

NEGOTIATING AGREEMENTS WITH ENVIRONMENTAL ACTIVISTS IN THE SHADOW OF REGULATION

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Abstract. This paper examines the conditions under which firms reach agreements with environmental activists in regulatory agency proceedings to mutually settle disputes. The paper argues that actions of firms will be dictated by the regulatory decision-making process which is susceptible to pressures emanating from the presence of multiple stakeholder interests and the prevailing political environment. As such, the chapter predicts that the likelihood of firms reaching agreements with environmental activists will be a function of how these regulatory considerations interact with the heterogeneity in the attributes of firms, activists, and the regulators. These predictions are tested in the context of participation by environmental activists in regulatory proceedings initiated by electric utility firms with State Public Utility Commissions (PUCs) in the US between 1990 and 2015. Results indicate that engagement of firms in practices contested by environmental activists, economic power wielded by firms' other influential stakeholders, spillovers from environmental activists' participation in extra-institutional tactics, and the political ideology of regulators influence the likelihood of firms reaching agreements with an activist.

1. INTRODUCTION

Interactions between firms and environmental activists have become increasingly commonplace as they both assume a central role, alongside governments, in addressing global environmental issues such as climate change. These interactions range from cooperative, when firms and activists work closely to address environmental challenges (Rondinelli & London, 2003), to more adversarial when activists target firms through boycotts or protests, or contest firms' practices via public institutions such as regulatory agencies (Baron, 2001). As a result, firm-activist interactions have received increasing attention in the management literature (Baron & Diermeier, 2007; Eesley & Lenox, 2006; Freeman, 2010; Hiatt, Grandy, & Lee, 2015; King, 2008) with prior studies examining tactics of activists (Baron & Diermeier, 2007; Lenox & Eesley, 2009), how firms respond to them (Delmas & Toffel, 2008; Eesley & Lenox, 2006; Mitchell, Agle, & Wood, 1997; McDonnell & King, 2013; Pacheco & Dean, 2015; Reid & Toffel, 2009), and the impact of activist campaigns on firm performance (King & Soule, 2007; Vasi & King, 2012).

The focus of this literature has predominantly been on private politics¹, when activists target firms in the social arena through actions such as protests and boycotts to harm their public reputation (Baron & Diermeier, 2007; Delmas & Toffel, 2008; Eesley & Lenox, 2006; Hiatt, *et al.* 2015; King, 2008; Odzeimkowska & Dorobantu, 2021). However, activists also target practices of firms via public institutions such as legislatures, regulatory agencies, and courts

¹ Private politics refers to actions of activists that target firms, often threatening to harm their public reputation, through actions such as protests and boycotts (Baron, 2003). A parallel stream of research on social movements has examined such extra-institutional tactics of activists using a sociological perspective (Baron, Neale, & Rao, 2016). On the other hand, public-politics tactics of activists target firms through public institutions such as legislatures, executive agencies, and courts (Baron & Diermeier, 2007).

where they seek to influence public policy outcomes to affect changes in firm behaviour. Yet, despite the state's ability to exert significant influence on firms' practices (Christmann, 2004; Darnall, Henriques, & Sadorsky, 2010; Henriques & Sadorsky, 1999; Hiatt, Grandy, & Lee, 2015; Reid & Toffel, 2009) and assertions that "most action in corporate environmentalism is mediated through public policy" (Lyon & Maxwell, 2004: 4), much less is understood about interactions between firms and environmental activists in such settings.

In this paper, we address this gap in the literature by examining firm-activist interactions that transpire in the regulatory arena. Ideological interest groups such as activists and advocacy organizations are frequent participants in regulatory agency rulemaking procedures across various industries. For instance, the U.S. Department of Health and Human Services' (HHS) 2018 proposed rule on *Blueprint to Lower Drug Prices and Reduce Out-of-Pocket Costs*, which targeted practices of pharmaceutical firms, attracted several ideological organizations including American Association of Retired Persons, Community Catalyst, Justice in Aging, National Health Law Program, and Public Citizen (Department of Health and Human Services, 2018). Likewise, activists such as American Civil Liberties Union, Future of Privacy Forum, and Privacy Rights Clearinghouse participated in the US Federal Communications Commission's (FCC) 2016 proposed rule on *Protecting the Privacy of Customers of Broadband and Other Telecommunications Services* to challenge the position of telecommunication firms (Federal Communications Commission, 2016). Environmental activists, on whom we focus in this paper, such as Environmental Defense Fund, Natural Resources Defense Council, and Sierra Club regularly highlight their work alongside government agencies to influence practices of firms in pursuit of their objectives. Moreover, in a number of industries – such as forestry, mining, oil and gas, and electric power generation – public politics tactics such as participation in regulatory

proceedings provide a particularly attractive alternative for activists as firms often lack publicly visible brands, limiting the ability of activists to harm firms' reputation through private campaigns.

In regulatory settings, disputes between firms and stakeholders (such as activist groups) that arise as a result of conflicts in their interests are typically settled via a formal administrative process where regulators base their decisions on the evidence and testimony presented by parties in support of their positions. Alternatively, parties can also engage in negotiations to mutually settle disputes and reach an agreement, which is then presented to regulators for a formal approval. If parties fail to reach an agreement through negotiations, disputes are settled by regulators through the formal administrative process (Littlechild, 2009). Focusing on such negotiated agreements, we examine the conditions that influence the likelihood of firms striking agreements with environmental activists during regulatory proceedings. Given the central role of regulatory agencies in shaping final outcomes, we assert that regulatory considerations will be the primary drivers of how firms respond to opposition from environmental activists, and whether they reach an agreement. To develop our hypotheses, we argue that the likelihood of observing an agreement will be a function of the attributes of firms, activists and the regulatory environment that interact with the features of the regulatory decision-making process – namely, the informational nature of regulatory proceedings, the presence of multiple stakeholder interests, and the political ideologies of the regulators themselves.

At the firm-level, we posit two such factors. First, we expect the extent to which firms engage in actions that activists deem contentious to influence the likelihood of observing an agreement. All else equal, firms that rely on the contested practice to a greater degree are likely to face greater costs of compliance to satisfy activist demands, and therefore less likely to reach

an agreement. Moreover, greater costs of compliance are also more likely to impose additional costs on firms' other stakeholders prompting opposition from them and therefore, reduce the likelihood of an agreement. Second, we expect pressure from firms' other stakeholders whose interests are in conflict with those of the environmental activist to influence firms' response to activist demands. Specifically, we argue that as the economic power wielded by such stakeholders over a firm increases, their interests become more salient for the firm reducing the likelihood of an agreement.

Next, we argue that private politics actions of activists will spill over in the regulatory domain to influence the actions of firms. Activists derive utility from private politics campaigns, such as protests and boycotts, by not only influencing practices of firms but also through the campaign itself, by drawing public attention to the contentious practices of firms (Baron, Neale, & Rao, 2016; Den Hond & De Bakker, 2007; Odziemkowska, 2021). We argue that such campaign specific capabilities developed by activists over time, as well as the need to preserve their reputation will manifest in activists making more substantial demands that will reduce the likelihood of an agreement. Finally, we hypothesize that the ideological alignment between regulators and activists will influence the actions of firms. Arguably, greater ideological alignment between activists and regulators will increase the regulatory threat perceived by firms, incentivizing firms to avoid disputes, and prompting them to seek agreements with activists. Further, we also expect such alignment between activists and regulators to positively moderate the effect of our hypothesized relationships between firm and activist attributes and the likelihood of firms reaching an agreement with activists.

We test our predictions on a sample of negotiated agreements between firms and their stakeholders during regulatory proceedings initiated by investor-owned electric utility firms in

the US. Our focus is on state-level regulatory rate cases² that determine regulated rates, financial returns, allowable capital expenditures, and other practices of utility firms. This regulatory process allows stakeholders, known as ‘intervenor’, who have a direct or substantial interest in the regulatory outcome, to formally participate and inform the decision-making process³. Utility rate cases are conventionally resolved by a formal regulatory adjudication process, where the firm and other affected stakeholders contest by presenting evidence and testimony in support of their positions. However, they also allow for negotiated settlements where firms can negotiate with affected stakeholders to voluntarily reach agreements, which are then presented to regulators for final approval. Such negotiated settlements have been viewed as a quicker, less costly, and less uncertain alternative to the formal administrative process allowing firms and stakeholders to mutually resolve differences amongst themselves (Littlechild, 2009).

Focusing on the participation of environmental activists in electric utility rate case proceedings from 1990 – 2015, that were settled via negotiations between firms and participating stakeholders we build a novel dataset by manually coding archival regulatory documents to precisely identify when environmental activists participate in settlement negotiations and whether the firm reached an agreement with the activist. To account for the potential sample selection bias arising from the non-random choice of activists to participate in a rate case, we employ a 2-stage Heckman selection model (Heckman, 1979). In our statistical analysis, we find that firms were less likely to reach agreements with activists when they engaged in the contested practice, measured as the firm’s reliance on coal to generate energy, to a greater degree. A

² A rate case proceeding is a formal regulatory process conducted by state public utility commissions (PUCs) to regulate the operations of electric utility firms including the retail rates utilities are allowed to charge consumers, allowable capital expenditures, and rate of return earned on investors’ capital.

³ Typical participants in regulatory rate review proceedings include different classes of rate payers (such as residential, industrial and commercial consumers), consumer advocates, shareholders, employee unions, business advocates, municipal and state-level government authorities, and civic and environmental activists.

greater share of sales to business consumers, who are relatively more sensitive to agreements that often impose additional costs on them, also reduced the likelihood of agreements. Firms were also less likely to strike agreements with activists who engaged in private politics actions to a greater degree. Finally, we find that a greater percentage of Democrat regulators, who are likely to be more pro-environment and therefore more aligned with the values of the activist, weakened the negative effect of the contentious practices of firms, economic power of business consumers, and participation by activists in private politics by increasing the firms' likelihood of striking an agreement.

2. ACTIVIST PARTICIPATION IN THE REGULATORY ARENA

Activist campaigns seek to change practices of firms that they deem objectionable and are accompanied by a punitive threat if the firm failed to comply to their demands (Baron & Diermeier, 2007). In the social arena, activists aim to harm the public reputation of firms with letter writing campaigns, community protests, or by threatening boycotts to influence a firm's practices (Baron & Diermeier, 2007). The highly visible nature of such campaigns has prompted several examinations of firm-activist interactions within this context, both from a sociological perspective (King, 2008; King & Soule, 2007; Ingram, Yue & Rao, 2010; McDonnell & King, 2013; Odziemkowska, 2021; Vasi & King, 2012) and the nonmarket strategy perspective (Baron, 2001; Baron & Diermeier, 2007; Fremeth, Holburn, & Piazza, 2021; Hiatt, Grandy, & Lee, 2015; Lenox & Eesley, 2009; Lyon & Maxwell, 2004; Odziemkowska & Dorobantu, 2021)⁴.

Activists, however, also engage in public politics – strategies that advance an activist's agenda through public institutions such as legislatures, executive agencies, and courts (Baron &

⁴ Also see Heyes and King (2018) for a review of these literatures.

Diermeier, 2007). In the legislative arena, activists often lobby policy makers or mobilize stakeholder groups to lobby on their behalf (Aranda & Simons, 2018; Kollman, 1998). Likewise, activists frequently partake in regulatory proceedings to influence regulatory outcomes by commenting on proposed rules, challenging the position of firms in official hearings, or via negotiated rulemaking (Furlong, 1997). However, much less is known about firm-activist interactions that occur in these contexts despite findings that public politics strategies of activists are often effective in inducing substantive changes to organizational practices (Hiatt, Grandy, & Lee, 2015; Reid & Toffel, 2009).

Unlike private campaigns of activists that aim to harm a firm's public reputation, actions of activists in the public arena challenge the contentious practices of firms by presenting information on policy alternatives to influence legislative and regulatory outcomes (Fremeth et al., 2016; Hiatt et al., 2015). The threat of activists influencing policy outcomes in ways that adversely affect firms therefore serves as the instrument of public politics and incentivizes firms to comply to the demands of activists (Baron, 2001). In this paper, our focus is on interactions between firms and environmental activists that occur during proceedings in regulatory agencies. The central role of regulatory institutions in determining final policy outcomes leads to our general expectation that actions of firms will be primarily motivated by regulatory considerations. In particular, we expect three attributes of the regulatory decision-making process to influence the actions of firms and activists during their interactions.

First, regulators base their decisions on arguments and information provided by firms and other stakeholders during regulatory proceedings. As such, the success of firms or activists in influencing regulatory outcomes rests on their ability to shape the informational environment by presenting evidence that convinces regulators of their positions (Fremeth, Holburn, and Spiller,

2014). Second, regulatory agency proceedings allow multiple interested stakeholders to participate and present evidence in support of their positions. As such, final regulatory outcomes are a function of these competing stakeholder demands, and not just the actions of firms and environmental activists (Baldwin, Rountree, & Jock, 2018). Building on the political-markets perspective (Buchanan & Tullock, 1962), the non-market strategy literature has also argued that increased demand-side competition resulting from participation of stakeholders such as activists reduces the attractiveness of the political market for firms as opposition from organized stakeholders can impact policy outcomes to the detriment of the firm (Bonardi, Hillman, & Keim, 2005; Fremeth, Holburn, & Vanden Bergh, 2016). Likewise, we expect the presence of multiple stakeholder interests during regulatory proceedings to influence the actions of both firms and activists. Finally, although regulatory agencies are often established as independent entities, regulatory decisions are often susceptible to political considerations (McCubbins, Noll, & Weingast., 1987). Such considerations include the pressures that emanate from the regulators' political principals in the executive branch who appoint regulators to their positions, as well as the political ideologies of the regulators themselves (Fremeth, Holburn, and Piazza, 2021).

As such, we expect these features of the regulatory decision-making process to influence the ability of firms and activists to shape regulatory outcomes, and therefore determine their actions through their interactions. Despite the crucial role of public policy in shaping the “rules of the game” that determines firm behaviour, as well as the ability of activists to adversely influence policy outcomes for firms, few studies have examined firm-activist interactions that occur in such settings. In the following section, we briefly discuss the nature of activist actions in regulatory settings, how firms respond to them, and their implications for regulatory outcomes.

2.1 Negotiated agreements between firms and stakeholders in the regulatory arena.

Conventional regulatory proceedings allow firms and affected stakeholders to influence regulatory outcomes by presenting evidence and testimony in support of their positions and challenging those of their rivals (Coglianese, 1996; Langbein & Kerwin, 2000). However, regulatory agencies also provide for a more collaborative process, termed *negotiated rulemaking*, that presents affected stakeholders a common forum to engage in consensus-oriented decision making (Ansell & Gash, 2008). While negotiated agreements present stakeholders a less adversarial alternative to settle their disputes they are still subject to final approval from the regulators. Prior studies have found that such agreements were quicker, less costly, and a less uncertain alternative to the conventional regulatory process allowing firms and stakeholders to voluntarily resolve disputes amongst themselves (Littlechild, 2009; Langbein, 2002). If stakeholders fail to reach a consensus through negotiations, they then participate in the formal administrative process where regulators determine regulatory outcomes based on the merit of the arguments made by each party (Lubbers, 2007).

While our focus is on such negotiated agreements within the electric utilities sector, these procedures exist across other state-level independent agencies that regulate environmental matters, and policies for water use and land development (Pritzker & Dalton, 1995). At the federal level too, regulatory agencies such as Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), and Department of Education have relied on regulatory negotiations (reg negs) between stakeholders for rulemaking purposes over the last several decades (Ryan, 2001). For instance, the EPA established a Negotiating Rulemaking Committee in 2017 for a proposed rule that would limit chemical data reporting requirements for manufacturers of any inorganic by-product chemical substances. The committee

comprised of diverse stakeholders including industry associations – American Chemistry Council, North American Metals Council; environmental groups – National Resources Defense Council, Sierra Club; community organizations such as the National Tribal Toxics Council; and federal and state government agencies, among others (EPA, 2017)⁵. Likewise, the US Department of Agriculture (USDA) constituted a committee in 2011 to engage stakeholders to draft regulations concerning mandatory reporting of price and volumes for packers of pork products (USDA, 2011).

Outside of the U.S., firms in the Canadian mining industry have been shown to work collaboratively with stakeholders and regulators to find mutually acceptable outcomes when seeking regulatory approval for a new mine or exploration permit (Annandale, 2000). Odziemkowska & Dorobantu (2021) examine conditions under which relationships between Canadian mining firms and local communities are governed by formal agreements. Similarly, Kagan *et al.* (2003) discuss the role of regulators in facilitating interactions between environmental activists and paper manufacturing mills across Australia, Canada, New Zealand, and United States. Specifically, they find that social pressure motivated firms to work with local environmental activists during their permit negotiations with regulators, resulting in firms prioritizing environmental actions based on the concerns expressed by the environmental groups.

These examples highlight the markedly different implications for firms when interacting with activists in the regulatory arena as compared to those in the social arena, where firms can simply undertake symbolic actions in order to address the concerns of activists (McDonnell & King, 2013). On the other hand, the binding nature of formal regulatory agreements, and the

⁵ A search of the US Federal Register reveals that negotiated rulemaking has been employed by the Department of Agriculture, Department of Energy, Department of Education, Environmental Protection Agency, Federal Aviation Administration, Federal Motor Carrier Safety Administration, among others in the recent past (see <https://www.federalregister.gov/> for additional details).

ability of regulators to closely monitor whether firms follow through on their commitments are likely to pressure firms into undertaking substantive changes that adequately address the concerns of the activist (Short & Toffel, 2010). As such, agreements with activists in the regulatory arena often entail substantial costs on firm. Moreover, disagreements can also prove costly, as any disputes settled through the formal administrative process can result in regulations that are sub-optimal for firms (Littlechild, 2009). Worse yet, disputes might spill over into the social arena if activists follow up regulatory disagreements by engaging in private campaigns against firms.

3. THEORY AND HYPOTHESES

Our central argument is that actions of firms will be dictated by the aforementioned regulatory considerations, which influence the nature of costs and benefits firms confront through their actions. For instance, an agreement might require firms to commit substantial resources that adequately address the demands of the activist, however insofar as it allows firms to avoid a protracted and costly contestation, we expect firms to strike agreements with activists. Likewise, agreements can also yield other benefits for firms through transfer of knowledge and expertise of environmental activists as well as indirect benefits in the form of enhanced reputation (Baron, 2012; Selsky & Parker, 2005) and strong ties with activists that mitigate future conflicts (Baron & Diermeier, 2007; Odziemkowska & Dorobantu, 2020). Notwithstanding these benefits, under certain circumstances firms might be less inclined to sign agreements. For example, if costs of compliance are prohibitively high, or when firms confront opposition from other stakeholders that constrain their ability to make concessions to activists.

To develop our hypotheses, we focus on the attributes of firms, activists and the regulatory environment to argue how heterogeneity in them influences the actions of firms. Prior examinations on firm-activist interactions in the social arena have found that factors at the firm-level – including size, visibility (Lenox & Eesley, 2009), organizational structure (Delmas & Toffel, 2008), market performance (King, 2008), and market dependence (Pacheco & Dean, 2015) – and activist-level – such as their power, legitimacy (Eesley & Lenox, 2006; Mitchell, Agle, & Wood, 1997), and ideology (Den Hond & De Bakker, 2007) – influence the actions of firms and activists during their interactions. Given our conceptualization of the firm-activist interactions that occur within the shadow of regulatory institutions, we extend this notion to identify how motivations for firms to reach agreements with environmental activists vary with the heterogeneity in the attributes of firms, activists, and the regulatory environment.

3.1 Hypotheses

Contentious practices of firms. A common finding in the studies on activist campaigns is that they often target firms whose practices they deem to be more objectionable (Baron & Diermeier, 2007; Lenox & Eesley, 2009). For environmental activists, actions of firms that harm the environment are particularly salient and indicative of the degree to which the firm shares the values of the activist. Activist campaigns therefore seek to change such contentious practices of firms in order to bring them in greater alignment with the activists' own values (Pacheco & Dean, 2015). Arguably, agreements require firms to decrease their involvement in such contested practices, by requiring them to make investments in new technology or through operational improvements. As such, we expect agreements to entail net costs for firms otherwise they would have an incentive to make those improvements irrespective of any demands from activists.

One determinant of the likelihood of firms agreeing with activists then, are the costs associated with reducing their reliance on the contested practice. We argue that firms who rely on the contested practice to a greater degree will find it more costly to change their practices. For instance, activist demands that require firms to meet certain environmental targets are likely to have greater cost implications for firms who currently have processes that are harmful for the environment to a greater extent. Moreover, for activists the marginal utility from their tactics is greater when they affect large scale changes at firms that engage in contentious practices to a greater degree. Conversely, demands of activists targeted at firms that engage in contentious practices to a lesser extent are likely to elicit relatively modest changes to the firm's operations. All else equal, we argue that, the likelihood of firms agreeing to the demands of an activist will be decreasing in the costs associated with complying to those demands.

Second, we also expect the regulatory context to influence firms' actions. Activist campaigns directed at firms in regulatory arenas rely on the threat of regulations to influence firms' practices. That is, firms will be more likely to agree with an activist when they perceive a greater credible threat from contestation resulting in relatively more stringent regulatory outcomes. Given that regulatory outcomes consider interests of multiple affected stakeholders, we argue that, opposition from other stakeholders will influence the regulatory threat perceived by firms. Activist demands that entail greater costs to firms are also likely to entail greater costs for firms' other stakeholders, such as consumers, who are likely to oppose agreements between firms and activists. Moreover, given the objective of regulation to balance the need of all stakeholders involved (Juntti, Russel, & Turnpenny, 2009), agreements that entail greater cost commitments from firms are less likely to receive support from the regulator as they will be unlikely to approve any changes that impose significant burden on firms' other stakeholders. As

such, we expect firms whose practices are more objectionable, to be less threatened by outcomes of regulatory contestation, and therefore less likely to reach an agreement with activists. This leads to the following hypothesis –

Hypothesis 1 (H1): Firms are less likely to reach agreements with activists in regulatory contexts when they are more reliant on the contested practice.

Pressure from other stakeholder groups. Unlike firm-activist interactions in the social arena that are predominantly dyadic in nature, regulatory proceedings often allow participation by a range of stakeholders including consumers, local communities, NGOs, and shareholders subjecting firms to diverse, and often, conflicting pressures (Kassinis & Vafeas, 2006). Contemporaneous pressures from multiple stakeholder groups require firms to carefully straddle their conflicting interests as gains by one stakeholder can often come at the expense of another group. For instance, conceding to the demands of an environmental activist might be perceived by shareholders as diverting resources away from profit maximization and negatively impact the firm's financial performance (Hillman & Keim, 2001; Jensen, 2002). As such, we expect pressure from other stakeholders during regulatory proceedings to influence a firm response to activist demands.

Pressures from other stakeholders are likely to be especially salient when they emanate from primary stakeholders with whom firms have direct economic relationships and rely on for access to crucial resources (Harrison, Bosse, & Phillips, 2010; Tantalo & Priem, 2016). Conflicts with such primary stakeholders can be extremely costly as they can affect resource flows and threaten a firm's financial position and its ability to survive. Extant studies have found that primary stakeholders were indeed more influential in shaping investors' perceptions and that primary stakeholder opposition had a stronger negative effect on firms' financial performance as

compared to their secondary stakeholders (Vasi & King, 2012). Demands of activists that are aligned with those of a primary stakeholder are perceived by firms as more legitimate (Mitchell, Agle, & Wood, 1997; Eesley & Lenox, 2006) often prompting activists to strategically align with other powerful and legitimate actors to increase the legitimacy of their own demands (Den Hond & De Bakker, 2007).

Compliance with demands of environmental activists often entail significant costs for firms such as capital investments, improvements to existing organizational practices, or allocation of funds for community initiatives. Since some of these costs are eventually shouldered by primary stakeholder groups such as consumers or shareholders, we expect their interests to conflict with those of the activists. However, we expect the pressure from such stakeholders to vary with the extent of economic power they wield over firms. Stakeholders will be less likely to sway firms' strategic decisions if they wield only limited power over a firm. However, as the power wielded by a stakeholder over a firm increases, it becomes harder for firms to disregard their interests, thereby constraining their ability to reach an agreement with the activist. This leads to the following hypothesis –

Hypothesis 2 (H2): Firms are less likely to reach agreements with activists in regulatory contexts when other stakeholders who are adversely affected by the agreement are more powerful.

Spillovers from Activist's Private Politics Tactics. Studies on firm-activist interactions have examined how activist characteristics influence response of firms. Mitchell *et al.*, (1997) argue that firms are more receptive to demands of stakeholders who they perceive to be more salient which they define to be a function of a stakeholder's power, legitimacy, and urgency of their

demand. Another dimension that has received attention in the literature is the ideology of activists that often arises from their beliefs about firms' motivations in addressing social problems as well as activists' own strategic orientation (Ählström & Sjöström, 2005). Characterizing activist ideologies as either confrontational or cooperative these examinations have argued that ideological motivations of activists are instrumental in determining the choice of tactics, they employ to influence firm behaviour (Baron, Neale, & Rao, 2016; Den Hond & De Bakker, 2007; Odziemkowska, 2021).

We extend this notion to argue that the choice of tactics employed by activists in the past will influence their interactions with the firm in the regulatory arena. Based on their past actions against firms such as protests and boycotts, activists develop campaign specific capabilities over time, allowing them to effectively influence firm behaviour through such actions (Odzienkowska, 2021). That is, activists who engage in private politics tactics to a greater degree, are more likely to develop capabilities that allow them greater success in influencing actions of firms through such tactics. Moreover, activists who engage in private politics not just derive utility from influencing practices of firms, but also from the campaign itself. By drawing public attention to contested practices of a firm, actions such as public protests allow activists to enhance their reputation of inflicting material and symbolic harm on firms.

We argue that these campaign specific capabilities as well as the need of the activists "to live up to their reputation" (Den Hond & De Bakker, 2007: 914), will spill over into the regulatory domain. Such activists are likely to make more substantive demands of firms that entail radical changes to firms' practices and, therefore, be less agreeable to firms. Although regulatory proceedings afford firms and activists an opportunity to negotiate and resolve their differences, activists that have relied in the past on more adversarial extra-institutional tactics

will be less accommodating of firms' interests and therefore, their interactions will be more susceptible to disputes. Given the significant cost implications in complying to substantive demands from such activists, firms too will be less likely to respond positively to them. Moreover, we also expect regulators to be less supportive of the positions of these activists as radical changes are also more likely to impose additional costs on firms' other stakeholders. All else equal, we expect interactions between activists who have relied to a greater degree on private politics in the past and firms to yield fewer agreements. This leads to the following hypothesis –

Hypothesis 3 (H3): Firms are less likely to reach agreements with activists in regulatory contexts when activists engage in private politics tactics to a greater degree.

Alignment between the activist and regulators. Studies on social movements have identified the role of political opportunity structures – factors in the political environment, such as political competition, presence of political allies, and political receptivity to claims of social movements (Tihanyi, Swaminathan, & Soule, 2021), that influence the prospects of collective mobilization as well as the success of social movements – on actions of activists and their ability to influence firm responses (Amenta *et al.*, 2008; Rao *et al.*, 2011). Likewise, in regulatory settings, ideological orientation of regulators has been shown to affect the outcomes of firm-activist interactions (Fremeth, Holburn, & Piazza, 2021).

We argue that the extent of ideological alignment between activists and regulators can influence the effectiveness of activist campaigns targeted at firms. That is, actions of activists targeted at firms are more likely to be effective when regulators are intrinsically supportive of the positions of the environmental activist. All else equal, ideological alignment between activists and regulators will present a greater credible threat to firms as any regulatory

contestation is more likely to bear success for the activists. The credible threat of regulators imposing stringent conditions on the firm, therefore, presents an incentive for firms to avoid a regulatory contest by reaching an agreement with the activist. Extending this argument, we also expect regulator ideology to moderate the relationships in H1-H3. That is, regulators who are sympathetic to the positions of the activists are likely to favor the positions of activists over firms. Therefore, regulatory contestation presents a greater credible threat to firms since activists will be more likely to convince regulators, who are already predisposed to support them, of their positions. As such, we argue that firms will be more likely to reach agreements with activists to avoid regulatory contestation despite their engagement in contested practices (H1), the economic power wielded by firms' other stakeholders (H2), or activists' engagement in private politics (H3). This leads to the following hypotheses –

Hypothesis 4a (H4a): Firms are more likely to reach agreements with activists in regulatory contexts when there is a greater ideological alignment between the activist and the regulator.

Hypothesis 4b (H4b): The negative effect of firms' reliance on the contested practice (H1), the power wielded by stakeholders adversely affected by agreements (H2), and the activist's engagement in private politics (H3) on the likelihood of firms reaching agreement with activists is weaker when there is greater ideological alignment between the activist and regulator.

4. EMPIRICAL CONTEXT

We focus our inquiry within the U.S. electric utilities sector, which was the largest industrial source of carbon dioxide accounting for 33% of total energy related CO₂ emissions in

2018 (U.S. Energy Information Administration, 2020). As such, strategic actions of electric utility firms such as investments in new power plants, choice of their energy source, or engagement in energy conservation programs have significant bearing on the natural environment. The environmental implications of their actions, not just in the US but also globally⁶, often attract attention from environmental activists therefore presenting an appropriate industry setting to observe interactions between firms and environmental activists.

Given its natural monopoly characteristics, the electric utilities sector is regulated by state-level independent agencies called public utility commissions (PUCs) in the US. Rates that electric utility firms charge their consumers, allocation of costs to different consumer classes, capital expenditures such as utility plant additions, and return on investor's capital, are all determined through periodic rate reviews initiated by firms with state PUCs. On receiving a new rate review case from a firm, the PUC conducts an extensive investigation to assess the firm's request and changes are approved with an objective to set rates that are "fair, just, and reasonable" for consumers and, at the same time, also allow utility investors an opportunity to earn a reasonable return on their investment.

The rate review process allows affected stakeholders – those who have a direct or substantial interest in the regulatory outcome – termed 'intervenors', to formally participate in the rate review process (Oregon Public Utility Commission, 2010). A variety of intervenors often participate in rate reviews including groups that have an ongoing economic relationship with the utility firm such as consumers, shareholders, labour unions, trade and business associations, as well as more ideological groups such as environmental activists, and public interest advocacy organizations. Intervenors typically participate in public hearings by presenting evidence or

⁶ Globally the electric utilities sector was responsible for more than 30 percent of the CO₂ emissions in 2019 (IEA, 2019).

expert testimony and cross-examining the firm's witnesses to provide information to PUCs which they incorporate in their final rulings.

An important feature of the regulatory review process is that it typically affords firms an opportunity to negotiate an agreement with the participating intervenors instead of contesting their positions in the formal and sometimes lengthy administrative process adjudicated by the PUC (Littlechild, 2009). Negotiated agreements between the utility and its stakeholders are voluntary and are subject to final approval from the regulators. When agreements cannot be reached, parties participate in a formal regulatory hearing where the agency determines outcomes based on the arguments and evidence presented by the firm and the intervenors (Fremeth & Holburn, 2009; 2012). Negotiated agreements have been viewed as a quicker, less costly, and less adversarial alternative to the formal adjudication process allowing firms and stakeholders to mutually resolve differences amongst themselves (Littlechild, 2009). The wide-ranging benefits of negotiated settlements to the regulators, utility firms and the stakeholders, has resulted in an increasing share of rate cases being settled through this channel (see figure 1).

[Insert Figure 1 here]

We examine the interaction between firms and environmental activists who participate in regulatory rate review proceedings with a focus on outcomes of negotiated settlements between them. Environmental activists have become increasingly active in regulatory agency reviews of electric utility operations (see Figure 2) and predominantly advocate for outcomes that are consequential for the environment such as adoption of renewable power generation technologies, closure of fossil-fuel plants, and promotion of energy conservation programs. For instance, when Natural Resources Defense Council (NRDC) sought intervention in a rate case initiated by

KCP&L Greater Missouri Operations Company in 2011, they expressed their interest in the rate case as follows –

“NRDC and its members are interested in promoting energy efficiency, peak demand reduction and renewable energy resources to meet Missouri’s energy needs. NRDC seeks to intervene in this proceeding in order that its members and others may benefit from well designed and cost-effective energy efficiency programs and a corresponding reduction in coal-fired generation. NRDC will bring significant expertise to this proceeding.”

[Insert Figure 2 here]

Therefore, agreements are often contingent on firms making assurances that adequately satisfy the demands of the environmental activists. For instance, in Arizona Public Service Company’s (APSC’s) rate case in 2009, Western Resource Advocates (WRA) an environmental activist demanded that APSC decrease their reliance on coal-fired energy and make substantial investments in renewable technologies. Post settlement negotiations, APSC committed to obtaining 10 percent of its energy needs from renewable resources by 2015, and funding in-state wind and photovoltaic generation projects. Notably, these resource commitments were not a part of APSC’s initial rate case application but were included only in final agreement after negotiations between APSC and WRA (Arizona Corporation Commission, 2009). On the other hand, disagreements can lead to a protracted regulatory contestation where parties present evidence in support of their respective positions and the regulators make final determinations based on the merit of the evidence presented and by taking into account the interests of all parties involved. Worse yet, disagreements can spill over into the social arena as happened in the rate case initiated by the Public Service Company of New Mexico (PNM) when New Energy

Economy (NEE), a local environmental group, launched a protest against the utility after the parties failed to reach an agreement during their negotiations (Bryan, 2011). Table 1 presents the terms of agreement between utility firms and environmental activists in a sample of rate cases.

[Insert Table 1 here]

5. DATA AND METHODS

5.1 Sample.

We compiled data on all rate cases that involved negotiated agreements between electric utility firms and participant intervenors between 1990 and 2015. We hand code archival regulatory proceeding documents published by state PUCs to obtain data on firms who initiated rate cases, stakeholders that formally participated in the regulatory proceedings and whether an agreement was reached between the firm and stakeholders. The resulting sample includes 694 rate cases, initiated by 174 different utility firms, that were settled through negotiated agreements. The number of intervenors participating in this sample of negotiated rate cases ranges between 1 and 43, with an average of about seven distinct intervenors participating in a rate case proceeding.

Typical intervenors include the State Attorneys General, Public Consumer Advocates, residential and business consumer groups, municipalities, federal government agencies, environmental activists, civic organizations, labour unions, utility shareholders, and trade associations among others. Business consumer groups were the most frequent participant and intervened about 77 percent of the rate cases in our sample. On the other hand, there were 257 instances of environmental activists participating in negotiated rate cases. These groups ranged from (i) large environmental organizations that have presence across the country such as Sierra

Club, Natural Resources Defence Council, and the Environmental Defense Fund; (ii) regional groups such as Appalachian Voices, Land & Water Fund of the Rockies, and Western Resource Advocates; and (iii) local groups such as neighbourhood environmental coalitions. Conditional on an environmental activist intervening in a negotiated rate case, the firm and the activist reached agreement in about 40 percent of their interactions.

[Insert Table 2 here]

5.2 Econometric Method.

To estimate the impact of firm, activist, and regulator attributes on the likelihood of agreements between firms and environmental activists, we use a fixed effects regression model with firm and time fixed effects to control for time-invariant unobserved firm characteristics (Angrist and Pischke 2009). Since participation by environmental activists in rate cases is not random, coefficient estimates from a linear regression model may be biased if the choice of an activist to participate in a rate case also influences the likelihood of observing an agreement. We correct for this potential sample selection bias by implementing a 2-stage Heckman selection model (Heckman, 1979). In the first stage, the Heckman model estimates the likelihood of *Participation* by an environmental activist in a negotiated rate case and is coded as a dummy variable that takes a value of 1 if an environmental activist participated in the rate case and 0 otherwise⁷. The second stage estimates the likelihood of an *Agreement* between the firm and the environmental activist, by correcting for potential sample selection bias by including the inverse Mills ratio. To account for potential serial correlation within firms, we estimate robust standard errors clustered at the firm-level (Williams, 2000).

⁷ We identify all active environmental activists within a state by assuming that an environmental activist becomes (and remains) active in a state after their first participation in a rate case in that state during the sample period. This process yields 1,763 potential firm-activist dyads, of which firms and activist interactions occur in 257 instances (or about 15%). Table 2 presents our sample construction technique using one environmental activist as an example.

Variables.

Dependent Variable: The dependent variable takes a value of 1 if the firm and the environmental activist who participated in the rate case reached an agreement during settlement negotiations, and 0 otherwise.

Independent Variables: To test Hypothesis 1, we create the variable *Firm's Share of Power Generated from Coal* which captures a firm's reliance on coal to generate electricity. A firm's choice of energy source to generate electricity is arguably the most important determinant of the impact of their operations on the environment. Several environmental NGOs, including Sierra Club, Environmental Defense Fund, and Greenpeace have environmental programs specifically targeting use of coal by corporations to encourage them to switch to cleaner sources of energy⁸. Therefore, the use of coal by utility firms to generate electricity, which has significant adverse effect on the environment, is likely to be perceived by environmental activists as more contentious. We obtain data on electric utility firms' fuel mix portfolio from US Energy Information Administration (EIA) form EIA-860 which collects annual generator-level data on existing and planned generators at electric plants with 1 megawatt or greater combined nameplate capacity. For each electric plant, we identify the nameplate capacity of its constituent generating units and their fuel source (coal, natural gas, hydro, solar, wind, nuclear, etc.). We then aggregate this generation data at the firm-level by types of energy source for each year in the sample period.

⁸ Environmental activists have been particularly vocal about retiring coal-based plants given its impact on the environment. Burning coal produce to energy is estimated to generate about twice the amount of CO₂ emissions as compared to producing the same amount of energy from natural gas. Moreover, coal use accounted for more than 65% of the total CO₂ emissions from the electric utilities sector in the US, although it represented only 28% of the total electricity generated (US Energy Information Administration, 2018).

Hypothesis 2 predicts a relationship between power wielded by a stakeholder whose interests are adversely affected by agreements between firms and activists and the likelihood of observing an agreement. While multiple stakeholder groups participate in regulatory proceedings⁹, we identify business consumers (commercial and industrial ratepayers) as the focal stakeholder to test our hypothesis for three reasons. First, given the primary objective of regulation to protect the interests of consumers, demands of consumer groups are particularly salient for the firm. Second, business consumers are relatively more price sensitive and predominantly participate in rate case proceedings to obtain preferential rates. As such, agreements with activists – that often entail investments in clean energy, or energy efficiency programs – impose additional costs for customers who eventually bear some of these costs, and therefore conflict with the interests of business consumers. Finally, business consumer groups are regular participants in rate review proceedings and frequently intervene in regulatory proceedings either individually or through industry associations. In our sample, business consumers intervened in about 77 percent of the rate cases. To capture the economic power wielded by business consumers over utility firms, we create a variable *Firm's Share of Sales to Business Consumers* that measures the percentage of sales made by utility firms to commercial and industrial consumers. Data on retail sales to different consumer classes is obtained from EIA form 861.

To test Hypothesis 3, we capture an activist's participation in private politics tactics based on their past actions that target firms via protests and boycotts. To capture this, we search the Nexis University Academic database for U.S. newspaper articles for data on protests,

⁹ Typical stakeholder groups that participate in regulatory rate reviews include consumers (commercial, industrial, and residential), state appointed consumer advocates, industry and trade associations, labour unions, state and federal government entities, public interest groups and shareholders.

boycotts, and media and letter-writing campaigns organized by each activist in our sample during 1990 – 2015. We create a variable *Number of Activist Protests* measured as the cumulative number of private politics campaigns (protests, boycotts, etc.) in which an activist participated within the focal state in the years preceding the rate case.

To test Hypothesis 4, we identify ideological alignment between the environmental activist and the regulator based on the political affiliation of PUC commissioners. Given the significant partisan differences between US political parties vis-à-vis environmental issues, with Democrats more likely to support pro-environmental legislation (Dunlap & McCright, 2008; Kim & Urpelainen, 2017), we expect commissioners who were members of the Democratic party to be more sympathetic to the positions of the activists. Therefore, we create a variable *Share of Democrat Regulators* measured as the percentage of PUC commissioners who were members of the Democratic Party to capture the degree of alignment between the activists and regulators. Data on party affiliation of PUC commissioners was collected from individual PUC websites, and the Institute of Public Utilities, Michigan State University's Annual Demographics of U.S. Public Utility Commissioners (IPU-MSU, 2020). To test the moderating effect of the regulators' ideology in Hypothesis 5, we interact the variable *Share of Democrat Regulators* with the independent variables that test Hypotheses 1-3 – that is, the *Firm's Share of Power Generated from Coal*, *Firm's Share of Sales to Business Consumers*, and *Number of Activist Protests*.

In addition to the independent variables used to test our hypotheses, we control for a number of additional factors that are also likely to inform the actions of firms and environmental activists during their interactions. At the rate case-level, we control for the amount of change requested by the firm to its total rate base (*Firm's Regulated Revenue Requirement*). A utility's revenue requirement determines the value of capital investments made by the utility firm on

which it is allowed to earn the PUC approved rate of return. As such, the revenue requirement is a critical determinant of profits earned by the utility and is frequently the primary issue of contention between firms and intervening stakeholders. A larger increase requested by the firm to its rate base is more likely to elicit stronger opposition from stakeholders and impact the nature of settlement negotiations. Next, we control for *Consumer Advocate Participation* in a rate case. Consumer advocates are publicly funded independent institutions who have the authority to represent the interests of consumers in rate review proceedings. Prior research has found that participation by consumer advocates alters the informational environment in regulatory proceedings (Fremeth & Holburn, 2016) and affects the rate of return a firm is permitted to earn and the allocation of costs across different consumer classes (Fremeth, Holburn, & Spiller, 2014).

Next, two variables control for the extent of stakeholder opposition confronted by firms during regulatory proceedings. First, we include the variable *Total Business Consumer Intervenors* to capture the total number of intervenors who were either commercial or industrial ratepayers to control for the opposition presented by this stakeholder group. Second, we include the variable *Total Number of Intervenors* (excluding intervenors who are business consumers) to control for the degree of opposition firms confront from other key constituents who participate in the rate case, as it can have a significant bearing on regulatory outcomes (Bonardi, Hillman, & Keim, 2005). Data for all rate case-level control variables are obtained from publicly available regulatory documents from the respective state PUC websites.

At the firm-level, the variable *Firm's Share of Power Generated from Renewables* controls for the share of nameplate generation capacity at the utility-level that uses renewable sources – namely, Hydro, Wind, Solar, Geothermal or Biofuels – as their primary fuel source.

We also include the variable *Years Since Firm's Previous Regulatory Proceeding* to control for the number of years elapsed since the firm's previous regulatory rate review, since a longer duration between rate cases can involve more substantial changes requested by the firm and influence the nature of negotiations between firms and intervenor groups. We also control for *the Firm's Annual Revenue* as the log of total annual revenues earned by the utility which is obtained from EIA form 861.

At the activist-level we control for their prior experience participating in regulatory proceedings (*Activist Experience in Utility Regulatory Proceedings*) as that can influence the tactics employed by activists during the regulatory proceeding as well as the nature of their relationship with the firm. The variable is coded as the cumulative sum of all rate cases in which an activist participated prior to the focal rate case. We also control for the resource base of the environmental activist that can affect the response of firms to activist demands (Eesley & Lenox, 2006). Activist organizations that are active across multiple jurisdictions are more likely to have a larger membership base, and, as a result, elicit greater funding and have relatively greater resources compared to activist groups that focus on specific issues and operate in a single jurisdiction. As such, we create a variable *Multi-state Activist* to account for an activist's resource base. The variable takes a value of 1 for activists who were active in rate cases across multiple states during the sample period, and 0 otherwise.

We also control for state-level enactment of renewable portfolio standards (RPS) policies. RPS require electric utility firms to generate or purchase a certain percentage of their total generation to be sourced from renewable sources of energy and have been shown to increase firms' use of renewable sources to generate electricity (Carley, 2009; Menz & Vachon, 2006). To control for the effect of RPS on a firm's generation mix, as well as the nature of activist

demands, we include the variable *State Renewable Share Goal* that identifies the percentage of electricity that utility firms are required to generate from renewable energy resources as mandated by the state RPS policy. Data on state enactments of RPS policies is obtained from the Berkeley Lab's annual status report on U.S. renewables portfolio standards (Barbose, 2019).

Finally, we include the variable *State Environmental Score* to satisfy the exclusion requirement of the Heckman selection model (Certo, Busenbark, Woo, & Semadeni, 2016). It is measured as the average of scores assigned to the members House of Representatives and the Senate in the US congress for each state by the League of Conservation Voters (LCV) based on how the members voted on environmental legislation. A higher average LCV score of legislators in a state represents a more pro-environment stance and is reflective of their preference for pro-environmental policies. While we expect this measure to influence how active environmental activists are in a state and therefore the likelihood of their participation in rate cases, it is unlikely to influence the outcomes of firm-activist interactions. Table 3 presents the descriptive statistics and the correlation matrix for all variables in our analysis.

[Insert Table 3 here]

6. RESULTS

In Table 4 we present the results from the Heckman selection models that estimate the statistical relationship between firm, activist and regulator characteristics on the likelihood of observing an agreement between the firm and the environmental activist. Model 1 presents the results of the first stage Probit regressions that identify the factors which influence environmental activists to participate in negotiated rate cases. Coefficient estimates indicate that environmental activists were more likely to participate in a regulatory proceeding when the *Firm's Share of Power*

Generated from Coal in a firm's generation mix was higher, when *Firms' Share of Sales to Business Consumers* was lower, and when *Number of Activist Protests* was lower. Although the coefficient estimates on these variables are not statistically significant at conventional levels, the signs on the coefficients match two out of the three hypothesized relationships, suggesting that activists were more likely to participate in regulatory proceedings where an agreement was more likely. Additionally, the coefficient on the variable *State Environmental Score*, included in the first stage models to satisfy the exclusion restriction, is positive (although not statistically significant at conventional levels) suggesting that a higher degree of support for pro-environmental policies in a state increased the probability of an environmental activist participating in the regulatory proceeding.

[Insert Table 4 here]

Model 2 presents the results from the second stage linear regressions that test our proposed hypotheses. The coefficient on the variable *Firm's Share of Power Generated from Coal* is negative ($p = 0.002$) and increasing the share of coal in a firm's fuel mix portfolio by one standard deviation from the mean value decreases the likelihood of agreement by about 70 percent. This result provides strong support for Hypothesis 1, which predicted that agreement was less likely when the firm was more reliant on the contested practice. The coefficient on the variable *Firm's Share of Sales to Business Consumers* is negative ($p = 0.007$), and a one standard deviation increase in the share of sales to business ratepayers from the mean value decreases the likelihood of agreement by 58 percent. Further, the negative coefficient on the variable *Consumer Advocate* ($p = 0.001$) indicates that the presence of the consumer advocate – who represents the interests of all consumers and negotiates with the firm on their behalf – reduced the likelihood of agreement by 53 percent. Together these results lend support to our argument

that pressure from consumer groups constrains the ability of firms to reach agreements with activists.

The coefficient on variable *Number of Activist Protests* is negative ($p = 0.035$) and a one standard deviation increase from the mean value in the number of protests initiated by the activist during the sample period decreases the likelihood of agreement by about 13 percent. This supports our prediction in Hypothesis 3. The coefficient on variable *Share of Democrat Regulators* is negative, however not statistically significant at conventional levels. Thus Hypothesis 4 is not supported. Finally, the statistically significant coefficient on *Inverse Mills Ratio* ($p = 0.066$) suggests that data could be subject to potential sample selection bias, especially since several independent variables from the second stage are also significant predictors of the first-stage dependent variable (Certo, Busenbark, Woo, & Semadeni, 2016).

Models 3a, 3b, and 3c introduce the interaction terms that test Hypothesis 5, which predicted that ideological alignment between the activist and regulator positively moderates the relationships hypothesized in Hypotheses 1-3. To interpret the statistical significance of the interaction terms, we estimate the marginal effect of an increase in one unit of our hypothesized variables – that is, *Firm's Share of Power Generated from Coal*, *Firm's Share of Sales to Business Consumers*, and *Number of Activist Protests* – on the likelihood of observing firm agreement at different values of *Share of Democrat Regulators*.

[Insert Table 5 here]

In Table 5a we assess the interaction between *Firm's Share of Power Generated from Coal* and *Share of Democrat Regulators*. As predicted the marginal effect of *Firm's Share of Power Generated from Coal* on the likelihood of agreement increases with the share of regulators who were members of the Democratic party. With respect to the magnitudes, the

likelihood of observing an agreement increases from -2.9 percent to -1.8 percent for a unit increase in *Firm's Share of Power Generated from Coal*, as the *Share of Democrat Regulators* increases from 0 to 100 percent. In Table 5b we present the interaction between *Firm's Share of Sales to Business Consumers* and *Share of Democrat Regulators*. The marginal effect of *Firms' Share of Sales to Business Consumers* on the likelihood of observing an agreement increases from -8.3 percent to -0.007 percent. Finally, Table 5c shows the results of the interaction between *Number of Activist Protests* and *Share of Democrat Regulators*. The marginal effect of activist protests on the likelihood of firm agreement increases with the share of commissioners who were democrats ranging from -3.5 percent to -0.004 percent. Taken together, these results provide strong support for Hypothesis 5.

7. DISCUSSION AND CONCLUSION

Firms often confront opposition from a variety of stakeholders in public institutions such as legislatures, courts, and regulatory agencies. Despite the outsized role of the state in determining actions of firms and their overall performance, not much is known about firm-activist interactions that occur in the regulatory context. In this paper, we fill this gap in the literature by developing novel arguments about conditions under which firms reach agreements with environmental activists in the regulatory arena. In a statistical analysis, conducted in the context of firm-activist interactions that occur during regulatory rate review proceedings initiated in the U.S. electric utilities sector from 1990-2015, we find evidence consistent with our predictions. We find that, all else equal, firms were less likely to reach an agreement with an environmental activist when (i) firms relied more on coal to generate electricity, a practice vehemently contested by activists, (ii) had greater economic reliance on stakeholders whose interests

conflicted with those of the environmental activist, and (iii) activists engaged in private politics actions to a greater extent. We also find that the ideological alignment between activists and regulators weakened the above relationships by increasing the likelihood of firms reaching an agreement with the activist.

Our empirical context confers several advantages allowing us an appropriate setting to examine how firms respond to opposition from activists in regulatory settings. First, the regulatory setting allows us to precisely observe the interaction between the firm and an environmental activist and whether it resulted in an agreement. In contrast, studies examining such interactions in the context of private politics have had to rely on more subjective measures such as media reports to evaluate the response of firms. Second, while extant studies have predominantly focused on dyadic interactions between firms and activists, these interactions do not usually occur in isolation but are subject to a multiplicity of pressures from other stakeholder groups. Our context allows us to observe and control for contemporaneous pressures that firms confront from a multitude of other stakeholders during their interactions with environmental activists. Finally, examining firm responses to activist actions creates potential challenges of endogeneity if choice of activists to target a firm is motivated by their expectation of obtaining a favourable outcome. By allowing us to capture data on all rate review cases initiated by firms with state PUCs – regardless of participation by an environmental activist – our context allows us to control for the resulting selection bias.

Our examination contributes to multiple streams of literature. First, we extend the literature at the intersection of stakeholder management and nonmarket strategy by examining the more commonplace, yet less visible, firm-activist interactions in the context of public politics where activists rely on public institutions such as regulatory agencies to affect organizational

change. In doing so, we integrate theoretical perspectives from the nonmarket strategy literature which has extensively examined firms' actions aimed at public institutions to influence public policy with insights from the literature on stakeholder management to shed light on conditions under which firms and activists can reach agreements to strategically pre-empt stringent regulations.

Second, although stakeholder theory has emphasized the diversity of pressures firms confront from a myriad group of stakeholders (Freeman, 2010), studies have largely modeled firm-activist interactions as dyadic and disregarded how pressures from other influential stakeholders inform the nature of firm-activist interactions. Insofar as actions of firms directed at one stakeholder have implications for other groups, we argue that, studies need to account for the complex nature of interconnected relationships between firms and the multitude of stakeholders they confront in their institutional environment. By incorporating the notion of contemporaneous demands from both secondary and primary stakeholders, our examination extends the literature on stakeholder management by explicating the interactive affect of multiple stakeholder demands on firms.

Finally, our research contributes to the stream of literature at the intersection of corporate environmentalism and public policy (Lyon, 2010; Lyon & Maxwell, 2004). Prior examinations have focused on dyadic interactions between firms and activists to examine adversarial relationships between firms and activists (Baron, 2001; Hiatt, Grandy, & Lee, 2015; King, 2008; Odziemkowska, 2021; Pacheco & Dean, 2015, among others). Likewise, other studies have examined collaborative relationships when firms pursue collaborations with NGOs to gain competitive advantage in the market by acquiring new capabilities (London & Hart, 2004; Perez-Aleman & Sandilands, 2008; Rondinelli & London, 2003) or to supplement weak institutional

environments in emerging markets (Ballesteros & Gatignon, 2019; Dahan, Doh, Oetzel, & Yaziji, 2010; McDermott, Corredoira, & Kruse, 2009; Quélin, Kivleniece, & Lazzarini, 2017)¹⁰. A parallel stream of literature has also examined dyadic interactions between firms and regulators when firms sign voluntary agreements with regulatory agencies through instruments such as negotiated agreements and public voluntary agreements (Blackman, Uribe, Hoof, & Lyon, 2012; Delmas & Marcus, 2004; Delmas & Montes-Sancho, 2010; Fleckinger & Glachant, 2011; Innes & Sam, 2008; Lyon & Maxwell, 2003; Segerson & Miceli., 1998). Our study integrates these perspectives to conceptualize a triadic relationship where firms and activists voluntarily sign agreements in the shadow of regulatory institutions. As such, our examination demonstrates how firms, activists, and public institutions interact to play a pivotal role in shaping public policy outcomes in the environmental domain.

Our study is naturally subject to a variety of limitations. First, our examination is limited to a single industry, electric utilities, which is heavily regulated given its natural monopoly characteristics and, as a result, presents an institutional environment which might differ significantly across other industries that are regulated to a lesser extent. We expect regulatory pressures that firms confront from environmental activists to be particularly severe in the context of the electric utilities industry and to assume a central role in informing actions of firms. Second, our study does not account for other nonmarket actions of firms directed at regulators and policy makers. For instance, studies have found that firms also engage in corporate political actions such as making financial contributions to election campaigns of politicians who oversee regulators to shore up support when they face a greater degree of stakeholder opposition in the

¹⁰ See Wassmer, Paquin, & Sharma (2014) for a review of literature on collaborative interactions between firms and environmental activists. Also, Kourula & Laasonen (2010) that presents a review of the broader literature on interactions between nongovernmental organizations, firms, and government.

regulatory policy-making process (Fremeth, Holburn, & Vanden Bergh, 2016). Insofar as firms and activists strategically employ complementary nonmarket actions which have the potential to influence the outcomes of their interactions, our study does not account for them. Future examinations that integrate such broader strategic actions can therefore contribute additional insights to our understanding of firm-activist interactions. Notwithstanding these limitations, our study develops novel insights towards research at the intersection of corporate environmentalism, and public policy to highlight the increasingly pivotal role assumed by firms and activists in addressing global environmental challenges such as climate change.

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Tables and Figures

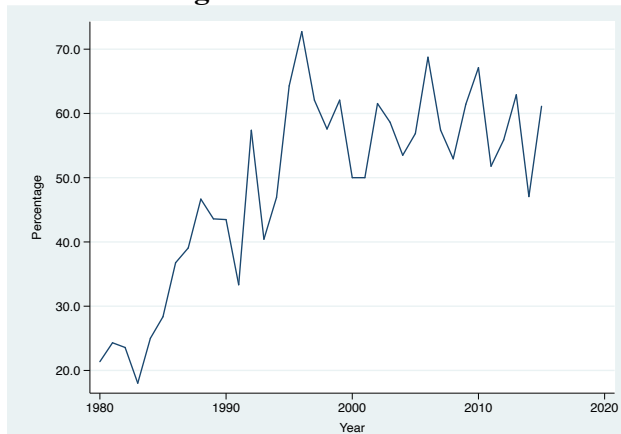


Figure 1: Percentage of rate cases settled through negotiated agreements

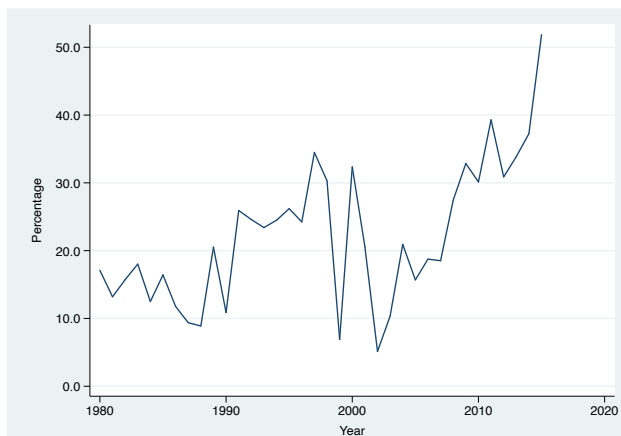


Figure 2: Percentage of rate cases in which environmental activists formally participated

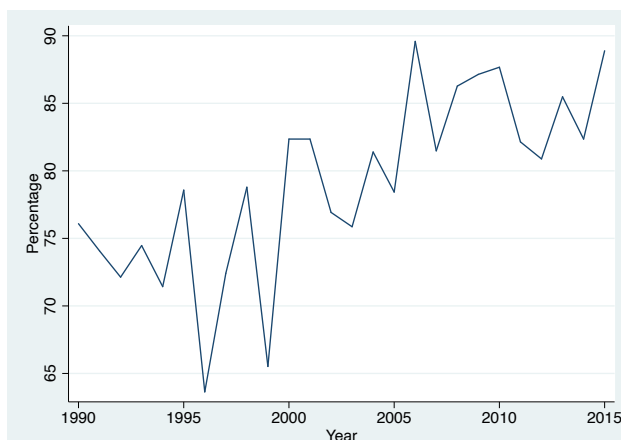


Figure 3: Percentage of rate cases in which business consumers formally participated

Table 1: Terms of agreement between utilities and environment activists

Firm	Activist	State	Year	Settlement Terms
Orange & Rockland Utilities Inc.	Pace Energy and Climate Center	New York	2015	Jointly develop a framework for advanced metering infrastructure to reduce operating costs, assist in more timely identification of customer outages, and improve overall outage response and efficiency.
Consolidated Edison Co. (ConEd)	Pace Center for Climate Change Law at Columbia University (Pace) and Environmental Defense Fund (EDF)	New York	2014	- ConEd and Pace agreed to jointly work towards a short and long-term vulnerability assessment with respect to climate change and prepare a climate change adaptation plan. - ConEd and EDF agreed to jointly develop time-invariant rate pilot projects, catalogue and reduce the utility's natural gas pipeline methane emissions.
Ohio Power Co.	Natural Resources Defense Council (NRDC)	Ohio	2011	Ohio Power and NRDC jointly proposed the Throughput Balancing Adjustment (TBA) Rider to help consumers through official energy efficiency programs, education, as well as to preserve customers' incentives to invest in energy efficiency and customer-sided renewable energy.
Arizona Public Service Co.	Western Resource Advocates (WRA)	Arizona	2009	As a part of the settlement agreement APS agreed to - - Make significant investment in renewable energy so that by 2015, an estimated 10 percent of APS's retail sales will come from renewable resources. - Include a project for in-state wind generation, a plan for a utility-scale photovoltaic generation project, and solar programs for Arizona schools and governmental institutions. - Adopt WRA's recommendation on demand response programs. - Jointly conduct a study on the impacts of demand rates on the mix of power generation sources, on air emissions, and on energy use by program participants.
Duquesne Light Co.	Citizens for Pennsylvania's Future (PennFuture)	Pennsylvania	2006	- Prepare joint proposals for energy conservation and education, time of use metering and economic development initiatives. - Duquesne Light agreed to contribute \$1.5 million per year for each of the four years 2007 through 2010 to fund certain renewable energy projects and/or to fund energy efficiency and energy education projects.
Public Service Co. of CO	Land and Water Fund	Colorado	2003	- The utility and the LAW fund worked closely to develop the voluntary green pricing concept with the LAW fund having been intimately involved in the inception, design and implementation of the Windsource program. - The LAW Fund, through its Green Marketing Program, actively promoted Windsource and helped solicit hundreds of customer sign-ups from PSCo's business, government, university and residential customers. The LAW fund lent its credibility as a not-for-profit environmental organization to the marketing of the Windsource program.
PacifiCorp	Land and Water Fund	Utah	1999	Based on recommendations from the LAW Fund PacifiCorp agreed: - To create a "green" offering to customers which would allow them to pay more for electricity to specify a green generation source, such as wind generation. - Net metering: which would allow a customer who generated electricity on site to sell any excess electricity back to the utility at retail price. - The parties agreed to establish a joint task force to develop concrete proposals, analyze costs and benefits, and specifics of program delivery.

Table 2: Data setup example for a sample environmental activist

Environmental Activist	State	Case Id	Utility Firm	Case Year	Participated	Dyad Included in Sample
California Center for Sustainable Energy	California	1085	San Diego Gas & Elec.	1992	No	No
California Center for Sustainable Energy	California	1124	Southern California Edison Co.	1996	No	No
California Center for Sustainable Energy	California	1086	San Diego Gas & Electric Co.	1998	No	No
California Center for Sustainable Energy	California	872	Pacific Gas & Electric	2000	No	No
California Center for Sustainable Energy	California	1126	Southern California Edison	2003	No	No
California Center for Sustainable Energy	California	874	Pacific Gas & Electric	2004	No	No
California Center for Sustainable Energy	California	875	Pacific Gas & Electric Co.	2004	No	No
California Center for Sustainable Energy	California	1088	San Diego Gas & Electric Co.	2004	No	No
California Center for Sustainable Energy	California	1558	Pacific Gas & Electric Co.	2007	No	No
California Center for Sustainable Energy	California	1619	San Diego Gas & Electric Co.	2008	Yes	Yes
California Center for Sustainable Energy	California	1098	Sierra Pacific Power Co.	2009	No	Yes
California Center for Sustainable Energy	California	1734	Pacific Gas & Electric Co.	2011	No	Yes
California Center for Sustainable Energy	California	1885	California Pacific Electric Co.	2012	No	Yes
California Center for Sustainable Energy	California	2108	Southern California Edison Co.	2015	No	Yes

Table 3: Descriptive Statistics and Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1 Participation	1																
2 Agreement	.	1															
3 Firm's Share of Power Generated from Coal	0.15	-0.16	1														
4 Firm's Share of Sales to Business Consumers	0.08	-0.02	0.04	1													
5 Number of Activist Protests	-0.03	-0.05	-0.04	-0.01	1												
6 Share of Democrat Regulators	0.05	-0.16	0.06	-0.03	-0.08	1											
7 Firm's Share of Power Generated from Renewables	-0.08	0.07	-0.25	-0.05	-0.02	0.12	1										
8 Consumer Advocate Participation	0.04	-0.12	0.00	-0.07	0.03	0.11	-0.11	1									
9 Number of Business Consumer Intervenors	0.19	-0.09	0.31	0.20	-0.05	0.04	-0.06	0.05	1								
10 Total Number of Intervenors	0.28	-0.12	-0.01	0.19	0.02	0.01	-0.26	0.34	0.36	1							
11 Activist Experience in Utility Regulatory Proceedings	0.08	0.11	0.01	-0.01	0.06	0.02	0.04	-0.09	0.02	-0.06	1						
12 Multi-state Activist	0.12	0.03	0.11	0.00	0.13	0.03	0.09	-0.04	0.11	-0.02	0.57	1					
13 Firm Annual Revenue	0.12	-0.15	0.13	0.10	0.08	-0.07	-0.28	0.07	0.27	0.48	-0.06	-0.07	1				
14 State Renewable Share Goal	-0.08	0.05	-0.23	-0.02	0.09	-0.13	-0.05	0.33	-0.09	0.13	0.02	-0.10	0.07	1			
15 Years Since Firm's Previous Regulatory Proceeding	0.03	0.14	-0.05	0.04	-0.01	0.04	-0.08	0.16	0.10	0.06	-0.01	-0.04	-0.27	0.05	1		
16 Firm's Regulated Revenue Requirement	0.10	0.00	0.01	0.17	0.02	-0.04	-0.16	0.16	0.16	0.35	-0.03	0.01	0.49	0.19	-0.03	1	
17 State Environmental Score (LCV)	-0.12	-0.18	-0.35	-0.18	0.07	0.05	0.20	0.19	-0.29	0.02	-0.07	-0.13	0.04	0.50	-0.09	0.08	1
N	1763	257	1763	1747	1763	1762	1763	1763	1763	1763	1763	1763	1763	1747	1763	1758	1760
Mean	0.15	0.37	17.35	63.16	2.21	0.38	19.51	0.63	1.82	7.80	8.41	0.40	13.77	0.14	3.82	103.42	56.94
SD	0.35	0.48	26.84	6.58	6.86	0.29	30.97	0.48	1.53	6.49	13.13	0.49	1.36	0.14	4.82	153.73	25.52

Table 4 Heckman Two-Stage Regression Models for Agreement—between firms and environmental activists

	(1) Participation	(2)	(3a) Agreement	(3b)	(3c)
Firm's Share of Power Generated from Coal (H1)	0.00994 (0.0102)	-0.0268*** (0.00873)	-0.0291*** (0.00768)	-0.0317*** (0.00878)	-0.0265*** (0.00860)
Firm's Share of Sales to Business Consumers (H2)	-0.0158 (0.0373)	-0.0875*** (0.0328)	-0.0725** (0.0343)	-0.0832*** (0.0312)	-0.0856** (0.0327)
Number of Activist Protests (H3)	-0.00204 (0.00776)	-0.0183** (0.00869)	-0.0183** (0.00861)	-0.0184** (0.00887)	-0.0351** (0.0168)
Share of Democrat Regulators (H4)	-0.0396 (0.365)	-0.106 (0.347)	-0.565 (0.388)	-5.131** (2.444)	-0.155 (0.344)
Firm's Share of Power Generated from Coal *			0.0120 (0.00922)		
Share of Democrat Regulators (H5)				0.0761** (0.0378)	
Share of Sales to Business Consumers *					0.0314 (0.0300)
Share of Democrat Regulators (H5)					
Number of Activist Protests *					
Share of Democrat Regulators (H5)					
Firm's Share of Power Generated from Renewables	0.0158* (0.00844)	0.0427*** (0.0121)	0.0360** (0.0142)	0.0292** (0.0144)	0.0419*** (0.0122)
Consumer Advocate Participation	0.137 (0.309)	-0.534*** (0.162)	-0.644*** (0.181)	-0.602*** (0.169)	-0.540*** (0.164)
Business Consumer Intervenors	-0.145** (0.0683)	0.0504 (0.0621)	0.0521 (0.0607)	0.0536 (0.0647)	0.0547 (0.0619)
Total Number of Intervenors	0.131*** (0.0310)	0.0466 (0.0383)	0.0376 (0.0385)	0.0382 (0.0394)	0.0423 (0.0391)
Activist Experience in Utility Regulatory Proceedings	0.0137** (0.00629)	0.00720 (0.00498)	0.00656 (0.00497)	0.00682 (0.00504)	0.00772 (0.00528)
Multi-state Activist	0.112 (0.204)	0.293*** (0.107)	0.279** (0.108)	0.270** (0.109)	0.274** (0.104)
Firm Annual Revenue	0.410 (0.302)	-0.865*** (0.325)	-0.815** (0.338)	-0.924*** (0.318)	-0.893** (0.341)
State Renewable Share Goal	0.786 (1.067)	2.811*** (1.040)	2.461** (1.201)	2.550** (1.063)	2.799*** (1.046)
Years Since Firm's Previous Regulatory Proceeding	0.0624** (0.0265)	0.0414 (0.0315)	0.0499 (0.0345)	0.0387 (0.0322)	0.0408 (0.0320)
Firm's Regulated Revenue Requirement	0.000107 (0.000726)	0.000697 (0.000458)	0.000392 (0.000521)	0.000581 (0.000428)	0.000674 (0.000462)
State Environmental Score (LCV)	0.00273 (0.00709)				
Inverse Mills Ratio		0.968* (0.572)	0.906 (0.581)	0.903 (0.590)	0.915 (0.582)
Constant	-5.119 (3.606)	18.32*** (5.535)	17.13*** (5.864)	19.36*** (5.529)	18.74*** (5.777)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	1398	248	248	248	248

Notes: Standard errors in parentheses, clustered at the firm-level; * p<0.10 ** p<0.05 *** p<0.01

Table 5a Marginal Impact of Firm's Share of Power Generated from Coal on Likelihood of Firm Agreement, Conditional on the Share of Democrat Regulators

Share of Democrat Regulators	Firm's Share of Power Generated from Coal Coefficient (Model 3a)
0%	-0.029***

10%	-0.028***
20%	-0.027***
30%	-0.026***
40%	-0.024**
50%	-0.023**
60%	-0.022**
70%	-0.021*
80%	-0.020
90%	-0.018
100%	-0.017

Notes: * p<0.10 ** p<0.05 *** p<0.01

Table 5b Marginal Impact of Firm's Share of Sales to Business Consumers on Likelihood of Firm Agreement, Conditional on the Share of Democrat Regulators

Share of Democrat Regulators	Firm's Share of Sales to Business Consumers Coefficient (Model 3b)
0%	-0.083**
10%	-0.076**
20%	-0.068**
30%	-0.060*
40%	-0.053
50%	-0.045
60%	-0.038
70%	-0.030
80%	-0.022
90%	-0.015
100%	-0.007

Notes: * p<0.10 ** p<0.05 *** p<0.01

Table 5c Marginal Impact of Number of Activist Protests on Likelihood of Firm Agreement, Conditional on the Share of Democrat Commissioners

Share of Democrat Regulators	Number of Activist Protests Coefficient (Model 3c)
0%	-0.035**
10%	-0.032**
20%	-0.029**
30%	-0.026**
40%	-0.023**
50%	-0.019**
60%	-0.016*
70%	-0.013
80%	-0.010
90%	-0.007
100%	-0.004

Notes: * p<0.10 ** p<0.05 *** p<0.01