

First Draft

## The Economics of NGO Behavior in the Policy Life Cycle

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### Abstract

We use the notion of the policy life cycle to review the existing economics literature on NGO objectives and strategies. Our goal is to synthesize our current understanding of these organizations and seek avenues for future research. In much of the extant economics literature NGOs have been modeled as a component of the broader economic phenomenon under study, e.g., the battle to shape political policies. As such, many questions about NGO objectives, strategies, and sources of funding have received little systematic attention. A notable exception is a recent branch of literature aimed at modeling private politics. NGO objectives and behavior lie at the heart of this literature that models direct engagement between NGOs and the firms they seek to influence. While this literature represents an admirable initial step in the direct modeling of NGOs as an economic player, the rising power of NGOs as an important economic player suggests a strong need for more systematic research on behavior in all parts of the policy life cycle. Fruitful areas for future research are discussed.

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## **Introduction**

A casual perusal of the popular press indicates that public concern over the social and environmental activities of firms is on the rise. Events such as global warming, Hurricane Katrina, the coverage of sweatshop labor conditions in Southeast Asia etc., have forced businesses to pay increasing attention to their environmental and social profiles. Environmental and social non-governmental organizations (NGOs) have played a leading role in communicating these concerns to the popular press, pushing for changes in existing regulations, and more recently actively engaging corporations to hold them accountable for the social performance. These activities have prompted a small but growing economics literature on NGO behavior. Traditional economics analyses involving NGOs largely focused on the interface between business and government in the battle over environmental and social legislation, and regulatory compliance. As such, the modeling of NGOs has been tangential to the focus of these analyses. In this paper we highlight a number of article that are representative of the way economists have modeled NGO objectives and strategies.

We begin with the literature on public politics, which has focused on how special interest groups attempt to influence public policy. In this literature NGOs may be viewed as one among many special interest groups, including firms, and industry groups, battling to change the legislative and regulatory agenda. We then turn to the recent literature on private politics that studies the behavior of firms and NGOs as the two directly engage with each other in order to effect changes in corporate behavior. Our goal is not to simply provide an overview of the literature. Instead, we seek to understand the state of current economic thinking on NGO objectives and strategies and highlight areas for future research.

Social and environmental movements are not new. It is, however, undeniable that the visibility of non-governmental organizations has been rising in recent years. This visibility is likely a function of several factors including the rise of the Internet, scientific discoveries in the area of global warming, wide scale coverage of environmental disasters such as Hurricane Katrina, and the phenomenon of economic globalization. The first of these factors has led to a dramatic reduction in the costs of mobilizing individuals and communicating concern to the broader public. The other factors create a sense of vulnerability and a need for change. At the same time government is often viewed as unresponsive to the needs of citizenry. In this setting NGOs have been able to grow and thrive. Citizens, hungry for change, find it easier to seek out like-minded individuals and strategize about ways to communicate their concerns. Less active members of the population feel empowered through their financial and participatory support of NGO causes. This confluence of factors has led to the rise of NGOs as important economic players worth of study.

NGO power gives rise to important and basic economic questions. What are the underlying objectives of NGOs? Do they seek social welfare improvements, or do they seek more narrowly defined environmental and social goals that may reduce social welfare? How important are their funding goals and how do these goals impact their social objectives and strategies? Are NGOs altruistic or self-interested? How do NGOs interact with one another? When will NGOs with different objectives cooperate, and when will they compete. Why do some NGOs work with firms while others refuse? The objective of this paper is not to answer these questions. Indeed one of the larger sub-branches of economics, industrial organization, seeks to answer similar questions concerning firms. Instead we seek to highlight current economic thinking about some of these questions, and use this thinking to highlight areas that need further study as we seek to develop a more structured approach to studying the economics of NGOs.

We structure our analysis by appealing to the policy life cycle. Broadly speaking the policy life cycle contains four stages: Issue identification, politicization, legislation, and implementation. In the subsequent section we will discuss several theoretical papers

highlight the current state of economic thinking on NGO objectives and strategies at each stage of the life cycle as it applies to the traditional regulatory approach. In section 3 we will summarize the literature on private politics. Private politics includes the first two stages of the policy life cycle and replaces the final two stages with direct engagement between NGOs and firms resulting in dramatically different NGO strategies. In the concluding section we summarize our findings and point to fruitful areas of future research.

## **2. NGOs and Public Politics: The Policy Life Cycle**

The concept of the public policy life cycle is a very useful framework for corporate “issues management” and is commonly used in textbooks on the relationship between public policy and corporate strategy. Four stages are typically identified as illustrated in figure 1. First is the *development* stage, in which events occur that lead various segments of society to become aware that a problem exists. Second is the stage of *politicization*, in which the issue acquires a label, opinion leaders begin to discuss the problem in public, the news media becomes more active and interest groups mobilize around the issue. This stage is sometimes capped by a dramatizing event that crystallizes the nature of the problem in the public’s mind. Reports of sweatshop labor being used to produce celebrity-endorsed clothing, Hurricane Katrina, and the scientific discovery of a hole in the ozone layer are examples of dramatizing events. Third is the *legislative* stage, in which political leaders take action to create new laws responding to the issue. Fourth comes the *implementation* stage, in which administrative agencies flesh out the details of the new legislation and regulators police, and the courts enforce it.

The nature of NGO behavior varies at each stage of the policy life cycle. For example existing NGOs may bring to light new public policy concerns in the first stage, or if those concerns arise from the scientific community new NGOs may spontaneously arise around the issue in the second stage. NGOs tend to be very active in the politicization of social and environmental issues, gathering and coordinating issue-oriented information, promoting media coverage, directly canvassing the general public and communicating the

need for legislation to elected officials. During the legislative phase NGOs often are a source of knowledge both about the desire for change and the technical and scientific issues involved. Indeed, many NGOs are actively involved in writing legislative drafts. NGOs also impact the legislative agenda by supporting political candidates that hold their views or by lobbying existing policy makers to persuade them to adopt their cause. During the *implementation* stage NGOs often serve as a check on both corporate compliance and the intensity of government regulatory efforts.

In the subsequent subsections we briefly highlight the findings of several prominent papers to show the current state of economic thinking about NGO objectives behavior at each stage of the life cycle.

### ***2.1 Development: Issue Identification***

The economics literature is silent on the role of NGOs in issue identification. The public policy life cycle framework traditionally views issues as arising from exogenous events, such as scientific discoveries. However, this view may be too simplistic in the presence of existing NGOs. Casual observation suggests NGOs are active in identifying new public policy issues. The Center for Science in the Public Interest has recently been active in promoting the findings of FDA research on Salmonella, and has called for a ban on imports of grain from China.<sup>1</sup> The active search for new issues may arise from a desire to improve social welfare, or to continue existence of the organization by identifying new sources of issue-oriented funding or membership growth. For example, labor unions may conduct or fund investigations into international labor practices not only to seek new legislation aimed at protecting domestic jobs, but to raise anxiety in the domestic workforce so as to facilitate unionization efforts.

Interesting areas of research in issues identification by existing NGOs include the extent to which NGOs have an incentive research and promote issues that are ultimately may

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<sup>1</sup> See <http://www.cspinet.org/>.

diminish social welfare. Are returns to such issues necessarily lower than those of issues that lead to broader social welfare improvements? Does the existence of NGO efforts in the search for public issues crowd out basic government research that might uncover such issues, or is it complementary?

## ***2.2 Politicization***

The policy life cycle views politicization as the stage at which NGOs form around and promote the policy issue. While there are no direct studies on the formation of NGOs that we are aware of, there is a large literature in economics on the voluntary provision of public goods.<sup>2</sup> To the extent to which NGOs provide social benefits beyond their immediate membership this literature may provide some insights into the formation of NGOs.

The key issue at the center of the formation of NGOs is the free rider problem. If individuals outside the NGO benefit from its efforts, and if participation is costly, why should individuals join? The logical outcome of the free rider problem is non-provision of the NGO and its associated public good. Individuals may overcome this free rider problem if they are altruistic, or obtain direct benefits from being members of the group. Such motivations, while possible, are of little economic interest. Furthermore, the proliferation of NGOs causes one to doubt these explanations. Economic study of the free rider problem in the provision of a public good has examined the conditions under which rationally self-interested agents may work together to provide a public good. While space limitations prevent us from reviewing the substantial literature on the voluntary provision of public goods, we will discuss three papers that provide insight into current economic thought on this issue. We discuss Palfrey and Rosenthal (1988) and Lohmann (1993) in this section, and leave to a later section a discussion of Ainsworth and Sened (1993).

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<sup>2</sup> See Olson (1965) for a discussion of interest group formation and associated free rider and coordination problems.

Palfrey and Rosenthal (1988) develop a game theoretic model in which individuals must incur a positive cost in order to affect the provision of a public good. Each player is identical and is restricted to contribute an equal amount to the provision of the good. If the amount contributed is equal to or above the (exogenous) threshold the public good will be provided. Provision of the good provides an equal benefit to all players. The authors consider the use of both pure and mixed strategies, and examine games in which players may or may not get refunds if the good is not provided. Mixed strategies imply that each player chooses to contribute to the provision of the good with a positive probability. The analysis of the mixed strategy equilibrium is restricted to symmetric equilibria in which all players use the same mixing probability.

The authors find that pure strategy Nash equilibria exist in which the public good is provided and these equilibria are characterized by an efficient number of contributors. That is, only the minimum number of individuals necessary to obtain provision of the good will contribute. If players engage in mixed strategies, equilibrium outcomes may arise in which the number of contributors exceeds the minimum amount necessary for provision. Finally, the authors find that for every mixed strategy equilibrium without refunds in which the good is provided, there exists a mixed strategy equilibrium with refunds in which a greater number of players contribute to provision.

Lohmann (1993, 1995) uses signaling models to explain spontaneous protests to effect policy changes. We focus here on her 1993 paper. In this paper individuals organize spontaneously in order to convince a political decision maker (PDM) to alter his policy from the status quo. Due to (unmodeled) reelection concerns the PDM will shift his policy from the status quo only if he expects that doing so will benefit a majority of the population. Individuals are indexed by their preferences over the policy outcome. The policy outcome depends on the PDM's policy decision and on the state of the world. In the model individuals receive a noisy signal about how the policy affects them. This signal is correlated with the true state of the world. This results in a situation in which aggregate information is more accurate than individual information. Consequently it is optimal for the PDM to condition his decision on the number of individuals who show up

to protest. Lohmann shows the existence of three categories of individuals. Status quo extremists, those committed to oppose changes from the status quo and will never protest. Activist extremists, those committed to always protest to change the status quo. Rational activists, who may protest if they receive a signal that indicates that they will benefit from changes to the status quo, and will not protest otherwise. Lohmann shows the existence of equilibria in which rational and committed activists signal to the PDM their desire for change by undertaking costly action. These two groups overcome the free riding problem because if an individual in either group failed to protest the decision maker would underestimate the level of popular support for change and would not shift from the status quo. The decision to show up to protest is an individual one. Although the PDM may be providing benefits to those that do not protest, an individual protests only if he or she personally benefits from a change in the status quo. That is, there is no sense in which the individual will incur personal costs only to generate benefits for society as whole. Ainsworth and Sened (1993), which we discuss in detail below, illustrates how an interest group entrepreneur, which we might view as an NGO or an individual member of an NGO, can improve the efficiency of the provision of a public good by seeking out and communicating about the number of individuals that would benefit from public good provision.

These papers illustrate that self-interested rational individuals can find it desirable to undertake costly actions that result in public benefits. In Palfrey and Rosenthal (1988) and Ainsworth and Sened (1993) individuals are identical. This brings rise to a coordination problem regarding who should engage in costly action to provide the good. In Lohmann (1993) each individual rationally believes that they may be pivotal to the PDM's decision. These models suggest that we do not need to rely on altruistic explanations in the modeling of NGO creation. Palfrey and Rosenthal's result of greater equilibrium participation in the case refunds suggest it may be fruitful to model heterogeneity across the public in NGO formation. If some individuals obtain private benefits from group membership will ease or exacerbate the creation of NGOs? On the one hand if a sufficient number of these individuals exist NGO formation will be aided, but if an insufficient number exist, uncertainty over their number might enhance the

desire for others to free ride. These questions suggest the need to examine more deeply results concerning the private provision of public goods when agents have heterogeneous preferences or face heterogeneous advocacy costs.

### ***2.3 Legislation: Engagement for change***

The next step in the policy life cycle is the battle over the necessity for legislation that dictates change. Before examining NGO behavior in the battle over legislative change it is worth noting that, in the context of corporate environmental strategy, Maxwell, Lyon and Hackett (2000) have shown that formal legislative change may be preempted by voluntary actions for two reasons.<sup>3</sup> First, voluntary corporate actions reduce the marginal benefits any supplementary action legislation is likely to bring about. Second, voluntary actions may serve to credibly commit corporations to fight harder in the legislative game, reducing the net benefit to NGOs and the broader public of legislation.<sup>4</sup>

#### **2.3.1 NGO activity in legislative preemption**

Preemptive actions (such as pollution abatement) are voluntary corporate decisions and generally do not directly involve NGOs. Exceptions to this rule arise when NGOs seek to enhance the benefits of corporate voluntary actions, or credibly communicate their actions to the public.<sup>5</sup> NGOs may use their credibility with the public to certify the existence of environmental or socially beneficial process changes.

Much of the economics literature in this area has to do with the certification of credence goods. Heyes and Maxwell (2004) model an environmental NGO that seeks to reduce pollution externalities by setting a voluntary labeling standard. The label is awarded to

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<sup>3</sup> Maxwell, Lyon and Hackett (2000) and Binder and Neumayer (2005) find strong empirical support for the notion that the presence of environmental NGOs leads firms to reduce their emissions of toxic chemicals.

<sup>4</sup> Preemption may arise as a strategy to preempt the private political actions of NGOs, such as boycotts, as we discuss in section 3 below.

<sup>5</sup> Many corporate voluntary efforts aimed at improving environmental and social performance involve process changes and are therefore are not publicly verifiable.

firms that abate to a level equal to, or beyond, the standard.<sup>6</sup> They are interested in the social welfare performance of the labeling scheme as compared to that of a minimum quality standard set by a social welfare maximizing government regulator subject to political pressures. They find that social welfare is higher under the minimum quality standard and that existence of the NGO's label will raise resistance to the minimum quality standard, effectively lowering it due to enhance industry opposition. However, they do find that if industry is unable to block the minimum quality standard, addition of the NGO's label enhances social welfare.

Bottega and De Freitas (2006) also examine the impact of a label offered by an NGO in the presence of a government minimum quality standard. In their model there is a single firm that can produce a low (environmentally unfriendly) and a high quality product. In addition to awarding a label, the NGO can engage in green propaganda to promote consumption of the labeled good. The propaganda raises the utility of consuming the high quality good. The authors show that as the level of green propaganda rises, the scope for government intervention diminishes, leading eventually to a withdrawal of the minimum quality standard.

Feddersen and Gilligan (2001) present a game theoretic model of incomplete information in which an NGO randomly inspects one of two duopoly firms that produce imperfect substitutes. The firms choose to produce their product using either a brown or a more costly, but environmentally friendly, green technology. Consumers cannot determine the production technology used before or after purchase. The NGO seeks to diminish the impact of production on the environment. Based on its findings the NGO can deliver a report to the public about the environmental quality of the production process being used by the firms. Interestingly, because of its objective the NGO will fail to deliver positive news about a firm that is producing with the green technology if it believes the rival is also using the green technology. Failing to deliver a report under these circumstances will lower overall consumption (because consumers also care about the impact of production on the environment). The authors show that although the NGO can never induce both

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<sup>6</sup> Since abatement is costly no firms abate beyond the standard.

firms to adopt the green technology equilibria exist in which one firm will adopt the green technology, something that would never be done absent the NGO.

These papers clearly illustrate the role that information provision by NGOs can play in the promotion of corporate voluntary efforts. They also point out, however, possible unintended consequences of the provision of NGO services. This provision may crowd out government action that might improve social welfare. The existence of NGO services may have political economic consequences that may cause industry to fight harder to preempt regulations.

### **2.3.2 NGO activity in the battle for legislation**

There is a vast literature on policy determination in legislative democracies; we focus here on models that highlight two broad NGO strategies. The first is to contribute to politicians or political parties in order to influence their legislative actions.<sup>7</sup> The second is to provide politicians with policy relevant information that they may use to craft new legislation. The branch of literature that seems most relevant to the task at hand deals with models of common agency in which a diverse set of special interest groups attempt to influence the behavior of a single agent, the PDM. In these models the NGO, as a special interest group, makes contributions to the PDM in order to influence either the policy or the legislative services provided by the PDM. The PDM is willing to respond to the political contributions on offer because the contributions can be used to enhance his election prospects.

Baron (1994) models electoral competition between two political candidates who present service-contribution offers to special interest groups. These services on offer can include support for specific legislation, and the contributions collected by the candidates are used

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<sup>7</sup> In a comprehensive review of the empirical studies of the impact of donations on the behavior of politicians Potters and Sloof (1996) report that the literature produces fairly mixed results. Some studies find no evidence that contributions make a difference in the voting behavior of politicians while other find significant evidence of substantial influence. They do conclude however that there is substantial support for the notion that various influence activities categorized as lobbying do impact the behavior of politicians.

to enhance reelection prospects. Campaign contributions can enhance reelection prospects because they can be used to influence uninformed voters.

Grossman and Helpman (1996) also model electoral competition between two candidates where special interest groups compete via campaign contributions to influence the candidates' "pliable" policy decisions. Again, campaign contributions are used to influence uninformed voters. The authors show that each candidate will behave in a manner that amounts to maximizing the weighted sum of the aggregate welfare of informed voters and members of the special interest groups. Furthermore they show that the party that is expected to win will cater more to special interest groups, while the underdog will set policies that are closer to those of the median voter.

Grossman and Helpman (1994) develop a common agency model in which incumbent party respond to contributions of special interest groups by altering a specific policy. In the model the party's optimal policy maximizes the weighted sum of total contributions and aggregate or average welfare. While this paper is set within the context of trade policy, Aidt (1998) adapts Grossman and Helpman (1994) to a model in which production generates negative environmental externalities that should be subject to Pigouvian taxes.<sup>8</sup> His game takes place in two stages. In the first stage lobby groups determine their campaign contributions, taking those of others and optimization by the PDM as given. In the second stage the PDM optimizes its policy and collects contributions. Since contributions reflect the true preferences of the lobby groups, the optimal policy is determined by the optimization of the weighted sum of social welfare and the welfare of those sectors with organized lobby groups. Therefore the model predicts that the PDM's policy maximizes social welfare only if all sectors are organized. Although all lobby groups desire to abate pollution in a socially optimal manner, they also care about wealth redistribution. Consequently, unorganized sectors of the economy will face taxation rates above their Pigouvian levels. Aidt undertakes an extension to his model in which two functionally specialized lobby groups may exist in each sector of the

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<sup>8</sup> In Grossman and Helpman (1994b) the setting is a small open economy and consequently the optimal policy should be free trade, howeverm the organized special interest groups distort policy away from this optimum toward protectionism.

economy. The first lobby group cares only about profits, while the second cares only about the environment. Aidt finds that in sectors facing a strong environmental lobby tax rates will exceed their Pigouvian levels as the PDM biases policy towards those organized interests.

Bardhand and Mookerjee (2000) develop a common agency model based on Baron (1994) and Grossman and Helpman (1996) in which political parties compete in an election, and choose policies that trade off welfare optimization with the attraction of campaign contributions. They compare the behavior of parties at local and federal levels. At the federal level parties are restricted to set the same policy across all districts. This isolates the influence of locally organized special interest groups in federal campaigns. The authors highlight the importance of organization and roll of uninformed voters in the influence of policy. Specifically, they show that politicians will be more biased towards special interest groups at the local level than at the federal level, under the assumption that voters are more informed about federal elections, and local interests are more concentrated. At the federal level, for example it is more likely that a local special interest group in one district will be counter balanced by another interest group with opposite preferences in a different district.

These models of common agency highlight the roll campaign contributions play in influencing the political agenda. These contributions may be monetary or in-kind offers of support during a campaign. Thus, while some NGOs (such as unions) can muster large monetary donations these results do provide insight into the behavior of smaller NGOs as well. What do these models suggest about NGO behavior in the battle over government policy? First NGOs may be more effective in obtaining desired policy outcomes in areas where rival interest find it hard to organize. For example advancing environmental legislation that is media-oriented (air, water, etc.) may be more fruitful for NGOs than fighting for legislation aimed at particular industry sectors. Second, NGOs may be more effective at local levels than at the federal level where it may be more likely to find

politicians that are already biased in favor of their concerns.<sup>9</sup> Environmental NGOs may be more effective in California than in the Midwest. Third, given that NGOs are likely to be less well organized than those of industry, these models suggest that NGO participation in the political arena is more likely to bias policy toward social welfare optimization than away from it. Finally, these models may suggest a reason for the difficulty in mobilizing a flow of contributions to NGOs that have objectives close to social welfare optimization. Since politicians are biased initially to optimize social welfare the returns to organizing such interest groups are lower than those to organizing more radical interest groups.

In addition to the provision of campaign contributions, economists have studied the use of information provision in effecting legislative outcomes. Spontaneous information provision by interested citizens has already been discussed in the context of Lohmann (1993). We now discuss three more papers that examine the role of information provision in the legislative agenda. The first paper explores the relationship between information provision and campaign contributions. The second looks at how corporations may react to block information provision flowing from NGOs to the PDM. The final paper looks at the how information provision may benefit both the public and the PDM in the provision of public goods.

Bennedsen and Feldmann (2002 and 2006) examine the incentive of an NGO to search for information when the decision to search carries an information externality. They note that the decision to search provides information to a decision maker whether the search turns up positive or negative information, and they show that this information externality may affect the desirability of search. We focus on their 2006 model in the discussion that follows.<sup>10</sup> This model examines a NGO's decision to search when it can pursue its policy

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<sup>9</sup> Potters and Sloof (1996) report a general empirical consensus for the notion that ideological groups support like-minded political candidates.

<sup>10</sup> Bennedsen and Feldmann (2002) compare and contrast incentives to search in the presence of single and multiple decision maker. They show that I cases where an NGO might never search for a single decision maker, search may be desirable in the presence of multiple decision makers.

objective through political contributions. In the model the PDM's objective is to choose between two policy alternatives each of which is optimal in one of two possible states of the world. In addition to setting his policy choice optimally, however, the PDM also cares about campaign contributions and therefore may deviate from setting the optimal policy if contributions are high enough to compensate him for doing so. The NGO can undertake search to determine the true state and may deliver that information to the PDM. The NGO, however, is biased with respect to the two policy alternatives always preferring one over the other. The NGO obtains hard (verifiable) information. Thus, the NGO cannot lie but can withhold information about the true state if that information would result in an unfavorable policy. The NGO can also offer campaign contributions to the PDM in order to influence the policy choice.

Bennedsen and Feldmann show that if the PDM can observe the NGO's search behavior it is possible for the NGO to abandon search in favor of the use of campaign contributions. Indeed, this will always be the choice if the NGO is willing to pay an amount high enough to induce his desired policy choice for sure. The logic is as follows. If the NGO searches and fails to report, the PDM can deduce one of two possible search results. First the NGO's search failed to determine the true state, or second, the NGO's is suppressing information. Bayesian updating implies that the PDM's expectation of the latter outcome is higher after a failed search than its ex ante value. Thus, the NGO will have to pay more to induce its desired policy outcome after a failed search than it would if no search was undertaken. Consequently this raises, ex ante, what the NGO expects to pay to ensure its desired policy outcome if it searches. Thus, if the NGO can induce its desired policy outcome via campaign contributions it will not search. In a more realistic setting in which the PDM is unable to observe the NGO's search behavior, the authors show that two rational expectations equilibria may exist, one in which the NGO searches and one in which it does not. They go on to prove that the availability of campaign funds always makes the search equilibrium less likely and the no-search equilibrium more likely.

Lyon and Maxwell (2004) develop a model in which an NGO may provide soft (unverifiable) information to a PDM in order to influence his policy choice. Their model, based on Grossman and Helpman (2001), features a PDM that desires to match his policy to the true state of the world, a green (or brown) NGO who is biased in the sense that it always prefers a policy choice that is stricter (or weaker) than the policy the DM would set in any state, and a firm that always desires the weakest policy. In the model the true state of the world can be either high or low. The PDM would prefer to set a strict policy in the high state and a weak policy in the low state. In these models if the NGO is not too biased it can credibly convey information about the state of the world in some cases. For example, although the green NGO always prefers a policy higher than the PDM will set, if the true state of the world is very low, the NGO might prefer a weak regulation to a strong one. Consequently announcement by the green NGO that the state is low is believable.

Lyon and Maxwell, however, consider the case where states are sufficiently close together so as to make the green (or brown) NGO always convey that the state is high (low) if communication were costless. They then posit a communication (e.g., lobbying) cost such that the green (brown) NGO will only incur the communication cost if the state is indeed high (low). In either setting the PDM will always be fully informed. If the green NGO is silent then the PDM knows the state is low. If the PDM faces a brown NGO and that group remains silent then the PDM knows the state is high. The authors examine various corporate strategies designed to jam the signals the NGO or brown group may send. In particular they illustrate the existence of an equilibrium in which the firm pays (or alternatively creates) a brown interest group so that will communicate that the state is low in both states of the world. This results in a moderate policy that is profitable for the firm.

Ainsworth and Sened (1993) extend Palfrey and Rosenthal (1988) to include a PDM that will provide a public good only if there are sufficient number of individuals willing to contribute to the provision of the good to make its provision profitable, and an agent labeled an interest group entrepreneur (IEG). The IEG is introduced into the model to

facilitate the provision of the public good. The authors note that once a public good provider is introduced incomplete information leads to two problems that inhibit provision. First the good may not be provided because the PDM may not know that there is sufficient demand for the good. Second, due to free rider problems an insufficient number of beneficiaries may petition the PDM for provision. The authors show that the introduction of an IEG may solve both of these problems.<sup>11</sup> The IEG undertakes to determine the number of individuals benefiting from provision of the public good. If the IEG determines that there are enough individuals to make provision profitable he will enter the game. Upon entry, petitioning for provision of the public good will take place through the IEG and the IEG will collect a portion of the funds petitioners direct towards provision of the good. The authors show that entry of the IEG, while not fully revealing, can cause the PDM and members of the public to update their expectations of the number of beneficiaries so as to make provision of the good more likely.

These papers highlight some aspects of the informational roll NGOs can play in the legislative process. NGOs can provide both hard and soft information to PDMs and may also provide information to the broader public about the likelihood of successful legislative change. The papers also highlight some difficulties NGOs face in information provision. Bennedsen and Feldmann show that, far from being complementary tools, information provision and campaign contributions may be strategic substitutes in the lobbying game. Their work also highlights the fact that the decision to communicate information, once it has been collected, is a strategic one. NGOs might strategically withhold information that does not advance their goals. Lyon and Maxwell illustrate that rival interest groups (firms) may not be passive with respect to the provision of information by NGOs, especially if the information that is provided is not fully verifiable.

We have only scratched the surface of the vast literature on information economics that is likely to provide useful insight into NGO information provision strategies and tactics. As we mine this literature, the goal of economists will be to determine whether those

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<sup>11</sup> Ainsworth (1993) and Austin-Smith and Wright (1992) use signaling game to model the informational role of lobbyist communication with legislators but do not address the collective action problems discussed here.

information strategies that are most effective for the NGOs are also ones that benefit social welfare.

The models we have discussed here view the PDM as passive in the face of information provision. To fully understand the role that NGOs play in information provision, we should also consider models of mechanism design in which the PDM might design contract to solicit information from NGOs.

#### ***2.4 Implementation: Regulation and enforcement***

Once legislation has passed regulatory bodies must draft, adopt and (along with the courts) enforce regulations. In drafting regulations, regulators and the courts become the PDMs at this stage of the policy life cycle. While it is illegal for regulators and judges to accept financial contributions, it is commonplace for regulators and the courts to solicit the comments of expert witnesses in drafting regulations and making judicial decisions. Thus, in this stage NGOs have an important role in information provision and the models discussed in the latter half of section 2.3 apply here as well.

Economic models of the enforcement of environmental and social regulations view the situation as a game between regulators and the firm. However, as noted by Lyon and Maxwell (2004, Ch 6), Zywicki (1999), Faber (1992) and Portney (1990), NGOs have played an active role at the enforcement stage through the filing of civil lawsuits. Lawsuits aimed at corporations serve to supplement the regulatory efforts by targeting violators of existing regulations. However, NGOs have not restricted their lawsuits to violators, they frequently target regulatory agencies as well, seeking damages from them for failing to enforce regulations. Lyon and Maxwell speculate that NGO lawsuits aimed at both industry and regulators may have been an important contributing factor for the rise in voluntary environmental agreements, which are harder for the courts to enforce.

### 3. NGOs and Private Politics

In this section we review the small but growing literature on the role of NGOs in private politics. The term private politics coined, by David Baron, refers to direct engagement between NGOs and corporations as opposed to engagement translated through government institutions (public politics). In this literature NGOs are prominent actors and as such their objectives and strategies are highlighted to a greater degree than they were in the previous models we have reviewed.

As illustrated in figure 1, in terms of our policy life cycle framework we can envision private politics arising following the politicization stage in which NGOs are formed. Direct NGO-firm/industry engagement occurs as an alternative to entering the legislative game. Baron and Diermeier (2006) suggest that NGOs have turned to private politics out of frustration with the traditional political process. As noted in the introduction, perhaps due to the rise of the Internet, NGOs now experience significantly lower internal and external communication costs. The former significantly lowers the cost of bringing together like-minded individuals and groups to plot complex strategies that can bring attention to the group's concerns. The latter significant lowers the costs of informing the public about objectionable corporate activities, and bringing about coordinated public actions such as boycotts of targeted firms and or individuals.<sup>12</sup>

Prominent research in the area of private politics includes Baron (2001,2003, 2005 and 2007), Baron and Diermeier (2006), Innes (2005), Feddersen and Gilligan (2001), and Lyon and Maxwell (2006). In what follows we first describe the general framework of private politics as envisioned by Baron and Baron and Diermeier, and then point out the main findings of each of these papers taking some time to describe the framework of those papers that differ substantially from the one we now discuss.

In the realm of private politics an NGO decides to target a firm or industry so as to induce it to undertake environmental or social change. The models do not claim that the NGO

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<sup>12</sup> See Diermeier (2005) for a discussion of how the media may be used to facilitate boycotts.

objective is one of social welfare maximization. Although this could be an objective, so too could be the complete mitigation of the offending practice (or any level of mitigation beyond the social optimum). For example, PETA has as a goal the complete abolition of animal testing, regardless of whether the goal benefits or harms society as a whole.

Mitigation of the objectionable activity is assumed to be costly to the firm or industry; otherwise the NGO would simply need to request the change in order to have the firm or industry comply. Thus, the firm or industry has an incentive to resist the NGOs demands. In order to induce compliance with its demands the NGO may offer the firm or industry a reward for its compliance and/or threaten to harm the firm or industry if it fails to comply. As mentioned above the firm or industry might at this point decide to self-regulate in order to avoid the threatened level of harm.<sup>13</sup> Self-regulation may or may not involve the active participation of the NGO. NGO participation in firm or industry self-regulatory efforts may be thought of as provision of the reward. NGO rewards usually take the form of public recognition and endorsement of the mitigation efforts undertaken by the firm or industry as in Feddersen and Gilligan (2001).

If the firm or industry fails to proactively concede to the NGO's demand, the NGO will attempt to deliver its threatened harm to the firm or industry. This harm may take the form of producing and disseminating negative propaganda about the firm or industry's corporate image (negatively impacting sales and or employee morale and recruitment activities), inducing a wider consumer boycott of the firm's or industry's products, or, using these same tactics, inducing the offending firm's corporate buyers or suppliers to cease dealing with it.

Within this general setting several issues regarding corporate and NGO strategies have been studied. Baron (2001) models an NGO campaign against a target whose motivation might be profit maximization, altruism, or avoiding harm. He shows that actions that may be viewed as altruistic may in fact be undertaken by profit maximizing firms as a

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<sup>13</sup> Paragal and Wheeler (1996) find that Indonesian industrial plants located in poor less educated areas are about 15.4 percent more water pollution-intensive than similar plants located in relatively affluent, well-educated areas.

strategic action in their battle with the NGO. Baron (2003) focuses on the informational aspects of a boycott. Individuals must decide whether to boycott a firm or not. Each decision to boycott conveys information to the general public about the likelihood that the firm's activities harm society. Individuals may have an incentive to act early so as to induce others to join, but there is also an incentive to delay to gain information about the social impact firm's practices from others. He explores the conditions under which citizens may boycott immediately or delay their boycotts. He finds that an important factor in immediate action is the citizen's private information about the seriousness of the activity. If the private information indicates that corporate action is causing serious harm the individual has three reasons to act. First, the earlier a successful boycott occurs the less harm will be done. Second, the earlier the individual acts the quicker she conveys her private information to others. Third, earlier actions lead others to take stronger actions. Baron models the end of the boycott as the outcome of a bargaining game between the firm and the NGO and he explores issues such as how uncertainty over agent type, and behaviors such as intransigence affect the bargaining outcome.

Barron (2005) focuses on the role of the media on informational competition between an NGO and a target industry in which each entity seeks public support by advocating for its position through the public media. In the model citizens make both private consumption decisions and collective action decisions about whether to advocate for regulatory changes. Thus, in the paper, the NGO-industry competition has implications for both private and public politics. Both the industry and the NGO can conduct investigations that result in hard verifiable information on the seriousness of the industries social or environmental externalities. If neither group delivers a report to the media it can conduct its own investigation. He finds that because of its position in society the media exhibits bias in favor of delivering reports that favor reduced consumption and an increased likelihood of regulation (correcting both market and government failures). Because of this Baron shows that it is always optimal for the industry to deliver its report to the

media while the NGO finds it optimal to report favorable information, but may conceal unfavorable information.<sup>14</sup>

Baron and Diermeier (2006) examine the targeting strategies of NGOs and corporate responses to the strategies. In their model firms may be targeted with the offer of a reward or the threat of harm that manifests itself as a boycott of the offending firm or firms. The severity of the boycott threat depends on the likelihood it will succeed. This in turn depends crucially on the degree of public participation and the cost the firm faces in complying with the NGOs demand. From this basic set up the authors derive several implications regarding NGO targeting strategies.

They find that the NGO will prefer to pick issues that have high social value and target firms that are likely to be responsive to the campaign, i.e., have low costs of complying with the NGO's demand (this will reduce the amount of resources needed to carry out a successful campaign).<sup>15</sup> The NGO will prefer to target firms sequentially rather than targeting multiple firms or an entire industry at the same time. Sequential targeting will lower the cost consumers face in participating in the boycott allowing them to purchase a similar product. The campaign will tend to be more demanding the weaker is the target firm. The NGO will prefer to deliver harm rather than rewards because harm will decrease investment in the targeted activity while rewards will tend to increase investment. Targeted firms will opt to self-regulate if the NGO can commit not to retarget the firm after self-regulation takes place. Such commitment may arise if self-regulation makes the pursuit of an alternative firm more desirable. Potential targets have an incentive to develop reputation for being tough. Not only will these reputations cause NGOs to target alternative firms, if a firm has a reputation for being weak it will face not only a greater likelihood of being targeted but will face more aggressive demands and threats. The authors note that this may have implications for public politics to the extent that

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<sup>14</sup> See Diermeier (2004) for a discussion of the informational role of the media in the launching of boycotts.

<sup>15</sup> Easley and Lennox (2005) find empirical support for targeting strategies. Specifically they find firms that are more consumer-oriented, financially sound, and heavier polluters are more likely to be targets of environmentally-oriented stakeholder actions.

intransigence in the public arena enhances a firm's general reputation for resisting social and environmental changes. Finally, the authors note that since activism produces a public good it is subject to free-riding and thus will generally be under provided by the public.

Baron (2007) considers a market in which a morally managed firm and a self-interested compete in a market where corporate social performance (CSP) can be used to differentiate their products. In this setting an NGO may exert social pressure on the firm to improve their corporate social performance. Citizens exert pressure for social performance through their purchases of good, funding of NGOs and the purchase of share in morally managed firms. Several aspects of CSP are examined including its impact on the value of firms, the prices of their products, firms profits, NGO targeting strategies, contribution to activist groups and the amount of CSP supplied.<sup>16</sup> The paper shows that if citizens do not distinguish between CSP arising from moral duty and CSP arising for strategic reasons, then NGOs prefer to target morally managed firms. These latter firms are softer targets and will produce more CSP for the amount of pressure applied.

Building on Barron (2001) Innes (2006) present models of consumer Boycotts under perfect information. In his model an asymmetric duopolistic industry is considered. In the model the NGO must decide whether to target the larger of the two firms, the smaller one, or both firms. Each firm is allowed to produce only with a green or a brown technology and the desire of the NGO is that the targeted firm or firms adopt the more costly green technology. Firms may preempt a Boycott by adopting the green technology. The model illustrates equilibria in which both short term and long term Boycotts may arise. Larger firms may face shorter boycotts while smaller firms may sustain longer boycotts. Short-term boycotts can arise because at the initial stage of the game firms are uncertain over the NGO targeting strategy. Facing a possibility that it might not be a target each firm may resist adopting the green technology. If it is revealed that the large firm is the NGO's target it immediately concedes and adopts the green technology, thus

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<sup>16</sup> See Diermeier and Trepanier (2007) for an analysis of the impact NGO targeting practices can have in industry structure.

generating a short-term boycott. If the larger firm adopts the green technology, the costs of adopting the green technology may be so high for the smaller firm that it is optimal for it to resist adoption, even in the face of a boycott which decreases demand for its product. At the same time the NGO may not abandon its boycott efforts because they serve to divert consumption towards the products produced using the green technology, which provides benefits to society.

Finally, Lyon and Maxwell (2006) develop a model of partial disclosure based on the assumption that NGOs target firms for perceived hypocritical behavior that NGOs have labeled Greenwash. Lyon and Maxwell define Greenwash as the act of disclosing or promoting activities with positive environmental benefits while at the same time suppressing information about activities that generate negative benefits. In their model a manager may find it optimal to suppress information about environmental failures because doing so enhances the company's stock price. Suppressing information is not equivalent to admitting failure because there is a positive probability that the manager may not know the environmental impact of all of the company's activities. Whenever a company fails to report its full environmental profile and an NGO will audit the company and with positive probability may uncover the fact that the manager is suppressing information about its failure. In this event the NGO will penalize the company by labeling the company a Greenwasher in the popular press or encouraging consumers to Boycott the firm's products. The authors prove the existence of the equilibria in which firms greenwash in the face of threatened NGO punishment and categorize the likelihood that firms will greenwash, fully disclose or forgo disclosure of any aspect of the firm's environmental profile as a function of the likelihood the manager knows the environmental impacts of each of the company projects and the likelihood that those projects will cause environmental or social harm.

Although Lyon and Maxwell adopt a behavioral approach to NGO behavior their insights are useful for two reasons. They point to the fact that NGOs may target firms based on corporate communication about environmental performance rather than actual performance. In their model firms that remain silent with respect to their environmental

profile are not targeted as greenwashers. Their model also points to potential difficulties that may arise through attempts to self-regulate on specific issues to avoid NGO targeting. While such efforts may deflect NGOs interested in improvements with the particular issue at hand, they may induce criticism from other NGOs for failing to adopt strategies that improve a company's overall environmental profile.

The literature on private politics, while fairly new, already encompasses a wide range of issues including targeting, information provision, changes in production techniques, investment choices and the funding of NGOs. Two aspects of the literature on private politics are striking. First, it is overwhelmingly positive in nature. Because the objective function of the NGO is not fully specified, normative analyses are difficult. While the focus on boycotts as a strategic tool lends weight to the notion that NGO targeting of firms raises social welfare, effective boycotts may be achieved by a relatively small fraction of the population, this is not assured. Additionally participation in boycotts has been modeled as voluntary, but this may not always be the case. Some members of the public may be averse to crossing picket lines even though they do not agree with the objectives of the picketers. Second, it is non-dynamic. NGO strategies are viewed in isolation. In models of public politics the focus of the NGO is to change specific government policy. It seems reasonable to view this as an end goal. In public politics however, it seems less reasonable to assume that changing the practices of a single firm represents the true objective of the NGO. It is more likely that the goal is to change practices within an entire industry (at least). To model this strategy we will need to use dynamic models in which the targeting of one firm fits into the broader goal of changing industry practices.

#### **4. Conclusions and directions for future research**

This paper used the notion of the public policy life cycle to highlight current economic thought on NGO objectives and behavior. Through this lens we have seen that economists tend to view NGOs as being comprised of self-interested rational agents that seek to effect change that may bring benefits to the broader society. Economists view

NGOs as special interest groups and their models suggests that special interest groups, by definition, do not seek to maximize social welfare.<sup>17</sup> However, in balancing out the interests of other special interests their actions may bring about welfare enhancing changes.

In the realm of public politics economists view NGOs as effecting change through the provision of information and campaign contributions to political decision makers. The provision of information, both hard and soft, on the social and environmental impacts of firms and industries or simply the broader public's desire for change helps decision makers make informed choices. The provision of campaign contributions, on the other hand, can distort choices away from those that maximize social welfare. In the realm of private politics economists view NGOs either directly applying social pressure on firms or encouraging citizens (usually via the provision of information to apply pressure) to apply pressure for change.

In models of both private and public politics NGOs are given an equal footing with firms and industries, while the former studies their interaction, the latter views both as special interest groups seeking to exert control over public policy. Viewed in this light we can see that the study of NGOs is in its infancy. As mentioned at the outset of this paper, the study of firms and industry, industrial organization, is one of the largest subfields of economics. Much work needs to be done to before the study of NGOs can even be comparable to the study of industry.

We need first more study into the objectives of NGOs. There is no widely recognized objective comparable to the profit-maximizing objective of firms. We model NGOs as seeking change, but some also likely care about their survival. More research is needed into the fundraising activities of these organizations, including how those fundraising

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<sup>17</sup> Handy (2001) investigates the advocacy policies of 50 environmental organizations in Canada and finds that efficient market-based policies are not generally advocated, while a greater emphasis is put on regulatory approaches combined with moral suasion through the dissemination of information and educational programs.

goals impact the strategies they use in interacting with firms, government officials and the public.

The economics literature tends to view a single NGO in isolation, yet we know there are many types of NGOs ranging from radical to moderate. Some are devoted to a single issue while others have broad ranging interests. Further research is needed into how these organizations interact with one another, both in the quest for social change and in the quest for funding.

Finally, we need to develop a better understanding of how success or failure impacts future NGO behavior and survival. Does success lengthen or shorten the life of an NGO? In short, how does NGO performance affect the structure and conduct of the NGO industry?

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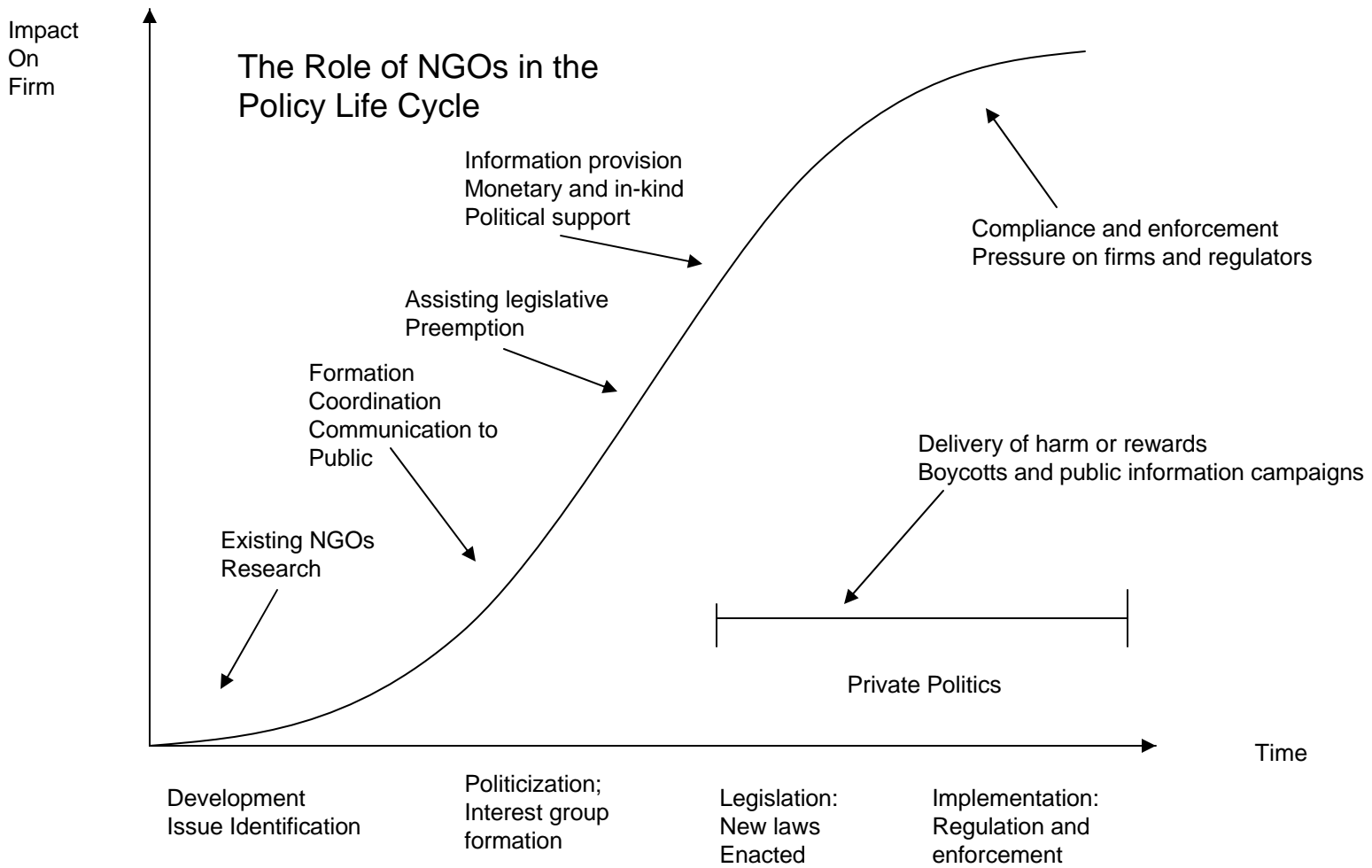


Figure 1