

**POLICY AND PROCESS:
A GAME-THEORETIC FRAMEWORK FOR THE DESIGN OF NON-
MARKET STRATEGY**

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ABSTRACT

We draw on the Positive Political Theory literature to develop insights into how firms decide whether to lobby legislatures or agencies in order to gain favorable policy outcomes. We present a simple structural model of the interaction between a firm, a legislature, an executive, a court and an agency to illustrate how, even if the *agency* has responsibility for implementing public policy, the firm will, under the right conditions, lobby the *legislature* instead to bring about a change in policy. Accordingly, we contribute to the existing non-market strategy literature by incorporating institutional players other than the legislature into the analysis, and by addressing the question of how firms allocate lobbying resources across the different branches of government.

Introduction

The ubiquitous presence of the government in private sector business transactions, either directly or indirectly, means that the competitive environments in which firms operate can significantly depend on public policy. Consequently, firms have an incentive to design non-market strategies that shape government decisions on issues that affect firm performance. While market strategies consist of actions aimed at shaping interactions with competitors, customers and suppliers in the market place (e.g. pricing and investment decisions), non-market strategies consist of actions specifically designed to influence the institutional players who determine public policy – state and federal legislatures, executives, regulatory agencies and courts – and include activities such as contributing to electoral campaign funds, lobbying and litigation. In the broadest sense, non-market strategies are primarily concerned with using the public policy process to shape the allocation of property rights or the “rules of the game” that govern the interactions between firms, competitors and consumers in their market environment.

Although there is a burgeoning literature on the objectives of non-market strategies (Baysinger, 1984; Weidenbaum, 1980), the categories of firms that engage in extensive non-market activities (Pittman, 1976; Zordkoohi, 1985) and the specific activities and tactics used in implementing non-market strategies (Bonardi, 2000; Baron 1996, 1994; Buchholz, 1990), relatively little research has been conducted on how the structure of government institutions affects the strategic choices that firms make when allocating resources in order to maximize their impact on public policy.¹ Although government decision-making procedures are frequently complex, involving multiple players – legislatures, executives, agencies and courts, each with their own preferences -- and a variety of decision-making rules, many existing non-market studies focus on one stage or player in the broader policy process. Propositions derived from such research often lead to highly conditional strategic implications that are divorced from the broader institutional context. In this paper, we contribute to the current literature by drawing on the Positive Political Theory (PPT) literature to present an approach to the formulation of non-market strategy that builds on a structural model of the public policy process. By doing so, we focus attention on the fact that firm strategies aimed at influencing government decisions depend significantly on the “rules of the game” that define the institutional context and process by which public policy is determined.

The chapter consists of three sections. We begin first by briefly discussing the role of non-market strategy in determining firm performance and its relative importance compared to market-based strategies. With this as background, we then turn to a review and assessment of the non-market strategy literature, focusing on the implicit or explicit assumptions typically made about the underlying public policy process. We find that the bulk of the literature does not

address the full complexity of the policy process, often leaving aside interdependencies between executive, legislative, judicial and agency branches of government. Consequently, little attention has been paid so far to how firms should allocate resources across different branches of the government in order to achieve the greatest effect on ultimate public policy. We propose that by using game-theoretic techniques to model the structured series of interactions between the various government branches, it is possible to derive strategic prescriptions about which part of the government firms should devote non-market resources to.

In the third section, we illustrate the potential benefit of adopting a more formal approach to modeling non-market strategy by outlining a simple game where a firm interacts with an agency, executive, legislature and court. While the game is not designed to represent a specific situation and is quite simplistic in its scope, we employ it to demonstrate that firm decisions to lobby one branch of the government or another (e.g. an agency) are typically highly dependent on the relative preferences of the other players (e.g. courts, executive, legislature) as well as on the sequence of play and the decision rules at each stage. By incorporating the full policy “game”, we find that the firm need not directly lobby the player with specific responsibility for implementing policy decisions (e.g. an agency) in order to induce that player to shift policy in the firm’s favor. Indeed, in certain circumstances, lobbying the primary player will be fruitless in that it has no impact on policy. In these situations, which occur for example when an agency is effectively constrained by the future threat of legislative override, the firm will instead lobby the legislature – since the agency’s decisions track the legislature’s preferences, any change in the legislature’s ideal point will be mirrored by equivalent shifts in agency rulings. More generally, our goal here is to develop a framework that allows us to analyze the formulation of non-market strategies and to tease out testable hypotheses that will guide future empirical work.

The Role of Non-Market Strategy

In many industries, performance depends on the ability of firms to shape public policy as well as on the ability to influence competitor and consumer decisions directly in the market place. Governments can have a direct or indirect impact on firm profitability, for example with the passage of legislation limiting domestic or foreign entry by competitors into a market place, with agency rulings on final rates in regulated industries or on the protection of intellectual property, or with judicial decisions in litigated disputes. The presence of the government, either as an active or passive influence on the nature of competitive markets, thus creates an additional opportunity for firms to improve their performance other than through the design of market strategies. Here, we define a firm’s non-market strategy as a concerted set of actions aimed at influencing government decisions on public policies. Such actions consist of those taken in non-market arenas (e.g.

lobbying legislators or agencies, contributing funds to electoral campaigns) as well as those taken in market arenas (e.g. plant location decisions, local component sourcing levels, or product pricing)². The balance of non-market and market *activities* in a non-market strategy depends on precisely whom in the policy-making process the firm wishes to influence; elected legislators, for instance, will have an interest in firm actions that directly improve their own welfare (e.g. campaign contributions) as well as in those that affect their voter-constituents (e.g. local employment levels, prices of widely consumed goods or services). Appointed regulators and agency officials, who are charged with implementing legislative directives, on the other hand, are more likely to respond to non-market strategies that are primarily focused on lobbying activities and the provision of information on policy options and policy consequences.

The relative importance of non-market compared to market strategies varies, depending on the actual or potential contribution of each to firm profitability. In some sectors of the economy, governments have a deep and direct impact on average profitability and on the distribution of profits among firms, for example in natural monopoly industries (water, electricity, gas) where entry, pricing and investment decisions are controlled frequently by regulatory agencies. In this and other cases where performance is determined more by government policy than by market forces, firms will naturally place a greater emphasis on designing non-market rather than market-based strategies. Lack of direct government influence in a market place, however, does not necessarily imply that non-market strategies play a reduced role. Indeed, in highly competitive industries such as consumer electronics, textiles and agriculture, the ability to obtain favorable public policies (e.g. import tariffs or quotas, direct producer subsidies) can be an important source of industry or firm-level rents. Irrespective of the degree of market competition, therefore, individual firm or industry-wide non-market strategies have the potential to improve overall performance.

The amount of resources that firms devote to non-market strategies depends not only on the expected policy gains as discussed above, but also on the costs of implementing the strategy, and hence on the expected financial returns from non-market investments. A variety of factors determine the supply cost of policy, including the “distance” between the firm’s favored ideal and the status quo policy, the degree of interest group competition or organized lobbying against the firm’s proposal and the ideological preferences of the salient policy-makers. These costs vary across issues and also over time as successive generations of policy-makers with differing preferences come into office. In general, firms will invest in non-market assets up to the point where the marginal benefit, in terms of increased revenues, is equal to the marginal cost.

Current Approaches to Non-Market Strategy

Despite widespread managerial and academic acceptance that the non-market component is an important and complex factor in the design of business strategy, the non-market strategy literature has largely focused on one dimension, specifically the relationship between interest groups and elected legislators, and on the ways in which interest groups strive to influence legislative outcomes. Although public policies are frequently determined by non-legislative institutions, i.e. by regulatory agencies and courts through administrative rulings and judicial decisions – interactions between interest groups and these institutional players have received less attention in the existing non-market strategy literature. In addition, the non-market strategy implications of how different branches of government (i.e. executive, legislative, judicial and administrative branches) interact in the broader policy-making process have not been fully developed. Before returning to and elaborating on this gap in the literature, we briefly review the current research, paying close attention to the underlying models of the public policy process.

A small but growing body of research, both theoretical and empirical, has emerged over the last two decades exploring the strategies that interest groups employ to shape legislative decisions. The intellectual foundations for this research were developed in the economics field by Stigler (1971) and Peltzman (1976) during the 1970s with the “Economic Theory of Regulation” which questioned the traditional assumption of government behavior, namely that elected officials, or policy-makers in general, act in ways that automatically maximize social welfare. Instead, elected legislators, who, as rational actors are assumed to pursue re-election goals, exchange regulatory policy favors, e.g. votes on legislative acts, in return for pecuniary or non-pecuniary resource transfers from interest groups. Theoretical attention has largely focused on understanding the conditions under which interest groups are likely to demand policy favors, through whatever means, and a number of empirical studies have attempted to identify, with mixed success, a relationship between interest group characteristics (e.g. size and concentration) and ultimate regulatory policies (Kalt and Zupan, 1984; Pashigian, 1984; Nelson, 1982; Nelson and Roberts, 1989). Although the empirical evidence is not fully conclusive, the theoretical premise of this line of work, by applying the rational actor model to the public sector, has significantly shaped the direction of political economy research and has prompted a more critical approach to understanding the determinants of government policies.

The influence of the rational approach to business-government relations is apparent in the managerial scholarship which, in recent years, has turned its attention to the mechanisms and organizational strategies by which interest groups actually influence legislative outcomes. Here, electoral campaign contribution (“vote-buying”) strategies dominate the literature: how much should firms or

collective interest groups contribute to legislators (Austen-Smith, 1995; Grier et al, 1994; Yoffie, 1987), if at all, and if so, to which legislators and at what stage during the electoral cycle (Krehbiel, 1999; Romer and Snyder, 1994; Snyder, 1990, 1991; Stratmann, 1992, 1998)? The more useful lessons for managers in the design of such strategies derive from those studies that draw on the structural characteristics of the legislative process. Snyder (1990), for example, argues that since the passage of legislation requires only a simple voting majority, firms should concentrate their resources on legislators who are slightly opposed to the proposed policy change rather than those strongly in support or strongly against. Krehbiel (1999) generalizes Snyder's argument by demonstrating that firms should target not only financial but also informational resources at "pivotal" legislators. Austen-Smith develops this approach further by considering the lobbying implications of the role that gate-keeping committees play in the broader legislative procedure within the United States. Since House and Senate committees have agenda-setting powers within their policy domains, firms have the option to transfer lobbying resources from floor members to committee members and to shape legislative results at the agenda stage in addition to, or instead of, at the final voting stage.

Although the political action literature offers some interesting insights into the design of effective strategies for shaping legislative outcomes, the literature as a whole remains somewhat narrow in its scope of study. First, there is an empirical emphasis on analyzing political strategies through firms' choices over *inputs*, especially campaign contributions, rather than through the impact on *outputs*, such as on final public policy decisions or even firm or industry financial performance. While data are usually more readily available on inputs than outputs, a natural drawback of this approach is that it becomes impossible to assess empirically the effectiveness of particular strategies. The question of whether, or under which conditions, firms should devote limited resources to non-market strategies therefore remains moot. A second bias exists, at least empirically, in the concentration on campaign contributions or financial inducements, as interest groups' primary vote-buying mechanism. In practice, lobbying, or the provision of information about policy alternatives and outcomes, is an alternative means by which interest groups can shape legislative preferences, especially when legislators have imperfect information about policy proposals. Relatively few empirical studies, however, have been conducted on lobbying strategy, again reflecting the relative cost of collecting appropriate data.³ The insights on lobbying strategies stem mainly from a small theoretical literature that has primarily concentrated on the informational and competitive interest group conditions under which lobbying is most effective (Austen Smith, 1993; Austen Smith and Wright, 1994, 1996). As such, there has been little integration between the campaign contribution and lobbying strands of the literature, leaving basic

questions about relative efficacies and optimal firm choices over each activity wide open for future research.

A more important feature of the broader non-market strategy literature's focus lies in the "dyadic" assumption about the nature of the public policy process with which firms, or interest groups more generally, interact. The implicit assumption in many non-market studies is that public policy is determined primarily by the legislature in isolation from other policy institutions, thereby allowing the researcher to focus on non-market strategy formulation in the context of a dyadic relationship between firms and legislators. The underlying model of the policy process is therefore of legislatures promulgating policy decisions independently of other players, i.e. agencies and courts.

In practice, however, public policies are frequently established not by legislatures but by regulatory agencies and the judicial system without direct legislative action (see Figure 1). Agencies typically have powers to promulgate rules and to arbitrate on specific disputes within their policy domain, and courts similarly have powers to reverse agencies or to strike down unconstitutional legislation. Consequently, this naturally raises some basic questions, which so far have not been fully addressed, about non-market strategy: for example, when and how should firms lobby agencies or use the courts in order to affect public policy outcomes, and what are the implications for strategies targeted at legislators?

INSERT FIGURE 1 ABOUT HERE

In this paper, we seek to build on the current literature by explicitly bringing in agencies and courts as additional players in the policy process and by exploring some of the implications for the design of non-market strategy. By doing so, we intend to develop a more integrated approach to non-market strategy that illustrates why firms lobby a particular branch of government, conditional on how that branch relates to the rest of the government. Admitting additional institutional players into the analysis of non-market strategy requires an understanding of how legislatures interact with agencies and courts, and how these interactions result in public policy decisions. Understanding the behavioral model of players in the non-market arena is thus the first step in crafting non-market strategies designed to improve a firm's position.

In order to develop a model of non-market strategy formulation that integrates regulatory agencies, courts and legislatures, we draw on the Positive Political Theory (PPT) literature, a body of research that explicitly recognizes the interdependencies between institutional players in the policy process. As a branch of the political science field, PPT is centrally concerned with understanding the organizational arrangements of government and the implications for the design of public policy. One feature of the literature, which makes it especially attractive

here, is that it uses game-theoretic models to analyze the interplay between executives, legislatures, agencies and courts, each of which is assumed to act rationally in a well-defined manner. Rather than provide an overview of this literature here, we instead describe several insights about the broader policy-making process that have emerged from PPT research and briefly illustrate initial implications for non-market strategy.⁴

(a) Agency – Legislature Interactions

Legislatures that delegate policy authority to expert administrative institutions (i.e. agencies) often build in a variety of safeguards to ensure that agency decisions do not stray too far or too fast from the legislature's ideal position (Holburn and Vanden Bergh, 2001; McCubbins and Schwartz, 1984; McCubbins, Noll and Weingast, 1987, 1989; Vanden Bergh, 2000). Safeguards can take the form of procedural requirements that allow selected interest groups to participate in agency decision-making procedures, that alert legislatures to an agency's intention to make a ruling in the future or that leave key staff appointment decisions with the legislature. Legislatures are also able to influence agency decisions by monitoring activities through specialist committees that can ultimately initiate legislative bills to override the agency or who can conduct public inquiries. One consequence of these safeguards is that, if they substantively constrain the agency – for example, if the threat of ex post sanctions is strongly credible – then agency decisions will track the preferences of the legislature (Ferejohn and Shipan, 1990; Weingast and Moran, 1983). Thus, in this case, even though the agency is actively formulating public policy, it is doing so under the watchful eye of the legislature. In other instances, when the procedural and ex post constraints are less “binding”, the agency will have greater latitude to set policy more in accordance with its own preferences than with those of the legislature.

From a non-market strategy perspective, one implication of adopting a game-theoretic model of agency behavior is that, under certain conditions, firms have the option to influence agency decisions by lobbying the legislature rather than the agency directly. The conditions under which such a strategy is optimal will naturally depend on the agency's implicit freedom to make rulings that transgress from the legislature's ideal without incurring ex post punishment as well as on the relative cost to the firm of lobbying key legislators. More generally, the analysis suggests that firms can potentially substitute resources between lobbying agencies and legislatures and that the expected returns, in terms of policy gains, of lobbying one institution or the other will depend on the relative alignment of their preferences.

(b) Agency - Court Interactions

Regulatory agencies operate not only in the shadow of the legislature, but also under the threat of reversal by appellate and supreme courts, adding a further layer of strategic complexity into the public policy process. Reviewing courts may overturn agency decisions either on the basis that they did not possess the requisite statutory authority to set the particular policy or else on the grounds that they failed in their reasoning processes to sufficiently justify the new policy (Tiller, 1998; Tiller and Spiller, 1999; Spiller and Tiller, 1997). Agencies, looking ahead to the likelihood of future appeals, will therefore select policies that maximize their utility net of the expected costs of being overturned or of being forced to reconsider their position. In the extreme case, this may imply that, in the presence of an opposed court, the agency chooses not to adjust the status quo when in more favorable circumstances it would in fact do so.

That firms can use litigation to challenge agencies and to gain favorable policy outcomes is a well-known aspect of non-market strategy. Local telecommunications firms in the U.S., for example, have frequently delayed the full onset of competition in their home territories by relying on lengthy and complex court cases to deter or hinder potential new entrants. MCI, for example, successfully sued the FCC and reversed its prior rulings which then allowed MCI to provide extended long-distance telecommunications services in direct competition with the incumbent, AT&T. In these and many other cases, interest groups have used the judicial process to reverse, modify or postpone the implementation of agency decisions in order to advance their competitive advantage.

Less obvious, however, are the implications from the analysis for the design of lobbying strategies. First, the threat of litigation by opposing groups suggests that the expected benefits to the firm of lobbying agencies are reduced as compared to the myopic approach to lobbying strategy that ignores interactions with courts and legislatures. Secondly, firms can potentially use lobbying and litigation as partial substitute strategies. Establishing a credible reputation as an aggressive and successful litigant, for instance, may serve to moderate initial agency decisions in the same manner as directly lobbying agency staff. Indeed, de Figueiredo and de Figueiredo (1999), in a model of two competing interest groups, find that under the right conditions, the existence of litigation completely eliminates lobbying activities.

(c) Court – Legislature Interactions

In the same way that agencies make rulings with an eye towards the threat of future override by legislatures or courts, recent scholarship suggests that such strategic behavior is also present in the judicial system (Gely and Spiller, 1990; Spiller and Gely, 1992; Vanden Bergh, 2000). Rather than acting purely on

legalistic considerations (i.e. legal precedent) courts have been found to make decisions in addition on the basis of ideological and political factors. One study, for example, finds that while the estimated ideological preferences of the Supreme Court were an important factor in predicting the nature of labor union case decisions during the 1949-1988 period, court decisions were also sensitive to Congressional preferences (Spiller and Gely, 1992); with more ideologically conservative legislative committees, even liberal courts adjusted their pattern of decisions, presumably in order to avoid the possibility of legislative overrule. These findings thus support the rational actor model of judicial behavior and the proposition that justices are politically sophisticated – that is, justices appear to consider the future political game that follows their rulings.

For firms aiming to influence regulatory policy through litigation, forum shopping decisions, as well as decisions to bring a case to court or not, will be informed by the ideological preferences of the legislature and of the court on the issue at hand. Even justices that have a historic record that is sympathetic towards the firm's case will be less willing to overturn agency rulings knowing that a strongly-opposed and active legislature could enact legislation reversing them. Similarly, firms may wish to delay or bring forward litigation strategies if expected changes in the political regime (for example, following member turnover in legislative committees) are likely to modify subsequent judicial behavior.

As a cumulative body of research, the PPT literature demonstrates, both theoretically and empirically, how public policies are determined by the structured interactions of self-interested government actors, namely executive, legislative, administrative and judicial bodies. Although a few studies have incorporated interest groups as additional institutional actors, these have typically done so in the context of a simplified version of the policy process (e.g. de Figueiredo et al, 2000; Spiller, 1990).⁵ Krehbiel (1999), for example, argues that firms should lobby “pivotal” actors, though the scope of analysis is confined to the legislature and pivotal legislators. Our goal here is to build on these studies by drawing on the structured-interaction approach of the PPT literature and by developing insights into the design of non-market strategy when we introduce firms as an additional actor into the broader policy process. In particular, we wish to understand how firms decide which branch(es) of government to lobby in order to gain favorable public policy outcomes.

A PPT Framework for Non-Market Strategy Formulation

In this section we develop a theoretical framework in two parts. In the first part we model the interaction between the firm, the legislature, the executive and the agency in charge of implementing and enforcing regulation in the context of a

complete information game, illustrating the strategic interaction among elected and appointed officials in determining policy outcomes. As discussed earlier, in large part, such strategic interactions are not assessed in the extant non-market strategy literature. More importantly, we explore the consequences of such interactions for non-market strategy and the allocation of lobbying resources across different branches of government. We find that the firm's strategy and decisions about whom to lobby in order to affect policy outcomes depend on the type of political environment. In the second part of the framework we extend the initial game by introducing courts into the analysis. Doing so creates additional strategic challenges and opportunities for the firm, and modifies the conclusions reached in the first part.

In the initial game, there are four players, the firm, the legislature, the executive and the regulatory agency.⁶ The legislature is assumed to be bicameral with two relevant players, the House and Senate. Since the House and Senate committees with jurisdiction typically have control over policy offered on the floor of the legislature we simplify the analysis by assuming that the ideal point of the joint conference committee represents the bargaining outcome between the House and Senate.^{7, 8} In addition, due to the existence of the executive with veto power, the override majority (two-thirds of all members) in the House and the Senate is also important. The executive is assumed to incur political costs if a veto is overridden and will therefore only veto bills that are certain to be sustained.⁹ The regulatory agency is assumed to be a unitary actor whose preferences reflect those of the executive and legislature due to the appointment process.¹⁰

We assume that each political actor and the firm are rational and have well-defined policy preferences. The policy preferences of the political actors reflect the interests of relevant constituents and interest groups that determine their electoral success.¹¹ As such, the political actors maximize utility, which is assumed to be linear, symmetric and single peaked. We further assume perfect and complete information.

The sequence of the game is as follows. In the first stage, the firm decides where to allocate its lobbying resources in order to shift policy outcomes closer to its ideal point, F . Here the firm must choose between lobbying the agency, the executive, the conference committee or the veto supermajority point of the legislature. We assume that lobbying by the firm – either through the transfer of resources or through the provision of new information on policy alternatives or impacts – has the effect of marginally shifting the ideal point of the relevant political actor. In the second stage the agency (A will represent the ideal point of the agency) makes a rule along the relevant dimension. This decision establishes the status quo (x_0). The agency is assumed to make its decision on a continuum.¹² In the third stage, the relevant committees decide whether to offer an alternative policy (x) to overturn x_0 .¹³ As mentioned, this decision reflects the constraints

imposed by the legislature, mainly that it must pass in both houses, and represents the post-bargaining outcome between the House and Senate committees. CC, for conference committee, represents the committee's ideal point. In the fourth stage the executive (E) decides whether to sign or veto x . A veto reflects executive preference for x_0 versus x . In the fifth and final stage, the maximum of the House and Senate two-thirds majority ($M_{2/3}$) determines whether the veto is overridden or sustained. An override reflects maximum super-majority preference for x versus x_0 .

To derive the equilibrium, the game is solved by backward induction. Subgame perfection is assumed throughout. Each actor attempts to maximize utility subject to the constraints imposed by the institutions. That is, actors are sophisticated and recognize the effect of their actions on the subsequent play of the game. Since we assume that utility is linear and single-peaked, a policy that is closer to an actor's ideal point is preferred to one further away.

A policy equilibrium is assumed to be pareto efficient in the sense that there is no incentive to alter the policy because any alteration will result in at least one relevant actor being made worse off. Here, the *core* of the game, consisting of all pareto efficient policies, lies in the region between the conference committee, CC, and the veto super-majority point of the legislature, $M_{2/3}$. Thus, any policy ruling outside the core will be unstable in that it will be unacceptable to both CC and $M_{2/3}$ when compared to any alternative within the core – in which case CC will propose an alternative, x , within the core and $M_{2/3}$ will sustain it, if necessary overriding an executive veto. Precisely where in the core the equilibrium policy lies will depend on the relative configuration of preferences of all the players.

In each stage, the relative position of the actors determines the equilibrium. For expositional purposes, the model analyzes the implications of the conference committee, CC, being to the left of the legislative supermajority, $M_{2/3}$, in the policy space (a more liberal supermajority implies similar qualitative results). See Figure 1. We also assume that the executive is relatively conservative compared to the supermajority, lying to the right in the policy space. Accordingly, the maximum of the House and Senate two-thirds majority is the relevant veto override point. Thus, at the fifth stage, $M_{2/3}$'s decision to override or sustain an executive veto depends on its relative position to the status quo, x_0 , and the conference committee's alternative, x . Since this is the final stage of the game the supermajority does not act strategically and simply chooses the action which immediately improves its utility; it will override the veto and restore x if x is closer to its preferred point than x_0 , otherwise it will sustain the veto and x_0 . The supermajority's preferred set consists of all x policies that are closer to its ideal point than the status quo.

In the fourth stage, the executive decides whether to veto x . Reemphasizing the assumption that there is a substantial cost incurred if a veto is overridden

(without offsetting benefit), the executive will only veto bills that the supermajority will sustain (i.e. not override) and that consequently also leave the executive better off (i.e. x_0 is closer to the executive's ideal point than x). If either of these conditions does not hold, the executive will not veto the conference committee's alternative bill. For example, the executive will not veto bills that are in the supermajority's preferred set, irrespective of whether they make the executive worse or better off.

In the third stage, the conference committee will propose policy x subject to the constraints imposed by an executive veto and by a veto override by the supermajority. As such, CC will offer x that maximizes its utility and which avoids veto by E, by selecting the position in the supermajority's preferred set that is closest to CC. Therefore, given that $CC < M_{2/3} < E$, x will be just inside the left hand boundary of the preferred set. Here, the executive has no incentive to veto x since x is (weakly) closer to CC than x_0 , a veto would be over-ridden by the supermajority, and the conference committee cannot propose any other policies which simultaneously satisfy these conditions and which make it better off.¹⁴

In the second stage of the game, the agency makes a rule and establishes x_0 , recognizing the subsequent actions of CC, E and $M_{2/3}$. The rule depends upon the position of the agency (A) relative to the other players. In each case, A maximizes its utility subject to the future play of the other actors. Since A wishes not to be overturned in subsequent moves, it establishes the equilibrium of the game. It is helpful at this point to distinguish between several political regimes, defined by alternative preference configurations, in order to illustrate how the equilibrium policy outcome depends on relative preferences (see Figure 2). In Regime 1, the agency is relatively liberal compared to the conference committee (which, as before, is liberal compared to the supermajority point).¹⁵ Thus, when $A < CC < M_{2/3} < E$, A makes a rule equal to CC's ideal point, since any $x_0 < CC$ will be replaced by $x = CC$ which is preferred by CC and $M_{2/3}$.¹⁶ In Regime 2, the agency is more moderate, lying between the conference committee and the supermajority on the policy dimension ($CC < A < M_{2/3} < E$). In contrast to Regime 1, the agency enjoys greater policy-making discretion in this situation since the conference committee and supermajority are "pulling" the agency in opposing directions. The agency is able to establish its ideal point as the equilibrium since any attempt by CC to propose a policy alternative closer to its ideal will be vetoed by the executive and sustained by the supermajority, thereby reasserting the agency-determined status quo. In Regime 3, where the agency is conservative relative to the legislative supermajority (i.e. $CC < M_{2/3} < A < E$), the agency is unable to obtain its ideal point as an equilibrium since, as in Regime 1, it lies outside the core. The best it can obtain, without triggering a sustainable alternative, is to set x_0 at the right hand boundary of the core, that is at $M_{2/3}$'s ideal point. To understand this, suppose that in fact the agency mistakenly set x_0 by an amount δ

to the right of $M_{2/3}$. The conference committee could then propose an x equal to $M_{2/3}$ minus δ , which CC and $M_{2/3}$ would both prefer to x_0 , and which $M_{2/3}$ would sustain after an executive veto. $M_{2/3}$ minus δ would then become the equilibrium policy, making the agency worse off. We can see that the best the agency can achieve in this situation is to set x_0 equal to $M_{2/3}$ since CC cannot propose an alternative which CC and $M_{2/3}$ both prefer. This is therefore a stable equilibrium.

INSERT FIGURE 2 ABOUT HERE

To summarize, in a complete information environment, the agency establishes the equilibrium through the initial rule x_0 subject to the constraints imposed by the existing institutional structure. Here there is no incentive for CC or E to alter x_0 as any change will make at least one party worse off. One can see that the equilibrium reflects the preferences of the electorate, the relative position of the actors within the institution as well as the institutional rules determining the play of the game.

We are now able to derive some propositions about the design of non market strategies by analyzing the firm's decision in the first stage. We consider the firm's decision about which political actor to lobby in order to achieve a favorable change in policy equilibrium outcomes promulgated by the agency in the context of each of the three regimes outlined above. Beginning with Regime 2, where the agency is relatively moderate compared to the conference committee and supermajority, the firm will directly lobby the agency in an effort to move the agency's ideal point closer to the firm's. Since the agency has free reign to set policy at its own ideal point without the threat of legislative override, any changes in its preferences, as induced by lobbying activities, will translate into corresponding changes in policy. However, when the agency is liberal relative to the committee and the veto override majority (Regime 1), directly lobbying the agency is a fruitless task: remember that when $A < CC < M_{2/3}$, the agency is effectively constrained to set the status quo at CC. Thus, even though the firm may succeed in moving the agency's ideal point, there will be no matching effect on the agency's equilibrium policy decision. Instead, the firm gains purchase by lobbying the legislative committee (CC) with jurisdiction over the policy issue since this will induce a shift in the agency's ruling in a bid to avoid CC proposing an alternative at its ideal. Similarly, in Regime 3 ($CC < M_{2/3} < A$), as in Regime 1, the firm moves policy not by lobbying the agency, but by lobbying the constraining institutional player, in this case the legislative supermajority congressman, $M_{2/3}$. Here, the agency establishes the equilibrium at the supermajority's ideal so any move in this ideal point will induce a subsequent shift in the agency's decisions as well.

Proposition 1: In the presence of complete information, a firm's decision about which branch of government to lobby depends on the type of political regime, as defined by the relative policy preferences of the political actors.

- A: If the agency is liberal relative to the committee and the veto override majority, then firms should allocate resources to changing the preferences of the *legislative committee* with jurisdiction over the policy issue (Regime 1).
- B: If the agency is moderate relative to the committee and the veto override majority, then firms should allocate resources to changing the preferences of the *agency* (Regime 2).
- C: If the agency is conservative relative to the committee and the veto override majority, then firms should allocate resources to changing the preferences of the relevant *elected legislators* likely to determine whether a veto can be sustained.

Further strategic implications may be derived once we recognize that agency preferences are not entirely independent of those of the legislature and executive, as has been implicitly assumed so far. U.S. agency heads or commissioners are typically appointed by the executive subject to the consent of the legislature, so the preferences of agency appointees are likely to reflect a combination of the appointing legislature's and executive's preferences. Firms thus have an opportunity to influence the nature of the agency's ideal position on any given policy issue by directly lobbying for the appointment of agency officials who are sympathetic to the firm's position. The above "regime" analysis, however, suggests that such lobbying activities will be more effective, in terms of ultimately affecting policy decisions, in some political regimes than others. For instance, in Regimes 1 and 3, where the agency is effectively constrained by the legislative committee and supermajority legislator, respectively, inducing a shift in the agency's ideal point will have no impact on the agency's policy ruling. When the agency has some latitude, on the other hand, as in Regime 2, changes in agency preferences that arise from firm lobbying over appointment decisions, will translate into corresponding changes in policy. In this case, the firm has a strong incentive to lobby the executive and legislature to appoint their preferred agency officials. More generally, the wider the distance between CC and $M_{2/3}$, the more likely that lobbying over agency appointments will matter.

As discussed above, agency rules are subject to reversal by appellate courts. Reviewing courts may overturn agency decisions in favor of an existing status quo policy because an agency ruling did not possess statutory grounds or was not reasonable (Tiller, 1998; Tiller and Spiller, 1999; Spiller and Tiller, 1997).¹⁷ At

the same time, legislatures may overturn court decisions through the statutory process. Thus, forward-looking justices incorporate the threat of a statutory response into their decision making calculus (Vanden Bergh, 2000; Spiller and Gely, 1992; Gely and Spiller, 1990). Similarly, far-sighted agencies will promulgate rules taking into account the threat that the courts can overturn their decision in favor of the status quo (Spiller, 1992). As such, to create a more complete framework, we must explicitly incorporate the courts into our analytical framework. By explicitly recognizing the strategic interaction among agencies, courts and legislatures, firms can identify where lobbying activities are likely to have the greatest affect in terms of changing policy outcomes.

Agency-Court-Legislature-Executive-Firm Model

With the introduction of courts into the general framework, there are now five players in the game, the firm, the legislature, the executive, the regulatory agency and the courts. Our assumptions about players' preferences from the initial game do not change, although the order of play now alters.

The sequence of the game is as follows. In the first stage, the firm decides which branch of government to lobby in order to shift policy outcomes closer to its ideal point, F . Here the firm must choose between lobbying the agency, the executive, the conference committee or the veto supermajority point of the legislature.¹⁸ In the second stage the agency (A represents the ideal point of the agency) makes a rule along the relevant dimension. This decision either reaffirms the status quo (x_0) or establishes a new rule, x , through the rulemaking process. In order to simplify the analysis we assume that the status quo resides at the conference committee's ideal point, CC . In the third stage, the court may uphold the agency's rule x or overturn it in favor of the status quo. In the fourth stage the relevant committees decides whether to offer an alternative policy (x_a) to overturn x if the court upholds x .¹⁹ In the fifth stage the executive decides whether to sign or veto x_a . In the sixth and final stage, the maximum of the House and Senate two-thirds majority ($M_{2/3}$) determines whether the veto is overridden or sustained. An override reflects maximum super-majority preference for x_a versus x .

As above, the equilibrium ruling by the agency is determined by solving the game via backward induction. In each stage, the relative position of the actors determines the equilibrium. For expositional purposes, the model analyzes the implications of the conference committee, CC , being to the left of the legislative supermajority, $M_{2/3}$, in the policy space (a more liberal supermajority implies similar qualitative results). We also assume that the executive is relatively conservative compared to the supermajority, lying to the right in the policy space. We thereby explore the affects of varying agency (A) and court (J) preferences on the allocation of lobbying resources by the firm. Figure 3 illustrates the setup.

INSERT FIGURE 3 ABOUT HERE

Stages four, five and six are equivalent to stages three, four and five in the no-court game. That is, the supermajority will override the veto and restore an alternative statute x_a if x_a is closer to its preferred point than x , otherwise it will sustain the veto and restore the agency ruling x . The supermajority's preferred set consists of all policies that are closer to its ideal point than the agency's ruling x . In stage five, the executive decides whether to veto x . The executive will only veto bills that leave the executive better off (i.e. the agency's ruling x is closer to the executive's ideal point than the alternative policy proposed by CC, x_a). If either of these conditions does not hold, the executive will not veto the conference committee's alternative bill. In the fourth stage, the conference committee will propose an alternative policy x_a subject to the constraints imposed by an executive veto and by a veto override by the supermajority. As such, CC will offer x_a that maximizes its utility and which avoids veto by E, by selecting the position in the supermajority's preferred set that is closest to CC. Therefore, given that $CC < M_{2/3} < E$, x_a will be just inside the left hand boundary of the preferred set. Here, the executive has no incentive to veto x_a . Since x_a is (weakly) closer to CC than x , a veto would be over-ridden by the supermajority, and the conference committee cannot propose any other policies which simultaneously satisfy these conditions and which make it better off.

In the third stage of the game, the court decides either to support the agency's rule or to overturn it in favor of the status quo policy x_0 . The decision by the court depends upon its ideal policy position relative to the other players. In all environments, the court maximizes its utility subject to the future play of the other actors. Since x_0 is assumed to be equal to the ideal point of the conference committee, the court knows that if it overturns the agency's rule x , then x_0 will be the final outcome of the game due to future actions in stages four through six. The court also knows that if the agency's rule x is an element of the core, then x will also be a stable outcome. Assuming that the ruling by the agency is an element of the core, then the court will uphold x if x is closer to the court's ideal point than x_0 , otherwise the court will overturn x . Theoretically, the agency could make a ruling x that is not an element of the core. This ruling, if upheld by the court, will lead to a statutory response by the legislature since the conference committee and the legislative supermajority will be able to pass an alternative x_a that makes them each better off as compared to the agency's ruling. In this environment, the court will uphold the agency's rule x if the court expects the alternative statute (x_a) to be closer to its ideal point than the status quo, x_0 . Otherwise the court will overturn x in favor of the status quo.

In the second stage of the game, the agency makes a rule and establishes x , recognizing the subsequent actions of the court, the conference committee, the

executive and the legislative supermajority. The rule depends upon the position of the agency relative to the other players. Since A can solve for subsequent moves, it establishes the equilibrium of the game. Given the addition of the courts, it is helpful at this point to distinguish between several political regimes, defined by alternative preference configurations, in order to illustrate how the equilibrium policy outcome depends on relative preferences (see Figure 3). In Regime 1, the agency is relatively liberal compared to the conference committee (which, as before, is liberal compared to the supermajority point). No matter where the court's ideal point resides in the policy space, when $A < CC < M_{2/3} < E$, A makes a rule equal to CC's ideal point, since any $x < CC$ will be overturned by the court in favor of $x_0 = CC$, which is preferred by CC and $M_{2/3}$.

In Regimes 2, the agency is more moderate, lying between the conference committee and the supermajority on the policy dimension ($CC < A < M_{2/3} < E$). With the introduction of the court, the agency is no longer able to establish its ideal point as the equilibrium policy in all cases. The agency must now consider the court's ideal point when promulgating rules. This is best illustrated in Regimes 2b and 2c.²⁰ Since the conference committee has jurisdiction to establish new policy in this area (x_0 and/or x_a), and the court can overturn agency rules in favor of x_0 , the agency's policy choice will move away from its ideal point closer to the conference committee's, depending upon the preferences of the court. If the court is moderate relative to the conference committee and agency (Regime 2b), then the initial policy choice of the agency will reside at the point in the policy space that makes the court indifferent to x and the status quo. In this way, the agency's rule is supported by the court and does not get overturned by the conference committee through a statutory process. As the court moves closer to the conference committee's ideal point, the agency's policy decisions also move closer to CC. Interestingly, for a relatively liberal court ($J < CC$), the agency makes a ruling equal to CC (Regime 2c). While on the surface the conference committee appears to be the critical political actor in this regime, it is the presence of the court and the threat of the court overturning the agency's policy choice that constrains the agency.

In Regimes 3, we observe a qualitatively similar dynamic. When the court is relatively conservative, the policy outcome is the same as in the no-court game above (Regime 3 in Figure 2).²¹ The agency is able to choose a policy $x = M_{2/3}$ and avoid a judicial overrule or statutory response. As the court becomes relatively liberal, however (Regimes 3b and 3c), the agency must respond to the threat of the court overturning their ruling in favor of the status quo. Again, the presence of the court moves agency policy closer to CC as the court becomes more liberal. In the extreme case where the court is liberal relative to all other political actors, a conservative agency (Regime 3c) will make a relatively liberal ruling ($x = CC$) since it recognizes that the court can overturn their decision in

favor of the status quo set by the conference committee. To understand this, suppose that in Regime 3c the agency mistakenly set x by an amount Δ to the right of CC. The court could then overturn x in favor of $x_0 = CC$. The legislature will not attempt to rewrite the law since the committee has no ability to write a statute that improves its utility. We can see that the best the agency can achieve in this situation is to set x equal to CC.

To summarize, in a complete information environment, the agency establishes the equilibrium through the initial rule x subject to the constraints imposed by the existing institutional structure. Here there is no incentive for the court, the conference committee or the executive to alter x as any change will make at least one party worse off. One can see that the equilibrium reflects the preferences of the relative position of the actors within the institution as well as the institutional rules determining the play of the game.

We are now able to derive additional propositions about the design of non-market strategies by analyzing the firm's decision in the first stage. We consider the firm's decision about which political actor to lobby in order to achieve a favorable change in equilibrium policy outcomes promulgated by the agency in the context of each of the regimes outlined above. The threat of the court overturning an agency rule does not affect the firm's behavior in Regime 1. For any ideological preferences of the court, the firm will lobby the conference committee (CC) in order to bring about more favorable policy outcomes. The relatively liberal agency is effectively constrained to confirm the status quo policy. Even if the firm can allocate resources to change (marginally) the preferences of any other political actor besides the conference committee, there will be no matching effect on the equilibrium policy outcome. Thus, the firm gains purchase by lobbying the legislative committee with jurisdiction over the policy issue since this will induce a shift in the agency's ruling in a bid to avoid the committee proposing an alternative at its ideal.

In Regimes 2 and 3 (see Figure 3), the presence of the court may change the firm's lobbying decision as compared to our earlier discussion when we assumed no judicial oversight. In Regime 2, when the agency is relatively moderate compared to the conference committee and supermajority, the firm will directly lobby the agency only if the court is more conservative than the agency. For relatively liberal courts however, the firm will only bring about change in policy by lobbying the conference committee. This is a much different result from the previous game. In Regimes 2b and 2c, the agency no longer has complete discretion to set policy because the threat of the court overturning the agency's decisions becomes credible. Thus, the agency will be careful to avoid an overruling by the court. The agency will pay close attention to the relative position of both J and CC when making policy choices. To effect favorable policy in this regime, the firm must therefore attempt to change marginally the

preferences of the conference committee. In Regime 3, a similar dynamic is at play. Whereas in the no-court environment, the agency was constrained only by the supermajority veto override legislator, with the presence of the court, the pivotal political actor shifts depending on the policy preferences of the court. As the court becomes more and more liberal (movement of court's preferences closer to CC relative to $M_{2/3}$ in Regime 3, Figure 3), the agency will need to pay closer attention to the relative position of J and CC as opposed to $M_{2/3}$. Again, to effect favorable policy in this regime, the firm must attempt to change marginally the preferences of the conference committee.²²

Proposition 2: In the presence of complete information, a firm's decision about which branch of government to lobby depends on the type of political regime, as defined by the relative policy preferences of the political actors.

- A: If the agency is liberal relative to the committee and the veto override majority, then firms should allocate resources to changing the preferences of the *legislative committee* with jurisdiction over the policy issue (Regime 1) irrespective of the policy preferences of the court.
- B: If the agency is moderate relative to the committee and the veto override majority, then firms should allocate resources to changing the preferences of
1. the *agency* if the court is conservative relative to the agency
 2. the *legislative committee* (Regimes 2b and 2c) if the court is more liberal than the agency.
- C: If the agency is conservative relative to the committee and the veto override majority, then firms should allocate resources to changing the preferences of
1. the relevant *supermajority legislators* likely to determine whether a veto can be sustained, if the court is conservative relative to the agency.
 2. the *legislative committee* (Regimes 3b and 3c) if the court is more liberal than the agency.²³

Further strategic implications may be derived once we recognize that court preferences are not entirely independent of those of the legislature and executive. Judicial selection methods vary across political environments and reflect either broad electoral preferences or a bargaining game between the executive and legislature. Vanden Bergh (2000) shows that judicial selection rules affect judicial behavior. In some states in the U.S., court justices are re-elected through a

competitive electoral process, whereas in other states they are selected through a non-competitive retention process. In the latter case, if a justice is voted out of office, then the legislature and executive appoint a replacement. Firms thus have an opportunity to influence the nature of the court's preferences by directly lobbying for the appointment of certain justices who are sympathetic to the firm's position or by supporting the campaign of a particular justice. Our "regime" analysis, however, suggests that such activities will be more effective, in terms of ultimately affecting policy decisions, in some political regimes than others. For instance, in Regime 1 (Figure 3), where the agency is effectively constrained by the legislative committee or supermajority legislator, respectively, inducing a shift in the court's preferences will have no impact on the agency's policy ruling. When the court is a pivotal actor, on the other hand, as in Regimes 2b and 3b, changes in court policy preferences that arise from firm's allocating resources to affect appointment decisions or electoral outcomes, will translate into corresponding changes in policy. In these cases, the firm has a stronger incentive to invest in lobbying activities that improve the electoral chances of their preferred justice.

Although we have presented a simple, stylized model of the policy-making and lobbying process, which ignores naturally important considerations such as interest group competition in lobbying and the existence of uncertainty about ideal points or about the costs of making policy changes, it does nonetheless provide a theoretical basis upon which future complexities can be built. Additionally, this simple framework provides new insights into the design of effective lobbying strategies. Perhaps most importantly, by explicitly recognizing the strategic nature of the interactions among political actors, firms can identify where in government their lobbying activities are likely to have the greatest impact in terms of changing policy outcomes. Thus, if the firm wishes to shift agency-determined regulatory policy in its favor, directly lobbying the agency responsible for the issue at hand need not be the most effective strategy. Deciding whether to lobby the agency or instead the political principals that oversee the agency will generally depend on their relative preferences and the nature of the decision-making game. When political actors are a binding constraint on the agency, the firm will shift its lobbying efforts towards the politicians and away from the agency, even though the agency continues to promulgate and enforce policy. This result substantially modifies the conclusions of much of the existing "Business and Public Policy Management" literature which, absent recognition of the strategic nature of the policy "game", typically prescribes lobbying strategies uniformly directed at *agencies* in regulatory situations (Buchholz, 1990; Baron, 1996).

Extensions

Incomplete Information

A natural limitation of the model is the assumption about complete and perfect information – each player is assumed to know the play of the game as well as the other players' preferences. In practice, while legal constitutions provide some clarity about the jurisdictions of different players and the sequence of policy-making games, it is likely that uncertainty exists about players' policy preferences. Agencies, for example, operating under fixed budgets, may not have sufficient resources to communicate the necessary information about policy alternatives and consequences to legislators in order to determine their ideal positions on a given issue. When agencies are uncertain about the precise location of constraining actors' ideal points, they may mistakenly issue a policy ruling that does not fall within the core, thereby triggering a legislative response that establishes a new equilibrium. Note that in the complete information scenario, our model predicts that we should not observe *legislative* activity at all: as a rational far-sighted actor, an agency responds to changes in legislative preferences such that its ruling establishes a new equilibrium, implying that acceptable legislative alternatives will not arise. The gains realized by the firm are thus limited by the response of the agency. However, if an agency does promulgate a policy outside the core, a legislative response will occur as the conference committee takes advantage of the opportunity to move policy closer to its ideal. From the firm's perspective, such out-of-equilibrium mistakes by the agency can ultimately be beneficial. In the right political environments, the legislative response will bring about new policy equilibria even closer to the firm's ideal point than a pareto efficient policy decision made by the agency. This is easily seen when the firm has an ideal policy that is more liberal than the legislative committee's, the veto override majority's and the agency's ideal points (as in Regime 3 in Figure 2). In this environment, a pareto efficient policy by the agency is equal to the ideal point of the veto override legislator's ideal policy. Yet if the agency makes a mistake by ruling outside the core (to the right of $M_{2/3}$ in Regime 3), then the legislative committee with jurisdiction will offer a statute to overturn the agency decision. This statute will be closer to the firm's ideal policy. On the other hand, by a similar reasoning, if the firm is relatively conservative compared to the other players (the firm's ideal is to the right of the agency in Regime 3 in Figure 2), an agency mistake would leave the firm worse off.

A strategic implication of this analysis is that firms have an opportunity to influence policy outcomes not only by lobbying for shifts in political actors' preferences, but also by lobbying to alter the informational asymmetries that exist between players. Take, for example, the latter scenario described above: lobbying activities that ultimately result in a reduction in agency uncertainty about the supermajority's ideal point would reduce the probability of a legislative response

that would leave the firm worse off than a more-informed agency ruling that is not overturned. If the agency understands the relative configuration of preferences but not their precise locations, then the firm would send an informational message to the agency about the location of the supermajority's ideal point. Since the agency knows that the firm will benefit from a correct rather than mistaken agency ruling, the agency will interpret the firm's message as credible. Such messages would be regarded as disingenuous, however, if the firm stood to gain from agency mistakes, suggesting that the firm would withhold from informational lobbying when the firm and agency are on opposite sides of the policy core.

The opportunity for a firm to engage in such informational lobbying depends on the firm having better information than the agency about other players' preferences. This could arise when agencies have limited budgets that do not allow them to sufficiently work with political actors when formulating policy. Firms, by contrast, do not operate under statutory fixed budgets and are thus able to invest in lobbying activities as long as they provide a net benefit. Thus, when agencies are at risk of making a mistaken ruling that would ultimately leave the firm worse off following legislative override, firms have an incentive to invest in learning more about politician's preferences and to subsequently lobby the agency with such information.

Competing Interest Groups

In addition to a simplified informational environment, the model also assumes that only a single private interest group (a firm or industry-wide association) is seeking to influence public actors in the policy process. Interest groups, however, frequently compete in the non-market arena with other organized interests who have opposing policy preferences (Austen-Smith and Wright; 1994, 1996). Real estate developers, for example, often must counteract powerful environmental groups in their plans to construct on greenfield sites; power generation companies commonly find that local residents, concerned about perceived pollution and health externalities, vigorously oppose the siting of new power plants. Jaffee and Freeman (in this volume) demonstrate how divisions can exist between firms within the same industry; while some German law firms advocated the adoption of legislation enabling clients to implement employee share option plans (ESOPs), other law firms, threatened by subsequent loss of competitive advantage, opposed such proposals. In these and other similar situations, organized interests attempt to shift policy-makers' positions in opposite directions.

Although the model presented here does not incorporate multiple interest groups, it is flexible enough to accommodate them as an extension in future research. The analysis of which public player is pivotal will not change since this is determined by the institutional rules that govern their interactions. Opposing

interests will thus concentrate on lobbying the same actor for preferential policy treatment. Predicting the outcome of the lobbying game with opposing interests will depend on factors such as the sequence of interest group moves and their relative resources. For each player, however, the marginal return to lobbying expenditures is likely to be reduced in the face of competition. Indeed, as Jaffee and Freeman discuss, the presence of multiple venture capital firms and law firms with opposing views on the merits of German ESOP legislation partially explained the lack of legislative or judicial decisions to change the existing status quo policy.

Political Dynamics

A further limitation of our model is that it represents a one-period game among the players. To this extent, expectations of future games, and policy outcomes, are not incorporated in the analysis of players' behavior. If firms expect future political preferences to change, however, they may take actions to prevent current agency-determined policies from shifting further away from their ideal position. Suppose, for example, that the firm anticipates that a new executive, with stronger anti-firm policy preferences, will gain office at the next election. Since agency heads or commissioners are generally appointed by the executive this would imply a rightward shift in the agency's preferences. If the agency's ideal position lies in the core and is able to set policy at its ideal, then the change in executive preferences will lead to a similar shift in the agency's equilibrium policy ruling.

To protect itself against such adverse policy shifts, the firm may lobby political actors to increase the agency's cost of changing policy, thereby insulating the status quo against future reversals or modifications. One way to do this is to lobby for structural changes in the agency's decision-making process that restrict agency discretion on a particular aspect of policy, such as the ability to determine specific rates or competition policy in regulated industries. Indeed, there is a growing body of empirical evidence that legislatures do act in a far-sighted manner when deciding upon the appropriate level of discretion for regulatory agencies. Holburn and Vanden Bergh (2001) find that in the U.S. during the 1970s and 1980s, Democrat-controlled state legislatures were more likely to enact legislation requiring regulatory agencies to admit consumer advocates to administrative hearings when they were relatively uncertain about being re-elected. By specifying this requirement in statute, incumbent Democrat coalitions increased the prospect of the policy remaining in effect even if future political generations were expected to have opposing preferences.

Alternatively, firms may lobby for changes in the selection procedures of agency heads which effectively lock-in agency preferences for a period of time. For example, increasing the number of agency commissioners may allow an

executive to make new appointments that alters the identity of the median commissioner and hence the nature of agency policies that are decided by a majority vote. Similar results may be achieved by adjusting the tenure of agency commissioners or by changing selection rules (e.g. which selecting parties have jurisdiction).

From a strategic perspective, therefore, dynamic political considerations influence the incentives of firms to lobby for changes in the relationship between political actors and agencies. While in a static setting, firms may opt to lobby agencies in order to shift agency preferences and policy rulings, they may instead lobby the legislature and executive to initiate legislation that insulates the status quo from future political generations.

This chapter has focused solely on *where* in the government institutional structure firms should allocate their lobbying efforts. Other strategic decisions relate to the *framing* of policy issues and informational arguments, and the *type* of resources to expend on lobbying. Such decisions will be informed additionally by the government location of firm lobbying activities. Dowell, Swaminathan & Wade (in this volume) argue that the appropriate framing of the rationale for High Definition Television (HDTV) technological standards was an important factor in the emergence of a powerful collective lobbying group that successfully influenced the nature of the adopted standards. The appropriate frame is likely to depend on whether the firm or industry association is lobbying legislators or agencies. Legislators are expected to respond especially to lobbying by their own electoral constituents since the latter can establish a direct personal connection to perceived future electoral fortune. Agency staff, on the other hand, will be less sensitive to partisan political considerations and more responsive to “public interest” arguments that bear on the agency’s statutory mandate. Framing issues in the context of broader societal welfare will thus be more appropriate when attempting to persuade agencies of the merits of a particular policy position.

In prescribing such lobbying strategies, this chapter has worked on the assumption that managers act in a highly calculative and hyper rational manner, correctly determining the relative advantages of alternative courses of action. As the experimental research by de Figueiredo and de Figueiredo (in this volume) suggests, however, this may be a strong assumption. As non-market strategy problems become more complex, including situations with increasing numbers of stages or players, de Figueiredo and de Figueiredo find that managers experience greater difficulty in reaching the optimal solution. The need for managers to identify pivotal agencies, legislators, legislative committees or executives, particularly under conditions of imperfect information, may thus be too complex a demand when managers are boundedly rational. If managers rarely participate in the non-market arena, the condition of bounded rationality could be extreme.

Hence, while this chapter presents a clear prescriptive model for non-market strategy formulation, the costs of implementation for individual firms may be prohibitively high. One implication is that future research seeking empirical evidence for the propositions contained here should potentially focus on firms that specialize in designing and enacting lobbying strategies for clients who wish to outsource such operations. On balance, lobbying specialists are more likely to reach the optimal lobbying strategy than less experienced firms.

Conclusion

Cursory glances at the daily headlines of most major newspapers demonstrate the myriad of ways in which governments directly or indirectly affect firms' performance. Even in industries where government has little or no direct role, government control over the levers of macroeconomic policy (e.g. interest rates, money supply) and microeconomic policy (e.g. tax structures) ensures that short-run and long-run returns to private sector investment are closely tied to government economic policy decisions. Consequently, non-market strategies that influence public policy outcomes can potentially improve firms' overall performance. In contrast to the voluminous competitive market strategy literature, however, the ways in which firms formulate and implement non-market strategy has received relatively little academic attention. In part, we suggest this research deficit is due to the lack of a theoretical framework that links non-market outcomes – i.e. public policies – to the complex interplay between political-institutional actors, such as legislatures, agencies and courts, and private sector interest groups, and that also yields empirically refutable hypotheses. Although the recent political action literature is a considerable advance on the traditional “life cycle” approach to public policy formulation in that it explicitly models political actors as rational agents, this stream of research is almost exclusively focused on the firm-legislature relationship, leaving aside the influence of other government branches in the broader policy process.

In this chapter, we take a small step towards developing a conceptual approach to non-market strategy analysis and formulation by drawing on the Positive Political Theory literature. PPT models the policy process as a well-defined game between institutional actors who have clear objectives and action spaces. By integrating the firm as an additional strategic player into an analysis of the policy process, we derive some preliminary implications for the design of non-market lobbying strategies. Chief among these is the firm's decision about which branch of government to lobby to achieve the greatest impact on policy outcomes. We find that, due to the strategic interactions of the political-institutional players, firms will not necessarily lobby regulatory agencies, for example, even when agencies are actively implementing and shaping policy, under conditions when the agencies are especially sensitive to the preferences of

the legislature, executive or judiciary. More generally, we argue that firms need to understand the broader public policy game - as defined by the sequence of play, decision-making rules and players' preferences – in order to identify where their lobbying activities will have the greatest leverage.

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NOTES

¹ For an exception, which draws on the heterogeneity across countries in national government institutions and the associated implications for lobbying strategies, see Hillman and Keim (1995).

² We depart here from conventional definitions of non-market strategy by including market and non-market based activities in the mechanisms. Baron (1995, p.47), for example, defines non-market strategy as “a concerted pattern of actions taken [by the firm] *in the non-market environment* to create value by improving its overall performance”, emphasis added. We focus attention on the *purpose* of non-market strategy – to influence public policy – rather than on the *means* by which it is implemented.

³ For an exception, however, see De Figueiredo and Silverman (2002).

⁴ For conference volumes on the topic see, Positive Political Theory and the Law, USC Law Review (1995); Conference. Regulating Regulation, Journal of Law and Contemporary Problems vol. 57, (Winter/Spring 1994); Conference on the Economics and Politics of Administrative Law and Procedure, Journal of Law, economics and Organization, vol. 8 (1992).

⁵ Spiller and de Figueiredo et al argue that interest groups provide informational, as well as financial, benefits to legislatures, reducing the informational disadvantage that legislature’s face vis-à-vis agencies. Although these papers also examine the relationship between interest groups, legislatures and agencies, the focus is on understanding how information asymmetries affect the incentives of legislatures to allow interest groups to lobby agencies. The paper here relates to these analyses by considering, under the perfect information scenario, the conditions under which interest groups choose to lobby agencies or legislatures.

⁶The policy space is assumed to be a single dimension. Poole and Rosenthal (1990) found that one dimension captured most of the spatial information. Where an issue maps onto the dimension may change over time (and is critical to the analysis), however, they found that

"economic" votes (e.g. rate regulation) tend to line up on one dimension. Snyder (1990) offers a critique to Poole and Rosenthal.

⁷ Since the committees are constrained by the veto prospects, this assumption does not affect the qualitative results of this analysis. Qualitatively similar results would obtain with more complex committee floor interaction at the expense of notational complexity.

⁸ Shepsle and Weingast (1987, 1989) argue that committee control of the policy results from their gate-keeping and ex-post veto powers. For a critique of this argument see Krehbiel (1991).

⁹ Relaxing this assumption would not change the equilibrium of the game. Examples of cost include, loss of reputation or loss of electorate confidence in the President's ability to lead. Certainty is possible because in this game information is assumed to be complete. Below, the complete and perfect information assumption is relaxed.

¹⁰ There is controversy in the literature over the source of an agency's preferences. For example, Bawn (1995) posits that preferences are endogenous to the designed procedures. On the other hand, Epstein and O'Halloran (1996) aver that the agency's preferences are aligned with the executive. In this paper, we follow Vanden Bergh (2000), arguing that an agency's preferences reflect a bargaining game between the executive and legislature depending on the appointment rules. In most circumstances, agency heads are appointed by the executive on the advice and consent of the legislature. In other environments agency heads are elected. In an elected state, agency preferences may be quite different from a bargaining outcome between the executive and legislature. We also consider this type of environment in our analysis.

¹¹ Mayhew (1974) shows that the electoral connection suggests that legislators take into account the interests of voters, that is, the electoral consequences of their actions. Legislators and the President are therefore constrained by this connection. Regulatory agents are discussed below.

¹² This is not an unreasonable assumption, as an agent often has discretion over rules on any one dimension.

¹³ Both x and x_0 are elements of X , the set of possible policy alternatives. X is a subset of \mathbf{R}^1 (the entire policy space).

¹⁴ We assume that the executive expends political cost or incurs adverse costs if its veto is overturned by the legislature.

¹⁵ This preference ordering can occur if the tenure cycle of the agency's political appointees is not aligned with that of the legislature or executive. Re-elections can generate new political coalitions with preferences differing from those of the incumbent agency – whose preferences are likely to reflect those of prior political generations – or at least until the legislature has an opportunity to replace key agency officials through the appointment process. State public utility commissioners, for example, are generally appointed for five or more years and typically remain in office beyond one political election cycle. This preference ordering can also occur when agency actors are elected to office.

¹⁶ We define $P^{M_{2/3}}(x_0)$ as the set of policies $M_{2/3}$ prefers to x_0 . The only time that x will not be an element of $P^{M_{2/3}}(x_0)$ is if $M_{2/3} < A < CC < E$ and A chooses $x_0 = A$. In this case $x = CC$ will be outside of $P^{M_{2/3}}(x_0)$, and will be signed by E . However, this x_0 would not arise if one assumes subgame perfection through out, since A will adjust x_0 to avoid CC offering an alternative policy that is preferred by E and $M_{2/3}$. That is, A will rule $x_0 = CC$ in this environment.

¹⁷ We assume throughout this paper that the court makes a decision to overturn an agency ruling in favor of the status quo. As such, the court faces a choice between 2 alternative policies. In some political environments, courts do have the authority to overturn an agency ruling in favor of any alternative policy. Under this type of decision rule, the court makes a decision on a continuum. The implications of this alternative decision process does not change the qualitative

results in this paper, mainly that firm resource allocation decisions depend upon the nature of politics within a given institutional environment. One can, however, derive distinct hypotheses regarding resource allocation by comparing and contrasting court decision rules. We leave this for future research.

¹⁸ As before, we assume that lobbying by the firm has the effect of marginally shifting the ideal point of the relevant actor.

¹⁹ The conference committee will only act if an agency rule is different from the status quo and the rule is upheld by the Court. As above, all policy choices, x_a , x and x_0 are elements of X , the set of possible policy alternatives. X is a subset of \mathbf{R}^1 (the entire policy space).

²⁰ In Regime 2a, the court's ideal point J is greater than A and the optimal ruling by the agency is equal to A . We do not show this regime in the figure.

²¹ In this regime (3a), the court's ideal point is to the right of M 's. The pivotal politician is thus M and the Agency's optimal ruling is located at M 's ideal point.

²² This is consistent with de Figueiredo and de Figueiredo (1999) which argues that litigation only makes sense in certain states of the world.

²³ For regime 2b and 3b the exact point of the agency ruling (x) will be in a range of values depending upon the location of the status quo and the court. It will be the point at which the court is indifferent too the status quo and the agency ruling. Thus, given the configuration of preferences and the location of the status quo in 2b and 3b, the agency ruling $x = 2J - x_0$.

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FIGURES

Figure 1: Schema of Public Policy Arenas

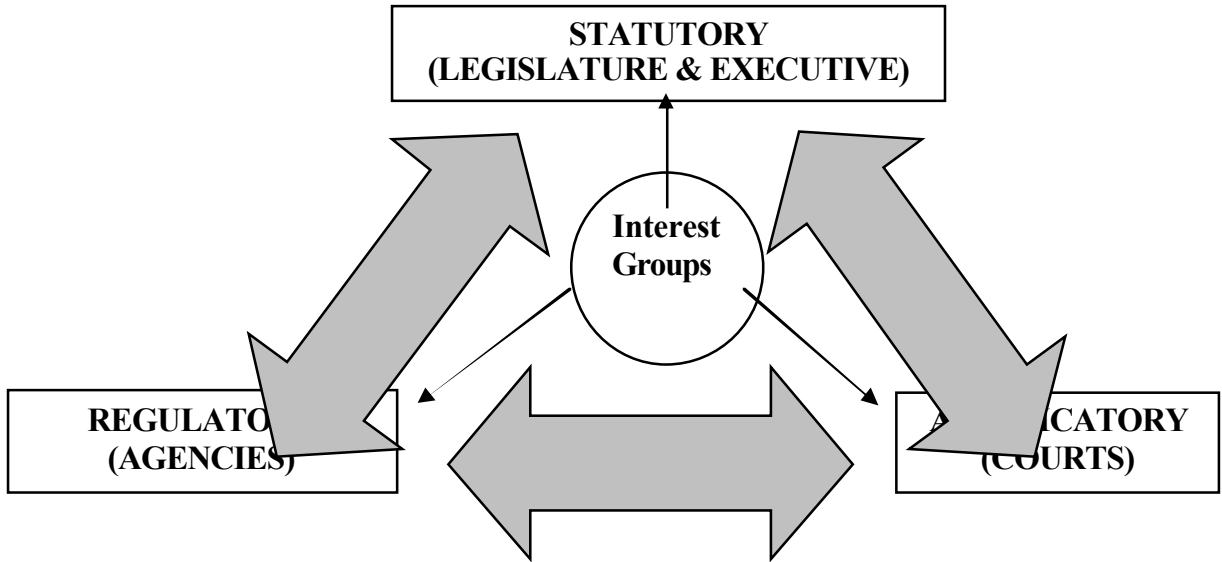


Figure 2: Political Regimes and Policy Equilibria (x_0)

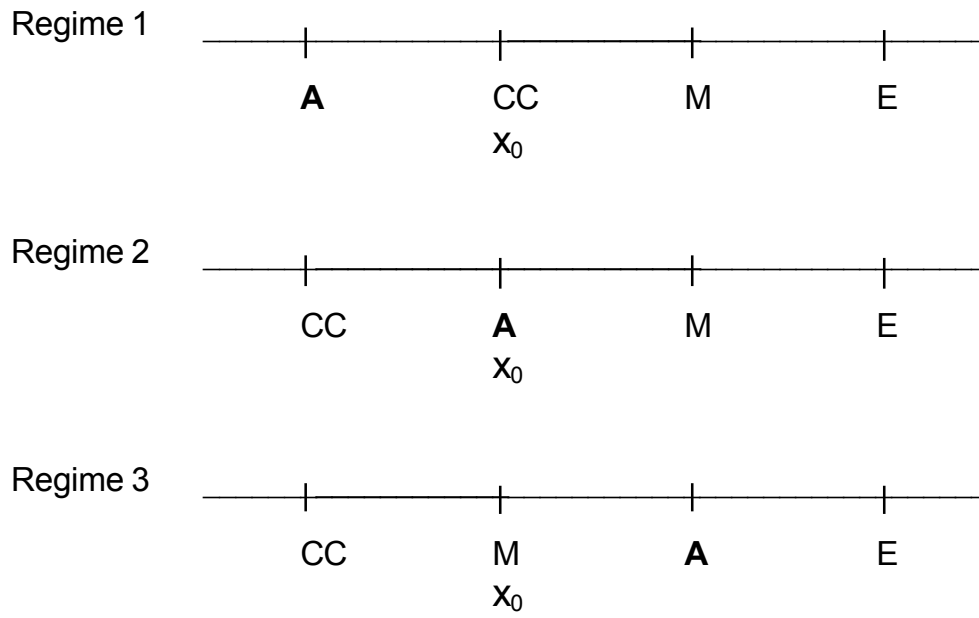


Figure 3: Policy Equilibria in Political and Judicial Regimes.
 (Status quo x_0 is at CC and x is the equilibrium ruling by A)

