The Industrial Organization of Private Politics*

David P. Baron

Stanford University

July 18, 2011

Abstract

Private politics social pressure in led by social activists that use confrontational and cooperative strategies to cause firms to provide social benefits. This paper presents theories of the supply of social pressure by activists and the demand for social pressure as represented by the attractiveness of firms as targets and partners. A confrontational activist can drive potential targets into competition for an engagement with a cooperative activist, as characterized by an ascending auction. A moderately socially responsible firm is more likely than a profit-maximizing firm to win the engagement with the cooperative activist. The threat of confrontation creates a positive externality for the cooperative activist, which has an incentive to participate in the campaign of the confrontational activist.

1 Introduction

Public policy is the outcome of government action driven by public politics. Private policy such as self-regulation occurs in the absence of government action and is frequently driven by social pressure associated with issues such as the environment, human rights, and social justice. Social pressure is often the result of private politics (Baron 2001, 2003) that focuses on changing the behavior of private economic agents. Private politics is led by NGOs and social activists many of whom have concluded that more progress toward their goals can be achieved by targeting economic agents directly rather than by working through government. NGOs and social activists also discovered that more progress could be made by targeting markets rather than the offending firms themselves. To stop the harvesting of old growth timber, NGOs campaigned not against the timber companies but against the retailers that sold lumber made from old growth timber. The retailers had a public face and brand equity that was threatened by the activist campaigns and were more

*This research has benefited from comments by Renee Bowen, Charles Cameron, Daniel Diermeier, Hugagreeva Rao, Andrzej Skrzypacz, and Dennis Yao.

responsive to the social pressure than were the timber companies. The retailers then pressured the timber companies.

Social pressure depends on support from the public, and at least implicit support comes from the greater trust the public has in NGOs relative to companies. The GlobeScan "Trust in Institutions" surveys covering 14 countries consistently found NGOs ranked highest in trust compared to the United Nations, large local companies, national governments, and global companies, in that order. For 2005 the difference between the percents of those surveyed responding "Trust" in the institution and the percent responding "No Trust" was 29 for NGOs and -15 for global companies.[1] The Edelman Trust Barometer for 2011 surveyed 5,025 people in 23 countries on their trust in NGOs, business, government, and the media.[2] Overall 61% responded that they had trust in NGOs compared to 56% who had trust in business. For the United States the responses were 55% and 46%, respectively.

NGOs and social activists initially used confrontational approaches to change the behavior of economic agents. In the 1990s, however, some NGOs began to adopt a cooperative approach in which they worked with firms to reduce threats to the environment, protect human rights, and improve social welfare. Gwen Ruta of the Environmental Defense Fund (EDF) commented on the change, "At the time, it was heresy to say that companies and NGOs could work together; now it it dogma, at least for the Fortune 500."[3] The *Financial Times* in conjunction with Dalberg Global Development Advisors surveyed 445 companies that engaged in long-term partnerships with NGOs or public agencies.[4] The companies were asked to evaluate the NGOs and United Nation's agencies on the dimensions of accountability, adaptability, communication, and execution. EDF ranked second among global organizations. EDF accepts no corporate funds but has been criticized by some social activists, "who asked why firms as rich as Wal-Mart and KKR [Kohlberg Kravis Roberts] should be the ultimate recipients of their charity."[5] In response to the criticism, social activists point to the results of their cooperation. Wal-Mart has adopted a green strategy and imposed it on its suppliers, and KKR has improved the energy efficiency of the companies in its portfolio by $160 million through its collaboration with EDF.

This paper studies the organization of private politics focusing on confrontational and cooperative strategies and identifies which strategy an activist chooses and which targets it selects as a function of the likelihood of success, costs, and the characteristics of potential targets.[6] The selection of targets can be thought of as an involuntary matching game where potential targets may be able to affect the likelihood that they encounter private politics social pressure.[7] The paper addresses three questions about the organization of

[1] www.globescan.com/rf_ir_first.htm, accessed September 21, 2010.

[2] The percents were those who answered 6 through 9 on a 9 point scale.
www.edelman.com/trust/3011/uploads/Edelman%20Barometer%20Global%20Deck.pdf Accessed July 6, 2011.

[3] *Economist*, June 5, 2010.

[4] www.ft.com/reports/philanthropy2007, accessed September 28, 2010

[5] *Economist*, June 5, 2010.

[6] Maxwell (2010) discusses NGOs as allies and adversaries.

[7] Activist campaigns often use tactics similar to those of labor unions, but private politics led by activists differs from union

private politics. First, where and why are confrontational and cooperative strategies used and by which types of activists, e.g., moderates or radicals, and how effective are those strategies? Second, how does the attractiveness of firms as targets depend on their characteristics such as their vulnerability to harm and the extent to which they take social externalities associated with their operations into account? Third, with which types of firms are cooperative and confrontational activists matched and what are the outcomes of the resulting engagements?

The approach taken is analogous to industrial organization where the performance of the social pressure market depends on the strategies and characteristics of both activists and their targets. Unlike much of positive political economy and like industrial organization there is little institutional structure to guide the modeling of the interactions between social activists and their targets. Basic models thus are introduced to represent the conduct of the market participants and are used to characterize the industrial organization of private politics.

The results of private politics can be similar to those of self-regulation as considered by Lyon and Maxwell (2004) and the authors in Potoski and Prakesh (2009). In addition to self-regulation resulting from private politics social pressure, self-regulation can be motivated by moral considerations that compel actions by firms. Baron (2010) provides a theory of morally-motivated self-regulation, and theories of corporate social responsibility (CSR) have been provided by Graff Zivin and Small (2005), Baron (2007)(2008)(2009a), Besley and Ghatak (2007), Calveras, Ganuza, and Llobet (2007), and Cespa and Cestone (2007). Because self-regulation can result from either social pressure or CSR, this paper considers private politics and the strategies of social activists where some potential targets are motivated by CSR and considers whether CSR firms are more attractive targets than profit-maximizing firms.[8]

2 Overview

The "social industry" in the industrial organization of private politics is identified by the social issue in question. The social issue could be the emissions of toxic substances in a particular region, workers rights in factories in developing countries supplying developed countries, the rights of indigenous peoples in mining areas, animal rights, conflict minerals, rainforest conservation, predatory lending, the opening by Wal-Mart of superstores selling groceries, and so on. Social issues can cut across product market lines. The issue of animal testing, for example, affects the cosmetics and pharmaceutical industries as well as laboratories in universities. Associated with the social industry is a market for social pressure pertaining to the social issue. The commodity exchanged in the market is social pressure. On the supply side of the market for social

campaigns in an important way. Unlike labor unions, social activists are not linked to their target through a market and hence have no market power over their target.

[8]In addition to self-regulation motivated by social pressure and CSR, some self-regulation is undertaken to forestall more stringent government regulation, as considered by Hamilton (1993) and Maxwell, Lyon, and Hackett (2000).

pressure are social activists and NGOs that have the social issue on their agenda. The social activists and NGOs may specialize on particular issues, providing differentiation in the market for funding. On the demand side are the firms whose activities lead them to be associated with a social issue. A firm may be in several social industries, as in the case of a mining company that may be involved in conflict minerals, rainforest conservation, and toxic emissions. Similarly, a social industry can include firms selling dissimilar products that do not compete in the same product market. The models in the following sections characterize strategies used by social activists, and activists in the same social industry may use different strategies. Heterogeneity thus is present on both the supply and demand sides of the market for private politics social pressure.

The demand side of the industrial organization of private politics is represented by the attractiveness of firms as potential targets for social activists and NGOs. The attractiveness creates the "demand" for social pressure that elicits the supply through private politics. The attractiveness of the firms depends on a variety of factors, four of which are considered here. The first is the social value achieved by causing a potential target to change its practices, as in the mitigation of a negative externality or improvement in the working conditions in suppliers' factories in developing countries. The second is how tough the potential target is, where toughness depends on the cost of changing its practices. The third is how vulnerable a potential target is, where vulnerability can depend on brand equity or reputation that could be harmed by a campaign. The fourth is the extent to which potential targets take into account the social value of a change in their practices when making their decisions; i.e., the extent to which they accept social responsibilities.

The following sections introduce simple models of the market for activist-driven social pressure, the strategies of NGOs and potential targets, and the matching of NGOs and targets. An activist seeks a change in the practices of a target firm. In a cooperative engagement the activist helps the target either identify the costs and benefits of the change or develop an externally legitimate policy to govern the change, as in the case of a certification program. In either case the target decides voluntarily whether to change its practices. With confrontation the activist makes a demand and threatens a harmful campaign if the target does not accept the demand and change its practices. Both conducting a campaign and developing the capability to reward a firm are costly, and because of the costs activists frequently specialize.[9] Some activists choose a cooperative strategy that can reward a target, whereas others choose a confrontational strategy involving threats of harm.

Baron and Diermeier (2007) present a model of an activist that makes a demand on a target firm and offers a reward if the firm agrees to the demand and threatens it with harm if it does not agree. The activist does not know the type of the firm, which is either rational or a behavioral type that never agrees to the demand. The threat establishes the reservation value of the firm, and the rational firm always accepts the demand so the threat never is carried out. The equilibrium threat and reward depend on the probability that the firm is rational, and as that probability goes to one the treat becomes infinite and the activist

[9] Eesley and Lenox (2006) and Lenox and Eesley (2009) provide empirical analysis of activist tactics and their effectiveness.

extracts everything from the firm. In contrast, in the present paper the target firms are rational, and threats can be carried out in equilibrium and hence can be costly to the activist. In addition, activists select their targets and choose either a cooperative or a confrontational strategy, since there are no gains to having both capabilities and fixed costs can be associated with each. One concern about an activist having both confrontational and cooperative capabilities is that the cooperative side of the activist organization could pass to the confrontational side inside information about the firm learned through a cooperative engagement. This could cause firms to reject participation in cooperative engagements.

To sketch the principal results, the outcomes of confrontational campaigns depend on factors such as support by the public which can be uncertain, so the target can prefer to take its chances rather than accept the demand of the activist. Campaigns thus can occur in equilibrium. The probability that a campaign is successful in changing the practices of the target firm is increasing in the campaign intensity and decreasing in the residual harm from the campaign remaining when the firm concedes and changes its practices. The activist conducts a campaign only if the residual harm is low in which case the probability of campaign success is at least one-half. Observed campaigns thus are more likely to succeed than fail. Cooperative engagements are voluntary, but a cooperative activist may have bargaining power. Greater bargaining power of the activist increases the probability that a cooperative engagement results in a change in practices by the firm but decreases the likelihood that the firm will enter into a cooperative engagement.

In a confrontational encounter radical activists conduct more intense campaigns than do moderate activists, and radicals can have a higher probability of success. In a cooperative engagement moderates have a higher probability of success than do radicals. If as seems likely the costs to the activist of developing expertise and the ability to convey external legitimacy are at least as great as the cost of designing a confrontational campaign, both moderate and radical activists choose confrontational strategies if their campaigns are sufficiently likely to succeed that their targets would accept their demands. If the targets would reject the demands and hence a campaign would be necessary to obtain a change in practices by the target, moderates can choose cooperation and radicals choose confrontation. Campaigns and radicals then go together.

Activists prefer targets for which greater social benefits result from a change in practices, have lower costs of changing their practices, and are more vulnerable to the harm from a campaign. Firms that assume social responsibilities are more attractive targets, since they internalize a portion of the social benefits from a change in practices. Socially-responsible firms incur less intense campaigns than do profit-maximizing firms. If the marketplace rewards the internalization of the social benefits, profit-maximizing firms can strategically accept social responsibilities. Rewards make a firm more attractive to activists.

If cooperative activists are scarce relative to potential targets, the cooperative activist can choose the firm with which to work. By targeting firms that do not participate in a cooperative engagement, confrontational activists and their threat of a campaign cause potential targets to compete for an engagement with the

cooperative activist where that competition is modeled as an ascending auction. The auction is a race to the top or more accurately a race to avoid the threat of a campaign by the confrontational activist. When the campaign is sufficiently likely to succeed that potential targets would accept the demand of the confrontational activist, a profit-maximizing firm and a socially-responsible firm tie in the auction. If the socially responsible firm would accept the demand and the profit-maximizer reject it, the former wins the auction. The socially responsible firm also wins the auction when both firms would reject the demand and the campaign intensities are exogenously determined, unless the firm is very socially responsible. Cooperative activists then engage socially-responsible firms and profit-maximizers find themselves in confrontational encounters. The same conclusion can result when campaign intensities are endogenous, but if campaigns against profit-maximizers are considerably more intense than campaigns against socially-responsible firms, the confrontational activist can drive a profit-maximizer into the arms of the cooperative activist.

Since the auction involves a race away from the threat posed by the campaign, greater campaign intensity by the confrontational activist generates a positive externality for the cooperative activist. That is, the potential targets of the confrontational activist bid more in the auction the greater is the threat from a campaign targeting the loser of the auction. This provides an incentive for the cooperative activist to participate in the campaign by covering part of its cost. The optimal participation by the cooperative activist equates the marginal benefit from the externality for the cooperative engagement to the marginal cost of inducing a more intense campaign. The optimal participation is increasing in the social valuation of the firm that wins the auction and the cooperative engagement, since a higher valuation increases the marginal benefits from the externality. Conversely, the optimal participation is decreasing in the social valuation of the target of the confrontational activist, but is increasing in the vulnerability of its target.

The next section presents a basic model of confrontational private politics involving a demand by the activist, acceptance or rejection by the target, and the launching of a campaign to harm the target if the demand is rejected. On the equilibrium path of play the target can reject the demand, and the activist can launch a campaign. Section 4 presents the basic model of cooperative private politics where an activist helps its target discover the private benefits of making a change in its practices, for example, to better protect the environment, or designs an externally legitimate program to govern that decision. Section 5 presents conditions under which moderate and radical activists separate with moderates choosing cooperation and radicals choosing confrontation. Section 6 considers the demand side of the market for social pressure focusing on the characteristics of targets and their attractiveness to activists. This section also introduces corporate social responsibility (CSR) and studies its interactions with activist strategies, including strategic CSR where consumers reward a firm for its CSR. Section 7 considers the matching of confrontational and cooperative activists with potential targets. The potential targets compete for an engagement with the cooperative activist, which uses an auction to select its partner with the loser being targeted by a confrontational activist. The positive externality created by the campaign of the confrontational activist is identified, and

the optimal participation by the cooperative activist is characterized. Conclusions are given in the final section.

3 Confrontational Private Politics

This section presents a basic model of a confrontational encounter between an activist and a target firm. The activist has an agenda that includes a social issue such as environmental protection, animal rights, or justice in supply chains, and the issue is linked to the operations of a target firm. For example, the issue could be the emission of toxic substances by the firm, and the activist wants the firm to change its practices to eliminate the emissions. Doing so is costly to the firm, so the firm will not voluntarily change, and the activist adopts a confrontational strategy to force the firm to change its practices. The basic model focuses on the activist's strategy and the firm's response as a subgame perfect equilibrium. The following Section 4 introduces a corresponding model of a cooperative engagement between an activist and a target firm, and the two basic models of confrontation and cooperation are used in Section 7 to characterize the matching of activists and targets.

3.1 A Basic Model

With a confrontational strategy the activist demands that the firm change its practices and threatens to launch a campaign if it rejects the demand. For example, the activist demands that a timber company adopt the sustainability standards of the Forest Stewardship Council (FSC). The activist is assumed to commit to its demand and does not soften it. A campaign has two stages. In the first stage the activist designs the campaign, which represents a credible threat that harm will be inflicted on the target firm if it rejects the demand. This stage may include selecting the tactics to be employed and raising the funds to execute the campaign. The second stage involves the conduct of the campaign in the event that the target rejects the demand.

Baron and Yurday (2004) describe a confrontational campaign by the Rainforest Action Network (RAN) against Citigroup.[10] The social issue was environmental degradation in developing countries caused by large scale projects such as mines and pipelines. Rather than target the project owners or the construction companies building the projects, RAN targeted a market crucial to those companies. The market campaign focused on the financing of the projects, most of which was provided by banks. RAN committed personnel to the campaign and earmarked funds to cover the campaign costs. It began the campaign with a letter to Citigroup demanding that it provide project finance only if it met environmental standards that were far more stringent than the currently applied standards of the International Finance Corporation. Citigroup rejected the demand, and RAN launched an aggressive campaign against the bank intended to harm its

[10] Ingram, Yue, and Rao (2010) studied the campaigns directed at preventing Wal-Mart from opening stores.

reputation and its operations. RAN conducted demonstrations against the bank, blocked branch offices, verbally attacked the CEO, and asked holders of Citibank credit cards to cut up their cards and send them to the company. Elementary school students sent letters to CEO Sandy Weill asking him to stop harming the environment. The campaign lasted over two years before Citigroup and three other banks developed the Equator Principles to govern project finance and invited other financial institutions to join them in applying the stronger environmental standards. RAN viewed the Equator Principles as insufficient and continued its campaign. Citigroup eventually agreed to adopt stronger environmental standards than contained in the Equator Principles.

The change in practices by the firm is assumed to be discrete; i.e., the firm either changes its practices or does not. For example, the firm either stops harvesting old growth timber as defined by the activist or it continues to cut, does or does not install the best available abatement technology, respects human rights or not, or prohibits its suppliers from employing children younger than 15 or it does not. The assumption that the firm has only two alternatives both simplifies the model and allows actual confrontation in the form of a campaign on the equilibrium path of play.

The sequence of play is that the activist makes a demand, and if the target firm accepts the demand and changes its practices, the game ends. If the firm rejects the demand, the activist can launch a campaign, and given the campaign results, the firm concedes and changes its practices or it continues its current practices and bears the consequences. The cost to the target of changing its practices is denoted by c, and a benefit could also result from the change. The benefit could, for example, be rewards from consumers for a change in environmental practices. The benefits are realized only after a change has been made and are thus uncertain ex ante and will be represented by a uniformly distributed random variable $\tilde{b}$ with support $[0, 2\bar{b}]$. This cost and benefit structure is also used in the model of cooperation in Section 4.

If the expected benefits $\bar{b}$ exceed the cost, the firm would voluntarily change its practices, so the model focuses on situations in which the cost is greater than the expected benefits; i.e., $c > \bar{b}$. If the target rejects the activist's demand, the activist can at a cost launch a campaign to harm the target. The effectiveness of a campaign and the harm it generates depend on a variety of factors such as the support from consumers and the public for the activist's cause and its campaign tactics, as well as the characteristics of the target. The actual harm generated by a campaign thus is uncertain and is represented by a uniform random variable $\tilde{h}$ with support $[0, \bar{h}]$ and realization h. The bound $\bar{h}$ can be thought of as indexing the intensity of a campaign which can depend on the salience of the issue with the public. The activist is assumed to commit to call off its campaign only if the target changes its practices.

If the firm rejects the demand and the confrontational activist conducts a campaign, the harm h is realized and the firm decides whether to change its practices. It concedes to the campaign and changes its practices when h is high, incurring the net cost $c - \bar{b}$. Even when the firm concedes, the campaign can result in residual harm denoted βh, where $\beta \in [0, 1)$. The residual harm represents damage to the reputation of

the firm or to its brand equity that persists when it concedes. If the firm does not concede, it bears the full harm h. The firm thus avoids a portion $1-\beta$ of the harm by changing its practices. The parameter β could depend on the type of campaign conducted or on characteristics of the target; for example, attacks on the reputation or brand equity of a firm could have long-lasting effects.

If a campaign is launched and generates harm h, the target thus concedes and changes its practices if and only if

$$-h \geq -(c-\bar{b}) - \beta h$$

or

$$h \geq \frac{c-\bar{b}}{1-\beta}. \tag{1}$$

That is, the harm must exceed the concession threshold $\frac{c-\bar{b}}{1-\beta}$, which is increasing in the proportion β of the harm that persists.

More effective campaigns have targets with weak incentives to oppose a demand (low $c-\bar{b}$), issues that are salient with the public (high $\bar{h}$), and harm that will be forgiven (low β) if the target concedes to the campaign. Conceding is more attractive to the firm the smaller is β, so if consumers and the public are more forgiving (lower β), the target concedes for a larger set of h. This may explain why activists praise their targets for changing their practices even though they had been involved in a confrontational campaign. For example, after a successful campaign RAN takes out full-page newspaper advertisements praising its target for changing its practices.

If $\bar{h} \leq \frac{c-\bar{b}}{1-\beta}$, a campaign cannot impose sufficient harm to cause the firm to concede. The activist then cannot gain from a campaign, and hence any threat to launch a campaign is hollow. Recognizing this, the target rejects the activist's demand, in which case the activist has no incentive to target the firm. Encounters between a confrontational activist and a target firm thus occur only if $\bar{h} > \frac{c-\bar{b}}{1-\beta}$, which is an assumption maintained in the subsequent analysis.

Using (1) the cost H imposed on the firm by a campaign is

$$H = \begin{cases} c-\bar{b}+\beta h & \text{if } h \geq \frac{c-\bar{b}}{1-\beta} \\ h & \text{if } h < \frac{c-\bar{b}}{1-\beta}, \end{cases}$$

and the (expected) cost EH if the firm rejects the demand is

$$\begin{aligned} EH &= \frac{1}{\bar{h}}\left[\int_0^{\frac{c-\bar{b}}{1-\beta}} h dh + \int_{\frac{c-\bar{b}}{1-\beta}}^{\bar{h}} (c-\bar{b}+\beta h) dh\right] \\ &= c-\bar{b} - \frac{(c-\bar{b})^2}{2(1-\beta)\bar{h}} + \frac{\beta \bar{h}}{2}, \end{aligned} \tag{2}$$

which is less than $c-\bar{b}$. The derivative of EH with respect to $c-\bar{b}$ is $\frac{dEH}{d(c-\bar{b})} = q$, where q is the probability that the firm changes its practices when targeted; i.e.,

$$q = \int_{\frac{c-\bar{b}}{1-\beta}}^{\bar{h}} \frac{dh}{\bar{h}} = 1 - \frac{c-\bar{b}}{(1-\beta)\bar{h}}. \tag{3}$$

The probability is positive for $\bar{h} > \frac{c-\bar{b}}{1-\beta}$ and is decreasing in the net cost to the firm, increasing in the intensity $\bar{h}$ of the campaign, and decreasing in the proportion β of residual harm. The expected harm is increasing in β, since $\frac{dEH}{d\beta} = \frac{\bar{h}}{2}q(2-q)$, so greater residual harm increases the threat from a campaign. The expected harm is strictly increasing and strictly concave in $\bar{h}$, so the threat of a more intense campaign increases the expected harm from confrontation.

The target can avoid the harm from a campaign by accepting the demand of the activist, in which case it incurs the net cost $c - \bar{b}$. The target thus accepts the demand and avoids a campaign if and only if

$$c - \bar{b} \leq EH$$

or

$$\bar{h} \geq \frac{c-\bar{b}}{(\beta(1-\beta))^{\frac{1}{2}}}. \tag{4}$$

Since $\bar{h} > \frac{c-\bar{b}}{1-\beta}$ for a campaign to have a positive probability of obtaining a concession from the firm, (4) is satisfied for $\beta \geq \frac{1}{2}$. Conversely, if $\frac{c-\bar{b}}{\bar{h}} > \frac{1}{2}$, the campaign intensity is insufficient to yield acceptance for any β from (4). For $\frac{c-\bar{b}}{\bar{h}} < \frac{1}{2}$, $q > 0$ if $\beta < \frac{1}{2}$, and (4) is satisfied if $\beta \in [\hat{\beta}^{-}, \hat{\beta}^{+}]$, where $\hat{\beta}^{-} = \frac{1}{2} - \frac{1}{2}\left(1 - 4\left(\frac{c-\bar{b}}{\bar{h}}\right)^2\right)^{\frac{1}{2}}$ and $\hat{\beta}^{+} = \frac{1}{2} + \frac{1}{2}\left(1 - 4\left(\frac{c-\bar{b}}{\bar{h}}\right)^2\right)^{\frac{1}{2}}$. If the residual harm is low ($\beta < \hat{\beta}^{-} < \frac{1}{2}$), the firm rejects the demand and a campaign results. When $q > 0$, $\hat{\beta}^{+} > \beta^{o} \equiv 1 - \frac{c-\bar{b}}{\bar{h}} \leq \frac{1}{2}$. Consequently, a campaign is a threat if $\beta < \beta^{o}$, and the activist demand is accepted for $\beta \in [\hat{\beta}^{-}, \beta^{o}]$ and rejected for $\beta < \hat{\beta}^{-}$.

A campaign of intensity $\bar{h}$ is assumed to cost the activist $\alpha\bar{h}$. The activist maximizes its expected utility for an encounter, which equals the social value z, as perceived by the activist, of a change in practices multiplied by the probability q that the target changes its practices less the cost of conducting the campaign. The activist's expected utility EU_A thus is

$$EU_A = qz - \alpha\bar{h}, \tag{5}$$

which must be nonnegative for the activist to launch a campaign, so $\frac{z}{\alpha} \geq \frac{\bar{h}}{q}$ is necessary. A firm with $\frac{z}{\alpha} < \frac{\bar{h}}{q}$ would never be targeted, and any threat against it would not be credible.

Campaigns occur in equilibrium when the activist has $EU_A \geq 0$ and the target firm rejects the demand ((4) is not satisfied). In contrast to the model of Baron and Diermeier and to basic complete information models of litigation in which litigants always settle disputes, a labor union and a firm settle rather than incur a strike, or security in which countries negotiate a resolution rather than go to war, here the target can reject the activist's demand resulting in a campaign. Campaigns result because of the uncertainty associated with how much harm a campaign will generate and the discrete alternatives available to the firm; i.e., change or do not change practices. The uncertainty gives the firm the option to bear the harm if h is low and to limit its impact to $c - \bar{b} + \beta h$ when h is high. If the change in practices were continuous, a campaign would not occur in equilibrium.

From the activist's perspective a firm with high $c-\bar{b}$ or high β is a tough potential target and can require a more intense campaign (higher $\bar{h}$) before it accepts the demand. An activist that cannot generate sufficient harm such that $EU_A \geq 0$ is too weak to engage a tough target. The activist is also weak if its campaign cost α is high, and it has a weak incentive to launch a campaign if z is low. A potential target that is tough or for which q is low or facing a weak activist thus may avoid confrontational private politics. High value (z) firms, however, are attractive targets and may encounter confrontational private politics.

The equilibria of the basic model of confrontation are summarized in the following proposition.

Proposition 1 *(i) If* $\frac{c-\bar{b}}{\bar{h}} > \frac{1}{2}$ *or* $\frac{z}{\alpha} < \frac{\bar{h}}{q}$*, confrontational private politics does not occur. (ii) If (4) is satisfied and* $\frac{z}{\alpha} > \frac{\bar{h}}{q}$*, the activist makes a demand and the target accepts it. (iii) If* $\frac{z}{\alpha} > \frac{\bar{h}}{q}$ *and (4) is not satisfied, the activist makes a demand, the target rejects it, the activist launches a campaign, and the resolution of the campaign is determined by (1). (iv) For* $\beta \geq \hat{\beta}^{-}$ *all confrontational encounters result in the demand being accepted, and for* $\beta < \hat{\beta}^{-}$ *demands are rejected and campaigns result.*

3.2 Campaign Intensity

If the activist can choose the intensity $\bar{h}$ of its campaign, it maximizes EU_A in (5) with respect to $\bar{h}$. The optimal campaign intensity $\bar{h}^*$ is

$$\bar{h}^* = \left(\frac{\left(c-\bar{b}\right) z}{\alpha(1-\beta)} \right)^{\frac{1}{2}}, \tag{6}$$

so more intense campaigns are conducted against higher cost ($c-\bar{b}$) and higher value (z) firms. More intense campaigns are also conducted against firms with high residual harm (high β) and when the marginal campaign cost α is low. A threatened campaign with intensity $\bar{h}^*$ is credible if $\bar{h}^* > \frac{c-\bar{b}}{1-\beta}$, which requires $\frac{z}{\alpha} > \frac{c-\bar{b}}{1-\beta}$. The incentive $\frac{z}{\alpha}$ of the activist thus must be greater than the concession threshold of the firm. The condition corresponding to (4) for the firm to reject the demand is $c-\bar{b} > \frac{\beta z}{\alpha}$, so the two inequalities require $\beta < \frac{1}{2}$ for a campaign to result.

The expected utility of the activist is

$$\begin{aligned} EU_A &= z - 2\alpha\bar{h}^* \\ &= z(2q^* - 1), \end{aligned} \tag{7}$$

where $q^* = 1 - \frac{\alpha\bar{h}^*}{z}$ is the probability of campaign success, which must be at least one-half for the activist to launch a campaign. Observed campaigns are thus more likely to succeed than fail. The threat of a campaign is credible if $EU_A \geq 0$, which requires

$$\frac{z}{\alpha} \geq 4\frac{c-\bar{b}}{1-\beta}. \tag{8}$$

Consequently, the activist participates if the ratio of the social value to the marginal campaign cost exceeds the firm's concession threshold by a factor of 4. The condition in (8) implies the condition for a campaign to constitute a credible threat.

A campaign occurs on the equilibrium path of play when (8) is satisfied and the firm rejects the demand ($c-\bar{b} > \frac{\beta z}{\alpha}$), so a necessary condition for a campaign is $\beta < \frac{1}{5}$. The residual harm from a campaign thus must be low for a campaign to occur. If the residual harm is higher than $\frac{1}{5}$, conceding to a successful campaign is more costly, and the firm accepts the demand and avoids a campaign.

3.3 Reputation and Commitment

An activist could have a reputation for conducting a campaign even if $EU_A < 0$. The activist might conduct the campaign to demonstrate its toughness to donors or volunteers, and the credibility of such a threat could be strengthened by, for example, making a public pledge to its supporters and donors. When $EU_A < 0$, the activist would commit to launch a campaign only if the firm would accept the demand, so commitment has an effect if (4) is satisfied, which requires

$$\bar{h} > \frac{c-\bar{b}}{(\beta(1-\beta))^{\frac{1}{2}}} > \bar{h}\left(1-\frac{\alpha}{z}\bar{h}\right)\left(\frac{1-\beta}{\beta}\right)^{\frac{1}{2}}, \tag{9}$$

so $\bar{h} > \frac{z}{\alpha}\left(1-\left(\frac{\beta}{1-\beta}\right)^{\frac{1}{2}}\right)$. Consequently, if (9) is satisfied and commitment is credible, the activist can credibly threaten a campaign and avoid having to launch it, so in equilibrium its commitment is not costly.

3.4 The Effectiveness of Confrontational Activists

Confrontational activists succeed under three scenarios. The first is the credible threat of a sufficiently threatening campaign that the target firm accepts the demand and avoids a campaign. The second is where a campaign is not sufficiently threatening that the firm would accept the demand but where the firm would concede and change its practices with a sufficiently high probability when the campaign is launched. The third requires credible commitment to a campaign sufficient for the target to accept the demand, in which case the activist avoids the cost of a campaign. Campaigns are observed only in the second scenario. In the first and second scenarios campaign costs α must be sufficiently low or the target have sufficiently high social benefits z that the activist is willing to launch a campaign if its demand is rejected, and in the third the activist must be able to credibly commit to conducting a campaign with a negative expected utility.

The attractiveness of a firm to an activist depends on the proportion β of the campaign harm that continues when the firm concedes to a successful campaign, and β can depend on both the campaign conducted and the characteristics of the target. Consider two types of campaigns. The first interrupts sales by pressuring retailers to halt their sales of a product. If there are few substitutes for the product, sales could quickly resume once a successful campaign ends. In this case β would be low, and from (1) less harm would be needed to obtain a concession but from (4) a more intense campaign would be needed before the firm would accept the demand. Consequently, activists that interrupt sales of a product with few substitutes are more likely to have to launch a campaign to force the target to change its practices. In contrast, a campaign

directed at damaging the brand equity of a target could have long-run effects, particularly if the product has close substitutes, in which case β would be high. A concession to a successful campaign would be less likely then, since conceding avoids only a relatively small share of the harm. But, the firm is more likely to accept the demand and change its practices to avoid facing a campaign.[11] Consequently, firms whose brand equity or reputation could be damaged are more likely to accept an activist's demand but less likely to concede to a successful campaign if one were launched.

Pharmaceutical companies producing prescription drugs may be difficult to harm and have low β, whereas consumer products companies may be relatively easy to harm and have long-run effects (high β). Friedman (1999) studied animal rights campaigns against cosmetics companies and pharmaceutical companies and found that virtually all the campaigns against cosmetics companies succeeded in halting animal testing, whereas all the campaigns against pharmaceutical companies failed. The theory predicts that firms with high $\bar{h}$ and high β, such as cosmetics companies, are more likely to accept demands, whereas firms with low β and low $\bar{h}$, such as pharmaceutical companies, are either likely to have no demands made of them or face campaigns with low probabilities of success.

A target with valuable brand equity such as a consumer products (e.g., cosmetics) company thus should be responsive to activist demands, whereas a target that has neither a public face nor depends on reputation should be less responsive to demands. This provides an explanation for the use of market campaigns by activists. Market campaigns are directed at the components of the value chain that are most susceptible to long-run harm from a successful campaign. Activists seeking to halt the sale of old growth timber thus target retailers with brand equity such as Home Depot and Lowes rather than the timber companies that have little brand equity and are difficult to harm. It also provides an explanation for boycotts of consumer products. Boycotts have received theoretical research attention (Innes (2006), Baron and Diermeier (2007), Diermeier and Van Mighem (2008)), but the theory leaves much yet to be explored, and the empirical studies of boycotts are inconclusive about their effectiveness.

The activist is more likely to be successful if the public, as consumers, employees, or investors, can add strength to a campaign; i.e., increase $\bar{h}$. Greater harm could be generated if consumers participate in a boycott or individually switch purchases to a different firm. Employee morale or productivity also could be affected by a campaign directed at damaging a brand or the reputation of the target. Socially responsible investors could refuse to hold shares in the target. The probability of campaign success could similarly be increased and concession made more likely if a campaign were to attract the interest of politicians or regulators.

[11] McDonald's would have a high β, which implies that it accepts the activist's demand (for $\beta \in [\hat{\beta}^{-}, \beta^{o}]$). A firm that accepts demands and faces frequent social pressure challenges can have an incentive to engage a cooperative activist, as considered in the next section.

4 Cooperative Private Politics

4.1 Cooperative Engagements

NGOs with expertise may be able to adopt a cooperative strategy. An NGO could help a firm identify the benefits and costs from changing its environmental practices, as in the case of EDF working with McDonald's to reduce behind-the-counter waste and packaging, or provide expertise as in the case of EDF working with BP to develop an internal carbon-trading system.[12] An NGO could also help firms develop an externally legitimate environmental program.[13] For example, several NGOs worked with the U.S. timber industry to develop a sustainability policy implemented through the Sustainable Forestry Initiative (SFI). The SFI has a more moderate set of sustainability standards than those of the FSC that more radical activists wanted the timber firms to join. As another example, EDF and the Natural Resources Defense Council (NRDC) helped broker the buyout of the Texas power company TXU, and their endorsement provided external legitimacy to the deal and may have facilitated regulatory approval. NGOs also worked with four major banks to develop the Equator Principles that govern project finance.[14] Gwen Ruta (2010, p. 189) explained EDF's approach: "To put its ideas into action, EDF works with unexpected allies: corporations, fishermen, landowners, and others who have a stake in the outcome. With a 20-year history of uncommon partnerships, EDF seeks to bring about lasting change not through confrontation, but through constructive engagement with powerful market leaders." The cooperative NGO thus either uses its expertise to help the target discover the consequences of a change in practices, where ex ante neither the NGO nor the target knows the specific benefits that might be discovered through a cooperative engagement, or it helps design an externally legitimate policy that governs the change in practices of the target, where legitimacy pertains to the confidence the public and other NGOs have that the firm will fully implement the policy. Certification by the activist is one way that external legitimacy is granted.

A firm could adopt its own policy or participate in an industry program to address a social issue, but frequently these efforts lack legitimacy and do little to reduce social pressure. Some industry programs are viewed by NGOs as greenwashing or as part of an advertising or public relations program. Conroy (2007, pp. 178-9) explained the legitimacy problem of the Council for Responsible Jewellrey Practices (CRJP).

> No social or environmental NGO participated in the development or governance of the CRJP, nor in the development of the code of practice. NGOs were simply asked to provide comments on documents drafted by CRJP. As a result, the organization suffered from the same fundamental lack

[12] McDonald's Corporation–Environmental Defense Fund, Waste Reduction Task Force, 1991 (April), "Final Report," available at www.environmentaldefense.org.

[13] GreenBiz.com listed 10 prominent NGOs that work with companies on their environmental practices. www.greenbiz.com/print/35540, accessed September 21, 2010.

[14] The activist could also have expertise in the sense of knowing better the attitude of the public and how likely the public is to respond to or reward a change in practices by the firm.

> of credibility as other industry-led attempts to take control of reputational risk management....
>
> NGOs were also concerned that there was no threshold or basis for entry into CRJP. Members were not required to demonstrate any commitment to standards or best practices. The only requirements for membership were that a company was active in the jewelry industry, was willing to pay a fee, and had expressed a commitment to some relatively vague language regarding social, environmental, and ethical performance....
>
> Before, during, and after CRJP's founding, NGOs hammered away at the lack of an entry threshold for CRJP and the lack of any real NGO role.

Conroy notes that CRJP subsequently joined with NGOs in a new initiative, the Initiative for Responsible Mining Assurance, to address the concerns raised by the NGOs.

External legitimacy could involve the certification of a change in the target firm's practices as in the case of the timber industry. For certification to provide external legitimacy the activist must have a degree of expertise to be able to judge the extent to which the change in practices accomplishes the activists' goals. External legitimacy improves the standing of the firm with the public, reduces social pressure, and makes the target less attractive to a confrontational activist because there is less that can be accomplished through a campaign.

Firms may have their own expertise but have difficulty establishing external legitimacy on their own because of an absence of trust by the public and a lack of transparency about their operations. A firm could recognize that a change in its practices would be rewarded by consumers, but it may lack a mechanism to assure skeptical consumers that it has actually changed its practices. The public cannot observe the change in practices nor know the costs and benefits associated with alternative changes that could have been made. A cooperative engagement can allow an activist to observe the firm's alternatives and certify for the public that the change has been made while not revealing specific information to the public and competitors. The cooperative activist thus certifies whether the firm changed its practices within the context of the engagement but does not reveal the actual costs or benefits associated with the change. This limited disclosure could be implemented through a non-disclosure agreement.

4.2 A Basic Model

Consider a potential change in practices that has uncertain benefits $\tilde{b}$ to a target firm that can only be discovered through an engagement with a cooperative activist, and where $\tilde{b}$ is uniformly distributed with support $[0, 2\bar{b}]$. Cooperation and the expertise of the NGO allow the target to discover the realization b of $\tilde{b}$ and make the change in its practices conditional on that realization. A cooperative engagement is voluntary, and the target can choose not to change its practices. In the cooperative project between McDonald's and EDF, McDonald's did not commit in advance to follow through on the recommendations of the joint task

force formed with EDF.

As in the model of confrontation, if the expected benefits $\bar{b}$ exceed the cost c, the target would change its practices absent any engagement with the activist.[15] Cooperative engagements thus take place where $\bar{b} < c$, and the target changes its practices if the realized b exceeds the cost c. Even if the firm has its own expertise and could discover b without an activist's assistance, the firm may prefer to engage a cooperative activist to provide external legitimacy, i.e., to assure other activists and the public that it changed its practices.

In conjunction with providing expertise and external legitimacy, the activist may be able to exert social pressure on the firm or take advantage of externally-generated social pressure. For example, TXU and the private equity firms KKR and Texas Pacific Group that were planning to acquire the company were under intense social pressure to cancel all 11 coal-fired plants planned by TXU, and that threat gave EDF and NRDC bargaining power.[16] The gain to the NGOs was the reduction in coal-fired power plants from 11 to 4 and a pledge to invest in alternative energy sources.[17]

The activist and the target can be thought of as bargaining over the terms of the cooperative agreement, where the activist offers its expertise to identify possible benefits for the target and its reputation to provide legitimacy or certification and the target offers the opportunity to change its practices. The outcome of that bargain will be represented by the portion $\delta \in [0, 1]$ of the social benefits z the target takes into account in deciding whether to change its practices. The portion δ reflects the bargaining power of the activist relative to the target and could be given by the Nash bargaining solution where the bargaining power of the activist could come from the threat of withholding its expertise and certification. Bargaining power could also have external sources as in the TXU case, so δ is treated as a parameter in this section. In Section 7 a theory is presented that explains bargaining power as resulting from the threat of a campaign by a confrontational activist, as in the TXU case.

The firm agrees to change it practices whenever the realization b satisfies $b \geq c - \delta z$, where δz is assumed to be no greater than c. If the firm agrees to an engagement with the activist, its expected profit $E\pi$ is

$$E\pi = \int_{c-\delta z}^{2\bar{b}} (b - c) \frac{db}{2\bar{b}} = \frac{1}{4\bar{b}} \left((2\bar{b} - c)^2 - \delta^2 z^2 \right). \tag{10}$$

If its reservation value is 0, the firm enters into the engagement with the cooperative activist if $2\bar{b} - c - \delta z \geq 0$. The ex ante and ex post effects of bargaining power work in opposite directions. After the firm has agreed to a cooperative engagement, an increase in bargaining power (higher δ) increases the likelihood that the firm will change its practices. Ex ante an increase in bargaining power reduces $E\pi$ and could result in the firm not participating in a cooperative engagement. The probability p that the engagement results in a change

[15] A cooperative engagement could also occur for $\bar{b} > c$ if the firm lacked external legitimacy and the activist could provide that legitimacy by certifying that the firm changed its practices.

[16] The engagement with EDF and NRDC was initiated by former EPA Administrator William K. Reilly, a senior advisor to the Texas Pacific Group. (*Business Week*, March 12, 2007)

[17] See Krill, (2010, p. 220).

in the practices by the firm is $p = 1 - \frac{c-\delta z}{2\bar{b}}$, which is increasing in bargaining power and in the expected benefit $\bar{b}$ and decreasing in the cost c of a change.

A cooperative activist provides expertise or external legitimacy to the firm without the activist being directly compensated. The term $\frac{1}{4\bar{b}}\delta^2 z^2$ in (10) is analogous to a payment by a profit-maximizing firm, and its value to the activist in (11) below is $\frac{\delta z^2}{2\bar{b}}$. Some activists accept donations from firms, whereas others such as EDF, Greenpeace, and RAN accept no corporate donations. The model assumes no corporate donations.

Developing the expertise to be able to identify the benefits in a cooperative relationship requires an investment, as does developing a reputation to be able to design or certify an externally legitimate policy for a target. The cost of the investment in expertise and reputation building is denoted by e, and donors that share the objectives of the NGO could provide the funding.[18] The return from the investment is the activist's expected utility EU_A, which equals the social benefits multiplied by the probability p of a change in practices less e or

$$EU_A = \int_{c-\delta z}^{2\bar{b}} z\frac{db}{2\bar{b}} - e = z\left(1 - \frac{c-\delta z}{2\bar{b}}\right) - e \equiv pz - e. \tag{11}$$

The expected utility of the activist is strictly increasing in $\bar{b}$, so firms with higher potential benefits are more attractive partners. In addition, activists with greater bargaining power are more willing to make the investment in expertise. The NGO will invest provided both that $EU_A \geq 0$ and that the target firm will cooperate.

A cooperative NGO is more effective in generating social benefits the higher are the expected benefits $\bar{b}$ to the target, which could be represented by a higher distribution of $\tilde{b}$ in the sense of first-degree stochastic dominance. The NGO is also more effective the greater is its bargaining power, which could depend on the extent to which it can work effectively with firms. For example, effectiveness could depend on the confidence the firm has that the NGO will not make demands beyond the bargain, and that confidence could depend on the reputation of the NGO for having successfully worked with firms in the past.

The results of this section are summarized in the following proposition.

Proposition 2 *A target firm accepts an engagement with a cooperative activist if* $2\bar{b} - c - \delta z \geq 0$ *and changes its practices if* $b - c + \delta z \geq 0$. *The probability* $p = 1 - \frac{c-\delta z}{2\bar{b}}$ *of a change in practices is increasing in* δz *and* $\bar{b}$ *and decreasing in* c. *The activist invests in expertise if* EU_A *in (11) is nonnegative. The utility of the activist is increasing in* δz *and in* $2\bar{b} - c$, *whereas the expected profit of the firm is increasing in* $2\bar{b} - c$ *and decreasing in* δz.

The weakness of the cooperative approach from the activist's perspective is that the social benefits z are not achieved when $b < c - \delta z$ even though $z > c - b$, since the target does not change its practices. A cooperative approach could be strengthened by greater bargaining power of the activist, but the target may

[18] The firm could also develop its own expertise, but if the cost of expertise is high, the firm may have little incentive to do so. In contrast, a cooperative activist could amortize a high cost over many targets.

then refuse to join in an engagement. A strength of cooperation relative to confrontation is that the cost of a campaign is avoided, but costs are incurred in developing expertise and external legitimacy.

4.3 Shielding

A successful engagement with a cooperative activist provides a shield against a confrontational activist, since the firm has changed its practices. An unsuccessful campaign also provides a partial shield. Suppose that in a cooperative engagement the firm and the cooperative activist learn that the benefits are less than $c-\delta z$, so the firm does not change its practices. With the confrontational activist able to observe only that practices were not changed, its posterior beliefs about the benefits are uniform on $[0, c-\delta z)$. If the firm were targeted by the confrontational activist, its net expected cost is

$$c - E(b|b < c - \delta z) = \frac{1}{2}(c + \delta z),$$

which is higher than in the absence of the engagement by the cooperative activist. The probability that the firm would change its practices when targeted by the confrontational activist is thus $q^o = 1 - \frac{\frac{1}{2}(c+\delta z)}{(1-\beta)\bar{h}}$, and the expected utility of the activist is

$$EU_A = zq^o - \alpha\bar{h},$$

which may be negative in which case the firm will not be targeted. Revelation that the benefits from the change in practices are low means that the net cost of a change in practices is high in which case the probability that the firm would concede to a campaign is low, providing a partial shield.

5 Moderates, Radicals, and the Selection of a Strategy

5.1 Moderates and Radicals

Not all NGOs invest in expertise. One explanation for not investing is the challenge of raising funds to cover the cost, but another rests on the social entrepreneurs that establish and lead the NGOs. Some NGOs are operated by self-proclaimed radicals and others by moderates, such as those at EDF. Kert Davies (2010, p. 196) of Greenpeace wrote,

> According to reports from Greenpeace staff of conversations with people at companies it has targeted, corporations may have a greater fear of its campaigns than those of other organizations because of the strong connotation of the Greenpeace brand. Thus some of the negative perceptions of the organization may actually serve to support its cause, upholding Machiavelli's proposition that it is better to be feared than loved, when campaigning against corporations. Indeed, the notion that NGOs often can be more effective by imposing harms rather than offering benefits is consistent with the economics literature, ...

Jennifer Krill (p. 209) of RAN stated, "RAN's view is that in order for our civilization to flourish through the twenty-first century and beyond, we need to achieve equity and justice for people around the world. The carrying capacity of the biosphere will not support expanding American levels of consumption; ..."

Suppose that social entrepreneurs differ in their ideologies, where moderates have a social efficiency objective and radicals have preferences for more extreme changes by their targets. This distinction will be represented as moderates (m) having $z_m = s$, where s represents the social benefits from the change in practices, and radicals (r) having $z_r = s + d$, where d represents the more extreme preferences corresponding to a greater change in practices. The additional perceived benefits d can be thought of as resulting from going beyond socially efficient regulation. For example, radicals could perceive distributive benefits from forcing firms to commit to renewable energy sources that are socially inefficient or to reduce toxic emissions beyond the levels allowed by regulations so as to benefit local residents at the expense of firms and consumers. As examples of direct redistribution, NGOs and activists in Chicago sought higher wages for employees of a new Wal-Mart store they had opposed and justice-oriented NGOs urged above market wages for workers in overseas plants supplying the apparel and footwear industries. The precautionary principle as implemented in the European Union also represents redistribution in favor of the very risk averse.

5.2 Campaign Intensity

Radicals thus seek a greater change in the practices of their targets, and they may be more aggressive in pursuing their objectives. If the activists choose the intensities of their campaigns in a confrontational strategy, radicals have stronger threats than do moderates. For example, the NGOs participating in the SFI are more moderate than the NGOs supporting the FSC; e.g., Conservation International supports the SFI whereas Greenpeace supports the FSC. In addition, radicals may demand a larger change in the practices of their targets than do moderates, in which case the cost c_r to the target of changing practices in a radical's campaign would be greater than the cost c_m with a moderate's campaign.

The optimal campaign intensity $\bar{h}_r^*$ for a radical is

$$\bar{h}_r^* = \left(\frac{\left(c_r - \bar{b}\right)(s+d)}{\alpha(1-\beta)} \right)^{\frac{1}{2}},$$

whereas the optimal campaign intensity $\bar{h}_m^*$ for a moderate is

$$\bar{h}_m^* = \left(\frac{\left(c_m - \bar{b}\right)s}{\alpha(1-\beta)} \right)^{\frac{1}{2}}.$$

Radical activists conduct more intense or aggressive campaigns than do moderate activists for two reasons. First, their motivation is stronger by d. Second, the cost to the target is higher making concession less likely, which induces the activist to increase its campaign intensity. Campaign success may not be more likely, however. The probability q_i that a confrontational strategy by activist i results in a change in practices by

a target is

$$\begin{aligned} q_i &= 1 - \frac{c_i - \bar{b}}{(1-\beta)\bar{h}_i^*} \\ &= 1 - \left(\frac{\alpha(c_i - \bar{b})}{(1-\beta)z_i} \right)^{\frac{1}{2}}, i = m, r. \end{aligned}$$

If the campaign intensity was the same for moderates and radicals ($\bar{h}_r^* = \bar{h}_m^* = \bar{h}$), i.e., the campaign is dictated by the characteristics of the target and not of the activist, then

$$q_m - q_r = \frac{c_r - c_m}{(1-\beta)\bar{h}} > 0.$$

With endogenous campaign intensities q_r is at least as great as q_m as

$$q_r \geq q_m \iff \frac{c_r - \bar{b}}{c_m - \bar{b}} < \frac{s+d}{s}.$$

If the difference in the net costs $(c_i - \bar{b}), i = m, r$, is small relative to the ratio of the intensities of the activist's preferences $\frac{s+d}{s}$, the radical has a greater probability of success with a confrontational strategy than does a moderate.

With a cooperative strategy the bargaining power of the radical should be less than that of a moderate, since the radical has less to withhold from the firm. Consequently, the threshold $c_r - \delta_r(s+d)$, where δ_r is the bargaining power parameter for a radical, for the firm to change its practices in a cooperative engagement is assumed to be increasing in d with $(c_r - \delta_r(s+d))|_{d=0} = c_m - \delta_m s$ for a moderate activist, where δ_m represents its bargaining power.

The probability p_i that a cooperative strategy of activist i results in a change in practices by a target is

$$p_i = 1 - \frac{c_i - \delta_i z_i}{2\bar{b}}, i = m, r.$$

Since $c_r - \delta_r(s+d)$ is greater than $c_m - \delta_m s$, $p_m > p_r$.

Moderate activists can have a higher probability of success in a cooperative engagement than do radicals, whereas radicals can have a higher probability of campaign success than do moderates in a confrontational encounter. Whether moderates and radicals activists pursue different strategies is considered next.

5.3 Separation of Moderates and Radicals

This section presents conditions identifying which strategies moderates and radicals choose. Developing the capability of carrying out a cooperative engagement involves a cost e, and analogously designing a campaign that constitutes a credible threat in a confrontational strategy may involve a fixed cost $k \geq 0$ in addition to the cost of conducting the campaign. The fixed cost k is likely considerably less than the fixed cost e, since campaigns are relatively straightforward to design, whereas the development of expertise or the capability to provide external legitimacy requires both expenditures as well as time to develop a reputation.

The choice of a strategy by moderates and radicals depends on whether the target would accept or reject the demand in a confrontational encounter. For the case in which the targets would reject its demand, a radical activist chooses confrontation over cooperation if and only if

$$(s+d)\left(1-\frac{c_r-\bar{b}}{(1-\beta)\bar{h}_r^*}\right)-\alpha\bar{h}_r^*-k\geq(s+d)\left(1-\frac{c_r-\delta_r(s+d)}{2\bar{b}}\right)-e, \tag{12}$$

and the radical activist will participate with a confrontational strategy if the left side of (12) is nonnegative. The condition in (12) for separation can be rewritten as

$$(s+d)\left(2q_r-1-p_r\right)\geq k-e,$$

so when $e\geq k$ a sufficient condition for a radical to choose confrontation is that $q_r\geq\frac{1}{2}(1+p_r)$, where q_r must be at least $\frac{1}{2}$ for the radical to participate. Consequently, a radical activist chooses a confrontational strategy if the probability of success is greater than one-half plus the probability of success with a cooperative strategy.

A moderate with $z_m=s$ will choose cooperation if and only if

$$s\left(1-\frac{c_m-\delta_m s}{2\bar{b}}\right)-e\geq s\left(1-\frac{c_m-\bar{b}}{(1-\beta)\bar{h}_m^*}\right)-\alpha\bar{h}_m^*-k, \tag{13}$$

and the moderate will participate with a cooperative strategy if $p_m\geq\frac{e}{s}$. The condition in (13) can be rewritten as

$$k-e\geq s\left(2q_m-1-p_m\right),$$

where q_m is the probability of success with a confrontational strategy. If $e\geq k$, the probability that a cooperative strategy succeeds must satisfy $p_m\geq 2q_m-1$ for the moderate to choose cooperation.

The following proposition characterizes the choice of strategies when the targets would reject the demands of the activists in a confrontational strategy.

Proposition 3 *(i) If the targets would reject the demands of both activists using confrontational strategies, necessary and sufficient conditions for separation are that*

$$(s+d)\left(2q_r-1-p_r\right)\geq k-e\geq s\left(2q_m-1-p_m\right). \tag{14}$$

(ii) If (12) is not satisfied and (13) is satisfied, both activists choose cooperation, and (iii) if (13) is not satisfied and (12) is satisfied, both activists choose confrontation.

Numerical evaluation indicates that (14) is satisfied for a large set of parameter values.

If the targets would accept the demands, the activists do not bear the cost of conducting a campaign, so confrontation is relatively more attractive than when campaign costs must be incurred. Radicals choose confrontation and moderates choose cooperation only if the cost k of designing and executing a campaign exceeds the cost e of expertise and legitimacy. The conditions corresponding to (12) and (13) are, respectively,

$$s+d-k\geq(s+d)\left(1-\frac{c_r-\delta_r(s+d)}{2\bar{b}}\right)-e \tag{15}$$

and

$$s\left(1-\frac{c_m-\delta_m s}{2\bar{b}}\right)-e\geq s-k. \tag{16}$$

The following proposition identifies the selection equilibria.

Proposition 4 *If the targets would accept the demands of both activists, (i) if $e \geq k$, both activists choose confrontation. For $k > e$, (ii) a necessary and sufficient condition for separation is*

$$(s+d)(1-p_r)\geq k-e\geq s(1-p_m). \tag{17}$$

(iii) If (16) is not satisfied and (15) is satisfied, both activists choose confrontation. If (15) is not satisfied and (16) is satisfied, both activists choose cooperation.

Proof: (i) Suppose that $k \leq e$. The condition in (15) is $e - k \geq -(s + d)(1 - p_r)$, which is satisfied. The condition (16) for cooperation implies

$$k-e\geq s\left(\frac{c_m-\delta_m s}{2\bar{b}}\right),$$

which is a contradiction since $s > 0$ and $c_m - \delta_m s > 0$. (ii) Simplifying (15) and (16) and linking yields (17). (iii) and (iv) follow immediately from (15) and (16). ■

Because the cost of a campaign is avoided when targets accept the demands, the moderate activist has a stronger incentive to choose confrontation than when the targets would reject the demand. When the cost e of expertise is at least as great as the cost k of developing the capability to mount a confrontational campaign, both activists choose confrontation. Even if $k > e$, a change in practices by a target that yields sufficiently high social benefits can cause the moderate to choose confrontation. As discussed above, the cost of developing expertise and a reputation sufficient to provide external legitimacy is likely to be considerably greater than the cost of being able to make credible threats in a confrontational strategy, in which case cooperation would be observed only in situations where the target would reject the demand in a confrontational strategy.

Radicals choosing cooperation and moderates choosing confrontation is not possible if targets would accept the activists' demands, but if the targets would reject the demands, those selections can occur. For each firm this requires satisfaction of two types of conditions, one absolute and one relative. First, for the radical to choose cooperation the probability p_r of success must be sufficiently high and cannot be much smaller than p_m or the moderate would also choose cooperation. Second, for the moderate to choose confrontation the probability q_m of success must be sufficiently high but cannot be too close to q_r or else the radical will choose confrontation.[19]

[19]More specifically, the conditions are:

$$p_r\geq\max\left\{\frac{e}{s+d}\ ,\ \frac{e-k}{s+d}-1+2q_r\right\}$$

The selection of strategies by activists thus depends on whether the demands of the activists would be accepted. When the cost of developing the capability to conduct a campaign is less than the cost of developing expertise and legitimacy and the demands would be accepted, both moderates and radicals choose confrontation. Separation with radicals choosing confrontation and moderates choosing cooperation can result when targets would reject the demands (when $e \geq k$), but the opposite separation is also possible.

5.4 Activists with Both Capabilities

Some activists have developed both cooperative and confrontational capabilities. For example, in Europe Greenpeace uses its confrontational strategy and also cooperates with firms as in the case of the deployment of the refrigeration technology it developed to replace CFCs and HFCs.[20] In the model presented here, an activist with both capabilities can accomplish no more than can be accomplished by two separate activists, one with each strategy, so there is no gain to having both capabilities. In addition, an activist that enters into a cooperative engagement with a firm learns private information in the form of the realization b, and the firm could be concerned that the cooperative wing of the activist could reveal it to the confrontational wing. With that information the confrontational wing could find it attractive to target the firm even though the realization was too low to result in a voluntary change in practices in the cooperative engagement. That is, the shield provided by the cooperative engagement is weakened. The firm then could be unwilling to enter into a cooperative engagement with an activist with both capabilities. An activist with both capabilities then would have to construct a firewall between its two sides.

5.5 The Choice of Social Issues

The conditions for separation are less likely to be satisfied when the activists have greater bargaining power. Bargaining power is only relevant with cooperation, and both p_m and p_r are increasing in bargaining power. The limit of the probability of success as bargaining power increases is 1, and a radical can choose cooperation for sufficiently high bargaining power.

If inexperienced (and smaller) activists have little bargaining power and experienced (and larger) activists have more bargaining power, inexperienced activists may use a confrontational strategy whereas experienced activists cooperate. To the extent that successful activist organizations grow over time, they may employ a confrontational strategy early in their lives and a cooperative strategy later in their lives. They may also

$$p_r \geq p_m - \frac{e-k}{s}$$
$$q_m \geq \max\left\{\frac{1}{2} + \frac{k}{s}\ ,\ \frac{1}{2} + \frac{p_m}{2} - \frac{e-k}{2s}\right\}$$
$$q_m \geq q_r - \frac{(e-k)d}{2s(s+d)}.$$

[20] Greenpeace participates in the Refrigerants Naturally initiative with Coca-Cola, PepsiCo, Unilever, and McDonald's.

gain expertise and the capability to provide external legitimacy over time that can speed the transition. If activist organizations that survive also grow over time, larger activist organizations may be more likely to adopt a cooperative than a confrontational strategy, whereas smaller organizations may be more likely to adopt a confrontational strategy.

5.6 Activism and Optimal Social Regulation

If optimal social regulation is in place for a social issue, then $s = 0$. With a cooperative strategy the expected utility of a moderate activist is 0, so the moderate will not invest in expertise. In contrast a radical activist has $z_r = d$, and its expected utility EU_A with a cooperation strategy is

$$EU_A = d\left(1 - \frac{c_r - \delta_r d}{2\bar{b}}\right) - e.$$

A radical activist with a cooperation strategy thus may be active in the presence of optimal social regulation, whereas a moderate is not active. Similarly, with a confrontational strategy the expected utility of a moderate activist is $-\alpha h$ if it launches a campaign, so it does not participate. In contrast if d is sufficiently great, a radical activist with a confrontational strategy is active.

The two types of activist thus could choose different social issues on which to focus. A moderate could focus only on issues for which $s > 0$; i.e., where regulation is not optimal, whereas a radical could also focus on issues that are optimally regulated but where there are opportunities for further change. For example, moderates might not demand reductions in toxic emissions beyond those allowed by (efficient) regulation, whereas radicals could make demands and conduct campaigns against firms that satisfy the regulatory standard but could make further reductions in emissions.

6 The Demand Side: Targets

6.1 Social Value

A higher social value z makes a firm more attractive to both moderate and radical confrontational and cooperative activists. Moreover, when the campaign intensity is endogenous, the probability that the campaign succeeds is greater the greater is z, since the activist conducts a more intense campaign. The expected utility of the confrontational activist is thus greater the more valuable is its target. Similarly, in a cooperative engagement the utility of the activist is higher for more valuable targets if a change in the practices of the target results, and the probability that the target changes its practices is greater for higher value targets when the activist has bargaining power. The demand for social pressure directed at firms thus is higher the greater the social value of the target.

6.2 Toughness

The higher the cost c to the firm of changing in its practices the tougher it is in the sense that its incentive to resist a confrontational campaign is stronger and its willingness to change its practices in a cooperative engagement is lower. With a confrontational campaign a higher cost also means that the firm is less likely to accept the demand, since the net cost $c - \bar{b}$ incurred by accepting the demand increases more than does the expected harm EH incurred by rejecting the demand. The campaign intensity is increasing in c, so the activist conducts a more intense campaign when it faces a tougher target and the probability of success is lower as is the expected utility of the activist. Confrontational activists thus prefer weaker targets.

In a cooperative engagement the probability that the target changes its practices is lower the greater is c, and hence the expected utility of the activist is lower. Cooperative activists thus also prefer weaker targets. The demand for social pressure is thus higher the weaker the target.

6.3 Vulnerability

Potential targets could differ in their vulnerability to a campaign. For example, a campaign with cost $\alpha\bar{h}$ could impose more harm on a firm that sells branded consumer goods than on a firm that sells industrial products to other firms. Similarly, a campaign against a firm with a fragile reputation may cause more harm than a campaign against a firm with a strong reputation. To represent this in a simple manner, let $\gamma \in [0, \infty)$ represent the vulnerability of a target in the sense that a firm of type γ incurs harm γh from a campaign with realization h. A firm with $\gamma(>)(<) = 1$ may be thought of as one with (above) (below) "average" vulnerability. In Friedman's study of animal rights campaigns, cosmetics companies had greater vulnerability than pharmaceutical companies.

The expected harm EH in (2) then has $\gamma\bar{h}$ replacing $\bar{h}$, and

$$\frac{dEH}{d\gamma} = \frac{c - \bar{b}}{2(1-\beta)\gamma^2\bar{h}} + \frac{\beta\bar{h}}{2} = \frac{\gamma}{\bar{h}}\frac{dEH}{d\bar{h}} > 0.$$

With an endogenous campaign the optimal campaign intensity is

$$\bar{h}^* = \left(\frac{(c-\bar{b})z}{\alpha\gamma(1-\beta)}\right)^{\frac{1}{2}},$$

which is decreasing in γ. The activist conducts a less intense campaign the greater is the vulnerability of the firm so as to reduce its campaign costs. The campaign impact $\gamma\bar{h}^*$ on the firm, however, is increasing in γ as is the expected harm EH, so more vulnerable firms face more threatening campaigns. The probability q^* that the firm changes its practices as a result of a campaign is increasing in the vulnerability γ.

The expected utility of the activist in (7) is increasing in γ, so confrontational activists prefer more vulnerable targets. Vulnerable firms thus attract private politics because they are more responsive to social pressure. This is the principle underlying market campaigns.

6.4 Corporate Social Responsibility

Some firms accept social responsibilities, and those responsibilities can affect their willingness to cooperate with a social activist and the point at which they concede to a confrontational campaign. Corporate social responsibility (CSR) thus affects the attractiveness of a firm to activists. CSR is assumed to mean that the firm takes into account a portion of the social benefits from the change in its practices. In the context of the cooperation model this is represented by the firm changing its practices for $b + \theta s \geq c - \delta z$, where the parameter $\theta \in [0, 1]$ is the proportion of the (external) social benefits the firm takes into account. Similarly, in a confrontational campaign the firm concedes and changes its practices if the harm is at least as great as $\frac{c-(\bar{b}+\theta s)}{1-\beta}$, and the firm accepts the demand if

$$\bar{h} \geq \frac{c - (\bar{b} + \theta s) - \delta z}{(\beta(1-\beta))^{\frac{1}{2}}}.$$

CSR thus provides an explanation for self-regulation.[21]

6.4.1 Corporate Social Responsibility and Cooperation

The firm with CSR has expected "CSR profits" $E\pi_F$ from a cooperative engagement given by

$$\begin{aligned} E\pi_F &= \int_{c-\theta s-\delta z}^{2\bar{b}} (b - c + \theta s) \frac{db}{2\bar{b}} \\ &= \frac{1}{4\bar{b}}((2\bar{b} - c + \theta s))^2 - \delta^2 z^2), \end{aligned} \tag{18}$$

where the social responsibility and the bargaining power of the activist are assumed to satisfy $c - \theta s - \delta z \geq 0$.[22] The expected CSR profits $E\pi_F$ is strictly increasing and strictly convex in θ, and the firm accepts a cooperative engagement if $2\bar{b} - (c - \theta s) \geq \delta z$.

The expected utility EU_A of the activist is

$$EU_A = zp_\theta - e,$$

where $p_\theta = 1 - \left(\frac{c-\theta s-\delta z}{2\bar{b}}\right)$. The expected utility of the activist is strictly increasing in θ, since CSR helps the activist obtain a change in practices. Firms with greater CSR thus are more attractive as targets than are firms with less CSR, so CSR increases the demand among cooperative activists for private politics social pressure.

[21] In the interest of comparability, the practice the activist wants changed is assumed to be independent of the CSR of the firm, so a change in practices by a CSR firm has the same social value to the activist as a change in practices by a profit-maximizing firm.

[22] If $c < \theta s + \delta z$, the firm changes its practices for all b, in which case $E\pi_F = \bar{b} + \theta s - c$.

6.5 Corporate Social Responsibility and Confrontation

When it encounters a campaign by a confrontational activist, the CSR firm concedes and changes its practices if

$$h \geq \frac{c - \bar{b} - \theta s}{1 - \beta},$$

so less harm is required to obtain a change in practices the greater is θ. The activist's campaign intensity $\bar{h}_\theta^*$ is

$$\bar{h}_\theta^* = \left(\frac{\left(c - \bar{b} - \theta s\right) z}{\alpha(1-\beta)} \right)^{\frac{1}{2}}, \tag{19}$$

which is decreasing in θ, so the confrontational activist conducts a less intense campaign the greater is the social responsibility accepted by the target firm. The expected harm in (2) from a campaign is strictly increasing in $\bar{h}$, so the expected harm to the CSR firm is decreasing in θ when the campaign intensity is endogenous.

The probability q_θ of campaign success is

$$q_\theta = 1 - \frac{\alpha}{z} \bar{h}_\theta^*,$$

and the activist's expected utility is

$$EU_A = z - 2\alpha \bar{h}_\theta^* = z(2q_\theta - 1),$$

both of which are increasing in θ. Firms that practice CSR are softer targets than profit-maximizers, since they have a higher probability of conceding to a campaign and are more likely to accept the activist's demand. Greater social responsibilities thus increase the attractiveness of firms as targets. Confrontational activists prefer softer target to harder targets for two reasons. First, the campaign is less costly. Second, the firm is more likely to concede.

6.6 Rewards and Strategic CSR

A profit-maximizing firm could adopt social responsibilities because doing so increases its profit, and this strategic CSR as considered in Baron (2001)(2007) has found empirical support. Siegel and Vitaliano (2007) found that CSR is used more with experience and credence goods, which they view as supporting the concept of strategic CSR. Fernández-Kranz and Santaló (2010) found that CSR is greater in more competitive industries, which they interpret as support for strategic CSR. A target firm could be rewarded for its CSR by consumers, suppliers, the public, or government. For example, consumers could be willing to pay more for a green product. A profit-maximizing firm then can choose CSR strategically to increase its profits, which then affects its attractiveness as a target for an activist.

Suppose that the reward for CSR results only from the change in the practices of the firm and is proportional to θs. Let $\eta\theta s$ denote the reward, where $\eta \in [0, 1]$, so in a cooperative engagement the profit

-maximizing firm changes its practices if $b + (1+\eta)\theta s \geq c - \delta z$. The expected profit of the firm when cooperating with an activist with expertise but no bargaining power is

$$\begin{aligned} E\pi_F &= \int_{c-\theta s(1+\eta)}^{2\bar{b}} (\eta\theta s + b - c)\frac{db}{2\bar{b}} \\ &= \frac{1}{4\bar{b}}((2\bar{b} - (c - \theta s\eta))^2 - \theta^2 s^2). \end{aligned} \tag{20}$$

When CSR is strategic, the profit-maximizing firm chooses θ, and the following proposition characterizes the optimal θ^*.

Proposition 5 *For a cooperative engagement and* $\eta < 1$

$$\theta^* = \frac{\eta(2\bar{b} - c)}{s(1-\eta^2)}, \tag{21}$$

which is strictly increasing and strictly convex in η *with* $\theta^* = 0$ *for* $\eta = 0$. *For* $\eta > 1$, $E\pi_F$ *is unbounded.*

Proof: Differentiating $E\pi_F$ in (20) with respect to θ yields

$$\frac{dE\pi_F}{d\theta}|_{\theta=\theta^*} = \frac{s}{2\bar{b}}\left(\eta(2\bar{b} - c + \theta^* s\eta) - \theta^* s\right) = 0,$$

and

$$\frac{d^2E\pi_F}{d\theta^2} = -\frac{s^2}{2\bar{b}}(1-\eta^2) < 0.$$

The first-order condition yields (21), and the properties of θ^* are straightforward to establish. ■

From the firm's perspective the greater the reward η the greater its strategic CSR, and the reward has a second benefit. The greater is η the greater is the expected utility of the cooperative activist, so the more the firm is rewarded for its CSR the more attractive it is as a partner for a cooperative activist. The expected utility EU_A of the activist evaluated at $\theta = \theta^*$ in is $EU_A = \frac{z}{1-\eta}\left(1 - \frac{c}{2\bar{b}}\right) - e$, so a target is more attractive in a cooperative engagement the greater is the reward η for its CSR.

If the firm encounters a confrontational activist, it changes its practices if $h \geq \frac{c-\bar{b}-(1+\eta)\theta s}{1-\beta}$ when a campaign is conducted, so the firm is a more attractive target for the activist. The expected harm from a campaign is

$$EH_\eta = c - \bar{b} - \eta\theta s - \frac{(c - \bar{b} - (1+\eta)\theta s)^2}{2(1-\beta)\bar{h}} - \frac{\theta s(c - \bar{b} - (1+\eta)\theta s)}{(1-\beta)\bar{h}} + \frac{\beta\bar{h}}{2},$$

which is decreasing in η. The expected profit of the firm is $-(c-\bar{b})+\eta\theta s$ if it accepts the demand, so strategic CSR makes it more likely that the firm will accept the demand; i.e., $-(c - \bar{b}) + \eta\theta s - EH_\eta$ is increasing in η. Strategic CSR makes firms more attractive targets for a confrontational activist for two reasons. First, if a firm would reject the demand, the probability it changes its practices is increasing in η. Second, the firm accepts the demand for a larger set of parameter values, allowing the activist to avoid the cost of a campaign.

The demand for private politics social pressure thus is greater the greater the reward for CSR.

7 Matching

7.1 Introduction

A firm that could be a target of a confrontational activist has an incentive to seek an engagement with a cooperative activist. If there are several potential targets of confrontational activists, they may compete for an engagement with a cooperative activist. Consider two otherwise identical firms, one of which (P) is a profit maximizer and the other (R) practices CSR with parameter θ. As above CSR is a commitment to count as a benefit a portion θs of the social benefits in deciding whether to change its practices. Assume that the cooperative activist has the capacity to engage only one of the two potential targets; i.e., cooperative activists that can conduct externally legitimate engagements and provide expertise are scarce relative to confrontational activists.[23] The firm that does not enter into the cooperative engagement will be targeted by the confrontational activist. The confrontational activist thus creates a demand for an engagement with the cooperative activist, and that demand is greater the greater is the campaign intensity, so radicals create a greater demand than do moderates. Davies (p. 200) of Greenpeace stated, "[Greenpeace's] reputation for radical actions positions it particularly well to play the bad cop that can drive a target organization to partner with groups that seem more middle-of-the-road in orientation, ..." In the TXU example, the social pressure from confrontational activists opposed to the construction of the coal-fired power plants drove TXU and the private equity firms into the cooperative engagement with EDF and NRDC.

To represent the competition for the engagement with the cooperative activist, the firms are assumed to make offers to the cooperative activist, which conducts an ascending auction. The timing of the matching game is that firms P and R simultaneously make offers to the cooperative activist, which then chooses one of the firm to engage, as in Section 4. The confrontational activist then targets the other firm, as in Section 3.

The currency of a bid $x_j, j = P, R$, is a pledge to change practices if the benefits are at least the cost less the bid; i.e., for $b \geq c - x_P$ and $b \geq c - x_R - \theta s$ for P and R, respectively. The maximum feasible bids are assumed to be no greater then c and $c - \theta s$ for P and R, respectively, and these conditions are satisfied in equilibrium. The cooperative activist will engage the firm with the greater probability of making a change in its practices, since the social benefits are the same for each firm. The cooperative activist thus engages P if and only if $Pr(b \geq c - x_P) \geq Pr(b \geq c - \theta s - x_R)$ or $x_P \geq x_R + \theta s$.

The expected profit $E\pi_P$ of P if it wins the engagement with the cooperative activist is

$$\begin{aligned} E\pi_P &= \int_{c-x_P}^{2\bar{b}} (b-c)\frac{db}{2\bar{b}} \\ &= \frac{1}{4\bar{b}}\left((2\bar{b}-c)^2 - x_P^2\right), \end{aligned} \tag{22}$$

[23] That is, forming an NGO with a confrontational strategy only requires developing a credible threat, whereas forming an NGO with a cooperative strategy requires the development of expertise and external legitimacy.

and the expected CSR "profit" $E\pi_R$ of R is

$$\begin{aligned} E\pi_R &= \int_{c-\theta s-x_R}^{2\bar{b}} (b-c+\theta s)\frac{db}{2\bar{b}} \\ &= \frac{1}{4\bar{b}}\left((2\bar{b}-c+\theta s)^2 - x_R^2\right). \end{aligned} \tag{23}$$

Note that the expected profit can be negative for sufficiently high bids. Comparing (23) and (24) with (10) and (18), respectively, indicates that the threat from the confrontational activist in the context of the auction provides one explanation for the bargaining power of the cooperative activist, as introduced in Section 4.

The reservation value of a firm in the auction is the expected harm it would incur if it lost the auction and was targeted by the confrontational activist. There is thus a complementarity between the strategy of the confrontational activist and the strategy of the cooperative activist, as noted by Davies. The expected harm EH^R for firm R is given in (2) with $\bar{h}$ replaced by $\bar{h}^{R*} = \bar{h}^*_\theta$ in (19), and the expected harm EH^P for P is given in (2) with $\bar{h}^{P*}$ replacing $\bar{h}$ in (6). Since EH^R is decreasing in θ, $EH^R < EH^P$ for $\theta > 0$. The reservation value $(-EH^P)$ of P is lower than that of R, but its expected profit is less than the expected CSR profit of R.

The confrontational activist launches a campaign targeting firm j if its expected gain exceeds the cost $\alpha\bar{h}^{j*}$ of the campaign. If its target is R, the condition is $z \geq 2\alpha\bar{h}^{R*}$, and the condition for P is analogous using $\bar{h}^{P*}$. Note that a radical confrontational activist could launch a campaign where a moderate would not.

7.2 The Auction

The equilibrium outcome of the auction is that the firm with the higher willingness to pay for the engagement with the cooperative activist wins with a bid equal to the maximal willingness to pay of the other firm. The bids and the auction outcome depend on whether the target of the confrontational activist would accept or reject the demand to change its practices. Consider first the case in which both firms would reject the demand, in which case the confrontational activist would launch a campaign. The bid of P satisfies the individual rationality condition $E\pi_P \geq -EH^P$, and similarly the bid of R satisfies $E\pi_R \geq -EH^R$. The auction is a race to the top or a race away from the threat posed posed by the confrontational activist.

The maximum bids $\bar{x}_P$ and $\bar{x}_R$ of the firms are defined by

$$\frac{1}{4\bar{b}}\left((2\bar{b}-c)^2 - \bar{x}_P^2\right) \equiv -EH^P \tag{24}$$

and

$$\frac{1}{4\bar{b}}\left((2\bar{b}-c+\theta s)^2 - \bar{x}_R^2\right) \equiv -EH^R \tag{25}$$

and are given by

$$\bar{x}_P = \left(c^2 - \frac{2\bar{b}\left(c-\bar{b}\right)^2}{(1-\beta)\bar{h}^{P*}} + 2\beta\bar{h}^{P*}\bar{b}\right)^{\frac{1}{2}}.$$

$$\bar{x}_R = \left((c-\theta s)^2 - \frac{2\bar{b}\left(c-\bar{b}-\theta s\right)^2}{(1-\beta)\bar{h}^{R*}} + 2\beta\bar{h}^{R*}\bar{b} \right)^{\frac{1}{2}}.$$

Since the firms reject the demands, $c - \bar{b} > EH^P$, so $\bar{x}_P < c$, and similarly $\bar{x}_R < c - \theta s$. The maximum bids are independent of the value of the target and are strictly increasing in the campaign intensity, so the greater the threat from the confrontational activist the more the firms are willing to bid. The maximum bids are strictly increasing in γ, so more vulnerable targets bid more for the cooperative engagement. Tougher (higher c) targets have higher expected harm in a confrontational encounter and lower expected gain in a cooperative engagement, so tougher targets may have higher or lower bids.

When the threat of a campaign is credible, the target of the confrontational activist has the alternative of accepting the demand in which case the cost to P is $c - \bar{b}$ and the cost to R is $c - \bar{b} - \theta s$. Firm R accepts the demand if $EH^R \geq c - \bar{b} - \theta s$ or

$$\frac{z}{\alpha} \geq (c - \bar{b} - \theta s)\frac{(1-\beta)}{\beta}, \tag{26}$$

so if P would accept the demand, R would as well.

The characterization of the auction outcome proceeds in three steps. First is the case in which both firms would accept the demand of the confrontational activist. Second is the case in which R would accept and P reject the demand. Third is the case in which neither would accept the demand. To simplify the notation, let $z = s$ and $\gamma = 1$.

If both firms would accept the demand, the maximum bids are $\bar{x}_P = c$ and $\bar{x}_R = c - \theta s$. From (24) and (25) the firms bid $x_P^* = c$ and $x_R^* = c - \theta s$, so the auction is a tie. The tie is then broken randomly. The socially-responsible firm is advantaged by θs in the auction, but it reduces its bid by that amount resulting in a tie. The socially responsible firm has no strict incentive to win the auction in equilibrium because its expected utility is $EU_R = -c + \bar{b} + \theta s$ if it wins or loses the auction. The loser accepts the demand of the confrontational activist and hence changes its practices with probability 1, and the winner also changes its practices with probability 1, since, for example, if P wins the auction, it changes its practices if the realization b satisfies $b \geq c - x_P^* = 0$. The expected profit of the profit-maximizer is $E\pi_P = -c + \bar{b}$, regardless of whether it is in the cooperative engagement or it is targeted by the confrontational activist. In the equilibrium the firms are thus indifferent to whether they engage the cooperative activist or they encounter the confrontational activist.

The expected utility of the cooperative activist is then z less its fixed costs, and the expected utility of the confrontational activist is also z less its fixed cost. The activists are thus equally effecting in obtaining a change in practices for a firm, and they extract all the available surplus. The activists are then indifferent to with which firm they are matched, since each extracts a change in the practices of a firm.

If R would accept the demand of the confrontational activist and P would reject it, $\bar{x}_R = c - \theta s$ and $\bar{x}_P < c$, so $\bar{x}_R + \theta s > \bar{x}_P$ and R wins the auction with a bid $x_R^* = \bar{x}_P - \theta s$. The socially responsible firm thus wins the engagement with the cooperative activist, and the profit maximizer is targeted by the

confrontational activist. Firm R then changes its practices with probability $1-\frac{c-\bar{x}_P}{b}$, and P changes its practices with probability $1-\frac{c-\bar{b}}{(1-\beta)\bar{h}}$. The expected profit of P is then $E\pi_P=-EH^P$, and the expected CSR profit of R is $E\pi_R=\frac{1}{4b}((2\bar{b}-c+\theta s)^2-(\bar{x}_P-\theta s)^2)$.

The following proposition characterizes the auction outcomes.

Proposition 6 *(i) If both firms would accept the demand of the confrontational activist, the auction is a tie. (ii) If R would accept the demand but P would not, i.e., (26) is satisfied for $\theta>0$ and not satisfied for $\theta=0$, R wins the auction. (iii) If both firms would reject the demand and the campaign intensity is the same for both firms, i.e., $\bar{h}^{P*}=\bar{h}^{R*}$, R wins the auction if*

$$\theta s\leq(\theta s)^o\equiv\frac{2(c-\bar{b})\left(\frac{c+\beta\bar{b}}{b}\right)^{\frac{1}{2}}}{1+2\left(\frac{c+\beta\bar{h}}{\bar{h}}\right)^{\frac{1}{2}}}. \tag{27}$$

Proof: (i) and (ii) have been shown above. (iii) The proof is by contradiction. Let $\bar{h}^{P*}=\bar{h}^{R*}=\bar{h}$. Assume that firm P wins the auction, which requires that there exists an x_P satisfying $\bar{x}_P\geq x_P\geq\bar{x}_R+\theta s$ which requires

$$\left(c^2-\frac{2\bar{b}(c-\bar{b})^2}{(1-\beta)\bar{h}}+2\beta\bar{h}\bar{b}\right)^{\frac{1}{2}}\geq\left((c-\theta s)^2-\frac{2\bar{b}\left(c-\bar{b}-\theta s\right)^2}{(1-\beta)\bar{h}}+2\beta\bar{h}\bar{b}\right)^{\frac{1}{2}}+\theta s. \tag{28}$$

Squaring both sides of (28), simplifying, and rearranging yields

$$c-\theta s-\frac{\bar{b}(2(c-\bar{b})-\theta s)}{(1-\beta)\bar{h}}\geq\left((c-\theta s)^2-\frac{2\bar{b}\left(c-\bar{b}-\theta s\right)^2}{(1-\beta)\bar{h}}+2\beta\bar{h}\bar{b}\right)^{\frac{1}{2}}. \tag{29}$$

Squaring both sides of (29) and simplifying yields

$$\frac{\bar{b}(2(c-\bar{b})-\theta s)^2}{2(1-\beta)\bar{h}}\geq c^2-c\theta s-\bar{b}^2+\beta(1-\beta)\bar{h}^2. \tag{30}$$

Since $\bar{h}>\frac{c-\bar{b}-\theta s}{1-\beta}$ (so that confrontation can result in a change in the practices of R), $\frac{1}{c-\bar{b}-\theta s}>\frac{1}{(1-\beta)\bar{h}}$ and

$$\frac{\bar{b}((c-\bar{b})-\frac{\theta s}{2})^2}{c-\bar{b}-\theta s}>\frac{\bar{b}(2(c-\bar{b})-\theta s)^2}{2(1-\beta)\bar{h}}>c^2-c\theta s-\bar{b}^2+\beta(1-\beta)\bar{h}^2,$$

which after simplification yields

$$0>c(c-\theta s-\bar{b})^2-\frac{\bar{b}\theta^2s^2}{4}+\beta(1-\beta)\bar{h}^2,$$

which yields a contradiction when (27) is satisfied. ■

To interpret the equilibrium (iii), note that R wins the auction if $\bar{x}_R+\theta s\geq\bar{x}_P$, which after squaring both sides and substituting for $\bar{x}_P$ and $\bar{x}_R$ can be rewritten as

$$p_R\equiv1-\frac{c-\theta s-\bar{x}_R}{2\bar{b}}\geq1-\frac{c-\bar{b}}{(1-\beta)\bar{h}}+\frac{\theta s}{2(1-\beta)\bar{h}}=q_P+\frac{\theta s}{2(1-\beta)\bar{h}}, \tag{31}$$

where the left side is the probability p_R that R changes its practices in a cooperative engagement when it bids its maximum $\bar{x}_R$ and the right side is the probability q_P that P changes its practices when it is the target of the confrontational activist plus a constant $\frac{\theta s}{2(1-\beta)\bar{h}}$ that depends on θ. Thus, when R wins the engagement with the cooperative activist, the probability it changes its practices in a cooperative engagement is greater than the probability that P changes its practices when targeted by the confrontational activist. If θs is sufficiently large, however, the inequality in (27) may not be satisfied, in which case firm P wins the engagement with the cooperative activist.[24]

When the demands would be rejected and R wins, the winning bid x_R^* is $x_R^* = \bar{x}_P - \theta s$. The expected profit of P is then $E\pi_P = -EH^P$, and the gain by R for winning the auction is $\bar{x}_R - x_R^* = \bar{x}_R - \bar{x}_P + \theta s > -EH^R$. To verify that $c - \theta s - x_R^*$ is nonnegative, substitute $x_R^* = \bar{x}_P - \theta s$, which yields

$$c - \theta s - (\bar{x}_P - \theta s) = c - \bar{x}_P > 0,$$

since $c > \bar{x}_P$.

The outcome of the auction depends on the strength of the threat by the confrontational activist. If the threat is very strong such that both firms would accept the demand ((26) is satisfied), the auction is a tie. For weaker threats R wins the auction when the threats to the two firms are the same unless R has sufficiently high social responsibility that (27) is not satisfied. The cooperative activist then engages the CSR firm and the profit maximizer is targeted by the confrontational activist, so softer firms participate in cooperative engagements and harder firms are targeted by confrontational activists.

When the confrontational activist can choose the intensity of its campaign, it launches a more intense campaign against the profit-maximizer than against the socially responsible firm. This increases the maximum bid of P relative to the maximum bid of R. Firm P then wins the auction if and only if

$$c - \theta s - \bar{x}_R^* \geq \frac{\bar{b}\alpha}{\theta s^2}\left(\bar{h}^{P*}\left(c - \bar{b} - \frac{\beta s}{\alpha}\right) - \bar{h}^{R*}\left(c - \bar{b} - \theta s - \frac{\beta s}{\alpha}\right)\right),$$

where $\bar{x}_R^*$ denotes $\bar{x}_R$ evaluated at $\bar{h} = \bar{h}^{R*}$. Numerical analysis indicates that this condition is satisfied for some parameter values, in which case P wins the auction. Consequently, when the campaign intensity is endogenous, the profit maximizer can win the auction. The greater campaign intensity of the confrontational activist thus can drive the profit-maximizer into the arms of the cooperative activist. Radical activists conduct more aggressive campaigns than do moderate activists, and if radicals self-select into confrontation, radical activists may drive profit-maximizing firms into cooperative engagements with NGOs.

The cooperative activist thus engages the profit-maximizing firm only if both firms would accept the demand of the confrontational activist or both firms would reject the demand and the confrontational

[24] A necessary and sufficient condition for P to win the auction is

$$\frac{\bar{b}(2(c-\bar{b}) - \theta s)^2}{2(1-\beta)\bar{h}} \geq c^2 - c\theta s - \bar{b}^2 + \beta(1-\beta)\bar{h}^2.$$

activist either conducts a more aggressive campaign against the profit-maximizer than against the socially-responsible firm or firm R is very socially responsible.

7.3 Complementarity and Synergy in the Matching Market

Social activism benefits in two ways from increased campaign intensity by confrontational activists. First, greater campaign intensity increases the probability that the target of the confrontational activist concedes in a campaign and can result in acceptance of the demand. Second, when there is competition for an engagement with cooperative activists, the greater the threat posed by the confrontational activists the higher are the bids of potential targets. In the analysis above, this positive externality is not exploited. The incentives rest with the cooperative activist, and the instrument for exploiting the externality is participation in the campaign of the confrontational activist. Social activists often join together in campaigns by sharing campaign costs, contributing personnel, or joining in activities. To represent this participation, the cooperative activist is assumed to contribute a portion $\sigma \in [0,1]$ of the cost of the campaign. The campaign cost to the confrontational activist is then $(\alpha - \sigma)\bar{h}$. The case considered is that in which both firms would reject the demand of the confrontational activist.[25]

In choosing its participation, the cooperative activist could take into account only the greater probability that its engagement results in a change in the practices by its target, but it could also take into account the greater probability that the campaign of the confrontational activist results in a change in practices of its target. To facilitate the comparative statics, let z_R and z_P denote the social valuations of firms R and P, respectively. The campaign intensity $\bar{h}_\sigma^{P*}$ chosen by the confrontational activist is given in (6) with $\alpha - \sigma$ replacing α and z_P replacing z. The analysis is presented for the case in which firm R wins the auction, and the analysis parallels this if P wins. When it takes into account only its own cooperative engagement, the cooperative activist chooses its optimal participation σ^* according to

$$\sigma^* \in \arg\max_{\sigma} \; z_R \left(1 - \frac{c - \bar{x}_P}{2\bar{b}}\right) - \sigma \bar{h}_\sigma^{P*}. \tag{32}$$

[25] If the firms would accept the demands of the confrontational activist, there is no incentive for the cooperative activist to participate in the campaign. Participation can affect whether the demand is accepted or rejected, so the important case is when the firms would reject the demand.

The optimal participation is characterized by[26]

$$\frac{z_R}{4\bar{x}_P}\left(\frac{(c-\bar{b})}{z_p}(\alpha-\sigma^*)+\beta\right)-\frac{2\alpha-\sigma^*}{2(\alpha-\sigma^*)}=0, \tag{33}$$

and the objective function in (32) is strictly concave at σ^*. In choosing its participation the cooperative activist takes into account the marginal cost of its contribution and the marginal benefit from the externality for the cooperative engagement.

If the cooperative activist considers the expected social benefits from its own engagement and the additional social benefits resulting from the confrontational encounter, the optimal participation $\hat{\sigma}$ satisfies

$$\frac{z_R}{4\bar{x}_P}\left(\frac{(c-\bar{b})}{z_p}(\alpha-\hat{\sigma})+\beta\right)-\frac{1}{2}=0.$$

Since $\frac{2\alpha-\sigma^*}{2(\alpha-\sigma^*)}>\frac{1}{2}$, the contribution is greater; i.e., $\hat{\sigma}>\sigma^*$.

To explore the comparative statics of the optimal participation, first note that σ^* and $\hat{\sigma}$ have the same comparative statics properties for all parameters except α. Totally differentiating (33) with respect to z_R yields

$$\frac{d\sigma^*}{dz_R}=-\frac{1}{SOC}\left(\frac{1}{4\bar{x}_p}\left(\frac{(c-\bar{b})(\alpha-\sigma^*)}{z_P}+\beta\right)\right)>0,$$

where SOC denotes the second-order condition which is negative at σ^*. A more valuable target in the cooperative engagement results in greater marginal benefits from the externality and greater participation in the campaign. Differentiating with respect to z_P yields

$$\frac{d\sigma^*}{dz_P}=\frac{1}{SOC}\left(\frac{z_R}{4z_P^2\bar{x}_P}(c-\bar{b})(\alpha-\sigma^*)+\frac{z_R}{4\bar{x}_P^2}\left(\frac{(c-\bar{b})(\alpha-\sigma^*)}{z_P}+\beta\right)\frac{d\bar{x}_P}{dz_P}\right)<0.$$

A higher value target for the confrontational activist leads it to choose a more intense campaign, which reduces the marginal benefits from the externality. That is, the confrontational activist does more of the work, allowing the cooperative activist to reduce its participation at the margin.

As campaign costs α increase, the confrontational activist chooses a less intense campaign, which increases the marginal benefits from participation and decreases the marginal cost of that participation, resulting in greater participation. The participation $\hat{\sigma}$ also is increasing in α, since the marginal benefits from participation are greater. Changes in the toughness of the two firms have a similar effect.

The synergy between the confrontational campaign and the cooperative engagement also depends on the vulnerability of targets. Maintaining the assumption that R wins the engagement with the cooperative

[26] Differentiating (32) yields the first-order condition

$$\frac{z_R}{2\bar{b}}\frac{d\bar{x}_P}{d\bar{h}}\frac{d\bar{h}_\sigma^{P*}}{d\sigma}-\bar{h}_\sigma^{P*}-\sigma^*\frac{d\bar{h}_\sigma^{P*}}{d\sigma}=0.$$

Since $\frac{d\bar{h}_\sigma^{P*}}{d\sigma}=\frac{1}{2(\alpha-\sigma)}\bar{h}_\sigma^{P*}$, the condition simplifies to

$$\frac{z_R}{2\bar{b}}\frac{d\bar{x}_P}{d\bar{h}}\frac{1}{2(\alpha-\sigma^*)}-1-\frac{\sigma^*}{2(\alpha-\sigma^*)}=0.$$

Evaluating $\frac{d\bar{x}_P}{d\bar{h}}$ and substituting yields (33).

activist, a change in the vulnerability of R has no effect on the participation of the cooperative activist in the campaign. Greater vulnerability of the profit maximizer, however, decreases the campaign intensity chosen by the confrontational activist, which strengthens the incentive of the cooperative activist to participate in the campaign. That is,

$$\frac{d\sigma^*}{d\gamma} = \frac{1}{SOC}\left(\frac{z_R}{4\bar{x}_P^2}\left(\frac{(c-\bar{b})(\alpha-\sigma^*)}{z_P}+\beta\right)\frac{d\bar{x}_P}{d\bar{h}}\frac{d\bar{h}_\sigma^{P*}}{d\gamma}\right) > 0.$$

Greater vulnerability of firm P could, however, cause it to win the engagement with the cooperative engagement, and then the vulnerability of R would be relevant.

The extent θ of the corporate social responsibility of R has no effect on the optimal participation σ^*, provided that firm R wins the engagement with the cooperative activist. That is, greater CSR increases the probability that R changes its practices but does not affect the choice of campaign intensity by the confrontational activist. If P would win the engagement, however, greater CSR would affect participation, but the effect is ambiguous in sign.

8 Conclusions

NGOs and social activists are active on a wide variety of social issues, and many focus on private politics rather than public politics. Private politics involves directing social pressure at economic agents, most of which are firms, with the objective of changing their behavior. The basic private politics strategy of social activists is confrontation where a demand is made on a firm accompanied by the implicit or explicit threat of harm if the demand is not met. To the extent that the threat is credible, confrontation can change the behavior of firms. Moreover, if there are indivisibilities in the alternatives available to the firm, threats are carried out through campaigns that impose harm on firms.

Confrontation has been successful, but some NGOs and activists have chosen a cooperative strategy in which they offer to firms their expertise or their ability to provide external legitimacy. Cooperation can be effective in changing the behavior of firms, but the degree of effectiveness depends on the bargaining power of the social activist. The social activist has bargaining power to the extent that it can withhold its expertise or grant of legitimacy, but bargaining power can also result from externally generated social pressure.

One source of externally generated social pressure is the threat of harm by confrontational social activists. If cooperative activists with expertise and credibility are scarce relative to confrontational activists, potential targets of confrontational activists can compete for an engagement with a cooperative activist. Viewing this competition as an auction, the potential targets make offers to the cooperative activist, and their reservation values are determined by the threat from the confrontational activist. The winner of the auction depends on both the reservation values and the value of the expertise and external legitimacy provided by the cooperative activist. If the campaigns that would be launched by the confrontational activist against two firms are equally intense and a campaign would be launched on the equilibrium path, a socially responsible

firm wins the auction over a profit-maximizing firm unless its social responsibility is high. If the campaign against the profit-maximizer would be considerably more intense than against the socially responsible firm, the profit-maximizer can win the engagement with the cooperative activist.

The threat from the confrontational activist generates bargaining power for the cooperative activist, and the cooperative activist can exploit this positive externality by participating in the campaign of the confrontational activist. The extent of the participation depends on whether the cooperative activist takes into account the effect of its participation only on its own engagement or on both its engagement and the targeting of the loser of the auction by the confrontational activist. Taking both into account results in greater participation by the cooperative activist and greater accomplishments for the private politics of social activism.

One question this paper has not addressed is why cooperation emerged when it did in the 1990s? One explanation involves both endogenous and exogenous factors. In the 1990s activists experimented with market campaigns that targeted not the firms responsible for the social bad but the markets in which they operated. Many of these market campaigns were successful, as in the case of the old growth timber campaign, and created a social pressure threat for a new set of firms such as retailers that had not been threatened in the past. In addition, the development of the Internet provided better communication between social activists and the public and between social activists and the volunteers who participated in campaign activities. The Internet also strengthened fundraising. At the same time the public politics efforts of social activists and NGOs were meeting with less success as business interests became more skilled at opposition public politics. In addition, shifts in public sentiment gave the Republicans a majority in the House of Representatives in 1994, which made it more difficult to pursue a social agenda through public politics.[27] Private politics social pressure became the preferred instrument of many activists, and with the increased social pressure firms began to seek shelter. Some NGOs saw an opportunity to make progress toward their agendas by working with rather than against firms, and firms sought shields against the confrontational activists, as shown in the theory presented here. Cooperative engagements became more common.[28] The NGOs that initially participated in these cooperative engagements may have been moderates.

[27]Brulle and Jenkins (2010, pp. 84-85) present data on the percent of pro-environmental success in the House of Representatives. From 1989 through 1993 the average success percent was over 70, whereas from 1994 through 2003 (the end of their data period) it was 30.

[28]Government also initiated voluntary programs, particularly in the area of environmental protection. See Prakash and Potoski.

References

[1] Baron, David P. 2001. "Private Politics, Corporate Social Responsibility, and Integrated Strategy." *Journal of Economics and Management Strategy*. 10: 7-45.

[2] Baron, David P. 2003. "Private Politics." *Journal of Economics and Management Strategy*. 12: 31-66.

[3] Baron, David P. 2007. "Corporate Social Responsibility and Social Entrepreneurship." *Journal of Economics and Management Strategy*. 16: 683-717.

[4] Baron, David P. 2008. "Managerial Contracting and Corporate Social Responsibility." *Journal of Public Economics*. 92: 268-288.

[5] Baron, David P. 2009a. "A Positive Theory of Moral Management, Social Pressure, and Corporate Social Performance." *Journal of Economics and Management Strategy*. 18: 7-43.

[6] Baron, David P. 2009b. "Credence Standards and Social Pressure." In *Voluntary Programs: A Club Theory Perspective*, Aseem Prakash and Matthew Potoski, eds. MIT Press; Cambridge, MA: 41-66.

[7] Baron, David P. 2010. "Morally-Motivated Self-Regulation." *American Economic Review*. 100:

[8] Baron, David P. and Daniel Diermeier. 2007. "Strategic Activism and Nonmarket Strategy." *Journal of Economics and Management Strategy*. 16: 599-634.

[9] Baron, David P. nad Erin Yurday. 2004. "Anatomy of a Corporate Campaing: Rainforest Action Network and Citigroup (A)(B)." Case Numbers P42 A,B. Graduate School of Business, Stanford University, Stanford, CA.

[10] Besley, Timothy and Maitreesh Ghatak. 2007. "Retailing Public Goods: The Economics of Corporate Social Responsibility." *Journal of Public Economics*. 91: 1645-1663.

[11] Brulle, Robert J. and J. Craig Jenkins. 2010. "Civil Society and the Environment: Understanding the Dynamics and Impacts of the U.S. Environmental Movement." in Lyon (2010), pp. 73-102.

[12] Calveras, Aleix, Juan-Jose Ganuza, and Gerard Llobet. 2007. "Regulation, Corporate Social Responsibility and Activism." *Journal of Economics and Management Strategy*. 16: 719-740.

[13] Cespa, Giovanni and Giacinta Cestone. 2007. "Corporate Social Responsibility and Management Entrenchment." *Journal of Economics and Management Strategy*. 16: 741-771.

[14] Conroy, Michael E.. 2007. *Branded! How the 'Certification Revolution' is Transforming Global Corporations*. Gabriola Island, British Columbia, Canada: New Society Publications.

[15] Davies, Kert. 2010. "Greenpeace," in Thomas P. Lyon (2010), 195-207.

[16] Diermeier, Daniel and Jan A. Van Meighem. 2008. "Voting with Your Pocketbook: A Stochastic Model of Consumer Boycotts." *Mathematical and Computer Modeling*. 48: 1497-1509.

[17] Eesley, Charles and Michael Lenox. 2006. "Firm Responses to Secondary Stakeholder Action." *Strategic Management Journal*. 27: 765-781.

[18] Fernández-Kranz, Daniel and Juan Santaló. 2010. "When Necessity Becomes a Virtue: The Effect of Product Market Competition on Corporate Social Responsibility." *Journal of Economics and Management Strategy*. 19: 453-487.

[19] Friedman, Monroe. 1999. *Consumer Boycotts*. New York: Routledge.

[20] Graff-Zivin, J. and A. Small. 2005. "A Modigliani-Miller Theory of Altruistic Corporate Social Responsibility." *Topics in Economic Analysis*. 5: Article 10.

[21] Hamilton, James T. 1993. "Politics and Social Costs: Estimating the Impact of Collective Action on Hazardous Waste Facilities." RAND Journal of Economics, 24 (Spring), 101-125.

[22] Ingram, Paul, Yue, Lori Qingyuan, and Hayagreeva Rao. 2010. "Trouble in Store: The Emergence and Success of Protests against Wal-Mart Store Openings in America." *American Journal of Sociology*. 116: 53-92.

[23] Innes, Robert. 2006. "A Theory of Consumer Boycotts under Symmetric Information and Imperfect Competition." *Economic Journal*. 116: 355-381.

[24] Krill, Jennifer. 2010. "Rainforest Action Network," in Lyon (2010), 208-220.

[25] Lenox, Michael J. and Charles E. Eesley. 2009. "Private Environmental Activism and the Selection and Response of Firm Targets." *Journal of Economics and Management Strategy*. 18: 45-73.

[26] Lyon, Thomas P., ed. 2010. *Good Cop, Bad Cop:Environmental NGOs and their Strategies toward Business*. Washington, DC: RFF Press.

[27] Lyon, Thomas P. and John W. Maxwell. 2004. *Corporate Environmentalism and Public Policy*. Cambridge, UK: Cambridge University Press.

[28] Maxwell, John W. 2010. "An Economic Perspective on NGO Strategies and Objectives." in Lyon (2010), 136-163.

[29] Maxwell, John W., Thomas P. Lyon, and Steven C. Hackett. 2000. "Self-Regulation and Social Welfare: The Political Economy of Corporate Environmentalism." *Journal of Law and Economics*. 43: 583-617.

[30] Potoski, Matthew and Aseem Prakash, eds. 2009. *Voluntary Approaches: A Club Theory Perspective*. Cambridge, MA: MIT Press.

[31] Ruta, Gwen. 2010. "Environmental Defense Fund," in Thomas P. Lyon, ed., 184-194.

[32] Siegel, Donald S. and Donald F. Vitaliano. 2007. "An Empirical Analysis of the Strategic Use of Corporate Social Responsibility." *Journal of Economics and Management Strategy*. 16: 773-792.