of a vote became public after the close of the market, we analyze the stock return on the following trading day.

Table 4: Climate-Related Proposals

Company	Key Element of Proposal	Sponsor	Proxy Filing Date	Date Shareholder Vote Announced
[1] CF Industries Holdings, Inc.[1]	Sustainability report	The Board of Pensions of the Presbyterian Church (USA)	04/03/13	05/17/13
[2] Occidental Petroleum Corp.[2]	Impact of 2 degree scenario	NA	03/27/17	05/12/17
[3] PPL Corp.	Impact of 2 degree scenario	NA	04/05/17	05/17/17
[4] ExxonMobil Corp.	Impact of 2 degree scenario	New York State Common Retirement Fund	04/13/17	05/31/17
[5] ESCO Technologies Inc.[3]	Sustainability report	Walden Asset Management	12/16/14	02/10/15
[6] Gilead Sciences, Inc.	Sustainability report	Trillium Asset Management	03/27/15	05/08/15
[7] BioMarin Pharmaceutical Inc.[4]	Sustainability report	NA	04/23/15	06/16/15
[8] ESCO Technologies Inc.[5]	ESG Report	Walden Asset Management	12/15/15	02/10/16
[9] ExxonMobil Corp.	Impact of 2 degree scenario	Sisters of St. Dominic of Caldwell, NJ	04/13/16	05/25/16
[10] ExxonMobil Corp.	Sustainability report	New York State Common Retirement Fund	04/13/16	05/25/16

Notes:

[1] CF Industries 8-K disclosing the results of the shareholder vote was filed on May 16, 2013 after the market close.

[2] Occidental Petroleum's proxy was filed on March 24, 2017 after the market close.

[3] ESCO Technologies Inc. 8-K disclosing the results of the shareholder vote was filed on February 9, 2015 after the market close.

[4] BioMarin Pharmaceutical Inc.'s 8-K disclosing the results of the shareholder vote was filed on June 15, 2015 after the close.

[5] ESCO Technologies Inc. 8-K disclosing the results of the shareholder vote was filed on February 9, 2016 after the market close.

Source: Company SEC Filings;
Factiva.

passed and six failed. In two cases, we analyze the same proposal that came to a vote in two consecutive years at the same company. In one of these cases (ESCO Technologies), the proposal failed both times, while in the other case (ExxonMobil), the proposal failed in 2016, but passed in 2017.

It is standard practice in event studies to take into account the effect of contemporaneous market and industry factors on stock returns. This is typically done by 1) estimating the historical relationship between changes in a company's stock price and contemporaneous changes in the performance of relevant market and industry indices, 2) using the historical relationship and the actual performance of these indices on the day in question to calculate an expected return, and 3) subtracting the expected return from the actual return to derive a "residual return" (sometimes referred to as an "abnormal return").

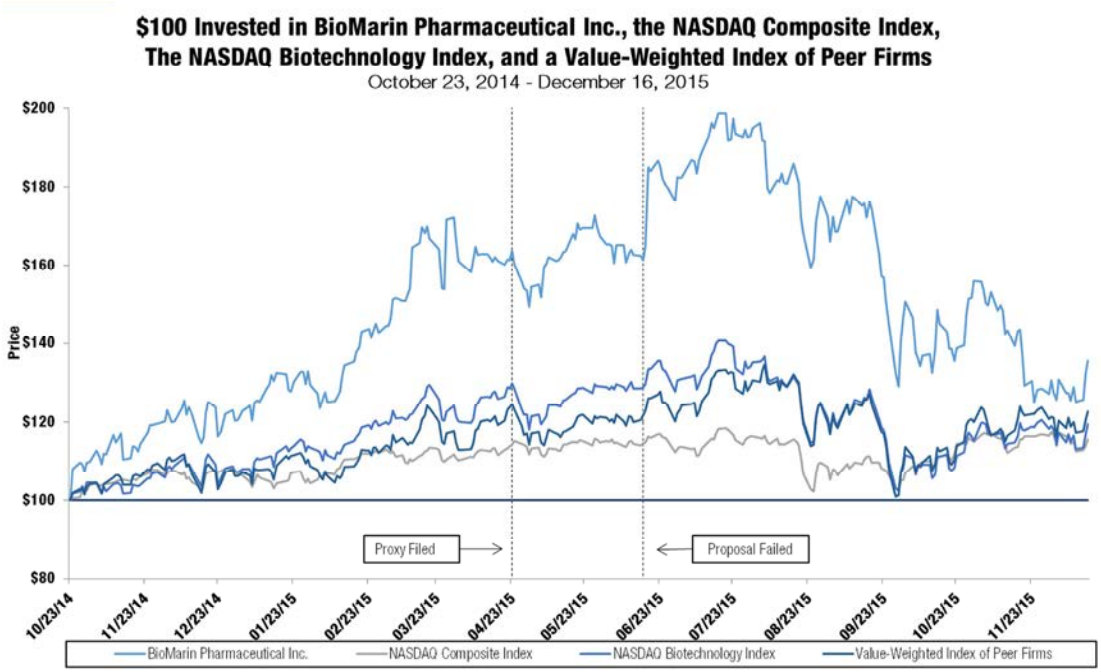
For the relevant market and industry indices, we relied on the market and industry comparables the companies themselves use as benchmarks in their ordinary financial filings. For instance, the earliest shareholder proposal we analyze proposed in 2013 at CF Industries, a manufacturer and distributor of agricultural fertilizers. We examined CF Industries' 10-K filing for 2013 and found that the company compares itself to the S&P 500 Index, the Dow Jones US Commodity Chemicals Index, and a portfolio of specific companies in its industry, including Agrium, Inc., The Mosaic Company, Potash Corporation of Saskatchewan, Inc., and Intrepid Potash.[102] Therefore, we also use these as benchmarks to calculate an expected return for CF Industries on the days relevant to the shareholder proposal in question.[103]

In order to better visualize the data used in our analyses, Figures 7A through 7I illustrate stock returns for each of the companies around the dates of the shareholder proposals we study. In each case, we plot the value on each date of a $100 investment made six months before the filing of the relevant proxy through to six months after

102 CF Industries Holdings, Inc., 2013 Annual Report at, p.4.

103 The market and industry indices used for each of the other proposals are indicated in the footnotes to Table 5, as discussed further below.

Figure 7A: $100 Invested in BioMarin Pharmaceuticals, the NASDAQ Composite Index, NASDAQ Biotechnology Index, and Value-Weighted Index of Peer Firms
October 23, 2014 – December 16, 2015



Note: BioMarin Pharmaceutical Inc. compared itself to the NASDAQ Composite Index, the NASDAQ Biotechnology Index, and peer firms comprised of: Alexion Pharmaceuticals, Inc., Alkermes Public Limited Company, Endo International Public Limited Company, Incyte Corporation, Jazz Pharmaceuticals Public Limited Company, Medivation, Inc., Regeneron Pharmaceuticals, Inc., Seattle Genetics, Inc., United Therapeutics Corporation, and Vertex Pharmaceuticals Incorporated in its 10-K for the fiscal year ended December 31, 2015 at p. 50.

Sources: Calculated (or Derived) based on data from database name ©2018 Center for Research in Security Prices (CRSP), The University of Chicago Booth School of Business; Bloomberg LP; BioMarin Pharmaceutical Inc. 10-K for the fiscal year ended December 31, 2015.

Figure 7B: $100 Invested in CF Industries Holdings, the S&P 500 Index, the Dow Jones US Commodity Chemicals Index, and a Value-Weighted Index of Peer Firms
October 3, 2012 – November 17, 2013

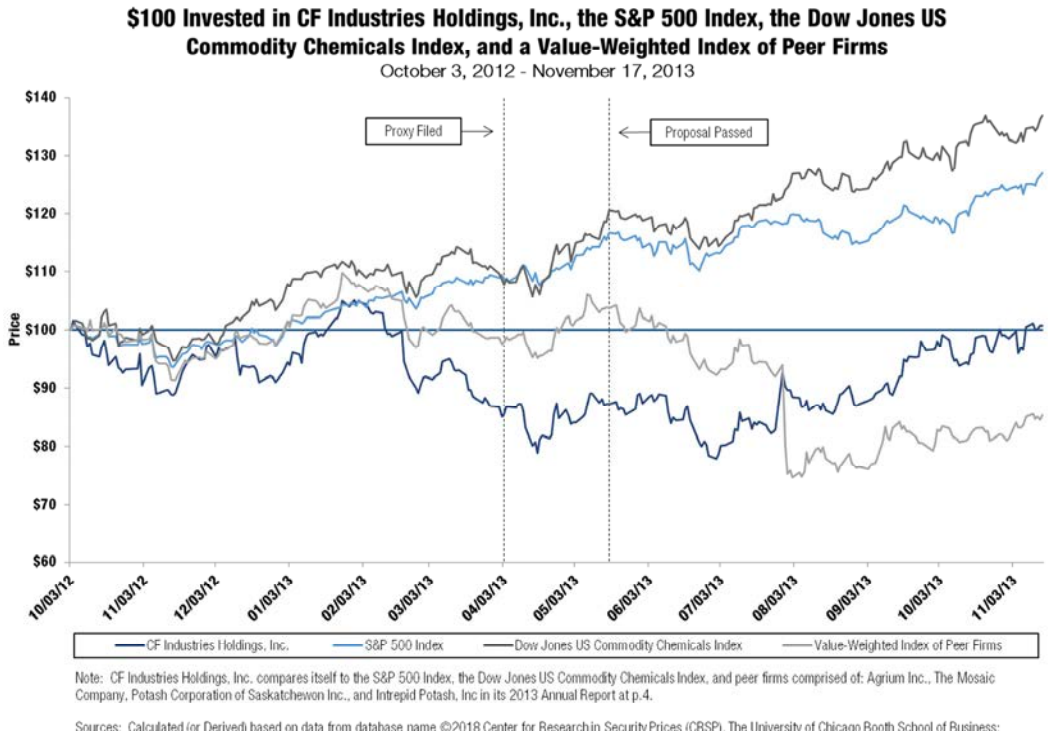


Figure 7C: $100 Invested in ESCO Technologies Inc., the Russell 2000 Index, and a Value-Weighted Index of Peer Firms
June 16, 2014 – August 10, 2015

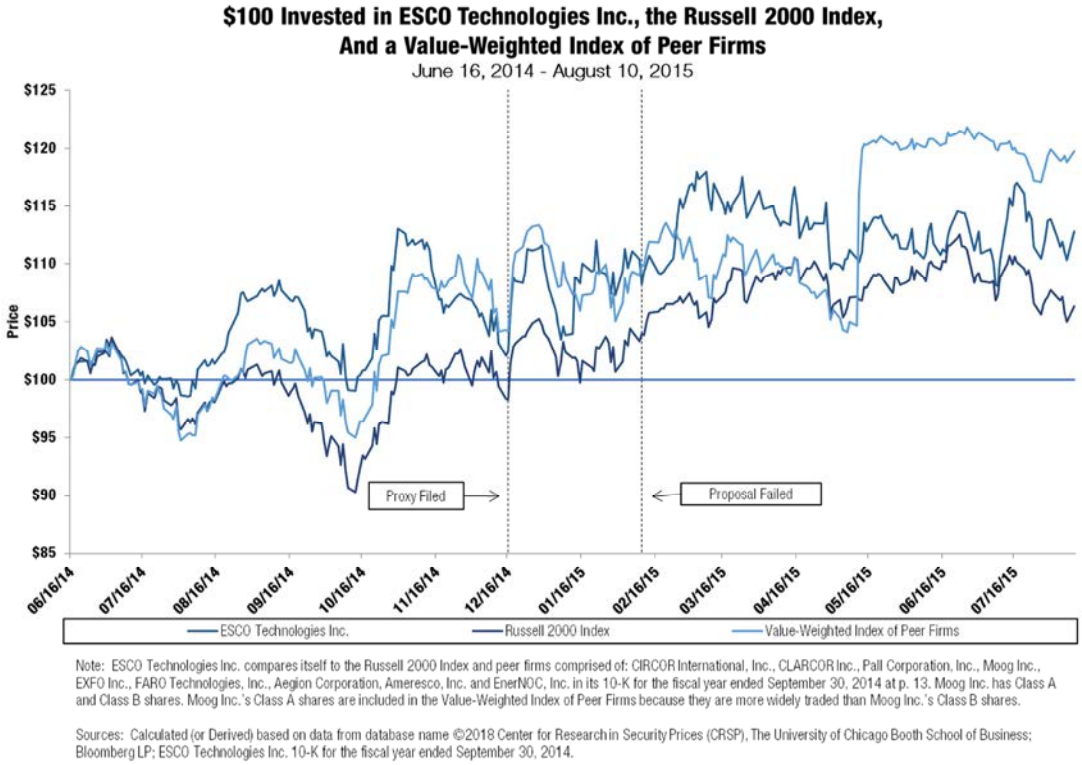
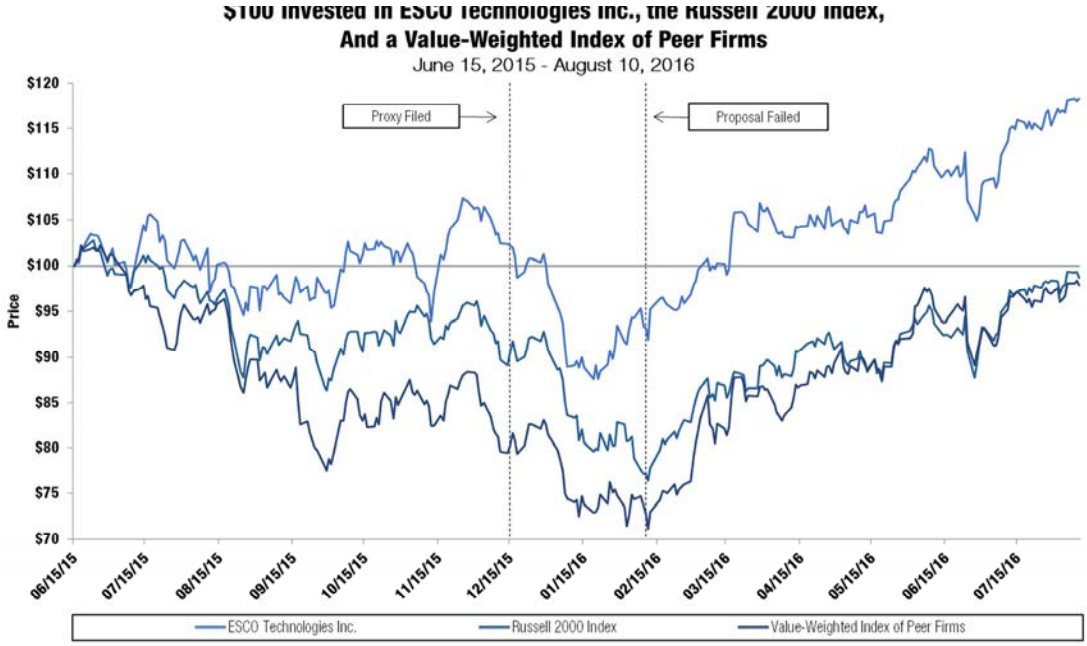


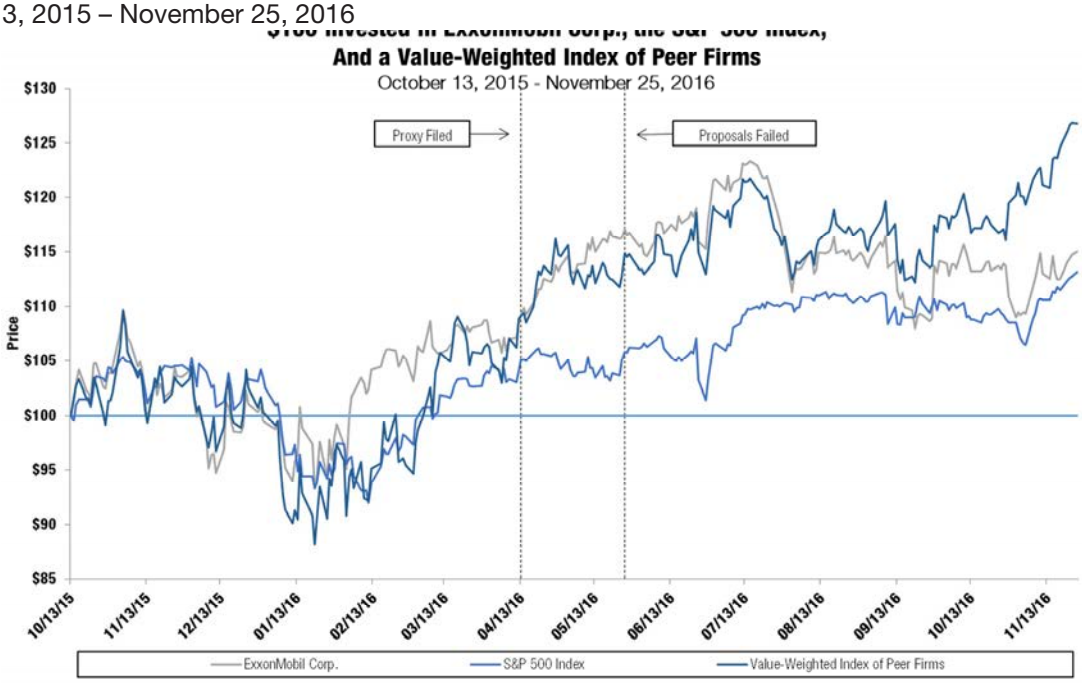
Figure 7D: $100 Invested in ESCO Technologies Inc., the Russell 2000 Index, and a Value-Weighted Index of Peer Firms
June 15, 2015 – August 10, 2016



Note: ESCO Technologies Inc. compares itself to the Russell 2000 Index and peer firms comprised of: CIRCOR International, Inc., CLARCOR Inc., Donaldson Company, Inc., Moog Inc., EXFO Inc., FARO Technologies, Inc., Aegion Corporation, Ameresco, Inc. and EnerNOC, Inc. in its 10-K for the fiscal year ended September 30, 2015 at p. 17. Moog Inc. has Class A and Class B shares. Moog Inc.'s Class A shares are included in the Value-Weighted Index of Peer Firms because they are more widely traded than Moog Inc.'s Class B shares.

Sources: Calculated (or Derived) based on data from database name ©2018 Center for Research in Security Prices (CRSP), The University of Chicago Booth School of Business; Bloomberg LP; ESCO Technologies Inc. 10-K for the fiscal year ended September 30, 2015.

Figure 7E: $100 Invested in ExxonMobil, the S&P 500 Index, and a Value-Weighted Index of Peer Firms
October 13, 2015 – November 25, 2016



Note: ExxonMobil Corp. compares itself to the S&P 500 Index and peer firms comprised of: Chevron, BP, Total S.A., and Royal Dutch Shell in its 2016 Annual Report at p.5.

Sources: Calculated (or Derived) based on data from database name ©2018 Center for Research in Security Prices (CRSP), The University of Chicago Booth School of Business; Bloomberg LP; ExxonMobil Corp. 2016 Annual Report.

Figure 7F: $100 Invested in ExxonMobil, the S&P 500 Index, and a Value-Weighted Index of Peer Firms
October 13, 2016-November 30, 2017

Figure 7G: $100 Invested in Gilead Sciences Inc., the S&P 500 Composite Index, and the NASDAQ Biotechnology Index
September 29, 2014 – November 9, 2015

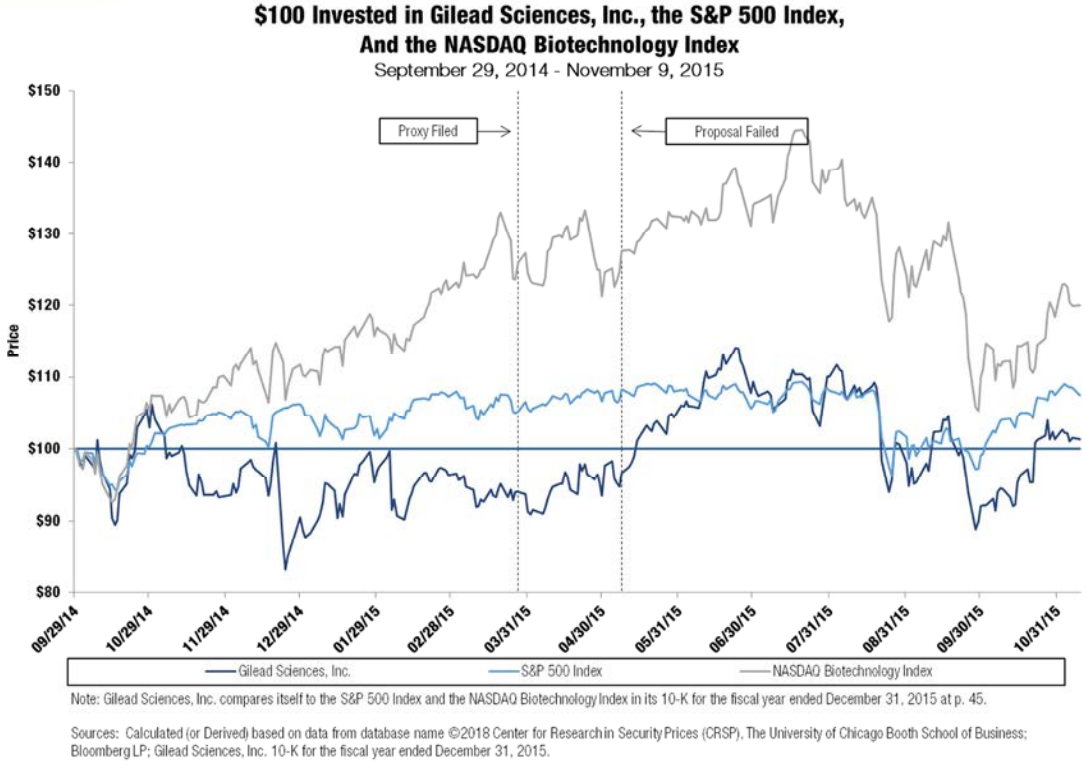
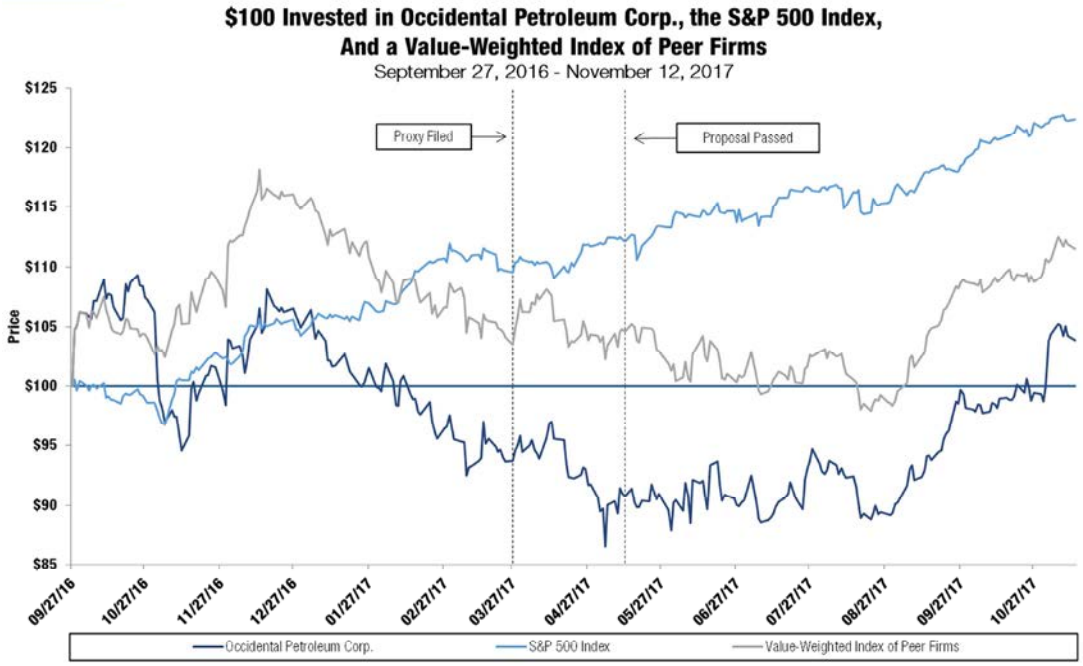


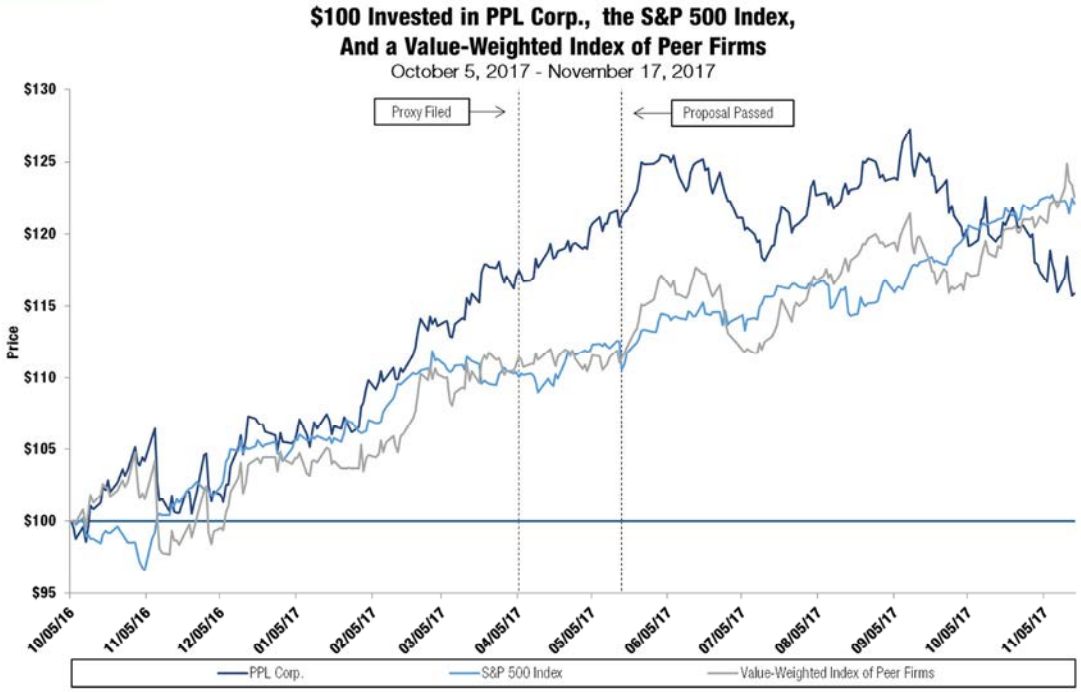
Figure 7H: $100 Invested in Occidental Petroleum Corp., the S&P 500 Index, and a Value-Weighted Index of Peer Firms
September 27, 2016 – November 12, 2017



Note: Occidental Petroleum Corp. compares itself to the S&P 500 Index and peer firms comprised of: ExxonMobil, ConocoPhillips, Chevron, Marathon Oil Corp., Hess Corp., Apache Corp., Andarko Petroleum Corp., EOG Resources Inc., Total S.A., Devon Energy Corp., Canadian Natural Resources in its 10-K for the fiscal year ended December 31, 2017 at p.10.

Sources: Calculated (or Derived) based on data from database name ©2018 Center for Research in Security Prices (CRSP), The University of Chicago Booth School of Business; Bloomberg LP; Occidental Petroleum Corp. 10-K for the fiscal year ended December 31, 2017.

Figure 7I: $100 Invested in PPL Corporation, the S&P Index, and a Value-Weighted Index of Peer Firms
April 5, 2017 – May 17, 2017



Note: PPL Corp. compares itself to the S&P 500 Index and peer firms comprised of: U.S. publicly traded firms of the EEI Index of Investor-Owned Electric Utilities in its 2017 Annual Report at p.178.

Sources: Calculated (or Derived) based on data from database name ©2018 Center for Research in Security Prices (CRSP), The University of Chicago Booth School of Business; Bloomberg LP; PPL Corp. 2017 Annual Report.

the shareholder vote on the proposal. Therefore, if the value of that $100 investment is, say, $140 on a particular date, that means the share price has risen by 40% since six months before the proxy was filed. For comparison, we also plot the value of an equivalent $100 investment in each of the market and industry indices used in the analysis of that company.

When performing event studies, the conventional practice is to test the "null hypothesis" that the residual return is zero against the alternative hypothesis that the residual return is different from zero.[104] If the null hypothesis cannot be rejected at standard levels of significance, then the residual returns are not considered to be statistically significant, i.e., they are not considered to be significantly different from zero. Under these circumstances, it is proper to conclude that the observed stock return on a particular date is consistent with the historical relationship between the stock return and the market and industry indices considered in the estimation model (given the normal volatility in the stock price), and therefore cannot reliably be attributed to the event in question.

In event studies, the statistical significance of the residual returns is typically assessed by calculating a standardized measure of the size of the residual return known as a "t-statistic."[105] A t-statistic with an absolute value of 1.96 or greater denotes statistical significance at the five percent level of significance (a conventional level at which such assessments are made).[106] Equivalently, the "p-value" of the residual return must be 0.05 or lower, i.e., the probability that the residual return would have occurred in the absence of firm-specific information relevant to investors is five percent or less.

Table 5 reports the results of our event study analyses of the nine shareholder proposals. As noted above, we run two separate analyses for each proposal, one on the proxy filing date and one on the date of the shareholder vote. We estimate the historical relationship between the stock return and the market and industry indices using a historical period of one year, but we also test the robustness of our results by focusing on a shorter historical period of six months. Hence, in total, we run four different event studies for each of the nine shareholder proposals, for a total of 36 event studies.

In each case, Table 5 reports the actual return on the relevant date and the residual return, given the return that would be expected given the value of the market

104 See, e.g., J.Y. Campbell, A.W. Lo, & A.C. MacKinlay, The Econetrics of Financial Markets, Princeton University Press, 1997, at pp. 160-66; A.C. MacKinlay, "Event Studies in Economics and Finance", Journal of Economic Literature, vol. 35:1, March 1997, at pp. 13-39.; G.W. Schwert, "Using Financial Data to Measure Effects of Regulation", Journal of Law and Economics, vol. 24, 1981, at pp. 121-57; D.R. Fischel, "Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities," The Business Lawyer, vol. 38, 1982, at p. 19.

105 J.Y. Campbell, A.W. Lo, & A.C. MacKinlay, The Econometrics of Financial Markets, Princeton University Press, 1997, at pp. 160-66.

106 See, e.g., W. Mendenhall, J.E. Reinmuth & R.J. Beaver, Statistics for Management and Economics, Duxbury Press, 1993, at pp. 346-47.

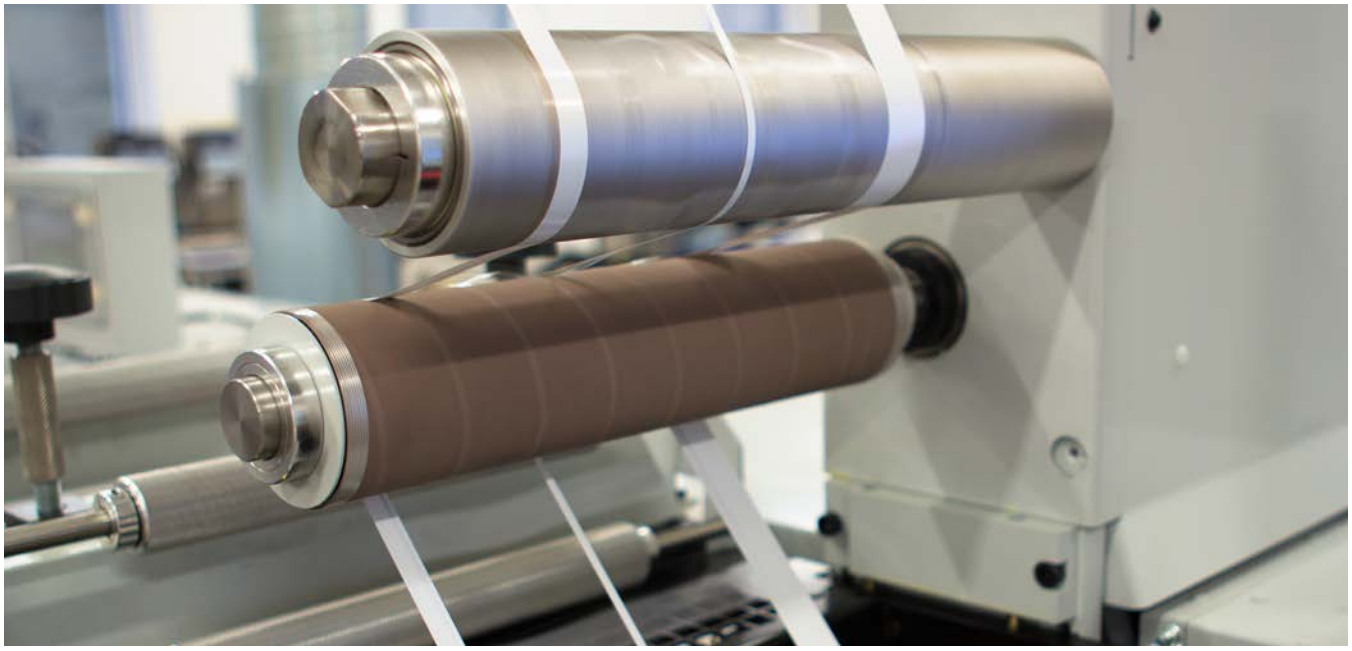


Table 5: Stock Price Reaction to Sustainability Proposals

	Company	Date Description	Outcome (Pass/Fail)	Date	One-Year Prior Estimation Period: Actual Return	Residual Return	t-stat	|t| >= 1.96	Six-Months Prior Estimation Period: Actual Return	Residual Return	t-stat	|t| >= 1.96
					4	6	7		4	6	7	
[1]	CF Industries	Proxy Filed		04/03/13	0.70%	0.81%	0.68		0.70%	1.01%	0.93	
		Shareholder Vote	Pass	05/17/13	-0.12%	-0.61%	-0.54		-0.12%	-0.30%	-0.28	
[2]	Occidental Petroleum	Proxy Filed		03/27/17	0.06%	0.61%	0.71		0.06%	0.67%	0.69	
		Shareholder Vote	Pass	05/12/17	-0.33%	-0.11%	-0.12		-0.33%	-0.21%	-0.26	
[3]	PPL Corporation	Proxy Filed		04/05/17	0.37%	0.09%	0.15		0.37%	-0.15%	-0.38	
		Shareholder Vote	Pass	05/17/17	0.55%	1.10%	1.88		0.55%	0.21%	0.52	
[4]	ExxonMobil	Proxy Filed		04/13/17	-1.54%	0.08%	0.12		-1.54%	-0.08%	-0.11	
		Shareholder Vote	Pass	05/31/17	-0.74%	-0.38%	-0.58		-0.74%	-0.41%	-0.65	
[5]	ESCO Technologies	Proxy Filed		12/16/14	0.32%	0.38%	0.44		0.32%	0.38%	0.63	
		Shareholder Vote	Fail	02/10/15	-1.92%	-2.46%	-3.03	***	-1.92%	-2.56%	-3.19	***
[6]	Gilead Sciences Inc.	Proxy Filed		03/27/15	-0.07%	-1.77%	-1.13		-0.07%	-1.82%	-1.01	
		Shareholder Vote	Fail	05/08/15	2.02%	0.01%	0.00		2.02%	0.15%	0.09	
[7]	BioMarin Pharmaceutical	Proxy Filed		04/23/15	1.54%	0.08%	0.05		1.54%	0.23%	0.13	
		Shareholder Vote	Fail	06/16/15	-0.68%	-0.70%	-0.47		-0.68%	-0.99%	-0.62	
[8]	ESCO Technologies	Proxy Filed		12/15/15	-0.13%	-1.26%	-1.29		-0.13%	-1.26%	-1.21	
		Shareholder Vote	Fail	02/10/16	-0.15%	0.17%	0.17		-0.15%	0.23%	0.22	
[9]	ExxonMobil	Proxy Filed		04/13/16	0.57%	0.12%	0.14		0.57%	0.28%	0.31	
		Shareholder Vote	Fail	05/25/16	0.66%	-0.64%	-0.80		0.66%	-0.55%	-0.62	

Notes: Results are based on regressions where the company is regressed against a broad market index and an industry index (or indices) as defined in their annual reports. Residuals and t-Statistics greater than the absolute value of 1.96 are statistically significant at the 5% level in a two-tailed test.

[1] CF Industries Holdings, Inc. compares itself to the S&P 500 Index, the Dow Jones US Commodity Chemicals Index, and peer firms comprised of: Agrium Inc., The Mosaic Company, Potash Corporation of Saskatchewon Inc., and Intrepid Potash, Inc. in its 2013 Annual Report at p.4.

[2] Occidental Petroleum Corp. compares itself to the S&P 500 Index and peer firms comprised of: ExxonMobil, ConocoPhillips, Chevron, Marathon Oil Corp., Hess Corp., Apache Corp., Andarko Petroleum Corp., EOG Resources Inc., Total S.A., Devon Energy Corp., and Canadian Natural Resources in its 10-K for the fiscal year ended December 31, 2017 at p.10.

[3] PPL Corp. compares itself to the S&P 500 Index, and a Peer Group Index comprised of U.S. publicly traded firms of the EEI Index of Investor-Owned Electric Utilities per its 2017 10-K at p.4.

[4] ExxonMobil Corp. compares itself to the S&P 500 Index and peer firms comprised of: Chevron, BP, Total S.A., and Royal Dutch Shell in its DEF 14A filed April 13, 2017 at p.28.

[5] ESCO Technologies Inc. compares itself to the Russell 2000 Index and peer firms comprised of: CIRCOR International, Inc., CLARCOR Inc., Pall Corporation, Inc., Moog Inc., EXFO Inc., FARO Technologies, Inc., Aegion Corporation, Ameresco, Inc. and EnerNOC, Inc. in its 10-K for the fiscal year ended September 30, 2014 at p. 13. Moog Inc. has Class A and Class B shares. Moog Inc.'s Class A shares are included in the Value-Weighted Index of Peer Firms because they are more widely traded than Moog Inc.'s Class B shares.

[6] Gilead Sciences, Inc. compares itself to the S&P 500 Index and the NASDAQ Biotechnology Index in its 10-K for the fiscal year ended December 31, 2015 at p. 45.

[7] BioMarin Pharmaceutical Inc. compared itself to the NASDAQ Composite Index, the NASDAQ Biotechnology Index, and peer firms comprised of: Alexion Pharmaceuticals, Inc., Alkermes Public Limited Company, Endo International Public Limited Company, Incyte Corporation, Jazz Pharmaceuticals Public Limited Company, Medivation, Inc., Regeneron Pharmaceuticals, Inc., Seattle Genetics, Inc., United Therapeutics Corporation, and Vertex Pharmaceuticals Incorporated in its 10-K for the fiscal year ended December 31, 2015 at p. 50.

[8] ESCO Technologies Inc. compares itself to the Russell 2000 Index and peer firms comprised of: CIRCOR International, Inc., CLARCOR Inc., Donaldson Company, Inc., Moog Inc., EXFO Inc., FARO Technologies, Inc., Aegion Corporation, Ameresco, Inc. and EnerNOC, Inc. in its 10-K for the fiscal year ended September 30, 2015 at p. 17. Moog Inc. has Class A and Class B shares. Moog Inc.'s Class A shares are included in the Value-Weighted Index of Peer Firms because they are more widely traded than Moog Inc.'s Class B shares.

[9] ExxonMobil Corp. compares itself to the S&P 500 Index and peer firms comprised of: Chevron, BP, Total S.A., and Royal Dutch Shell in its 2016 Annual Report at p.5.

Sources: Calculated (or Derived) based on data from ©2018 Center for Research in Security Prices (CRSP), The University of Chicago Booth School of Business; Bloomberg LP; Company SEC Filings; Factiva.

and industry indices on that date. The t-statistic is also indicated and asterisks denote cases where the residual return is statistically different from zero, i.e., when the null hypothesis that the residual return is zero can be statistically rejected at the five percent level of significance.

Of the 36 event studies, 34 resulted in statistically insignificant residual returns. In other words, there is no statistical basis to conclude the shareholder proposals had any effect on the company share price, given the contemporaneous trends in market and industry stock returns. In the case of two of the event studies (analyzing one shareholder proposal), an event study indicated a statistically significant result. ESCO Technologies experienced a negative residual return of 2.46% (one-year historical estimation period) or 2.56% (six-month historical estimation period) on the date of the shareholder vote in which a climate change-related proposal failed. However, the residual return on the date of the filing of the proxy containing that proposal is not significantly different from zero. Moreover, ESCO Technologies also released an earnings announcement on the same day as the shareholder vote that was below analysts' estimates,[107] and the event study methodology cannot distinguish between the effect of the disappointing earnings announcement and the effect of the climate change-related proposal.

Overall, these findings indicate essentially no basis for concluding that shareholder proposals seeking climate change-related disclosures have any consistent effect on stock prices. To be sure, there may be other events affecting the company stock prices on the dates in question, such as other proposals included in the proxy or other news coming out of annual shareholder meetings where votes are taken. Nevertheless, our findings are consistent with the results of prior published studies. For instance, Schopohl (2017) studied 3,360 environmental and social shareholder proposals and found that "the CARs [cumulative abnormal returns] are quite small."[108] Byrd and Cooperman (2014) studied environmental health shareholder resolutions filed by shareholder activists at 70 different companies during 2006-2011, and found an insignificant abnormal return (t = 0.687) for those filed with oil and gas companies.[109] They did, however, find a significant negative residual return of 0.41% on stock prices for non-oil and gas companies (t = 1.95), indicating a reduction in value for those companies.[110]

Our findings are also consistent with the fact that studies, reports and data detailing the potential impacts of climate change, regulatory responses and consequences for different areas of economic activity are already available to sophisticated investors. In particular, the lack of a significant impact on shareholder value of such resolutions suggests that the market does not anticipate that the studies, reports, and other data being requested will provide material information.

D. ANALYSES OF CDP DISCLOSURES PROVIDE NO EVIDENCE THAT FURTHER DISCLOSURE INCREASES SHAREHOLDER VALUE

CDP, formerly known as the Carbon Disclosure Project, is a charitable organization that focuses on disclosure of environmental impact and risk by major companies, as well as government entities. Every year since 2002, CDP has sent out questionnaires to a sample of large companies seeking information on their activities related to climate change, water usage, and deforestation.[111] Disclosure is voluntary, but nevertheless, many companies respond. For example, among the companies in the S&P 500, 70% responded to questions on climate change in the most recent CDP report.[112]

CDP then publishes these disclosures and summarizes them in periodic reports. The 2017 report for U.S. companies assigns a letter grade to approximately 1,000 companies for which climate disclosure was requested. Companies that fail to respond to the questionnaire or

107 Reuters Significant Developments, "ESCO Technologies Inc. reaffirms FY 2015 EPS guidance; gives Q2 2015 EPS guidance below analysts' estimates- Conference Call", 10 February 2015.

108 Lisa Schopohl, "The Materiality of Environmental and Social Shareholder Activism – Who Cares?!" University of Reading Henley Business School Working Paper, 2017, at p. 22.

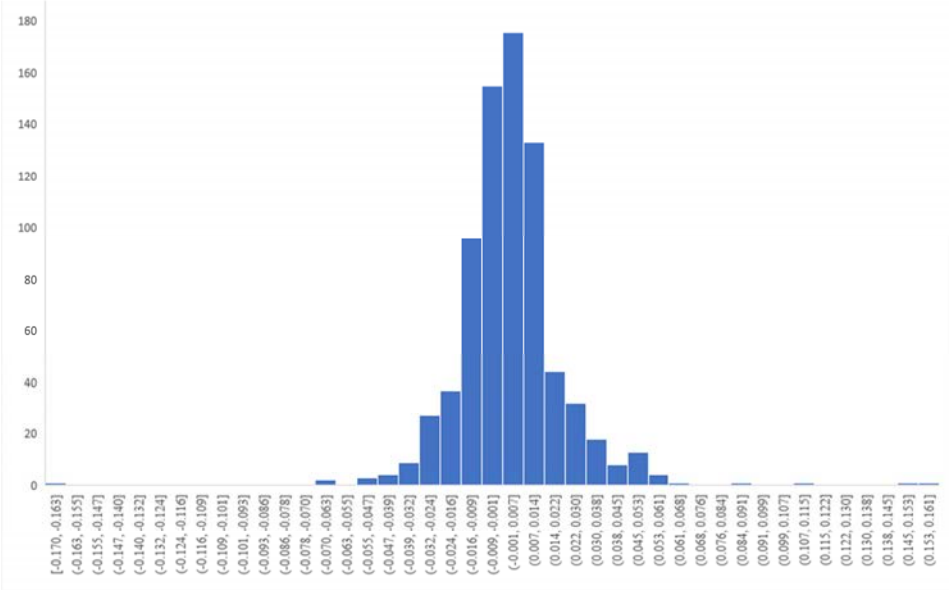
109 John Byrd and Elizabeth S. Cooperman, "Let's talk: An analysis of the 'vote vs. negotiated withdrawal' decision for social activist environmental health shareholder resolutions", Journal of Sustainable Finance & Investment, vol. 4:3, 2014, at pp. 245-6.

110 Ibid.

111 Paul Simpson, "Environmental disclosure: from transparency to transformation", CDP, 27 July 2017, accessed at: https://www.cdp.net/en/articles/climate/environmental-disclosure-from-transparency-to-transformation.

112 "CDP US Report 2017", CDP, 7 December 2017, at p. 2.

Figure 8: 2-Day Abnormal Return of 767 Publicly-Traded U.S. Firms in CDP U.S. 2017 Report



Notes: P-Value is reported in the second row for each variable. Abnormal return and cumulative abnormal returns are calculated from the OLS regression of each company's stock return against the S&P 500 index return during the estimation period from 256 days to 6 days prior to the release of the CDP US 2017 Report on December 7, 2017.
Sources: www.cdp.net; ©2018 Center for Research in Security Prices (CRSP), The University of Chicago Booth School of Business; Capital-IQ.

fail to provide a response sufficient for evaluation receive an "F."[113] By contrast, CDP assigns an "A" to companies that "have shown a thorough understanding of risks and opportunities related to climate change."[114] More generally, CDP evaluates each company along four dimensions: (1) completeness of disclosure; (2) the extent to which the company has assessed environmental issues, risks, and impacts in relation to its business ("awareness"); (3) the extent to which the company has implemented action to address environmental issues ("management"); and (4) implementation of best practices in environmental management ("leadership").[115]

CDP disclosure information has been studied by other authors in the peer-reviewed academic literature. For instance, Kim and Lyon (2011) study the effects of disclosure through the CDP during 2003-2006 on company share prices. They run event studies for each company, estimating the change in the share price as a result of their disclosure to CDP (or lack thereof) as of the date when each year's CDP report was published. If disclosure of climate change-related information is material to investors, the release of those reports should have material effects on the share price. However, Kim and Lyon conclude, "[w]e find no systematic evidence that participation, in and of itself, increased shareholder value."[116]

We first sought to update Kim and Lyon's findings to determine whether disclosure has now become a relevant factor for investors. We started with the 1,040 companies included in the 2017 CDP report, and excluded those that were not public companies or for which no grade was given. This left 767 companies. Following Kim and Lyon's methodology, we ran for each of these companies an event study using a methodology similar to that described in the previous section. In particular, we estimated the abnormal return for each company based on the historical relationship between that company's daily returns and the returns on the S&P 500 index during a 250-day period leading up to the six days prior to the December 2017 release of the CDP report.

We calculated these abnormal returns for the day after the report was published, relative to the closing price immediately prior to publication. Figure 8 below is a histogram of these abnormal returns across the 767 companies. As Figure 8 indicates, most abnormal

113 Ibid. at p. 47.

114 Ibid. at p. 19.

115 Ibid. at p. 47.

116 Eun-Hee Kim and Thomas Lyon, "When Does Institutional Investor Activism Increase Shareholder Value? The Carbon Disclosure Project", The B.E. Journal of Economic Analysis and Policy, Contributions 11(1), Article 50, 2011. The authors do, however, find that disclosing companies experience larger returns on dates when information about climate change-related regulation is released.

Table 6: Effect of Company's 2017 CDP Climate Score on Abnormal Returns

	All Sectors				Energy Sector			
	All Companies		Current Companies		All Companies		Current Companies	
Variables	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Intercept	1.4259	1.4364	1.5759	1.6004	-1.3610	-1.4613	-1.2334	-1.3069
	0.0041	0.0043	0.0044	0.0043	0.0031	0.0040	0.0007	0.0018
N of Employees	-0.0447	-0.0556	-0.0068	-0.0205	0.0210	0.0391	-0.0520	-0.0331
	0.5094	0.4136	0.9288	0.7890	0.7534	0.5742	0.3321	0.5551
Total Revenue As of 2013	-0.0830	-0.0780	-0.1385	-0.1339	0.0917	0.0852	0.1380	0.1290
	0.2935	0.3308	0.1297	0.1485	0.2343	0.2997	0.0249	0.0575
In Energy or Materials Sector	-0.2808	-0.2893	-0.3099	-0.3163				
	0.1121	0.1017	0.1159	0.1087				
Responded to CDP Questionnaire	-0.0847		-0.0941		-0.0803		-0.0064	
	0.5339		0.5333		0.5602		0.9531	
Score A and A-		-0.1206		-0.1270		0.1886		0.1762
		0.5775		0.5954		0.5366		0.6079
Score B & B-		0.1424		0.1794		-0.1652		-0.0747
		0.3676		0.3038		0.4513		0.6619
Score C & C-		-0.0582		-0.0349		-0.0259		0.0360
		0.7519		0.8613		0.8851		0.7944
Score D & D-		-0.2120		-0.2277		-0.6100		-0.4113
		0.3240		0.3371		0.1492		0.2071
Number of Observations	470	470	424	424	38	38	35	35
R-squared	1.84%	2.44%	2.11%	2.83%	12.84%	20.71%	20.62%	27.11%
Adjusted r-squared	1.00%	0.96%	1.17%	1.19%	5.15%	5.36%	12.93%	11.50%

Notes: P-Value is reported in the second row for each variable. Abnormal return and cumulative abnormal returns are calculated from the OLS regression of each company's stock return against the S&P 500 index return during the estimation period from 256 days to 6 days prior to the release of the CDP US 2013 Report on November 25, 2013. "Current Companies" refer to companies not delisted as of December 31, 2017.

Sources: www.cdp.net; ©2018 Center for Research in Security Prices (CRSP), The University of Chicago Booth School of Business; Capital-IQ.

returns are close to zero.

We also calculated abnormal returns for other periods, such as the second day after the report was published, relative to the closing price immediately prior to publication, and both these and the one-day abnormal returns plotted above were analyzed through a regression analysis. In particular, we run a regression of the form:

$$r_i = \alpha + \beta Score_i + \gamma X_i + \varepsilon_i.$$

In this equation,

- r_i represents the abnormal return for company i.
- $Score_i$ represents the CDP score for company i in the December 2017 report. We consider two ways to implement this variable:
  - In Model 1 we include one indicator variable that takes the value of 1 if the company received any score other than "F" (in other words, if the company responded at all), and takes the value 0 otherwise. This reflects an assumption that disclosure matters, but that the difference between a company that receives an "A" and one that receives a "D" is not relevant.
  - In Model 2 we include five separate indicator variables, each taking the value of 1 if the company received a particular score, and 0 otherwise. We grouped together A and A- companies, B and B- companies, C and C- companies, D and D- companies, and F companies.
- X_i represents several related variables that we controlled for in the regression. These include:
  - The number of global employees the company has;
  - The company's 2017 total revenue; and
  - An indicator variable for whether the company was in the energy or materials sector, as defined by CDP.

- ε_i represents a random term incorporating other factors that affect returns.
- $\alpha, \beta, and\ \gamma$ are constants that we estimate through regression analysis.

The results of this analysis are summarized in Table 6.

In the first five columns, we examine whether simply responding to the CDP questionnaire (i.e., getting any letter grade other than F) has any relationship with a company's abnormal return at the time the CDP report was released. In other words, are disclosing companies rewarded through higher returns? As noted above, we calculate each company's abnormal return over different time periods to investigate the robustness of the model, and these are reflected in the first five columns. The coefficient in the row labeled "Responded to CDP Questionnaire" reflects the average difference in abnormal returns between disclosing and non-disclosing companies, holding constant other factors. For instance, the coefficient in the first column under Model 1, -0.0014, indicates that, on average, disclosing companies experienced an abnormal return that was 0.14% (14 basis points) lower than companies that did not disclose.

Underneath each coefficient is the p-value. As discussed previously, a p-value of 0.05 or lower indicates, under commonly used standards, that the coefficient is different from zero in a statistically significant sense. In the first three regressions under Model 1, the coefficient on responding to the CDP questionnaire is not statistically significant, and there is therefore no basis to conclude that disclosure has any consistent effect on stock returns.

In the last three columns, which reflect abnormal returns over the three or four days after the release of the CDP report, the coefficients indicate that disclosure have a statistically significant negative relationship with returns, i.e., disclosing companies experience lower returns than non-disclosing companies, by approximately 0.43% – 0.50% (43 – 50 basis points). Further analysis indicates that these results are primarily driven by low abnormal returns in the consumer discretionary sector, including large retailing firms.[117] When these firms are excluded, the effect of disclosure becomes statistically insignificant. We note that there is no clear economic reason why the effect of CDP disclosure would not be evident until more than a day after the report was published. For this reason, these results may be spurious. In any case, these results are inconsistent with any claim that disclosure benefits company shareholders.

The results in Model 2, in which we estimate the effect of disclosure separately on different CDP scores, are similar to those of Model 1.

We also considered the longer-term impact of disclosure through the CDP. In particular, we examined an earlier CDP report, from 2013, and followed the returns for each company scored in that report through to December 2017. Table 7 summarizes the results. We used a

117 We ran the model specifically for the energy sector, where one would expect disclosure to potentially have the most salient effect, and found no statistically significant relationship between disclosure and abnormal returns in any of the models.

Table 7: Effect of Company's 2013 CDP Score on Stock Return:
November 25, 2013 – December 31, 2017

Effect of Company's Climate Score in CDP US 2017 Report on Stock Return

	Model 1					Model 2				
Variables	1- Day Window AR0	5-Day Window CAR(-2, 2)	3-day Window CAR(-1, 1)	2-Day Window CAR(0, 1)	3-Day Window CAR(0, 2)	1- Day Window AR0	5-Day Window CAR(-2, 2)	3-day Window CAR(-1, 1)	2-Day Window CAR(0, 1)	3-Day Window CAR(0, 2)
Intercept	0.0037	-0.0284	-0.0179	-0.0108	-0.0162	0.0031	-0.0293	-0.0188	-0.0121	-0.0178
	0.3583	0.0005	0.0049	0.0411	0.0137	0.4428	0.0004	0.0036	0.0244	0.0078
N of Global Employees	0.0000	-0.0013	-0.0002	-0.0008	-0.0023	-0.0001	-0.0013	-0.0002	-0.0008	-0.0024
	0.9540	0.2732	0.8277	0.3228	0.0176	0.8857	0.2534	0.7941	0.2777	0.0136
Total Revenue As of 2017	-0.0001	0.0043	0.0027	0.0026	0.0045	0.0000	0.0045	0.0028	0.0028	0.0048
	0.8961	0.0026	0.0171	0.0061	0.0001	0.9664	0.0020	0.0130	0.0032	0.0000
In Energy or Materials Sector	0.0024	-0.0042	-0.0145	0.0013	0.0069	0.0024	-0.0044	-0.0146	0.0013	0.0069
	0.1011	0.1572	0.0000	0.5013	0.0047	0.1044	0.1454	0.0000	0.5117	0.0050
Responded to CDP Questionnaire	-0.0014	-0.0028	-0.0043	-0.0050	-0.0048					
	0.2758	0.2602	0.0284	0.0023	0.0198					
Score A and A-						-0.0018	-0.0050	-0.0062	-0.0064	-0.0063
						0.3321	0.1826	0.0388	0.0104	0.0396
Score B & B-						-0.0009	-0.0013	-0.0043	-0.0056	-0.0054
						0.6344	0.7467	0.1638	0.0263	0.0852
Score C & C-						-0.0023	-0.0031	-0.0041	-0.0057	-0.0058
						0.1288	0.3152	0.0922	0.0044	0.0213
Score D & D-						0.0011	-0.0014	-0.0029	-0.0008	0.0005
						0.6206	0.7444	0.4046	0.7706	0.8971
Number of Observations	767	767	767	767	767	767	767	767	767	767
R-squared	0.80%	1.88%	6.88%	2.17%	4.19%	1.11%	1.99%	6.98%	2.59%	4.61%
Adjusted r-squared	0.28%	1.37%	6.39%	1.66%	3.69%	0.19%	1.09%	6.12%	1.69%	3.73%

methodology similar to the one used in Table 6 above, but focused on the abnormal return over this much longer period. Because some of the companies that were rated by CDP in 2013 are no longer in existence, we also ran the model on a more limited set of companies that still existed as of December 2017.

As reported in Table 7 there is no statistically significant relationship between disclosure in 2013 and longer-term investor returns in either set of companies. We also ran the model only on energy companies, since disclosure of climate-related information may be more salient to investors for those companies. Again, we found no evidence that disclosing companies experience greater long-term performance in any statistically significant sense.

E. INSTITUTIONAL SHAREHOLDER BEHAVIOR

These findings raise the question: If environmental shareholder proposals impose nontrivial costs on corporations and do not generate any demonstrable benefits, why do institutional shareholders make—or vote in favor of—such resolutions? In principle, asset managers could be acting in pursuit of any of four different interests: (1) maximizing the value of their investors' stock holdings; (2) acting on the preferences of their investors; (3) acting in the interest of the asset manager's owners; or (4) acting in their own personal interest. As the evidence presented above indicates that environmental shareholder proposals do not increase shareholder value, we focus on the latter three potential explanations.

Some have argued that "company and asset managers should pursue policies consistent with the preferences of their investors."[118] While a full consideration of this claim is beyond the scope of this paper, we can look to existing research and publicly available information to inform our understanding as to whether or not major asset managers have supported environmental proposals because they were intent on acting on the preferences of their investors by evaluating whether their actions are consistent with this intent.[119] Available evidence indicates that a majority of retail investors do

118 Oliver Hart and Zingales, Luigi, "Companies Should Maximize Shareholder Welfare Not Market Value" ECGI - Finance Working Paper No. 521/2017, 1 August 2017, accessed at: https://ssrn.com/abstract=30,04794.

119 See, for example, the finding of Nobel Prize winner Oliver Hart, who, in a recent working paper discussing asset managers' social and environmental goals, noted "in most cases they arbitrarily set their goals themselves." Oliver Hart and Zingales, Luigi, "Companies Should Maximize Shareholder Welfare Not Market Value", ECGI - Finance Working Paper No. 521/2017, 1 August 2017, accessed at: https://ssrn.com/abstract=3004794.

not support environmental proposals. As discussed above, only 10% of shares held by retail investors voted in favor of environmental shareholder proposals in 2017, whereas the remaining 90% either opposed the proposals or abstained.[120] Similarly, a recent survey of CalPERS and NY City retirement fund members indicated 89% of each fund's members were somewhat or very concerned about the resources their fund was devoting to shareholder proposals.[121]

This is unsurprising as U.S. public opinion has not reached consensus on the appropriate national policy responses to climate change. Not only is this confirmed by the latest presidential election, but evidence also indicates that a significant number of Americans are unwilling to make a financial contribution—i.e., paying higher prices or receiving lower investment returns—to address climate change. For example, a 2017 survey conducted by the University of Chicago and the Associated Press indicated that 48% of Americans would vote against a proposal to add $1 per month to consumers' electricity bills to combat climate change and 60% would vote against a $10 per month fee.[122] Retail investors' relative lack of propensity to invest in low carbon, SRI or other sustainable investment products provides further indication of their interest in supporting environmental proposals. For example, Vanguard's only sustainable investment fund had $4 billion in assets as of January 31, 2018, representing roughly 0.1% of its total assets under management, while the $3 billion in assets at the twelve sustainable investment funds offered by Blackrock represent less than 0.1% of Blackrock's total assets under management.[123]

The potential for corporate managers to use corporate resources to support those special interests they personally favor is well-understood as a special case of the "principal-agent" problem in economics. In this context, corporate managers are the agents charged with serving the interests of their principals – shareholders, but it is problematic for shareholders to guarantee that managers will do so. Thus, for example, the economic literature finds that corporations have a greater tendency to donate to charity when the corporation's managers have a smaller ownership stake.[124] This finding is attributed to the fact that managers with a low ownership stake bear a smaller fraction of the cost of corporate gifts to charity.[125]Similarly, economic theory predicts that the asset management firms will be more likely to support environmental and social proposals at the firms in their portfolio than retail investors because they do not bear the costs of these proposals.

Research shows that asset managers, and managers of index funds in particular, have little incentive to invest in information-gathering and decision-making around shareholder proposals. In 2017, for example, it was reported that BlackRock had 31 employees devoted to voting and stewardship at the approximately 14,000 companies held in its portfolio, while Vanguard had 20 and SSgA had 11, respectively, responsible for voting and stewardship at their portfolio companies—meaning that each employee devoted less than one day per year to each portfolio company.[126] Given these limited resources, why have these firms decided to invest resources in re-evaluating their policies on climate change disclosure risk? The answer is that supporting these proposals can help them both to reduce their own costs and increase revenues.[127]

Sponsoring and voting in favor of environmental proposals can also help asset managers to increase

120 "2017 Proxy Season Review", ProxyPulse, September 2017, at p. 4.

121 "Tensions with Pensions", Spectrum Group, at p. 10.

122 "Public Opinion on Energy Policy under the Trump Administration", Interviews: 8/17/17-8/21/17, The Associated Press - NORC Center for Public Affairs Research, at p. 5, accessed at: http://www.apnorc.org/PDFs/EnergyClimate2017/EPIC%20Topline_FINAL.pdf.

123 "Vanguard FTSE Social Index Fund Investor Shares", Vanguard, accessed at: https://personal.vanguard.com/us/funds/snapshot?FundId=0213&FundIntExt=INT&funds_disable_redirect=true#tab=2; Blackrock lists its sustainable investment products at https://www.blackrock.com/investing/investment-ideas/sustainable-investing. Asset data from individual fund "Fact Sheets" and "Key Facts"; Blackrock's sustainable investment group oversees $195 billion in assets 3% of Blackrock's total assets under management. (James Comtois, "BlackRock Recruits Sustainable Investing CIO", Pensions and Investments, 10 January 2018, accessed at http://www.pionline.com/article/20180110/ONLINE/180119976/blackrock-recruits-sustainable-investing-cio-money-management?template=print.)

124 See Ronald W. Masulis, and Syed Walid Reza, "Agency problems of corporate philanthropy", The Review of Financial Studies, 28.2, 2014, at pp. 592-636. See also, Ing-Haw Cheng, Harrison Hong, and Kelly Shue, "Do managers do good with other people's money?" No. w19432. National Bureau of Economic Research, 2013.

125 Ibid.

126 Madison Marriage, "BlackRock, Vanguard and State Street bulk up governance staff", Financial Times, 28 January 2017, accessed at: https://www.ft.com/content/657b243c-e492-11e6-9645-c9357a75844a. Lucian A. Bebchuk, Alma Cohen, and Scott Hirst, "The Agency Problems of Institutional Investors", Journal of Economic Perspectives, vol. 31:3, Summer 2017, at p. 100.

127 Lucian A. Bebchuk, Alma Cohen, and Scott Hirst, "The Agency Problems of Institutional Investors", Journal of Economic Perspectives, Vol 31:3, Summer 2017, at pp. 89-112.

assets under management by attracting investors who support the objectives of these proposals. Sponsoring proposals at some of our nation's largest corporations can generate public attention for lesser-known SRI funds, such as Walden and Trillium, which helps them attract investors to their SRI products. Voting in favor of these proposals helps well-known asset management firms, such as the Big Three and Fidelity, to burnish their reputation as environmentalists to attract and retain investments in their overwhelmingly non-SRI investment products.

By supporting environmental proposals at their portfolio companies, asset managers can avoid the costs associated with having to deal with their own shareholder proposals. It has been reported that some major asset managers—including Vanguard, Blackrock, and JP Morgan—decided to vote in favor of the climate change disclosure proposals at ExxonMobil and Occidental because they faced pressure from SRI asset managers who filed shareholder proposals urging them to support environmental and social proposals.[128] In each case the proposal was withdrawn after the asset management firm agreed to reevaluate its proxy voting policies and/or voted in favor of the climate change disclosure proposals at ExxonMobil and Occidental.[129] In contrast, T. Rowe Price's Board opposed a similar proposal made by the same SRI funds, explaining that "[t]he suggestion that the Price Group Board of Directors should intervene in … proxy voting is inappropriate and conflicts with the fiduciary principles applicable to the Price Advisers."[130] The proposal received little support, with only 9% of shares voted in favor.[131]

To summarize, the available evidence indicates that major asset manager support of environmental and social proposals may be the result of management pursuit of either their own social and environmental policy goals, increasing the asset management firm's profits/assets under management, or both. However, the fact that the largest U.S. asset managers have adopted similar stances on these issues despite their varying ownership structures—Blackrock and SSgA are public firms, while Fidelity is controlled by its founder's heirs and Vanguard is owned by its funds—suggests that their support of environmental proposals is driven by their common interest in increasing assets under management and not increasing shareholder value.

F. CONSEQUENCES OF ACTIVIST SHAREHOLDER PROPOSALS

Our findings in the previous section indicate no basis for concluding that shareholder proposals mandating climate change-related disclosure have any consistent effect on the targeted companies. This does not, however, mean that such proposals are entirely harmless. Preparing, proposing, and campaigning for a shareholder proposal is costly to the proposer (and often to the target company, who must respond to the proposal). Such proposals can often cost millions of dollars.[132] Such costs are particularly concerning in cases where the sponsoring investor is a public pension fund, given the obligation fund managers have to maintain returns to their pensioners and the current underfunded status of many funds.

The number of publicly-traded U.S. firms has fallen by half over the last two decades as a number of regulatory, financial and technological changes have made the public corporation a relatively less attractive capital structure.[133] In particular, many observers have attributed the decline in the number of IPOs to the cumulative effect of "[h]eightened compliance costs related to the Sarbanes-Oxley Act, Regulation FD, shareholder proposal rules, and Dodd-Frank."[134] As the U.S. Chamber of Commerce has noted, the prospect of facing "politically driven campaigns intended to embarrass an enterprise" creates an incentive for start-up founders to avoid going public.[135]

128 Virginia Harper Ho, "Sustainability in the Mainstream: Why Investors Care and What It Means for Corporate Boards", DN-V8N6, The Conference Board, November 2017, at p. 10.

129 "Agreement Reached: Walden Withdraws Shareholder Resolution at Vanguard on Proxy Voting", Walden Asset Management, 14 August 2017; "Research and Engagement Brief," Walden Asset Management, Second Quarter 2017, at p. 4.

130 T. Rowe Price, Notice of 2017 Annual Meeting and Proxy Statement, SEC Form Def 14A, filed 17 March 2017 for the Period ended 26 April 2016, at p. 69.

131 T. Rowe Price, Form 8-K, filed 26 April 2017.

132 Nickoley M. Gantchev, "The Costs of Shareholder Activism: Evidence from a Sequential Decision Model", The Wharton School at the University of Pennsylvania working paper, November 2009.

133 "The Incredible Shrinking Universe of Stocks, the Causes and Consequences of Fewer U.S. Equities", Credit Suisse, 22 March 2017, at p. 1.

134 "A Financial System That Creates Economic Opportunities: Capital Markets", U.S. Department of the Treasury, October 2017, at p. 26.

135 "Shareholder Proposal Reform", U.S. Chamber of Commerce Center for Capital Markets Competitiveness, Summer 2017, at p. 3.

Seemingly innocuous shareholder proposals can also serve as an introduction to more radical and potentially harmful outcomes. For instance, a combative experience between company management and activist shareholders may, if the shareholders' demands are not met, lead to frustration and fuel efforts for fossil fuel divestment campaigns – which available evidence indicates can create substantial losses for investors due to increased transactions and management costs, and loss of diversification.[136]

Shareholder proposals seeking to direct company resources towards achieving environmental and social goals also may open the door to the diversion of resources towards other goals besides profit maximization, with consequent harm to good corporate governance standards. The separation between a company's owners and its management creates a principal-agent problem in which the agent (management) must be properly incentivized to act in the interest of its owners (shareholders).[137]

Creating incentives for managers to act in ways that focus more on environmental and social goals instead of strictly maximizing shareholder wealth may simultaneously license managers to seek other goals besides maximizing shareholder wealth, such as maximizing personal wealth or popularity, which will be more difficult to discipline appropriately. While there is a substantial literature on the role of "corporate social responsibility" in corporate governance, and not every instance of firm social engagement necessarily leads to a reduction in the quality of governance, the academic literature also finds that the long-run impact of social-issue shareholder proposal activism is negative. For instance, Woidtke (2015) studied public and private pension fund ownership of Fortune 250 and S&P 500 companies during 2001-2013 and found that "[o]wnership by public pension funds engaged in social-issue shareholder-proposal activism is negatively related to firm value."[138]

136 See, e.g., Daniel R. Fischel, Christopher R. Fiore, and Todd D. Kendall, "Fossil Fuel Divestment and Public Pension Funds", June 2017; Hendrik Bessembinder, "Frictional Costs of Fossil Fuel Divestment", June 2016, at pp. 1-26.

137 See, e.g., Michael C. Jensen and William H. Meckling, "Theory of the firm: Managerial behavior, agency costs and ownership structure", Journal of Financial Economics, vol. 3, at pp. 305-60.

138 Tracie Woidtke, "Public Pension Fund Activism and Firm Value: An Empirical Analysis", Legal Policy Report 20, September 2015. See also Yawen Jiao and Pengfei Ye, "Public pension fund ownership and firm performance", Review of Quantitative Finance and Accounting, vol. 40:3, 2013, at p. 571 ("… excessive PPF [public pension fund] ownership may facilitate PPF managers' pursuits of political interests and destroy shareholder value.")

V. CONCLUSIONS

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In this study we illustrate the rise in socially focused shareholder activism. In doing so, we set out to answer two questions: Do social and environmental shareholder proposals raise or lower shareholder returns?; and if these proposals do not contribute to increased shareholder returns, then why do some shareholders support the use of corporate resources in these unproductive activities? In seeking to answer these questions our analysis has focused specifically on climate change and human rights proposals both because they constitute the largest categories of environmental and social proposals and because, like many such proposals, they address an issue of broad social concern that cannot be successfully addressed without government action. One difference, however, is the increased receptivity on the part of institutional asset managers for climate-related proposals but not for human rights proposals. Given the increase in receptivity, including the fact that three climate resolutions received a majority of shareholder approval, we conduct a series of econometric tests to assess the impact of such resolutions on shareholder value. We conclude that climate change proposals do not contribute to shareholder value and that support for these proposals may reflect the differing incentives and preferences of the asset managers casting the votes of the funds they manage.

While proponents of increased climate change-related disclosure commonly argue that increased disclosure enhances shareholder value, our analysis indicates that increased disclosure does not enhance shareholder value. Upon reflection, this is not surprising. The key factor driving forecasts of the value of, for example, carbon fuel-producing companies is found in global political uncertainties affecting the likelihood, timing, intensity, and sustainability of regulatory policies that might be adapted in coming decades. Corporate managers have neither special ability in forecasting, nor do they possess superior knowledge regarding, such uncertainties relative to the myriad organizations and institutions that provide information to investors on pertinent risks and outlooks.

To test the impact of shareholder proposals seeking disclosure of climate risks, we examine statistically the reaction of each company's stock price reactions to a climate risk disclosure proposal that was published in the company's annual proxy statement and voted on at its annual shareholders' meeting. We do not find statistical support for the proposition that the adoption of shareholder resolutions seeking greater disclosure affects company returns one way or the other. Similarly, when we apply statistical analyses to the impact of voluntary disclosure of climate-related information on shareholder value, we do not find material support for the view that shareholder value is affected by disclosure.

None of this is to say that we should not be extremely concerned about such issues as global climate change. Effectively dealing with such problems, however, will require that wise public policy measures be taken across a wide swath of the world's nations. While frustration with slow progress on this front is understandably accompanied by the desire to "do something", doing something effective is the task of our political institutions, and shareholder resolutions targeted at prominent corporations is an ineffectual substitute for policy making via the political institutions of democracy.

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