INTEREST GROUP SUBSIDIZATION OF CONGRESSIONAL WORK: A THEORY OF INTEREST GROUP INFLUENCE THROUGH LEGISLATIVE COMMITTEES

DISTRIBUTION

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ABSTRACT

In this dissertation I develop a theory of interest group influence that centers on the idea of groups subsidizing congressional work through legislative committees. The theory predicts that the amount of leverage groups holds over policy is a function of whether or not they agree with Congress that policy needs to be reformed, the level of cooperation groups have with the relevant committees, and the amount of competition between groups. An extension of the theory that allows the level of group-committee cooperation to be a choice by Congress shows it will alter the structure of committees to increase cooperation over time in response to growing interest group competitiveness. I test the first set of predictions on bills in the U.S. House of Representatives from the 109th through the 111th Congresses lobbied by either the U.S. Chamber of Commerce (USCC) or the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), and find some support for the theory. I also test the long-run prediction about committee structure using data from the 101st through the 111th Congresses, and find further support.
For Angie.
ACKNOWLEDGMENTS

This dissertation was only possible because of the help I received from a number of people. First, I would like to thank Craig Volden. As my graduate advisor, Craig helped me not only with this research, but has had the biggest influence on my graduate education. Without his guidance, I would be a less effective scholar, and I am thankful that I was able to work with him for the past six years. I also want to thank Luke Keele and William Minozzi. In different ways both have made my work better and expanded my base of knowledge which will serve me well in future work. Greg Caldeira and Alex Thompson also deserve recognition for agreeing to sit on my dissertation committee and helping along in the process. Also, I want to thank Alan Wiseman for providing a challenging and rigorous beginning to my graduate education. Finally, I want to thank my wife, Angie, who made many sacrifices, big and small, which enabled me to finish this dissertation and earn my doctorate. I will always be grateful and will be repaying her for many years to come.
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CHAPTER 1
INTRODUCTION

It is obvious to even casual observers of the modern U.S. Congress that interest groups are active participants in the legislative process, though exactly how they affect policymaking is hotly debated. My dissertation examines the means and consequences of interest group influence over the legislative process in Congress, how committee structure mediates this relationship, and how the evolution of the committee system in the postwar years is related to changes in the interest group environment. Modern theoretical work on interest group influence has been dominated by the “exchange” and “persuasion” theories. Exchange theories argue that legislators trade policy for some form of benefit provided by interest groups, while persuasion theories posit that interest groups have an advantage over legislators in the quantity and/or quality of information they possess and leverage this advantage when bargaining with legislatures. However, empirical evidence for each of these theories is mixed. More recently, “subsidy” theories have emphasized the advantage in material resources interest groups enjoy and view groups as subsidizers of legislative action. This approach has brought a fresh perspective to interest group scholarship. However, if lobbying acts as a subsidy for legislative work, then I argue some role for the institution where most of this work takes place – committees – should be included in our theories.

The central role of committees in my theory of congressional policymaking follows from what I believe to be their central importance in understanding the interactions
between Congress and the collection of interests it governs. Scholarship on legislative committees and interest groups are two foundational areas of study in American politics, though they have mostly been pursued separately. I argue they overlap naturally and that there is much to be gained by exploring where they do so more systematically. Doing so leads to the central questions of this dissertation: Under what circumstances does interest group subsidization of legislative work affect policy outcomes, how does the structure of legislative committees affect this dynamic, and how would Congress prefer to structure its committee system given these relationships?

I address these questions by using a game-theoretic model to generate clear and unique predictions, and then subject the predictions to empirical verification using data on the observed behavior of interest groups and legislators in the U.S. House of Representatives. I take the central idea of subsidy theories – the subsidization of legislative action – and develop a complete theory by modeling a bargaining environment between an interest group and a legislature with a mediating role for committees. The model rests on three key assumptions. First, legislatures do not have the resources to do everything they want, but groups have resources they can provide legislatures to relieve this constraint. Second, groups will provide the resources strategically in exchange for policy rewards. And third, the structure of committees, specifically their capacity to cooperate with groups, affect the behavior of groups and the legislature, and hence policy outcomes.

Of the model’s many predictions, I explore the empirical evidence for three. The first prediction states that when a group wants to protect policy, the more the committee system is structured to facilitate cooperation with interest groups, the more leverage the group has to pull policy away from the legislature’s preferred position. The opposite is true if the group wants to reform policy. The second prediction states that this dynamic is conditional on the nature of competition among interest groups,
with a more competitive environment eliminating the leverage any single group holds over the legislature. The third prediction states that the legislature, in the long-run, will alter committee structure to facilitate more cooperation with groups as the level of competitiveness among interest groups in particular policy areas increases.

I test the first two predictions on bills in the U.S. House of Representatives from the 109th through the 111th Congresses lobbied by either the U.S. Chamber of Commerce (USCC) or the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO). With the USCC data I find that when it is “protecting” policies, the more the relevant committee is oriented towards cooperating with interest groups, the more the policy position of the bill is pulled away from the House’s preferences. In contrast, when the USCC is “reforming” a policy, cooperation with the committee has the opposite effect. Further, I find that this leverage enjoyed by the USCC is conditional on the level of interest group competition over the bill, with greater competition leading to policy outcomes, all else equal, closer to the preferred position of the House. Both of these findings support the model’s predictions. Using the AFL-CIO data, I find no evidence of these relationships.

I test the third prediction using a unique measure of the level of competitiveness in the interest group environment, derived from patterns in group contributions to members of congressional committees, to predict changes in the institutional structure of committees. The findings support the theory’s predictions that Congress will make a committee more accessible to groups as they become more competitive.

My goal with this dissertation is to make a contribution to the theoretical literature on interest groups, and then show the plausibility of the theory with analysis of the empirical data. I believe I succeeded in this goal. The remainder of this chapter shows how I went about this, outlining the dissertation, and then presenting a critical review
of the literature that informed the structure of my theory. First, I present the chapter outline.

**Chapter Outline**

**One: Introduction**

**Two: A Theory of Interest Group Influence Through Legislative Committees**

This chapter presents my game-theoretic model which captures the strategic interactions between interest groups and Congress over policy formation and implementation. At the center of this theory is the idea that interest groups subsidize legislative action, and do so through committees. Congress likely wants to reform many different existing policies, but there are just too many for it to do so with the given staff and time. However, Congress has access to legislation developed and solicited by interest groups. Using group proposals allows Congress to address more policy areas than they could otherwise, but creates the opportunity for groups to leverage their resources and secure a policy that differs from what Congress would prefer if it had unlimited legislative capacity. How much groups are able to do this depends on three things. First is the goal of the groups, namely if the group wants to “protect” or “reform” the current policy. Second is how closely groups are able to work with Congress, or how accessible to the group is the committee with jurisdiction over the relevant policy area. Third is the level of competition there is among groups over a place on Congress’s agenda. The model shows that the more accessible the committee – i.e. the more Congress can incorporate the group’s resources effectively – the more the content of the final policy represents the protecting group’s preferences and the less it represents the reforming group’s preferences. However, all this is conditional
on there being little competition among groups, as with competition all leverage shifts from the groups to Congress.

More formally, I present a model in which a legislature wishes to change policy in two separate policy areas, but only has the resources to alter one. Groups may offer a proposal on one of the two status quo policies, which the legislature may then accept and put on the agenda with a high or low priority. Bills given a high priority will be enacted with certainty, but low priority bills are enacted with some level of uncertainty. How much uncertainty depends on how able the legislature is to translate group resources into legislative action. If committees are structured so that they can work seamlessly with groups, the legislature can add the group’s resources to its own and act on both status quo policies. Anything less and the proposal given a lower priority – whether it is the group’s or the legislature’s own proposal – is less likely to be enacted.

My theory presents a number of useful insights, however I first focus in this dissertation on two. First is how committee structure impacts the efficacy of group subsidies, and hence policy outcomes, depending on the goals of the group. When committees are structured so that they are able to incorporate group resources into the legislature’s resources easily, this increases the leverage groups have over the final position of policy if the group is trying to protect the status quo, and decreases that leverage if they want to reform the status quo. The logic that leads to this result is that when a group is protecting the status quo they can credibly claim they do not want to help the legislature, which they can not claim when they want to reform the status quo. The value of the group subsidy is therefore used as leverage by the group in the former situation, and by the legislature in the latter. The second insight about how interest groups influence policy outcomes relates to how groups interact with each other. Any leverage a group has, in the model, is due to its first-mover status.
That status evaporates when there are multiple groups competing for the legislature’s attention. In short, this model explains when, and through what means, groups are able to bias policy away from the legislature’s preferences, and what factors influence group leverage.

Three: Explaining Short-run Policy Outcomes

My model produces a number of insights and relevant predictions. However, of equal importance is how amenable these predictions are to empirical analysis. In this chapter I test three predictions from the model. This requires a sample of bills of importance to an interest group and the ability to measure cooperative capacity, interest group competition, the group’s position, and policy outcomes. An explanation of how each variable is operationalized is given. With analysis on House bills lobbied by the USCC, I find strong support for my hypotheses. Specifically, I find that as cooperative capacity increases, the position of the policy outcomes becomes more skewed towards the preferred position of the group when groups are “protecting” the status quo, while the opposite is true when they want to “reform” the status quo. Further, I find that the strength of this relationship is conditional on the level of competition among groups, with more competition lessening the relationship. Analysis of bills lobbied by the AFL-CIO does not support the hypotheses.

Four: Explaining the Long-run Evolution of Committee Structure

In the baseline theory and its extension to competing groups that generated the first two hypotheses, the capacity of the legislature to cooperate with groups is exogenously given. However, there is reason to believe this is actually a choice, especially in the long-run, of the legislature. When the model is extended in this manner a prediction is given that the legislature, all else equal, prefers to increase capacity as interest group competition grows. This chapter formalizes this situation and explores
the empirical evidence for its prediction. First, I use the measure of capacity used in the previous chapter and extend the data back to the 101st U.S. House of Representatives. I then measure the level of interest group competition by using political action committee contribution patterns to members of specific committees. Using these measures of competitiveness as the key independent variables, I analyzed how the changes in committee structure that relate to cooperation with groups for four committees from the 101st to the 111th Houses. The results show a strong correlation, where higher competitiveness is associated with greater cooperative capacity.

Five: Conclusion

In this chapter I summarize my theory and its empirical support. Further I place my theory in the larger literature on interest group politics, and in the ongoing debates about the health and efficacy of representative democracy in the United States. Finally, I discuss direction for future work.

Literature Review

This dissertation evolved out of my readings of the interest groups and congressional committees literatures in American political science. First, I engaged with the congressional committees literature looking for a question suitable for my dissertation. I had a feeling that the close study of committees in the U.S. Congress, and particularly their unique role in the policymaking process, had been lacking in recent years. To my reading, scholars had too quickly shifted from viewing committees as important independent actors in policymaking, to seeing them as subservient to the majority party. I felt this was too great of a shift in attention, and that committees still played an instrumental role in policy development that scholars were overlooking.

At the same time I was searching the committees literature for a dissertation
topic, I was enrolled in a seminar on interest group politics. In that seminar I was exposed to a new theoretical perspective on how groups influenced policymaking in Congress. Richard Hall and Alan Deardorff (2006) developed a theory that sees group lobbying as a subsidy which increases the amount of work a policymaker can devote to a particular issue. With this perspective, group lobbying is not coercive, but rather simply enables Congress to do more work on shared goals.

The idea of a subsidizing role for groups in legislative policymaking rang true to me, and I quickly saw a natural connection to the study of congressional committees. If lobbying by groups takes the form of a subsidy to Congress, a subsidy that increases the amount of legislative work that Congress can do, then committees must have a role since this is where most legislative work is done. This insight launched the development of the theory at the center of this dissertation. I wanted to better understand how this subsidizing relationship would work if committees played a mediating role between groups and Congress. In order to do this effectively, I needed to understand the theoretical interest group literature intimately, and understand the scholarship on interest group interaction with and within committees.

To develop a theory that contributed to the discipline best I needed a number of questions answered. First, I needed to understand the different theories of interest group influence in government, and in particular, the theories that understand the relationship as strategic. If groups are going to provide a valuable and costly resource to Congress, then they will expect something in return. This seems likely to take the form of a bargain, where groups and Congress negotiate over the position of policy and the nature of the subsidy, and they do so strategically, each trying to get the best outcome possible for themselves. A lot of good and subtle work has been

1Beth Leech’s essay in The Oxford Handbook of The American Congress (2011) was a particularly useful guide in organizing the literature and this review.
done exploring the strategic nature of this relationship. To ensure that my work is a valuable contribution to the field, I need to place it within that literature thoughtfully.

Second, I needed to understand what sort of tactics groups use when trying to influence Congress, and what the research shows about their effectiveness. A “subsidy” can take many forms, and groups used many different tactics. A theory of group subsidies needed to be sensitive to what groups do and how they work. Third, I needed to know the literature on how groups work with committees to achieve their goals. A small but robust literature developed in the 1990s that studied what groups were doing within congressional committees. Though these works were almost exclusively empirical, they would provide important insights and uncover consistent relationships that my theory would need to account for.

The first literature I discuss presents the various theories of how interest groups attempt to influence government. This is the focus of the next section.

Theories of Interest Groups Influence

The theoretical approaches to understanding how interest groups influence American politics can be separated into two basic categories: pluralist and transaction theories. The key distinction between the two is the level of focus. Pluralist theories understand interest group politics as a system. This perspective looks at the political system as a whole and seeks to understand how the various interests made claims to the government, how government reacts to that pressure, and what effect this has on policy. In contrast, transaction theories explain the direct, and often strategic, interactions between groups and the government, analyzing group-government interaction at the individual actor level. Competition between multiple groups can be part of transaction theories, but they rarely attempt to analyze the political system as a whole as pluralist theories do.
Pluralism is the first modern theory of interest group politics. It dominated the discipline for decades, though they fell from prominence in the late 20th century. Pluralism’s place was taken by transaction theories which arose in the 1970s as political science developed a more positive scientific orientation. Adopting much in attitude and tools from the economics discipline, transaction theories focused on the mechanisms of interest group influence. Below is a discussion of the literature in each approach, beginning with pluralist theories.

**Pluralist Theories**

Bentley (1908), and then later Schattschneider (1935), Truman (1951), and Latham (1952), provide the foundation for pluralist theories of organized interests. Each of these scholars viewed groups as a cloud of divergent interests “pressuring” the government to prioritize and reform many different policies simultaneously. To them, the mechanisms at work were not distinct, or even important. What mattered was the dynamic of competing groups pushing and pulling the government in different directions, which, they theorized, led to somewhat moderate policies.

Bentley (1908) emphasized the idea of studying politics and government from the perspective of groups. In his book, *The Process of Government*, Bentley argues that reducing the study of politics to the study of individuals makes it impossible to understand government sufficiently (pg. 117). If you want to study something, like government, that is grounded in society, then Bentley sees groups as the appropriate unit of analysis. This group-centered perspective dominated early political science, and particularly the study of groups and their influence on government.

E.E. Schattschneider built off this tradition in an early work (1935) where he

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2Lowrey and Gray (2004) argue for the renewed relevance of pluralist theories and the development of a new generation of work they call “neopleralism.” However, for the purposes of this literature review the encompassing label of “pluralism” will be used.
studied a single legislative initiative concerning the revision of trade tariffs in the 71st Congress. In 1929 the Congress took up the revision of the tariff systems established seven years earlier. The existing tariff system, and its allocation of costs and benefits, had calcified, and Schattschneider wanted to use the attempt at revision as a case study to understand how effective various economic interests were in changing the status quo. He found that during the 1929-1930 revision no single interest, or collection of interests, was able to alter the trade system in their favor. Schattschneider counted this as a victory for pluralism since the existing system was favored by the public.\(^3\) This work was not greatly theoretical but it is one of the first attempts to empirically examine pluralist claims.

Truman (1951) makes a more general and theoretical argument, but echoes Schattschneider’s conclusions. He argues that competing groups lead to a better policymaking process, and in particular, he argues that the American system, with its institutional protections for minority rights and multiple points of entry for groups in the policymaking process (two legislative houses and the executive branch), is well situated to benefit from competing groups.\(^4\)

In many ways Latham (1952) provides the bookend to the era when groups were the central theoretical concept in American political science. Much like Bentley, Latham argues that groups are important in every aspect of government, and that they must be central in any theory of social science (pg. 376). Latham’s work being

\(^3\)Later, Bauer et al. (1963) examined the same process in the 1950s and came to the opposite conclusion

\(^4\)In this work Truman closely examines how the interaction of group characteristics with government structure affects policy outcomes. He notes that the group environment can change, mostly through the rise-and-fall of specific types of interests from a sort of natural selection process, which results in efficient integration with the government. However, he views government institutions as much more static. As discussed earlier, I take a different view, and emphasize how the government itself may alter its institutions, at least the less formal ones, like committees, in response to the group environment.
essentially the last great pluralist work is somewhat ironic, as he makes perhaps the most aggressive argument for the importance of groups. The pluralist era that began with Bentley (1908), and ended with Latham, dominated political science in the first half of the 20th century, after which political scientists and economists began to sharply question the optimism of pluralists.

Schattschneider (1960), himself once somewhat of a pluralist, argued in a later work that pluralism was not working. In his book, *The Semisovereign People*, he famously summed up his pessimism by stating that the “flaw in the pluralist heaven is that the heavenly chorus sings with a strong upper-class accent.” In short, he argues that pluralist theorists place to much emphasis on the diversity of interests at work in the American political system, and that in actuality business groups dominate. This domination allows upper-class interests to ingratiate themselves with both political parties, with the outcome being a consistent bias in policy towards the wealthy.\(^5\)

Years later Lowi (1969) continued the attack on pluralism with *The End of Liberalism*. The core point of his work is an indictment of the delegation of authority by Congress to the executive branch, which he argues led to domination of policy-making by interest groups. Lowi argues that liberalism works best if policy originates in the Congress, where the public has more control over its representatives. But as authority moved to the mostly unaccountable bureaucrats in the executive branch, the more powerful interests were able to take control of policy and insulate decisions from public scrutiny.

Mancur Olson (1965) continued the skepticism. In *The Logic of Collective Action*

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\(^5\)A second important theme in this work is the role of “scope” in politics. Basically, Schattschneider notes how interests work to expand or contract the scope of a debate to alter the policy outcome. This has interesting, if not direct, implications for my theory in terms of committees, which can be thought of as the bodies where scope is institutionalized.
he specifies the mechanisms that explain variation in group size and strength, noting that small groups that would disproportionately benefit from a policy change – arguably “upper-class” interests – are more likely to organize and be effective than larger, more populist groups with diffuse policy goals. In many ways, Olson’s work is the jumping-off point for a new theoretical approach to the study of interest groups. These theories took a more “economic” view of the relationship between groups and government, where independent actors interact strategically in mutually beneficial “transactions.” This approach became dominant in the modern study of interest groups, in both political science and economics, and is the literature in which the theory presented in this dissertation is placed.

Transaction Theories

Transaction theories center on the idea of a voluntary exchange between groups and policymakers. However, the mechanism of the exchange, or the currency used, can vary greatly with each theory. Olson’s (1965) work, discussed earlier, may be thought of as the original transaction theory. In this volume Olson presents a cost-benefit framework to understand which groups emerge and survive in the political environment, as well as explain the relationship between the tactics of different types of groups and their organizational structure. The core assumption of his theory is that interest groups are aggregations of individuals, and therefore groups suffer from the same sorts of collective action problems that any group of individuals seeking to act together does. The baseline incentive structure of individuals, as well as certain institutional characteristics – such as group size – determines the stability of various organized groups and influences the tactics they use. This theme of individual actors interacting strategically to maximize their individual benefit runs through all the transaction literature, and this work by Olson was its first appearance in the interest group literature.
Later, in the mid to late-1980s, the study of American political institutions became increasingly positive in its theoretical approaches, and decidedly more formal. Not surprisingly, as this trend grew the questions and puzzles surrounding interest group interaction with the government were addressed with these new tools. As might be expected when using formal models, particularly game-theoretic models focused on the strategic interaction of actors, these theories are almost exclusively of the transaction perspective. The use of formal transaction theories of interest groups has been dominated by the “exchange” and “persuasion” theories. Exchange theories argue that legislators trade policy for some form of benefit provided by interest groups, while persuasion theories posit that interest groups have an advantage over legislators in the quantity and/or quality of information they possess, leveraging this advantage when bargaining with legislatures.

The first formal theory from the exchange literature is a model by Denzau and Munger (1986). In this model, interest groups offer resources to legislators in exchange for policy concessions, with the final policy approved by voters. The model finds that groups will essentially target the legislators near the median with their resources, which are also the legislators with the most voter support, suggesting that policy will reflect majority preferences even if the majority is unorganized. This paper presented the first formal model of how interest groups may exchange resources for policy, though its main implication is that competing groups are unable to control the outcome much, which interestingly echoes the optimism of pluralist theories.

Grossman and Helpman (1994) develop a formal model to understand the formation of trade policy in a representative democracy. In their model, groups offer

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6The labels come from Hall and Deardorff (2006).

7Grossman and Helpman also present a comprehensive account of various theories explaining how interest groups influence policy – with coverage of exchange and persuasion models – in Special Interest Politics (2001).
contributions to a legislature, which is motivated to maximize the welfare of voters, to influence policy. The level of protection groups can expect – through tariff schedules – is a function of voter preferences for imported products and the relationship between voters and domestic producers. Essentially, the organized interests – domestic producers – can skew policy in their favor, but their ability to do so is mediated by the preferences of consumers translated into policy positions by legislators.

An alternative to exchange theories, but still under the “transaction” label, are persuasion theories. These theories view the currency that groups provide government as information, which changes the nature of the transaction dramatically. Austin-Smith and Wright (1992) present a model where groups provide information to legislators about the legislator’s constituents, though it is not clear to the legislature if that information is true. To confirm the validity of the information, the legislators can pay to audit the claims of lobbyists. In their model, groups lobby allies to make it too expensive for their opponents to come along make legislators switch their votes. In essence, groups lobby to “counteract” the latent lobbying of opponents. With competition among groups, the legislator does not to pay to audit the information the group provided because the competition induces the groups to be truthful.8

Similarly, Ainsworth (1993) presents a model that also has information asymmetry at its core, but is concerned with the different mechanisms available to reveal a lobbyist true type. In particular, Ainsworth shows that by controlling the costs groups must pay to access the policymaking process, a legislature can get the truth from groups, without using costly registration and disclosure requirements. This works by

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8Initially, persuasion theories predicted that groups should lobby ideological opponents, which contradicted observed behavior (Hojnacki and Kimball 1998). Austen-Smith and Wright theory explain this puzzle by distinguishing when a group will lobby an ally versus an enemy and, looking at patterns of lobbying for a supreme court nomination process, found support for their theory (1994). For a critique of Austen-Smith and Wright’s theory and empirical analysis, see Baumgartner and Leech (1996), and Austen-Smith and Wright’s response (1996).
getting groups to make a costly signal by “paying” for access, which separates the
groups by type (pg. 51).

Austen-Smith (1993) developed a model which takes the “persuasion” story and
adds a complication. In his model groups lobby a legislature at two stages: an agenda
formation stage and a voting stage. The currency groups offer is information, which
is valuable to risk-averse legislators in the face of uncertainty. Information provision
can change policy outcomes consequentially, showing that groups can effect policy
by simply strategically offering information, and no material resource needs to be
exchanged.

These three models (Austin-Smith and Wright (1992); Ainsworth (1993); Austin-
Smith (1993)) focus on how groups have private information that the government
seeks, and what mechanisms are available to get groups to reveal that information.
The persuasion theories dominated the theoretical study of interest group politics in
the 1990s and early 2000s, while exchange theories dominated the empirical studies.
However, neither of these theories have had unequivocal support when tested empir-
ically. Persuasion theories are notoriously difficult to test empirically, and tests of
exchange theories had findings that were simply not believable (Strattmann 1998) or
contradictory.

This left room open for an alternative explanation. Subsidy theories rose as this
alternative. Subsidy theories view interest group lobbying as a sort of subsidy to
Congress, and is basic perspective I adopt with my theory. The next section presents
two recent theoretical works based on this idea.

**Subsidy Theories**

This alternate perspective was developed in two studies that have emphasized the
advantage in material resources interest groups enjoy and the ways they use this ad-
vantage strategically to subsidize legislative action and hence shape policy. Baron
(2006) creates a model structure where multiple interest groups lobby multiple legislators, offering resources valuable in the legislative process. In the model, lobbyists provide resources politically valuable to legislators, who in turn strategically set the agenda before voting. Though Baron provides an important step forward for resource-based scholarship on interest groups, it has one major flaw. Baron’s model begins with the assumption that all actors prefer any achievable outcome to the status quo. Therefore the status quo has no “anchoring” role in legislative bargaining. This setup makes sense if we view legislative bargaining as a distributive “divide-the-dollar” type game. However, this leaves out an important, and perhaps dominant, dimension to interest group interaction with legislatures: protection of the status quo. Any model that hopes to fully address interest group politics needs to address the circumstance where competing groups differ in their preference for keeping policy at the status quo position.

Another subsidy theory is Hall and Deardorff’s “legislative subsidy” model (2006). In their model a legislative subsidy enables legislators to work towards their preferred policy outcomes. Resources increase the “budget” of legislators and thereby subsidize their actions. While Hall and Deardorff do use a formal model in their work, it is not the game-theoretic approach used by most of the other formal literature on interest groups. They rely on a decision theoretic framework where legislators maximize utility by optimally “consuming” action on legislative issues given budget restrictions. The general conclusions of Hall and Deardorff are that interest groups will only subsidize their allies, and that when groups can demand a “matching grant” – one that requires a legislator to add their own resources to the effort on a particular policy – subsidizing one policy necessarily leads to a reduction of effort on another policy.

As with Baron, there are problems with Hall and Deardorff’s theory. Some have noted their model allows for strategic subsidizing where lobbying an ally could be
the result of a desire to influence the ally or an enemy (Wright 2007), which makes it difficult to map motives to actions. What no one has pointed to is that one main finding of the study – that subsidy of one policy leads to less action in another – relies on two fragile assumptions. First is that the different “goods” legislator’s consume are substitutes. And second, that groups can demand that their contribution takes the form of a matching grant. Both of these assumptions are problematic.

On the first assumption, while it reasonable to assume that action on different policies are not compliments, it is not clear they are substitutes. Substitutes would suggest that the two “goods” are from the same policy area, or that they serve the same ends (such as translating into electoral gain equally). It seems that to me that most general assumption available is that the goods are “demand independent.” The second assumption – the “matching grant” – is presumptuous. A weaker assumption would be that groups provide “in-kind grants” where there is no matching requirement but any subsidy can be directed toward action on a particular policy. If either of these assumptions Hall and Deardorff make are untrue, then the main conclusion of their model is dramatically different. But perhaps most critically, the connection between lobbying and policy outcomes is unclear in Hall and Deardorff’s model. Hall and Deardorff link lobbying action on bills in specific policy areas, but there is no mechanism in the model where the policy-making process concludes. This puts us in a situation much like with pluralist theories, where we can make nothing but the most general predictions about policy outcomes.

All the theories just discussed made important contributions to our understanding of how interest groups influence policy in Congress. However, obviously I feel there is room for improvement. To make the a solid contribution to the field, I not only needed to understand the existing theories, but also what the empirical literature has taught us about group influence. The focus of this dissertation is on how groups
lobby the U.S. Congress, in particular how they lobby with legislative subsidies. The idea of a legislative subsidy is rather abstract, and in actual practice a subsidy could take many forms. The next section describes the literature on the tactics groups use and evidence for their effectiveness.

**Empirical Evidence for Interest Group Influence**

Groups and their representatives have a number of options in the tactics they use to influence Congress, but they can all be categorized as either direct and indirect lobbying. Direct lobbying are the sort of tactics that are usually what is though of as “lobbying.” These can include a range of actions, such as direct contact with legislators, contributions to members’ campaign committees, meeting with office or committee staff, etc. In contrast, indirect lobbying attempts to shape the political environment in which Congress makes policy by rallying a group’s grassroots supporters, organizing letter-writing campaigns, or engaging in public relations to raise the salience of an issue, among others. Over the years scholars have studied the tactics used.

Schlozman and Tierney (1983) examined interest group activities and found the three most used tactics by groups were direct contact (98 percent used this tactic), presenting research (92 percent), and consulting with government officials (85 percent). In a later study, *Hollow Core: Private Interests and National Policymaking*, Heinz, et al. (1993) found similar patterns of group activities, with more than half of the groups surveyed stating their most important activities were maintaining relations and providing information with officials.

Most recently, Baumgartner et al. (2009) conducted a survey of professional lobbyists and lobbying organizations in which they asked what were the most often used tactics in their efforts. Of the 30 different tactics supplied by the respondents,
the top six were some version of direct contact. Groups and their representatives seem to place a lot of emphasis on contacting not only individual members, but pay particular attention to relevant committee members, as well the staff of members or committee staff (pg. 151). The consistent finding across all the surveys of group tactics, which span a range of over 25 years, is the importance direct contact with members and staff, and the information-providing role of groups.

As to the effectiveness of these efforts, the literature provides some lessons. Despite the numerous studies empirically examining interest group influence on government actions, no clear connection has been found between group tactics and government policy. Various scholars have surveyed the literature at different points in time, and they have consistently found weak evidence of interest group influence. Smith (1995) combed through the various empirical analyses and found that only half of the studies found evidence of group effectiveness, and those with evidence were substantively weak. Baumgartner and Leech (1998) also looked to the literature finding little evidence of effectiveness. Again, Baumgartner et al. (2009) conducted an extensive study of interest group influence. In their work, the authors examined the activities of over 1,000 organizations on 98 different issues. They found that more often the not, there was no correlation between the amount of resources spent on lobbying and a change in policy.⁹

However, whatever the form of the subsidy, my theory places committees at the center of the process. The next section presents the literature on how groups work with congressional committees.

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⁹An important caveat to this is that when you isolate those issues where business and organized labor went head-to-head, it seems that business groups did relatively well. However, when business groups battled with citizen groups, the advantage in resources did not seem to help (pgs. 237-8).
Interest Groups Lobbying in Committees

Since Fenno (1966, 1973), American politics scholars have understood the unique importance of committees in U.S. policymaking. Interest group researchers were no different. Surveying professional lobbyists, Wright (1990) found that interest group contacts influence legislator voting in committees, with more contacts positively related to voting in the groups’ favor. Others researchers have concluded that interest group political action committee contributions affect member participation in committee, but not voting (Hall and Wayman 1990). Baumgartner and Leech (1996) studied who groups work with to get legislation through the committee, and found that the majority of effort groups put into the legislative process is work with allies. Cooperation between groups and their allies includes a range of tasks such as bill writing, coalition building, vote counting, etc. Similarly, Ainsworth (1997) studied what he called “lobbying enterprises,” where he argues that legislators will structure institutions in Congress to facilitate the strengthening of these enterprises. Specifically, he argues that one major area this occurs in in the committee system. Ainsworth notes the importance of reducing “transaction costs and uncertainty” with greater connections to committees, singling out how committee jurisdiction can influence the strength of these enterprises (pg. 524).

Kollman (1997) tackles the problem of establishing causality, by attempting to disentangle whether lobbying in committees changes behavior, or simply is a function of shared interests between the committee members and groups. He concludes that groups lobby committees because that is where their legislative allies are, not to change the decisions of committee members. Hall and Kimball (1998) also found that groups work mostly with allies, an in particular, found that groups focus on the work in the committee stage of the legislative process.
Hojnacki and Kimball (1999) study the various strategies groups use in committees, and find empirical evidence that when groups have strong ties to a member's constituents, then groups use grassroots lobbying, and when those ties do not exist, they make direct contact with allies in committee. Relatedly, the authors find that when groups are trying to change the status quo, they opt for a more grassroots approach to build support for the legislative battle after committee, while status quo protecting groups use a insider approach in committees. Hojnacki and Kimball (2001) later study the relationship between PAC contributions by groups and the level of access groups enjoy in committees. They find that groups with PACs do enjoy more access, but that access is not a function of contributions made to committee members by the affiliate PACs, but rather connections the groups have to districts. More recently, Carpenter et al. (2004) find that the greatest asset groups have when working with committee members it provide them with information they wouldn't normally have access to.

The takeaway from these studies of how interest groups lobby in committees is that when groups are engaged in a specific policy debate, they work with their allies in committee. This does not mean that other forms of influence – grassroots organization, floor lobbying, etc. – are not important to their overall strategy. But it seems that in a battle over specific pieces of legislation, groups work through committees. In particular, it seems that groups work with their allies in committees, which fits neatly within the subsidy framework. The next section takes the lessons of this literature review and describes how they fit into my theory.

Towards a New Theory of Interest Group Influence

As discussed in the introduction, the aim of this dissertation was to develop and test a theory of interest group influence that both centers on a subsidizing role for groups
and takes variation across legislative committees seriously. This goal came out of my reading of the vast literature on interest groups and committees in American politics, where I saw a promising new theoretical perspective in subsidy theories, but a flaw in its omission of a role for committees. In my review of the numerous theoretical works on interest groups, it became clear that there are a number of possible mechanisms of interest group influence. It is also became clear from the review of the empirical tests of these theories that no single theory stands out from the data. There is obvious room for a new theory, and I would argue there is a need for a new theory.

The theory I present in the next chapter is my attempt to provide that new theory. My model connects group subsidization of legislative action to a model structure that speaks to legislative actions and policy outcomes, and incorporates committees into the theory. To do this I construct a model from three key assumptions. First, legislatures do not have the resources to do everything they want, but groups have resources they can provide legislatures to relieve this constraint. Second, groups will provide resources strategically in exchange for policy concessions. Third, the structure of the legislative institutions through which groups interact most with the legislature – committees – affect the behavior of each. The structure of these committees, namely how much access they give to interest groups, is the important concept integrating committees into my model of group-legislature interactions.

With this structure the model explains when groups will choose to subsidize legislative work, when close relationships between groups and committees will work to the advantage of Congress, and when it will hurt Congress, and what role competition between groups will play. These various relationships are tested in Chapter 3 using data on bills from recent Congresses, but first the theory is presented.
CHAPTER 2

A THEORY OF INTEREST GROUP INFLUENCE THROUGH LEGISLATIVE COMMITTEES

Congress simply does not have the resources to address all of the nation’s pressing issues itself. However, it does have access to legislative proposals developed and solicited by interest groups. Congress can use these proposals to address more issues than it could otherwise, though using group proposals is not costless as something will be demanded in return. The model and its extensions presented in this chapter attempt to capture these group-Congress interactions meaningfully.

First, the baseline model explores a simple interaction between a single interest group and a legislature. It provides an explanation for when a group will choose to subsidize legislative action, and how variation in the legislature’s capacity to cooperate with groups influences the final position of policy. In sum, the baseline model shows that when a group wants to protect the status quo policy, a closer relationship with the relevant committee benefits the group. This is because the group can credibly claim that it does not want policy to change, and so their subsidy, which increases in efficacy with a greater ability to cooperate with the relevant committee, gives the group more leverage over the legislature. However, when the group wants to reform the status quo policy, just like the legislature, then neither the group nor the legislature has leverage and policy has no relation to capacity. This baseline model is
simple and limited, but it provides important insights in how groups affect legislative policymaking with subsidies through committees.

The first model extension attempts to make the baseline model more realistic in an important way. The baseline model assumes that level of group-committee cooperation, called “cooperative capacity,” is always the same, no matter what policy is under consideration. The “heterogeneous capacities model” relaxes this assumption and allows different policy areas to have different levels of cooperative capacity. This extension is designed to mimic the real-world policymaking environment where policy areas are assigned to different legislative committees which may have different institutional relationships with interest groups, leading to different levels of cooperative capacity.

This simple extension adds depth to the insights provided by the baseline model. Specifically, the heterogeneous capacities model shows, as before, that a group looking to protect the status quo leverages capacity to its advantage, but a reform-minded group hands that leverage over to the legislature, and therefore increased cooperative capacity forces the group to make policy concessions. This results in an interesting non-monotonic relationship between capacity and policy outcomes, with capacity helping the group in some circumstances and hurting it in others.

The second model extension aims to model an environment with competing interest groups. By simply adding a second group to the model with preferences opposed to the first, the groups are forced to compete with each other so that the legislature has all the leverage. In fact, the model shows that all policy ends up exactly at the legislature’s ideal position, showing that any leverage a group has is eliminated with competition from another group.

Together, the baseline model and the two extensions presented in this chapter provide a unique contribution to the literature on group-legislature interactions. This
chapter lays out each piece of the formal theory and presents numerous comparative statics. This is followed in the next chapter by empirical tests of some of the model’s predictions. First, I begin with the baseline model.

**The Baseline Model**

This section formally presents a baseline model where a legislature wishes to change policy in two separate policy areas, but only has the resources to alter one. Groups may offer a proposal on one of the status quo policies, which the legislature may then accept and add to its agenda with a high or low priority. Bills given a high priority will be enacted with certainty, but low priority bills are enacted with some level of uncertainty. How much uncertainty depends on how able the legislature is to work with groups and take advantage of their resources, which is determined by the capacity of the group to work with the relevant committee, or “cooperative capacity.” The lower the cooperative capacity, the less likely the proposal given the lower priority – whether it is the group’s or the legislature’s own proposal – will be enacted. The next section formalizes the baseline model with one interest group and characterizes its equilibrium.

**Baseline Model Structure**

I begin by assuming there are two actors, which are identified as a legislature and an interest group. The model is set in a unidimensional policy space, with $x \in X \subset \mathbb{R}$. The legislature and the group each have an ideal policy outcome ($x_i$ with $i = \ell$ or $g$, respectively). Each actor has preferences represented by a linear utility loss between its ideal position and one or two policy outcomes ($y^A, y^B$). For the legislature, which cares about both outcomes, the utility function is $u_\ell = -|y^A - x_\ell| - |y^B - x_\ell|$. The group only cares about one policy outcome, in particular policy area $A$, and hence
its utility function is \( u_g = -|y^A - x_g| \). For simplicity, I set \( x_\ell \) to equal 0 and \( x_g \) to \( g \), which makes the utility functions for the legislature and the group \( u_\ell = -|y^A| - |y^B| \) and \( u_g = -|y^A - g| \) respectively.

The game has 2 stages (see Figure 2-1). First, the interest group may propose a change to the status quo policy in policy area \( A \) \((a_g \in X)\), which is presented to the legislature as a “take-it-or-leave-it” offer\(^1\), or choose not to make a proposal \((a_g = \emptyset)\). This model restricts group proposals to policy area \( A \) to represent that their knowledge and expertise is limited to a particular policy area. Second, the legislature puts together the legislative agenda. This is done by accepting or rejecting the interest group’s offer, making its own proposal on either of the status quo policies \((a_\ell, b_\ell \in X)\), and prioritizing the proposals. This cluster of decisions by the legislature are summarized in the model in one stage with six possible actions: the legislature can choose to place no proposals on the legislative agenda \((\pi = (\emptyset, \emptyset))\), place only its own proposal for either status quo policy on the agenda \((\pi = (a_\ell, \emptyset) \text{ or } \pi = (b_\ell, \emptyset))\), place only the accepted group proposal \((\pi = (a_g, \emptyset))\), or put both proposals on the agenda, giving either the legislature’s own proposal a high priority relative to the group’s proposal \((\pi = (b_\ell, a_g))\), or a low priority \((\pi = (a_g, b_\ell))\).

The proposal given the higher priority on the agenda is enacted with certainty,\(^2\)

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\(^1\)Often in legislative studies this assumption is described as a “closed rule,” or a provision that protects a bill from amendment. This is not the assumption I am making. Rather, I am simply assuming that the legislature does not have the resources or information to alter the proposal from the group.

\(^2\)
Figure 2.1: Game Sequence
and the lower priority item is enacted with probability $\delta$. This probability represents cooperative capacity. The cooperative capacity parameter captures how able the legislature is to utilize the resources of groups to enable legislative action. The legislature is able to use its resources to act on one status quo policy, and if it accepts the group subsidy, then it has additional resources to devote to the proposal given a low priority on the legislative agenda, which will have $\delta$ probability of being enacted. This setup allows the group subsidy to be transferable from the legislature’s own proposal to the group’s, if the legislature chooses to do so.

Given this game structure, the equilibrium concept used is subgame perfect Nash equilibrium. The next section presents the equilibrium.

**Baseline Model Equilibrium**

In the “baseline equilibrium” (BE), the position of the proposal made by the group and the resulting response from the legislature depend on the relative distances of the status quo policies $(a_q, b_q)$ from the legislature’s ideal policy position ($\ell$), and the level of cooperative capacity ($\delta$). The logic here is that when the status quo position on policy area A, $a_q$, is further away from the legislature’s ideal policy position than $b_q$, it becomes more “urgent” for the legislature to reform $a_q$. This, combined with variation in the efficacy of the subsidy that follows from cooperative capacity, determines the group’s proposal and in turn the legislature’s agenda choice.

With the position of the legislature’s ideal policy already set to 0 ($\ell = 0$), the

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2 The introduction of uncertainty over outcomes creates a need for a utility function with a von Neumann-Morgenstern expected utility form, where $EU = \sum u_n p_n$ with a vector of probabilities defined as $p = (\delta, 1 - \delta)$, and $u_n$ is the realized utility function for each outcome.

3 Throughout this chapter, I will use the terms “cooperative capacity” and “capacity” interchangeably.
urgency of acting on $a_q$ relative to $b_q$ can be represented simply by $\frac{|a_q|}{|b_q|}$, where $\frac{|a_q|}{|b_q|} < 1$ and $\frac{|a_q|}{|b_q|} > 1$ represent less relative urgency and more relative urgency respectively. Also, without loss of generality, I will assume that $g > 0$, or that the group has a preferred policy position to the right of legislature’s ideal policy position. For all combinations of parameter values, there exists a unique subgame perfect Nash equilibrium that can be separated into three environments. These three environments are:

1) **Low Urgency**: If $\frac{|a_q|}{|b_q|} \in [0, 1)$, and $a_q$ is between 0 and $g$ ($a_q \in (0, g)$), the group will make no proposal. However, if $a_q$ is less than 0 and is not between 0 and the reflection point $|a_q|$, the group will propose a bill at that reflection point. If the group has an ideal policy position somewhere between 0 and this reflection point, it will propose its own ideal policy position, $g$. Any group proposal acceptable to the legislature will be put on the agenda with a low priority.

2) **High Urgency, Low Capacity**: If $\frac{|a_q|}{|b_q|} \geq \delta + 1$, when $g \notin (0, \delta|b_q|)$ the group proposes to move policy to $\delta|b_q|$, which will be given a high priority by the legislature. However, if the group has an ideal policy position between 0 and $\delta|b_q|$, then it will propose its own ideal point, which the legislature will put it on the agenda with a high priority.

3) **High Urgency, High Capacity**: If $\frac{|a_q|}{|b_q|} \in [1, \delta + 1)$, and the group is on the same side of 0 as $a_q$, the group proposes $\frac{1}{\delta}|b_q| - \frac{1 - \delta}{\delta}|a_q|$, which will be given a low priority by the legislature. If the group has a preferred policy on the opposite side of the legislature’s preferences as $a_q$, then it will propose $|a_q| - |b_q|$, which is given a high priority by the legislature. Again, if the preferred position of the group is sufficiently close to legislature’s, the group will propose its ideal policy.
Derivations for the equilibrium in the baseline model are given in Appendix A.

The three equilibrium environments are illustrated for the entire parameter space in Figure 2-2. First we have the Low Urgency equilibrium environment where the status quo on policy area $A$ is closer to the legislature’s ideal position than the status quo on policy area $B$ ($\frac{|a_q|}{|b_q|} \in [0, 1]$), and hence less “urgent.” When the group and the legislature disagree about the direction in which policy should change ($a_q \in (0, g)$), the group will make no proposal since they know the legislature will leave policy area $A$ alone to focus on area $B$. In contrast, if they agree on the direction of change ($a_q < 0$), the group has the freedom to propose a bill that makes the legislature indifferent between the proposal and the status quo ($a^*_g = |a_q|$), since the legislature is going to prioritize action on $b_q$ anyhow. Finally, if the group has an ideal policy position between 0 and $|a_q|$ then they will propose their own ideal policy. All group proposals will be given a low priority on the agenda since action in policy area $B$ is relatively urgent to the legislature.

To the right on the figure is the High Urgency-Low Capacity equilibrium environment. Here action on policy area $A$ is now more urgent to the legislature than policy area $B$, but it has relatively little capacity to utilize group resources ($\frac{|a_q|}{|b_q|} \geq \delta + 1$). Hence the group’s ability to offer a proposal that would be given a low priority is precluded by the legislature’s concern over the possibility of $a_q$ remaining in place given the relatively low level of cooperative capacity, and the group is forced to make a proposal that will get a high priority ($\delta|b_q|$). Again, if the group has an ideal policy position sufficiently close to the legislature’s ideal policy position, then they will propose their own ideal policy. In response to the offer, the legislature puts the group’s proposal on the agenda with a high priority.

In the middle of the figure is the High Urgency-High Capacity equilibrium environment where it is still urgent to the legislature that $a_q$ is addressed, but its capacity
to work with groups is high enough that it will consider giving a proposal on $a_q$ a low priority on the agenda because it is confident that it will be acted on ($\frac{|a_q|}{|b_q|} \in [1, \delta+1]$).

Unlike in the previous two environments, the position of the group’s ideal policy becomes a factor in how far the group’s proposal is from the legislature’s preferred policy. If the group and the legislature disagree on the direction that policy should move, then the group will act to “protect” the status quo of policy area $A$ by making a proposal ($a_g^* = \frac{1}{\delta} |b_q| - \frac{1-\delta}{\delta} |a_q|$), which the legislature will give a lower priority, and that the group hopes will fail and policy remain at the status quo. If they agree on the direction, then the group will attempt to “reform” the status quo policy by making a proposal that the legislature will give a high priority ($|a_q| - |b_q|$), even if they could make a proposal closer to their ideal policy that would get a low priority. This is done because the group is concerned about the distant $a_q$ remaining in place.
As before, if the group’s ideal policy position is sufficiently close to the legislature’s ideal position, the group will propose its ideal policy.

The separation of the equilibrium into three environments highlights the importance of 1) the relative position of the status quos in each policy area, and 2) the level of cooperative capacity. Capacity has no role in the equilibrium until the legislature is also sufficiently concerned about the policy area salient to the group. When action on that policy area is urgent to the legislature, then capacity begins to play a role. If capacity is low, then the group has no flexibility in the position of its proposal. However, if capacity is high, then the group can be strategic about their proposal and will choose according to their preferences over the status quo, with a “protecting” group acting differently than a “reforming” group. Essentially, for groups to have options in their proposals, the status quo for the policy area the group is interested in must be sufficiently distant from the legislature’s preferences and the capacity to cooperate with the relevant committee must be sufficiently high. In each of the environments, the position of the group proposal varies with the model’s parameters quite differently. The next section presents these comparative statics for the group proposal in each environment.

**Comparative Statics for Baseline Model**

This model characterizes the relationship between the policy position of the group’s proposal and the legislature’s priorities and exogenous parameters such as the status quo policy positions \((a_q, b_q)\), the preferred policy of the legislature \((\ell)\) and the interest group \((g)\), and the legislative capacity of the legislature \((\delta)\). First we will discuss the policy position of the group’s proposal in each of the three equilibrium regions.
**Low Urgency:** \[ \frac{|a_q|}{|b_q|} \in (0, 1) \]

This is the region where the policy the group cares about, \( a_q \), is not as urgent to the legislature as \( b_q \). This makes it certain that any proposal by the group will be made a lower priority. As discussed above, this creates two possible equilibrium proposals based on the position of the group’s ideal policy relative to \( a_q \) and the legislature’s ideal policy. When \( a_q \) is in the interior of \( g \) and \( \ell \), there is no proposal and therefore no comparative statics. If it is in the exterior, the following comparative statics follow:

\[
\frac{\partial |a_g|}{\partial \delta} = 0: \text{ Since the group simply takes advantage of the fact that the legislature is more concerned with } b_q, \text{ the group makes the same proposal regardless of the level of } \delta.
\]

\[
\frac{\partial |a_g|}{\partial |b_q|} = 0: \text{ Again, since the legislature is concerned chiefly with } b_q, \text{ the group does not have to adjust their proposal, } a_q, \text{ according to the position of } b_q.
\]

\[
\frac{\partial |a_g|}{\partial |a_q|} \geq 0: \text{ The group’s proposal in this case is designed to make the legislature indifferent between accepting or rejecting the proposal which that will be given a lower priority. Therefore, as } a_q \text{ gets further from the legislature’s ideal policy, the group has more leverage to make a proposal further towards its own ideal policy position.}
\]

**High Urgency, Low Capacity:** \[ \frac{|a_q|}{|b_q|} \geq \delta + 1 \]

This is the region where the legislature now cares about \( a_q \) more than \( b_q \), but the cooperative capacity, \( \delta \), is sufficiently low such that the group makes a conciliatory proposal to the legislature, which is then given a high priority \( (a^*_g = \delta |b_q|) \). Given this equilibrium proposal, the comparative statics are as follows:

\[
\frac{\partial |a_g|}{\partial \delta} > 0: \text{ As } \delta \text{ increases it is more likely that the legislature’s proposal on } b_q, \text{ which it was willing to give a lower priority given the group’s proposal, will be}
\]

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enacted, and therefore the group can leverage this decreasing expected disutility and extract greater policy gains for itself on \( a_q \).

\[
\frac{\partial |a_g|}{\partial |b_q|} > 0: \text{As the distance between } b_q \text{ and } \ell \text{ grows, the opportunity cost to the legislature of rejecting the group's proposal grows, and the group can leverage this growing discomfort to extract more policy space in its proposal.}
\]

\[
\frac{\partial |a_g|}{\partial |a_q|} = 0: \text{Since the group's proposal on } a_q \text{ is going to be given higher priority, and therefore be addressed with certainty, the distance between } a_q \text{ and } \ell \text{ has no effect on the position of the group's proposal.}
\]

**High Urgency, High Capacity with Protecting Group:** \( \frac{|a_q|}{|b_q|} \in (1, \delta + 1] \) and \( g \in (0, a_q) \)

The “high urgency-high capacity” region is where the legislature still cares about \( a_q \) more than \( b_q \), but the capacity is high enough that the group has the choice to make a proposal that would get a high priority \((a^*_g = |a_q| - |b_q|)\) or low priority \((a^*_g = \frac{1}{\delta}|b_q| - \frac{1 - \delta}{\delta}|a_q|)\). If a group wants to “protect” the existing status quo policy position, then it chooses to make the latter proposal that gets a low priority. In this circumstance the comparative statics are:

\[
\frac{\partial |a_g|}{\partial \delta} > 0: \text{The group is balancing the legislature’s disutility from the group proposal with the disutility from the status quo in policy area } A, a_q. \text{ As the cooperative capacity grows, experiencing the disutility from } a_q \text{ becomes less likely, and therefore the group can extract more policy space in its proposal.}
\]

\[
\frac{\partial |a_g|}{\partial |b_q|} > 0: \text{The growing distance between } b_q \text{ and } \ell \text{ makes it more valuable for the legislature to act on } b_q \text{ relative to } a_q, \text{ and therefore the group has more freedom with its proposal on } a_q.
\]
The greater the distance between \( a_q \) and \( \ell \), the less the group has the ability to extract policy gains because the legislature is increasingly concerned about \( a_q \) remaining in place.

**High Urgency, High Capacity with Reforming Group:** \( \frac{|a_q|}{|b_q|} \in (1, \delta + 1) \) and \( g \notin (0, a_q) \)

Again, the legislature cares about \( a_q \) more than \( b_q \), but the legislative capacity is high enough that the group has the choice to make a proposal that would get a high priority or low priority. If a group wants to “reform” the status quo in policy area \( A \) then it proposes \( a_g^* = |a_q| - |b_q| \). In this circumstance the comparative statics are:

\[
\frac{\partial |a_g|}{\partial \delta} = 0: \text{This proposal is a result of the group balancing the legislature’s expected utility of giving the group proposal a high priority to giving it a low priority. If the legislature gives the group proposal a high priority, then there is uncertainty if the legislature’s own proposal will be enacted with a low priority. If the legislature gives the group proposal a low priority, then there is uncertainty in it being enacted. However, the level of uncertainty is exactly the same (\( \delta \)) in each situation, and hence the effect of capacity is cancelled out.}
\]

\[
\frac{\partial |a_g|}{\partial |b_q|} < 0: \text{The growing distance between \( b_q \) and \( \ell \) increases the expected disutility from giving the legislature’s proposal on policy area \( B \) a low priority, and hence the group loses leverage.}
\]

\[
\frac{\partial |a_g|}{\partial |a_q|} > 0: \text{The greater the distance between \( a_q \) and \( \ell \), the more important to the legislature that a proposal on \( a_q \) goes first, which the group uses as leverage in its proposal.}
\]

The baseline model helps uncover the logic behind the actions of the group and the legislature. However, it does make a number of simplifying assumptions, which, when
relaxed, provide better insight into the legislature-group interactions under analysis. The first assumption I relax has to do with capacity, and is presented in the next section.

**Model Extension I – Heterogeneous Capacities Model**

The baseline model assumes a level of capacity, \( \delta \), that is the same no matter which policy proposal is given a lower priority. For example, if the legislature decides to take the group proposal on the status quo on policy area A, and give it a high priority, then the legislature’s own bill on the status quo in policy area B will be enacted with probability \( \delta \), and fail to be enacted with probability \( 1 - \delta \). If, however, the legislature decides to put the group’s proposal second on the agenda, giving it a low priority, then that group proposal will be enacted with the same probability.

In the actual policymaking world it is more likely that proposals in different policy areas would not share the same level of cooperative capacity. This is especially true if we believe that these capacities have some connection to legislative committees. There is no reason to suspect that a committee with jurisdiction over a particular policy area would have the same capacity to act on a proposal as an entirely different committee and policy area. In terms of the model, this heterogeneity would be captured by having capacities vary based on which policy area the proposal is focused.

This section presents a model that is extended in this manner, with the parameter for capacity, \( \delta \), split into two parameters – \( \delta_A \) and \( \delta_B \) – that correspond the policy area of the proposal. This simple change affects the predictions of the model in important ways. Specifically, the model shows that effect of cooperative capacity in policy area \( A \), \( \delta_A \), on how much the group can pull policy away from the legislature’s ideal position can be zero, positive, or negative, depending on the other parameters. Most important to this non-monotonic relationship is the relative position of the two
status quo policies, the level of capacity in one policy area relative to there other, and whether the group is seeking to reform or protect the status quo in the policy area they care about. The next section presents the equilibrium of this extended model.

**Heterogenous Capacities Equilibrium**

In the “heterogenous capacities equilibrium” (HCE), the position of the proposal made by the group is, as in the baseline model, a function of the relative distances of the status quo policies ($a_q, b_q$) from the legislature’s ideal policy position ($\ell$). However, unlike the baseline model, the equilibrium proposal is function of not a single uniform capacity, $\delta$, but rather the level of two capacities, each unique to the different policy areas, $\delta_A$ and $\delta_B$. I make the additional simplification of setting the distance between $b_q$ and the legislature’s ideal policy position to 1 ($|b_q - \ell| = 1$), which makes a focus on the effect of differing capacities easier.\(^4\)

Although the HCE leads to quite different predictions, the geometry of the equilibrium environments defined by the parameter space are similar to the baseline equilibrium. First, the distinction between the level of “urgency” is defined as before, with a “low urgency” and a “high urgency” environment defined by the position of the status quo in policy area $A$, $a_q$. Second, there is also still an important distinction between “low capacity” and “high capacity,” though the threshold separating the two is now a relative function of both capacities, $\delta_A$ and $\delta_B$, and therefore I now use the terms “low relative capacity” and “high relative capacity.” With this model structure, there exists a unique subgame perfect Nash equilibrium that can be separated into three environments. These three environments are:

1) **Low Urgency**: If $|a_q| \in [0, 1)$, and $a_q$ is between 0 and $g$ ($a_q \in (0, g)$), the group

\(^4\)This simply makes the high urgency threshold $|a_q| > 1$ rather than $\frac{|a_q|}{|b_q|} > 1$. 

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will make no proposal. However, if $a_q$ is less than 0, and is not between 0 and the reflection point $|a_q|$, the group will propose a bill at that reflection point. If the group has an ideal policy position somewhere between 0 and this reflection point, it will propose its own ideal policy position, $g$. Any group proposal acceptable to the legislature will be put on the agenda with a low priority.

2) **High Urgency, Low Relative Capacity:** If $|a_q| \geq \frac{1 - \delta_A \delta_B}{1 - \delta_A}$, when $g \notin (0, \delta_B)$ the group proposes to move policy to $\delta_B$, which will be given a high priority by the legislature. However, if the group has an ideal policy position between 0 and $\delta_B$, then it will propose its own ideal point, which the legislature will put it on the agenda with a high priority.

3) **High Urgency, High Relative Capacity:** If $|a_q| \in \left[1, \frac{1 - \delta_A \delta_B}{1 - \delta_A}\right)$, and the group is on the same side of 0 as $a_q$, the group proposes $\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q|$, which will be given a low priority by the legislature. If the group has a preferred policy on the opposite side of the legislature’s preferences as $a_q$, then it will propose $|a_q| - \frac{1 - \delta_B}{1 - \delta_A}$, which is given a high priority by the legislature. Again, if the preferred position of the group is sufficiently close to legislature’s, the group will propose its ideal policy.

Derivations for the equilibrium in the heterogeneous capacities model are given in **Appendix B**.

The three equilibrium environments are illustrated for the entire parameter space in **Figure 2-3**. The **Low Urgency** equilibrium environment in the HCE works nearly identically to the analogous environment in the baseline model. As in that equilibrium, since action on policy area $A$ is less urgent for the legislature, the group has nearly full discretion in making a proposal. If the group would prefer the existing status quo position to anything closer the legislature’s ideal policy, then no proposal is made. If, however, the group decides it does want to reform policy in a direction
the legislature agrees with, then the group can make a proposal that moves policy a distance up to $|a_q|$ away from the legislature, and will do so unless their own ideal point is not as far as $|a_q|$. With any proposal made, the legislature will give the proposal low priority relative to its own proposal on $b_q$.

To the right of Figure 2-3 is the *High Urgency-Low Relative Capacity* equilibrium environment. Again, analogous with the BE, action on policy area $A$ is now more urgent than on policy area $B$, but there is relatively low capacity for policy area $A$. Also similar to the earlier model, the group’s ability to offer a proposal that would be given a low priority is precluded by the legislature’s fears of $a_q$ staying in place if it was to grant that lower priority. When capacity is high enough, we move *High Equilibrium-High Relative Capacity* equilibrium environment in the middle of the figure where the legislature is sufficiently confident that a proposal by the group in policy area $A$ will be enacted if given a lower priority.

The two key differences between the HCE and the BE is how high capacity in policy area $A$ needs to be to move from the *High Urgency-Low Relative Capacity* environment to the *High Urgency-High Relative Capacity* environment, and the structure of the maximum proposal that can be made in each. First, for capacity, the threshold is not just a function of $|a_q|$ anymore, but also includes the size of the capacities for each policy area, $\delta_A$ relative to $\delta_B$. As can be seen in Figure 2-3, the size of $\delta_A$ needed to move from one environment to another changes with the size in $\delta_B$. Most simply, as $\delta_B$ gets larger, all else equal, the threshold for $\delta_A$ also gets larger.

Second, the maximum distance that the group can pull policy away from the preferred position of the legislature is strikingly different in the HCE that in the BE. In *High Urgency-Low Capacity* and the *High Urgency-Low Relative Capacity* environments in each model respectively, the equilibrium proposal is similar, with the only difference being that instead of the proposal being a function of $\delta$, in the HCE it is
a function of $\delta_B$. However, in the high capacity environments, the structure of the proposal changes dramatically from the BE to the HCE. In the baseline model, the proposal for the *High Urgency-High Capacity* environment was structured differently depending on whether or not the group was “protecting” or “reforming” the status quo in policy area $A$, with the reforming proposal an increasing function of the capacity parameter $\delta$ and the “protecting” proposal independent of the level of capacity. However, the model extension suggests that the “reforming” proposal is still increasing, this time in $\delta_A$ rather the $\delta$, but now the “protecting” proposal is decreasing in $\delta_A$, whereas before it was independent of capacity.

The importance of relative urgency and capacity in defining the three environments is similar to the baseline model. While the structure of the proposals are
somewhat different, they are very much like those found in the baseline model. However, the comparative statics act quite differently. These are presented in the next section.

Comparative Statics for Heterogenous Capacities Model

The effect of the distance between $a_q$ and $\ell$ and $b_q$ and $\ell$ on the group’s proposal is the same for both the baseline model and the heterogenous capacities models. However, since we relaxed the assumption of uniform capacity, the comparative statics changed as well, though not for the “low urgency” environment. The following are how the different capacities affect the group proposal in the “high urgency” environments.

High Urgency, Low Relative Capacity: $|a_q| \geq \frac{1 - \delta_A \delta_B}{1 - \delta_A}$ and $g \notin (0, \delta_B)$

Again, this is the region where the legislature cares about $a_q$ more than $b_q$, and the capacity in policy area $A$, $\delta_A$, is sufficiently low such that the group makes a conciliatory proposal to the legislature, which is then given a high priority ($a_q^* = \delta_B$).

Given this equilibrium proposal, the comparative statics are as follows:

$$\frac{\partial |a_q|}{\partial \delta_A} = 0$$: The proposal is designed to make the legislature give it a high priority, and therefore action on $a_q$ happens with certainty. Hence $\delta_A$ has no effect.

$$\frac{\partial |a_q|}{\partial \delta_B} > 0$$: Since the legislature’s own action on $b_q$ is where uncertainty matters, the greater $\delta_B$, or the more likely the legislature will get what it wants in policy area $B$, the more leverage the group has on its own proposal.

High Urgency, High Relative Capacity with Protecting Group: $|a_q| \in (1, \frac{1 - \delta_A \delta_B}{1 - \delta_A})$ and $g \in (0, a_q)$

In the “high urgency-high relative capacity” environment, the group now has the opportunity to make a proposal that will be given a low priority. The only group
that would want to do this is one that likes the current status quo in policy area $A$ to anything the legislature would accept. Therefore, this “protecting” group makes such a proposal, which is $\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q|$. This leads to the following comparative statics:

$\frac{\partial |a_g|}{\partial \delta_A} > 0$: Since the group’s proposal is designed to get a low priority, uncertainty in the enactment of the proposal in policy area $A$ is salient. As the likelihood that action on $a_q$ rises, or $\delta_A$ gets larger, the group has more flexibility in its proposal.

$\frac{\partial |a_g|}{\partial \delta_B} = 0$: As action on $b_q$ is certain, the capacity for policy area $B$ has no effect on the group proposal.

**High Urgency, High Relative Capacity with Reforming Group:** $|a_q| \in (1, \frac{1 - \delta_A \delta_B}{1 - \delta_A}) \text{ and } g \notin (0, a_q)$

Again, in this environment the group now has the opportunity to make a proposal that will be given a low priority. However, a “reforming” group is fearful of the status quo in policy area $A$ remaining in place, and therefore makes a proposal that is given a high priority. Specifically, the group proposes $|a_q| - \frac{1 - \delta_B}{1 - \delta_A}$, which leads to the following comparative statics:

$\frac{\partial |a_g|}{\partial \delta_A} < 0$: This proposal is a result of the group balancing the legislature’s expected utility of giving the proposal a high priority to giving it a low priority. Therefore, as the likelihood of a proposal in policy area $A$ with a low priority being enacted increases (higher $\delta_A$) the greater the legislature’s expected utility if they give it a low priority, and hence the less leverage the group has if it wants to ensure it gets a high priority.

$\frac{\partial |a_g|}{\partial \delta_B} > 0$: Again, given the goal of this proposal, as the likelihood of a proposal on policy area $B$ with a low priority being enacted increases (higher $\delta_B$) the greater the
legislature’s expected utility if they do what the group wants and give the legislature’s own proposal a low priority. This declining expected disutility gives the group more leverage in their proposal.

The baseline model highlighted the importance of the relative urgency of action in each policy area in the group’s proposal and therefore in policy outcomes. The heterogenous capacities model relaxed the assumption of uniform capacities across policy areas, and showed that the capacities of the two policy areas mattered importantly at different times. However, each of these models assumes only one group is interacting with a legislature. However, real-world interest group lobbying often has multiple competing groups. The next model extension takes the heterogeneous capacities model and adds a group to the analysis. The following section discusses this extension.

**Model Extension II – Competing Interest Groups Model**

Analytically, there are two important cases with multiple groups. The first involves two or more groups that generally agree on where policy should move. The second is where two or more groups disagree sharply on where policy should move, which I am calling “competing” groups. In the former the equilibrium is the same as in the one-group case, with the only difference being that the group with the ideal policy position closest to the legislature’s is pivotal. Therefore the focus will be on the “competing group” environment.

I formalize the competing groups setting by replacing the single interest group with two interest groups, where ideal policy positions are denoted as \( g_1 \) and \( g_2 \). Specifically, I add a second group that prefers action on the same policy area as the first group and has a preferred policy position on the opposite side of the legislature’s ideal policy position than the other group (\( \ell \in (g_1, g_2) \)). Further, I assume that groups must
make their proposals simultaneously.\(^5\) All other model structure remains the same as before. The equilibrium of this model is as follows.

In the “competing groups equilibrium” (CGE), for all \(\delta_A, \delta_B \in [0, 1]\) and all \(a_q\) and \(b_q\), there is a subgame perfect Nash equilibrium where both groups will propose a bill with a policy position at the legislature’s ideal policy position, 0. The legislature will respond by giving the group’s proposal a high priority if \(|a_q| > |b_q|\), and a low priority otherwise.

Derivations for the equilibrium in the Competing Interest Groups models are given in Appendix C.

In equilibrium, when there are two groups that compete over placement on the legislature’s agenda, they are each concerned about the other group proposing a bill marginally more attractive to the legislature than their own. The logic of this bidding continues until both groups end at the legislature’s ideal policy position (\(a_1^* = a_2^* = 0\)), with a dynamic identical to that of the canonical median voter theorem. The legislature will then set its agenda according to which status quo policy is most urgent.

It is obvious that the solution to this equilibrium is quite simple. Competition between the groups over a place on the legislative agenda devolves quickly into each group doing their best to appeal to the legislature with attractive policy proposals. This theory, like almost all others that speak to interest group influence, predicts that with competition comes a “pluralist heaven.” Of course this outcome is a direct result of the model structure, including how competition is modeled. In the future I will work to incorporate competition in the model in more sophisticated ways.\(^6\)

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\(^5\)This assumption is meant to model an environment where groups can continually adjust their proposals in response to competitor actions.

\(^6\)One alternative in particular will be to let groups have preferences over different policy areas,
However, for now, the model with competing groups shows that any leverage a group has is erased with competition.

**Conclusion**

This chapter presented a theory of interest group subsidization of the legislative process aimed at increasing our understanding of how groups can influence the policies that are passed by Congress. It starts with the understanding that Congress is limited in its ability to address all the policy issues it wished to and that groups, for a price, will help Congress out. However, both Congress and the groups must work through the existing institutional structure, most importantly legislative committees. Each choice made in model structure was meant to mimic the real-world nature of these interactions as much as possible.

In the end, the model and its extensions provide some important insights into how this relationship may work. These insights include how the relative positions of various policy status quo positions affect the agenda priorities of Congress. However, most important for this dissertation is what determines the position of policy outcomes.

Most basically, the model suggests that three factors matter in determining how far groups can pull policy away from the preferred position of Congress with subsidization: 1) the capacity of Congress to cooperate with groups through committees, 2) if the groups are trying to protect or reform the status quo, and 3) if there is competition among multiple interest groups. The work in this chapter shows that those factors can interact in subtle ways that lead to dramatic differences in the policy that Congress passes. The next chapter takes the comparative statics derived here, which will make them “competition” in the sense that they are competing for a place on the agenda, not over the direction of policy change.
presents them as formal propositions and their related hypotheses, and then tests them using data on the observable actions of the U.S. House of Representatives and the organized interests.
CHAPTER 3
EXPLAINING SHORT-RUN POLICY OUTCOMES

A theory is most useful when its implications can be tested empirically. The aim of this dissertation as a whole is to better understand how interest groups interact with Congress, and what effect these interactions have on the policies enacted by the U.S. government. To do this, considerable effort was put into developing a formal theory of a particular type of interaction, namely a subsidizing relationship between groups and Congress. Like most theories, formal models of politics have advantages and shortcomings. Their shortcomings mostly reside in their level of abstraction and necessary distance from the real-world concepts they try to explain. However, one of their advantages is they have very clear predictions, and often those predictions are quite subtle and have implications that were previously not obvious. In this chapter I rely on these advantages to test my theory of interest group influence.

The tests in these chapters are not causal tests. My analysis is inherently limited by the available data and difficulty in operationalizing the theory’s concepts. However, the findings in this chapter and the next, combined with the clarity of the hypotheses derived from the theory’s predictions, provide strong corroborating evidence of the theory’s validity. I begin the empirical analysis with a translation of the comparative statics from the theory into propositions and then testable hypotheses. The logic of each is then explained to provide intuition for how these hypotheses should relate to observable behavior. Next, the concepts in the theories need to be
operationalized, and a description of the resulting measures is discussed. Finally, an analysis is conducted and the results discussed. First, we begin with the propositions and hypotheses.

**Propositions and Hypotheses**

The model and its extensions presented in the previous chapter present a number of predictions, relating the level of various exogenous variables – such as the status quo policy positions \((a_q, b_q)\), the preferred policy of the the legislature (\(\ell\)) and the preferred policy position of an interest group (\(g\)) or groups (\(g_1, g_2\)) – to the positions of policy outcomes and the agenda decision of the legislature. In this chapter I focus on uncovering empirical support for the theory’s prediction on the effect of cooperative capacity in the policy area the group cares about (\(\delta_A\) in the “heterogenous capacities” model) on the group’s proposal (\(a_g\)). I do this for two reasons. First, how groups alter policy choices made by governing institutions is a central question in the study of interest groups. Second, this prediction is the most amenable to quantitative analysis, and therefore a good initial test of the theory. I begin with a discussion of the predictions about policy outcomes in the baseline model with a single group.

**Policy Position of Group’s Proposal with One Group**

**Proposition 1: Protecting Group Hypothesis.** All else equal, the “protecting” group’s proposal is more distant from the legislature’s ideal policy position when cooperative capacity in the relevant committee is high.

Proof of all propositions are given in Appendix D.

If the cooperative capacity is sufficiently low in the committee with jurisdiction over the relevant policy (\(\delta_A < \frac{|a_q| - 1}{|a_q| - \delta_B}\)), then the group can make no proposal that
the legislature will give a low priority. Therefore there is no uncertainty about the
fate of the proposal which makes the capacity in the relevant committee unrelated
to the proposal. However, for a sufficiently high capacity \( \delta_A \geq \frac{|a_q| - 1}{|a_q| - \delta_B} \) the group
does have the option to make a proposal that will get a low priority.

When an interest group wants to protect the status quo policy, they make a
proposal to the legislature that aims for that low priority \( \left( a_g^* = \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q| \right) \).
The group does this because it is hoping that a de-prioritized proposal will not be
enacted, leaving policy at the status quo, which the group favors to all others that the
legislature would accept. The legislature agrees to this deal because using the group’s
proposal frees it up to address other policies, and the group is willing to propose a
policy further from its ideal position than the existing status quo to prevent the
legislature from moving it even further away. However, since the group’s proposal is
given a low priority, its outcome is uncertain; the proposal could be enacted, or it
could fail to be enacted, with the latter outcome most painful to the legislature. The
more capacity that exists, the less likely it is that the proposal will fail, and hence the
legislature’s concern over the fate of the group’s proposal lessens. That decreasing
discomfort by the legislature provides more leverage to the interest group, which it
uses to make a less generous proposal. The group’s leverage grows with capacity
because it can credibly claim that it does not want any reform to take place, as it is
only engaging to keep the legislature from creating a worse outcome for the group.
That dynamic switches completely when both the group and the legislature want
policy to be reformed in the same manner. This is the focus of the next hypothesis.

**Proposition 2: Reforming Group Hypothesis.** All else equal, the “reforming”
group’s proposal is less distant from the legislature’s ideal policy position when
cooperative capacity in the relevant committee is high.
In contrast to the previous scenario, here the group wants to make a proposal that will be given a high priority \( (a_g^* = |a_q| - \frac{1 - \delta_B}{1 - \delta_A}) \). This is the case because, above all else, the group fears that policy will remain at the existing status quo position. For this reason they are willing to make a proposal that gets a high priority, and even more importantly, as cooperative capacity in the relevant committee increases the legislature is able use this as leverage over the group. Essentially, the group can no longer credibly claim that it is happier if no reform takes place. The legislature, in turn, is able to force more concessions from the group as capacity increases because the legislature knows the group wants successful reform more than the legislature.

However, the predictions from either the “protecting” or “reforming” group scenarios rely on the assumption of no competition for the proposing group from any other group, which is not the situation for most modern policymaking environments. The second extension of the model explored the effect of competition among interest groups on the actors’ decision-making. The resulting prediction is presented in the next hypothesis.

Policy Position of Group’s Proposal with Competing Groups

**Proposition 3: Interest Group Environment Hypothesis:** All else equal, the policy proposal from a group will be at the legislature’s ideal policy position when groups are “competing.”

This proposition simply states that when the ideal policy position of two or more groups are on opposite sides of the legislature’s ideal policy position, they each will be forced to propose a policy that satisfies the legislature completely. This follows from each group’s knowledge that any proposal that deviates from the legislature’s ideal position leaves an opportunity for the competing group to make a marginally more attractive proposal to the legislature. Each group prefers the legislature’s ideal
policy to any proposal by the competing group. Therefore the groups will bid each other down until each proposes the legislature’s preferred policy.

The three propositions presented here highlight some of the model’s useful insights. When groups subsidize legislative action, three factors greatly influence policy outcomes. The first relevant factor is if the group doing the subsidizing wants to protect the existing status quo policy as much as possible, or if it wishes to reform the status quo dramatically as the legislature does. The second factor is the capacity of the legislature to cooperate with groups and incorporate their resources. The third factor is how the groups compete with each other. The interaction of these three factors leads to the three unique predictions presented in the three hypotheses.

When a group is “protecting” the status quo, it makes a proposal that it hopes will fail because it does not want action in the first place. Therefore as capacity increases in these situations, the group can leverage the increasing value of their subsidy for more policy concessions. In contrast, when a group wants to “reform” a status quo policy, its leverage shrinks with capacity and it has to make more concessions to the legislature. However, any leverage the group has, in the model, is due to its first-mover status. That status evaporates when there are multiple groups competing for the legislature’s attention. In short, this model explains when, and through what means, groups are able to bias policy away from the legislature’s ideal position, and what factors influence the group’s leverage.

My model produces a number of insights and relevant predictions. However, of equal importance is how amenable these predictions are to empirical analysis. These three hypotheses presented give an opportunity to test the validity of the model. The following section identifies the data collected, how the variables in the hypotheses are operationalized and recorded, and the results of the statistical analysis that test these hypotheses.
Empirical Analysis

Testing these hypotheses requires a sample of bills subsidized by an interest group and the ability to measure the model’s variables: cooperative capacity, interest group competition, interest group position, and policy outcomes. There are of course many groups to choose from, but I chose to focus on the bills lobbied by the U.S. Chamber of Commerce (USCC) and the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) given their importance and history in national politics. The USCC is arguably the most important and influential business organization in Washington, and its influence is felt in a number of different policy areas. Over the years the AFL-CIO has been the most consistent opponent of the USCC. Some have argued that the influence of labor in direct lobbying has waned in recent years, and is now dominated by business and corporate interests (see Schlozman and Tierney 1984, Heinz et al. 1993, and Baumgartner et al. 2009), but I use these two groups because together they cover the standard left-right political spectrum well for this analysis.

Using data from the Center for Responsive Politics\(^1\), which they gathered from lobbying reports kept at the Senate Office of Public Records, I identified every bill that the USCC and AFL-CIO reported lobbying for the 109th, 110th, and 111th Congresses.\(^2\) From those I kept all bills that received a recorded roll call vote for final passage on the floor of the U.S. House of Representatives. Finally, I identified the committee of primary referral.\(^3\) This left me with 148 bills over the three Congresses

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\(^1\)www.opensecrets.org

\(^2\)While the model imagines that groups subsidize bills, there is no data on such activity, so I use the only data available that directly connects groups to particular bills. Lobbying is likely a weaker activity than subsidizing, so using this data would bias the results towards null findings, and therefore any significant results are in spite of using this data.

\(^3\)When referred to multiple committees, a bill’s primary committee was the first committee it was
for the USCC, and 101 for the AFL-CIO, with 68 bills lobbied by both groups.\textsuperscript{4} So for these 181 unique bills I needed the associated level of cooperative capacity, the nature of interest group competition, what position the groups held on the bill, and the policy position of the bill. The next section discusses the operationalization of these variables.

**Operationalizing the Theoretical Variables**

**Operationalizing Cooperative Capacity**

In the model, cooperative capacity ($\delta_A$ and $\delta_B$) are parameters representing how able committees are to work with interest groups, and therefore we need measures of this capacity that vary across committees. To do this I focus on the internal organization of committees themselves, and the mechanisms that might facilitate close cooperation with interest groups. I argue that patterns of subcommittee action provide the needed variation. If we think of subcommittees as similar to their parent committees, only focused on a more narrow subset of policy, then decisions by full committees to defer legislative action to subcommittees signals greater opportunity for cooperation between the legislature and groups, and therefore greater cooperative capacity.

Hence we need measures of how much legislative work each full committee hands over to subcommittees. I use two related measures.\textsuperscript{5} For the first measure, I simply referred to. I dropped all bills with primary referral to the Appropriations, Budget, and Ways and Means committees given their unique status.

\textsuperscript{4}The descriptive statistics for both the USCC and AFL-CIO bills are presented in Tables 3.1 and 3.2.

\textsuperscript{5}These two measures are similar to components of Deering and Smith’s (1997) composite measure of subcommittee autonomy that uses the ratio of committee to subcommittee referrals, hearings, staff allocation, and bill management. For this study, I chose not to use the percentage of bill managed by the subcommittee chair because of the cost of collecting the information. I will do so for later work. The last measure – the percentage of committee staff that are assigned to subcommittees – is not used because staff is no longer exclusively assigned to subcommittees.
take the total number of bills from a committee that receive floor action and record the fraction of those bills that were referred to at least one of the primary committee’s subcommittees (Percent Referred).\textsuperscript{6} The second measure again takes the total number of bills with floor action from a committee, and records the fraction of those bills that received a hearing or markup session in one of its subcommittees (Percent Hearing/Markup).\textsuperscript{7} These two measures are meant to capture cooperative capacity based on the assumption that referring bills to a subcommittee or having subcommittee hearings provide interest groups greater access and increase the potential for cooperation.\textsuperscript{8} These operationalizations gave me two measures that capture the general pattern of how much particular committees rely on subcommittees during bill deliberation.

The data used to construct these measures were collected from the Library of Congress’s Thomas database\textsuperscript{9}, where for each committee I looked at all bills that had floor action and were referred to that committee, and then noted how many of those bills were referred to one of that committee’s subcommittees. The percentage of bills referred to at least one of a committee’s subcommittees is the first measure of cooperative capacity. The second measure used the same data from the Thomas website, but instead of recording if a bill was simply referred to a subcommittee, I recorded if it received a hearing and/or markup in one of the committee’s subcommittees.\textsuperscript{10}

\begin{itemize}
\item \textsuperscript{6}I use only bills that received floor action as the theoretical model is of positive action, and therefore only bills that make it to the floor and pass are salient.
\item \textsuperscript{7}This is not exactly the measure used by Deering and Smith, but in collecting the measure there were a number of committees where there were no hearings on bills at all, so I chose this alternative measure.
\item \textsuperscript{8}These two measures have a Pearson’s correlation coefficient of 0.58.
\item \textsuperscript{9}www.thomas.gov
\item \textsuperscript{10}In the creation of these measures, I considered the subcommittee referral and hearing/markup
\end{itemize}
Cooperative capacity is the first of the three key theoretical independent variables. The operationalization of the second, interest group environment, is discussed next.

**Operationalizing Interest Group Environment**

The model clearly defines a “competitive” interest group environment as one in which there are at least two groups with ideal policies on either side of the legislature’s preferred policies. Therefore, if we take the model literally, then a competitive environment could exist with as few as two groups lobbying a bill. However, a more realistic approach would assume that environments with many active groups are more likely to be competitive. If this assumption holds, then the interest group environment could be operationalized by recording the number of groups involved on a particular bill. I collected this information from the Center for Responsive Politics for each bill, and then performed a logarithmic transformation (Log of # of Groups).\(^{11}\)

**Operationalizing Interest Group Position**

To estimate which position the USCC preferred on each bill, I used the voting behavior of House members allied with the USCC. In each session of Congress the USCC gives a “Spirit of Enterprise” award to legislators that get at least 70 out of 100 points on their vote scores. If a majority of the winners of this award for a given session voted “Yea” on the final passage for a bill, I coded the USCC’s position as in favor of passage, and not in favor otherwise. This allowed me to code the group position whether that coalition was the “Yea” or “Nay” side of the vote. I went through the pattern for all bills referred to a committee, even if it was not the primary committee. Alternative measures were created by considering the subcommittee referral and hearing/markup pattern only for bills where the committee was the primary committee. Empirical results with all versions are not substantively different.

\(^{11}\)Given the large range of groups that lobbied particular bills, and its skewed distribution, a logarithmic transformation was warranted.
same process with the AFL-CIO, though since they do not give an equivalent award I simply used the same threshold of 70 out of 100 points using the AFL-CIO’s own vote scores.\textsuperscript{12}

**Operationalizing the Position of Group Proposals**

Operationalizing the dependent variable – the position of the the group proposal in policy space – was not straightforward. As with most studies of legislative politics, direct measures of bills in policy space are hard to come by. This is made even more difficult for my model due to concerns about dimensionality, and the possibility of groups being on either the ideological left or right of the legislature on any given issue. The distance of the proposal by the group from the legislature’s ideal position is in part determined by the position of the status quo policy, and the preferences of the legislature and the group. This creates difficulty in isolating the effect of capacity since it acts differently in each of the four possible combinations (leftist group protecting the status quo, leftist group reforming the status quo, rightist group protecting the status quo, rightist group reforming the status quo). However, there is an approach that will provide a measure that is consistent across environments. The key is to think in terms of the size of the “yea” coalition.

To see this look at Figures 3-1 and 3-2. Here we have a leftist group in both reforming and protecting environments with “high relative capacity.” In Figure 3-1 we see that if $\delta_A = \frac{|a_q| - 1}{|a_q| - \delta_B}$, the group’s proposal would be to the left of the

\textsuperscript{12}Vote scores for the USCC and the AFL-CIO were found at www.uschamber.com and www.aflcio.org respectively.
Figure 3.1: Varying Cutpoints as a Function of $\delta_A$ in Reforming Environment

The legislature’s ideal policy position, and as $\delta_A$ increases, the group is forced to make more concessions, and the proposal moves rightward.\textsuperscript{13}

\textbf{Figure 3-2} shows the opposite is true in the protecting environment. That is, as capacity increases, the group is more able to pull policy away from the legislature’s ideal position towards its own. When $\delta_A = \frac{|a_q| - 1}{|a_q| - \delta_B}$, the group is forced to make a proposal at the ideal point of the legislature, putting the cut point equidistant between that ideal point and the status quo. As $\delta_A$ grows, the groups is better able to pull policy towards its own ideal position.

However, even though the group has different intentions in each situation, and the effect of the capacity acts differently in each environment, the correlation between capacity and the size of the “yea” coalition is consistent. Specifically, in both instances the size of the “yea” coalition grows with capacity. Therefore, we can use the size

\textsuperscript{13}The lowest $\delta_A$ can be is $\frac{|a_q| - 1}{|a_q| - \delta_B}$ since any lower would put is the the “low relative capacity” environment. Similarly, the largest $\delta_A$ can be and still have an effect on the proposal is $\frac{|a_q| - 1 - \delta_B}{|a_q|}$ since this is when the proposal $a_q^* = 0$, or is at the legislature’s ideal position.
of the “yea” coalition as our dependent variable no matter the situation. I will take
the further step to normalize the size of the “yea” coalition by the total number of
votes.\footnote{\textsuperscript{14}}

\textbf{Control Variables}

Finally, I collect three control variables, each of which may influence the size of the
“yea” coalition (or, in turn, the size of the “nay” coalition). The first was whether
or not the bill was voted on under “suspension of the rules,” which is a legislative
procedure in the House that speeds deliberation but raises the bar for passage from
a simple to two-thirds majority. Second, I recorded whether or not a bill was re-
ferred to multiple committees, as the effect of cooperative capacity from the primary

\footnote{\textsuperscript{14}It is important to note that while the expected relationship between the “yea” coalition and
capacity is always positive, in either the reforming and protecting environments, it is positive to
different degrees. This subtlety is explored in the data analysis in a secondary set of tests. The
first set of tests will look at the data with the observations pooled according to the position of
the groups. The second set of tests split the data according to group position.}

\textbf{Figure 3.2: Varying Cutpoints as a Function of $\delta_A$ in Protecting Environment}
committee may be ameliorated by the ability of other referred committees to alter the legislation. Finally, I used categorical dummy variables for each Congress to account for differences in partisan control or divided government regimes. With the model’s two independent variables and its dependent variable operationalized, as well as some relevant control variables collected, we are able to conduct the analysis. But first I pause to explore the characteristics of the various measures created in the next section.

Descriptive Statistics of Theoretical Variables

Tables 3.1 and 3.2 provide the descriptive statistics for the bill lobbied by the USCC and the AFL-CIO respectively. Before discussing the key theoretical independent variables, it is important to focus on the dependent variable. First, looking at Table 3.1, we can see that the dependent variable Percent Yea ranges from 0.51 to 1.00 for all bills. For the key independent variables, Table 3.1 also provides important information. First, for Percent Referred, we can see that it ranges from 0.00 to 0.98, nearly the entire range possible, and has a mean of 0.58. This tells us that the typical bill is referred to a committee that, on average, refers 58 percent of its bills to a subcommittee. Similarly, for Percent Hearing/Markup we see the range is from 0.00 to 0.83, and the typical bill is referred to a committee where, on average, 32 percent of bills have a hearing or markup in a subcommittee.

The other important independent variable is the number of groups that lobbied a particular bill, or Log # of Groups. We can see this ranges from 0.00 to 6.92, with an average of 4.11. Finally, Table 3.1 shows that 27 percent of the bills under analysis were considered under suspension of the rules, 36 percent were referred to multiple committees, and the distribution of bills between the 109th, 110th, and 111th Congresses were 20 percent, 48 percent, and 32 percent respectively.

For the AFL-CIO bills, Table 3.2 shows that the dependent variable Percent
<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Referred</td>
<td>0.58</td>
<td>0.27</td>
<td>0.00</td>
<td>0.98</td>
</tr>
<tr>
<td>Percent Hearing/Markup</td>
<td>0.32</td>
<td>0.24</td>
<td>0.00</td>
<td>0.83</td>
</tr>
<tr>
<td>Log # of Groups</td>
<td>4.11</td>
<td>1.23</td>
<td>0.00</td>
<td>6.92</td>
</tr>
<tr>
<td>Suspension of Rules</td>
<td>0.27</td>
<td>0.45</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Multiple Referral</td>
<td>0.36</td>
<td>0.48</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>109th Congress</td>
<td>0.20</td>
<td>0.40</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>110th Congress</td>
<td>0.48</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>111th Congress</td>
<td>0.32</td>
<td>0.47</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Percent Yea</td>
<td>0.76</td>
<td>0.17</td>
<td>0.51</td>
<td>1.00</td>
</tr>
<tr>
<td>Percent Pro-USCC Coalition</td>
<td>0.69</td>
<td>0.24</td>
<td>0.24</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Table 3.2: Descriptive Statistics – AFL-CIO Bills

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
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</thead>
<tbody>
<tr>
<td>Percent Referred</td>
<td>0.59</td>
<td>0.26</td>
<td>0.04</td>
<td>0.98</td>
</tr>
<tr>
<td>Percent Hearing/Markup</td>
<td>0.28</td>
<td>0.23</td>
<td>0.00</td>
<td>0.83</td>
</tr>
<tr>
<td>Log # of Groups</td>
<td>4.37</td>
<td>1.30</td>
<td>0.00</td>
<td>6.92</td>
</tr>
<tr>
<td>Suspension of Rules</td>
<td>0.15</td>
<td>0.36</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Multiple Referral</td>
<td>0.39</td>
<td>0.49</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>109th Congress</td>
<td>0.14</td>
<td>0.35</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>110th Congress</td>
<td>0.59</td>
<td>0.49</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>111th Congress</td>
<td>0.27</td>
<td>0.44</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Percent Yea</td>
<td>0.73</td>
<td>0.17</td>
<td>0.51</td>
<td>1.00</td>
</tr>
<tr>
<td>Percent Pro-AFLCIO Coalition</td>
<td>0.67</td>
<td>0.23</td>
<td>0.01</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Yea ranges from 0.51 to 1.00. The key independent variables, Percent Referred and Percent Hearing/Markup have a range from 0.04 to 0.98 and 0.00 and 0.83 respectively, and the typical bill is referred to a committee where, on average, 59 percent of bills are referred to a subcommittee, and 28 percent have a hearing or markup in a subcommittee.

As for the other variables, the mean score for the Log # of Groups is 4.37, 15 percent of the bills under analysis were considered under suspension of the rules, 39 percent were referred to multiple committees, and the distribution of bills between the 109th, 110th, and 111th Congresses were 14 percent, 59 percent, and 27 percent respectively.
Pooled Observations Models

Each model estimated uses ordinary least squares with fixed effects for committees to allay concerns about clustering in the data. Since I am analyzing the effect of committee-level variables, Percent Referred and Percent Hearing/Markup, but the observations are at the individual bill level, there is a potential problem with clustering effects by committee. First, some may be concerned that Percent Referred and/or Percent Hearing/Markup are not capturing cooperative capacity, but may merely be acting as a proxy for different committees. Given the relatively short time span for the data, and the fact that there is not much variation in Percent Referred or Percent Hearing/Markup within committees, this is an especially salient concern.

Beyond heterogeneity among the committees, there may also be concern that any heteroskedasticity in the errors is related to the committee of primary referral.\textsuperscript{15} The first two models estimated in each table use the standard Huber-White procedure clustered on committees to correct for heteroskedasticity. This generalized form of the Huber-White procedure is the conventional fix that allows for observations to be clustered. However, this procedure relies on asymptotic assumptions about the number of clusters (Cameron and Miller 2010, pg. 9). The USCC data only has 13 committees, or 13 clusters, and the AFL-CIO bills only 12, which reduces confidence in the estimated errors using robust clustered errors. The only recourse is to use block-bootstrapping techniques that allow me to stretch the too few committees I have and estimate clustered errors more confidently.\textsuperscript{16} The last two models in each table use this bootstrapping technique. Finally, given the directional expectations of

\textsuperscript{15}Imagine a model $y_{ik} = x_{ik}' + u_{ik}$ where $i$ is an observation and $k$ is a cluster, and $u_{ik} = \alpha_k + \epsilon_{ik}$ where $\epsilon_{ik} \sim [0, \sigma_{ik}^2]$. The fixed effects addresses the cluster-specific effect, $\alpha_k$, and the clustered standard errors address the errors distributed with a variance $\sigma_{ik}^2$ influenced by cluster.

\textsuperscript{16}Bootstrapping takes the available data as the population and “samples” from it with replacement a specified number of times. From these numerous samples the standard errors are estimated.
the key theoretical variables – Percent Referred and its interaction with the number of groups, Percent Referred \(x\) Groups, as well as Percent Hearing/Markup and its interaction – significance tests use one-tailed criteria, while all other variables with no strong theoretical expectations rely on two-tailed criteria. Finally, the analysis was restricted to bills that got no more than a 95 percent majority, a common tactic when analyzing the size of coalitions in legislative voting (Wiseman 2004).

The models estimated in the pooled data tests all hypotheses – Protecting Group Hypothesis, Reforming Group Hypothesis, and the Interest Group Environment Hypothesis – together. This is because of the ability to use the size of the “yea” coalition for both the consistent predictions in both the protecting and reforming group environment, I only need to separate observations by the group. However, I keep the hypotheses separate because they will be discussed in a later section where this distinction is explored. For now, I analyze the pooled data, where Tables 3.3 and 3.4 estimate a number of models on the USCC bills, with the former using Percent Referred as the key independent variable and the latter using Percent Hearing/Markup. Tables 3.5 and 3.6 run the same models for the AFL-CIO bills.

For clarity, I will outline what the theory tells us to expect in the empirical results. The theory says that as cooperative capacity increases, policy will be pulled further away from the legislature’s ideal position when the subsidizing group is protecting the status quo, and move closer when the group is reforming the status quo. In both of these cases, this is related to the size of the “yea” coalition. That is, when there

\(^{17}\) This effects different models in different ways, with some models losing statistical significance for the key theoretical variables when all bills are included. However, if bills analyzed are restricted the analysis to bills with a 97 percent or lower majority then the results are similar to those reported.

Boostrapping is effective for clustered data because it can draw from clusters rather than individual observations, and thereby estimate consistent standard errors. All models using bootstrapping in this study drew 1000 samples.
is a protecting group, their growing influence from greater capacity can be seen in a larger “yea” coalition, while the shrinking influence of a reforming group caused by greater capacity can also be seen in a larger “yea” coalition. Hence, with these pooled models, the greater the two measures of capacity, Percent Referred and Percent Hearing/Markup, the larger the “yea” coalition should be. Finally, the positive effect of capacity on the “yea” vote should dissipate as competition between groups increases, operationalized as the natural log of the number of groups that reported lobbying the bill under analysis. The next section shows that, for the most part, these expectations are confirmed.

Pooled Models Results

Table 3.3 shows the results for four estimated models using all USCC bills and Percent Referred. Model 1-1 is a simple interaction model with the independent variables being Percent Referred, Log of # of Groups, and their interaction, using Huber-White robust clustering techniques. This model uncovers the expected relationships, though only weakly. Using one-tailed significance criteria, Percent Referred is in the expected positive direction and significant at the one-percent level. In words, the data show that as cooperative capacity increases (Percent Referred increases), the size of the “yea” coalition increases (Percent Yea increases). Further, as the interest group environment surrounding a bill becomes more competitive, measured through the number of groups that lobbied a bill (Log of # of Groups increases), the effect of cooperative capacity lessens, as shown through the negative sign on the model’s interaction term (Percent Referred x Groups).

An important issue is the robustness of the findings in Model 1-1. These concerns are in two forms. The first is the possibility of confounding factors. There are a number of other factors that may affect “yea” coalition size, and if correlated with the key theoretical variables, could be leading to spurious results. Looking at Model
<table>
<thead>
<tr>
<th></th>
<th>Model 1-1</th>
<th>Model 1-2</th>
<th>Model 1-3</th>
<th>Model 1-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Referred</td>
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<td>0.30**</td>
<td>0.42**</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>(0.14)</td>
<td>(0.15)</td>
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<td>(0.26)</td>
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<td>-0.01</td>
<td>-0.02</td>
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</tr>
<tr>
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<td>(0.02)</td>
<td>(0.04)</td>
<td>(0.04)</td>
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<tr>
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<td>-0.00</td>
<td>-0.02</td>
<td>-0.00</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.06)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Suspension of Rules</td>
<td>-</td>
<td>0.08**</td>
<td>-</td>
<td>0.08**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.03)</td>
<td></td>
<td>(0.03)</td>
</tr>
<tr>
<td>Multiple Referral</td>
<td>-</td>
<td>-0.08**</td>
<td>-</td>
<td>-0.08***</td>
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<tr>
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<td></td>
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<td>(0.03)</td>
</tr>
<tr>
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<td>-</td>
<td>0.01</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.03)</td>
<td></td>
<td>(0.03)</td>
</tr>
<tr>
<td>111th Congress</td>
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<td>-0.01</td>
<td>-</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.02)</td>
<td></td>
<td>(0.03)</td>
</tr>
<tr>
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<td>0.59***</td>
<td>0.57***</td>
<td>0.59***</td>
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<td>(0.10)</td>
<td>(0.07)</td>
<td>(0.17)</td>
<td>(0.17)</td>
</tr>
</tbody>
</table>

**Fixed Effects**

Yes Yes Yes Yes

**Robust Clustered Errors**

Yes Yes No No

**Block Bootstrapped Clustered Errors**

No No Yes Yes

**N**

113 113 113 113

**Pr > F**

0.0193 0.0000 0.0272 0.0000

*Note: Coefficient estimates for Models 1-1 and 1-2 with robust standard errors clustered on committee, and estimates for Models 1-3 and 1-4 with block bootstrapped standard errors clustered on committee. All models use fixed effects for committee. Significance tests for Percent Referred and Referred x Groups are one-tailed. All others significance tests are two-tailed. *p<0.10, ** p<0.05, *** p<0.01.*
1-2, the data show results consistent with the findings in Model 1-1, though slightly weaker. The data also show that the “yea” coalition size is about 8 percentage points higher when a bill is considered under suspension of the rules, and about eight percentage points lower if the bill is multiply-referred.

Also, as discussed earlier, there is some concern about using Huber-White robust clustering techniques for estimating the standard errors. For this reason I estimated the same models, but used block bootstrapping techniques to estimate the errors. Using these techniques, the basic model without control variables shows the key theoretical variables keeping its statistical significance (Model 1-3) at the five-percent level. However, when using block bootstrapping techniques with the full control model the key variables lose statistical significance (Model 1-4).

The alternative measure of cooperative capacity developed is based on patterns of hearing and markups in subcommittees, rather than simple referrals to subcommittee. Table 3.4 shows the results from the models estimated when Percent Referred is replaced by Percent Hearing/Markup, and Percent Referred x Groups replaced by Percent Hearing/Markup x Groups. The two simple interaction models, Models 2-1 and 2-3, differing only in the method used to estimate the standard errors, show results similar to what was found with the previous measure of cooperative capacity. However, the full control models show the effect of Percent Hearing/Markup dropping out of statistical significance.

Overall, when looking at all bills lobbied by the USCC, without consideration of the USCC’s position on the bill, the results generally support the three hypotheses. That is, the size of the “yea” coalition seems to grow with capacity, and that growth seems to be conditional on the number of groups that lobbied the bill. However, in addition to bills lobbied by the USCC, I collected data on bills lobbied by the AFL-CIO. Tables 3.5 and 3.6 run the same types of models as in the previous two
<table>
<thead>
<tr>
<th></th>
<th>Model 2-1</th>
<th>Model 2-2</th>
<th>Model 2-3</th>
<th>Model 2-4</th>
</tr>
</thead>
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<tr>
<td>Percent Hearing/Markup</td>
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<td>0.27</td>
<td>0.36*</td>
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<td>(0.16)</td>
<td>(0.25)</td>
<td>(0.22)</td>
<td>(0.25)</td>
</tr>
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<td>0.00</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Referred x Groups</td>
<td>-0.08**</td>
<td>-0.06*</td>
<td>-0.08**</td>
<td>-0.06*</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.05)</td>
<td>(0.04)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Suspension of Rules</td>
<td>-</td>
<td>0.07**</td>
<td>-</td>
<td>0.07**</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.03)</td>
<td>-</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Multiple Referral</td>
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<td>-0.07**</td>
<td>-</td>
<td>-0.07**</td>
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<tr>
<td></td>
<td>-</td>
<td>(0.03)</td>
<td>-</td>
<td>(0.03)</td>
</tr>
<tr>
<td>110th Congress</td>
<td>-</td>
<td>0.03</td>
<td>-</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.04)</td>
<td>-</td>
<td>(0.04)</td>
</tr>
<tr>
<td>111th Congress</td>
<td>-</td>
<td>-0.02</td>
<td>-</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.05)</td>
<td>-</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Constant</td>
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<td>0.65***</td>
<td>0.68***</td>
<td>0.65***</td>
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<td>(0.08)</td>
<td>(0.11)</td>
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<td>(0.11)</td>
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**Fixed Effects**

<table>
<thead>
<tr>
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<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Robust Clustered Errors</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td><strong>Block Bootstrapped Clustered Errors</strong></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>113</td>
<td>113</td>
<td>113</td>
<td>113</td>
</tr>
<tr>
<td><strong>Pr &gt; F</strong></td>
<td>0.0001</td>
<td>0.0000</td>
<td>0.0023</td>
<td>0.0000</td>
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</table>

*Note: Coefficient estimates for Models 2-1 and 2-2 with robust standard errors clustered on committee, and estimates for Models 2-3 and 2-4 with block bootstrapped standard errors clustered on committee. All models use fixed effects for committee. Significance tests for Percent Referred and Referred x Groups are one-tailed. *p<0.10, ** p<0.05, *** p<0.01.
tables, with no significant findings for the theoretical variables. Across all models, and with both methods of estimating the standard errors, Percent Referred and Percent Hearing/Markup, or their related interactions with Log of # of Groups, none of the variables reach statistical significance.

**Interpretation of Results for Pooled Observations Models**

Using data composed from bills the USCC lobbied, the results from the analysis support both hypotheses: an increase in cooperative capacity increases the bias in policy outcomes toward the group’s preferences, and this effect is conditional on the level of competition between groups. However, no such results exist for the data composed of the AFL-CIO bills. One could argue that this is because either the results from the USCC bills are spurious, or that there is something inherently different about the USCC and AFL-CIO lobbying, and those differences show up in the data.

I argue for a third possible reason, which is the alignment of preferences between groups and the legislature across Congresses. Looking again at Figures 3-1 and 3-2, imagine that group preferences \( g \) are now the same as the legislature’s \( \ell \). If this is the case, the group proposal \( a_g \) would always be at \( \ell \), and therefore, for a given status quo position, the cutpoint would always be the same no matter the level of cooperative capacity \( \delta \). In short, there would be no relationship between cooperative capacity and the pro-group coalition. Of course, not all status quo positions are the same, so there still should be variation in size of the coalition following from variation in the status quo, it just would not be due to changes in cooperative capacity.

If this is the case, and we believe that the AFL-CIO has preferences similar enough to the pivotal actors in the Democrat-controlled House of Representatives, and the USCC for the Republican House, then statistical models used should be run on subsets of data distinguished by partisan control. Unfortunately, there are not enough observations in Republican-controlled 109th Congress data to test this expectation.
Table 3.5: All AFL-CIO Observations Models with *Percent Referred*

<table>
<thead>
<tr>
<th></th>
<th>Model 3-1</th>
<th>Model 3-2</th>
<th>Model 3-3</th>
<th>Model 3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Referred</td>
<td>0.20</td>
<td>0.12</td>
<td>0.20</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>(0.23)</td>
<td>(0.24)</td>
<td>(0.33)</td>
<td>(0.38)</td>
</tr>
<tr>
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<td>0.01</td>
<td>-0.01</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.05)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Referred x Groups</td>
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<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.07)</td>
<td>(0.08)</td>
</tr>
<tr>
<td>Suspension of Rules</td>
<td>-</td>
<td>0.10*</td>
<td>-</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.05)</td>
<td>-</td>
<td>(0.06)</td>
</tr>
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<td>-0.08*</td>
<td>-</td>
<td>-0.08*</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.04)</td>
<td>-</td>
<td>(0.04)</td>
</tr>
<tr>
<td>110th Congress</td>
<td>-</td>
<td>-0.02</td>
<td>-</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.03)</td>
<td>-</td>
<td>(0.03)</td>
</tr>
<tr>
<td>111th Congress</td>
<td>-</td>
<td>-0.06*</td>
<td>-</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.03)</td>
<td>-</td>
<td>(0.05)</td>
</tr>
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<td>0.63***</td>
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<td>(0.12)</td>
<td>(0.22)</td>
<td>(0.22)</td>
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</table>

*Fixed Effects*         Yes   Yes   Yes   Yes

*Robust Clustered Errors* Yes   Yes   No   No

*Block Bootstrapped Clustered Errors* No   No   Yes   Yes

*N*                      86     86     86     86

*Pr > F*                 0.5302  0.0000  0.6902  0.0461

**Note:** Coefficient estimates for Models 3-1 and 3-2 with robust standard errors clustered on committee, and estimates for Models 3-3 and 3-4 with block bootstrapped standard errors clustered on committee. All models use fixed effects for committee. Significance tests for *Percent Referred* and *Referred x Groups* are one-tailed. All others significance tests are two-tailed. *p<0.10, ** p<0.05, *** p<0.01.
Table 3.6: All AFL-CIO Observations Models with Percent Hearing/Markup

<table>
<thead>
<tr>
<th></th>
<th>Model 4-1</th>
<th>Model 4-2</th>
<th>Model 4-3</th>
<th>Model 4-4</th>
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<tbody>
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<td>0.22</td>
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<td>(0.28)</td>
<td>(0.32)</td>
<td>(0.37)</td>
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<td>Log of # of Groups</td>
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<td>0.01</td>
<td>0.03</td>
</tr>
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<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.03)</td>
</tr>
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<td>(0.05)</td>
<td>(0.07)</td>
<td>(0.08)</td>
</tr>
<tr>
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<td>0.10*</td>
<td>-</td>
<td>0.10</td>
</tr>
<tr>
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<td>(0.05)</td>
<td>-</td>
<td>(0.06)</td>
</tr>
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<td>Multiple Referral</td>
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<td>-0.08*</td>
<td>-</td>
<td>-0.08*</td>
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<td>-</td>
<td>(0.04)</td>
</tr>
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<td>110th Congress</td>
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<td>-</td>
<td>-0.01</td>
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<tr>
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<td>(0.02)</td>
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<td>-0.06*</td>
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<td>-0.06</td>
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<td>(0.05)</td>
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<td>(0.09)</td>
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<td>(0.13)</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Robust Clustered Errors</td>
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<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Block Bootstrapped Errors</td>
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<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>N</td>
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<td>86</td>
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<tr>
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<td>0.6343</td>
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<td>0.0291</td>
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</table>

Note: Coefficient estimates for Models 4-1 and 4-2 with robust standard errors clustered on committee, and estimates for Models 4-3 and 4-4 with block bootstrapped standard errors clustered on committee. All models use fixed effects for committee. Significance tests for Percent Referred and Referred x Groups are one-tailed. *p<0.10, ** p<0.05, *** p<0.01.
However, to explore the plausibility of this interpretation, we can compare the variance in two altered versions of the dependent variable. If we look not just at the percent of “yea” votes, but rather bring back the distinction of what position the group prefers, and construct Percent Pro-USCC Coalition and Percent Pro-AFL-CIO Coalition. In short, if this explanation for the lack of findings in the AFL-CIO data is true, we would expect that the variance in Percent Pro-AFL-CIO Coalition would be lower in the Democratic Houses compared to the Republican House – because the AFL-CIO has similar preferences to the Democrats, so changes in cooperative capacity would not change coalition size – and the opposite should be true for the USCC bills using Percent Pro-USCC Coalition.

This is exactly the case. I ran a Brown-Forsythe test (1974) that compares variances across two samples. In the Republican 109th House, the variance for Percent USCC Coalition is significantly lower than in the the Democratic 110th and 111th Congresses ($p < 0.00$ with an $F$-test). Similarly, the variance for Percent Pro-AFL-CIO Coalition is significantly lower in the 110th and 111th Congresses than the variance in the 109th Congress ($p < 0.00$). While this is not conclusive, it is suggestive that there is something different about the effect of interest group lobbying on coalition size depending on the alignment of group and legislative preferences. When data on lobbying for the current 112th Congress, with a Republican-controlled House, becomes available, a better test of AFL-CIO influence is possible.

This section pooled observations without consideration of the group position, but the hypotheses that follow from the theory do make that distinction. The theory tells us that the size of the “pro-group” coalition will increase with capacity in some circumstances and fall in others, and both these circumstances are observed as increases

---

18 These variables are simply the size of the “yea” vote when the group supports the bill, and the size of the “nay” vote when they oppose the bill.
in the “yea” coalition. However, the growth of the “yea” coalition with capacity is not exactly the same with a protecting and reforming group. The next section estimates the same models as above, but segments the data according to group position to try and capture these differences. To keep consistency with the hypotheses, the dependent variable used previously, Percent Yea, is replaced with Percent Pro-USCC Coalition and Percent Pro AFLCIO Coalition.

Again, let me take a moment to outline what is expected from these analyses. When the data are split into the “protecting” and “reforming” data, and the dependent variable Percent Pro-USCC Coalition is used, then the measures of capacity should have the opposite effect in each situation. Namely, with a protecting USCC, an increase in capacity should increase the size of the USCC’s coalition, and when they are trying to reform the status quo, then capacity should have a negative effect. Finally, as with the pooled data, both of these relationships should lessen with group competition. The results printed in the next section generally support these expectations.

**Protecting and Reforming Models**

As mentioned before, the theoretical model suggests that the effect of cooperative capacity on the size of the “yea” vote is in the same direction, namely positive. However, the nature of these effects are quite different between those bills being protected or reformed by the group. In particular, as the Reforming Group Hypothesis suggests, the effect of capacity on the position of the group proposal is negative, or as cooperative capacity grows, when a group is working to reform a bill in collaboration with Congress, the group has less leverage and the bill position ends up closer to the preferred position of Congress. Further, the Protecting Group Hypothesis suggests the exact opposite, as a “protecting” group gains more leverage with capacity and
can therefore pull the position of the bill further away from what Congress wishes. While both of these effects work to increase the size of the “yea” vote, they do so through completely different mechanisms. The models in this section separate bills by this distinction, and estimate the same types of models as before. Specifically, I estimate models on the bills lobbied by the USCC, as those were the models where results were found in the pooled data sets.¹⁹

**Reforming Group Models**

Table 3.7 shows the results for four estimated models testing the *Reforming Group Hypothesis* and the *Interest Group Environment Hypothesis* using *Percent Pro-USCC Coalition* as the independent variable. *Model 5-1* is a simple interaction model with the independent variables being *Percent Referred*, *Log of # of Groups*, and their interaction, using Huber-White robust clustering techniques. This model uncovers the expected relationships, though only weakly. Using one-tailed significance criteria, *Percent Referred* is in the expected positive direction and significant at the ten-percent level (*p* < 0.07). This finding supports the *Reforming Group Hypothesis*. In words, the data show that as cooperative capacity increases (*Percent Referred* increases), policy ends up closer to the legislature’s preferences (*Percent Pro-USCC Coalition increases*). Further, as the interest group environment surrounding a bill becomes more competitive, measured through the number of groups that lobbied a bill (*Log of # of Groups* increases), and the effect of increases in cooperative capacity shrinks, as shown through the negative sign on the model’s interaction term (*Percent Referred x Groups*), and is significant at the ten-percent level (*p* < 0.06). This latter finding provides support for the *Interest Group Environment Hypothesis*.

An important issue is the robustness of the findings in *Model 5-1*. Again, these

---

¹⁹I estimated the models on the AFL-CIO bills as well but, as previously, null results were found.
<table>
<thead>
<tr>
<th>Model</th>
<th>Model</th>
<th>Model</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-1</td>
<td>5-2</td>
<td>5-3</td>
<td>5-4</td>
</tr>
<tr>
<td>Percent Referred</td>
<td>0.43*</td>
<td>0.40***</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td>(0.27)</td>
<td>(0.14)</td>
<td>(0.38)</td>
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<tr>
<td>Log of # of Groups</td>
<td>0.02</td>
<td>0.03</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.03)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Referred x Groups</td>
<td>-0.05*</td>
<td>-0.04*</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Suspension of Rules</td>
<td>-</td>
<td>0.02</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.06)</td>
<td>-</td>
</tr>
<tr>
<td>Multiple Referral</td>
<td>-</td>
<td>-0.07</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.05)</td>
<td>-</td>
</tr>
<tr>
<td>110th Congress</td>
<td>-</td>
<td>0.06*</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.03)</td>
<td>-</td>
</tr>
<tr>
<td>111th Congress</td>
<td>-</td>
<td>0.15***</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.05)</td>
<td>-</td>
</tr>
<tr>
<td>Constant</td>
<td>0.51***</td>
<td>0.44***</td>
<td>0.51**</td>
</tr>
<tr>
<td></td>
<td>(0.14)</td>
<td>(0.05)</td>
<td>(0.23)</td>
</tr>
</tbody>
</table>

*Fixed Effects* | Yes | Yes | Yes | Yes |
*Robust Clustered Errors* | Yes | Yes | No | No |
*Block Bootstrapped Clustered Errors* | No | No | Yes | Yes |
*N* | 69 | 69 | 69 | 69 |
*Pr > F* | 0.3688 | 0.0007 | 0.7270 | 0.0186 |

Note: Coefficient estimates for Models 5-1 and 5-2 with robust standard errors clustered on committee, and estimates for Models 5-3 and 5-4 with block bootstrapped standard errors clustered on committee. All models use fixed effects for committee. Significance tests for *Percent Referred* and *Referred x Groups* are one-tailed. All others significance tests are two-tailed. *p<0.10, ** p<0.05, *** p<0.01.
concerns are in two forms. The first is the possibility of confounding factors. There are a number of other factors that may affect coalition size, and if correlated with the key theoretical variables, providing for spurious results. Looking at Model 5-2, the data show that the average pro-group coalition size for the 110th and 111th Houses of Representatives are statistically distinct from the 109th Congress, with a lower pro-groups coalition size of 6 percentage points, and 15 percentage points respectively. This suggests that USCC coalitions were smaller during the Democratic 110th and 111th Houses when compared to the the Republican-controlled House in the 109th Congress. Model 5-2 adds the four control variables to account for those other factors. Figure 3-3 shows the interactive relationship found in this model in graphical form.

Also, as discussed earlier, there is some concern that using Huber-White robust clustering techniques for estimating the standard errors. For this reason I estimated the same models, but used block-bootstrapping techniques to estimate the errors. Using these techniques, the basic model without control variables shows the key theoretical variables falling out of statistical significance (Model 5-3). However, including the control variables brings that significance back (Model 5-4), though at weaker levels than with the standard Huber-White method. Overall, these two addition models show the earlier findings supporting the hypotheses remain, though are somewhat weaker.

The alternative measure of cooperative capacity developed is based on patterns of hearing and markups in subcommittees, rather than simple referrals to subcommittee. This section presents the results of the models which switched out Percent Referred for Percent Hearing/Markup. Table 3.8 shows the results from the models estimated. In every case the results at at least as strong, if not stronger, than when using Percent Referred, and as before the hypotheses are supported.

While the theoretical model gives the prediction that an increase in capacity
Table 3.8: USCC Reforming Group Models with Percent Hearing/Markup

<table>
<thead>
<tr>
<th></th>
<th>Model 6-1</th>
<th>Model 6-2</th>
<th>Model 6-3</th>
<th>Model 6-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Hearing/Markup</td>
<td>0.64***</td>
<td>0.50***</td>
<td>0.65**</td>
<td>0.50***</td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td>(0.10)</td>
<td>(0.29)</td>
<td>(0.47)</td>
</tr>
<tr>
<td>Log of # of Groups</td>
<td>0.04**</td>
<td>0.04***</td>
<td>0.04*</td>
<td>0.04**</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.01)</td>
<td>(0.02)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Hearing/Markup x Groups</td>
<td>-0.12***</td>
<td>-0.10***</td>
<td>-0.11**</td>
<td>-0.10***</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.02)</td>
<td>(0.05)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Suspension of Rules</td>
<td>-</td>
<td>0.03</td>
<td>-</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.05)</td>
<td>-</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Multiple Referral</td>
<td>-</td>
<td>-0.06</td>
<td>-</td>
<td>-0.06</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.05)</td>
<td>-</td>
<td>(0.05)</td>
</tr>
<tr>
<td>110th Congress</td>
<td>-</td>
<td>0.06**</td>
<td>-</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.03)</td>
<td>-</td>
<td>(0.04)</td>
</tr>
<tr>
<td>111th Congress</td>
<td>-</td>
<td>0.14***</td>
<td>-</td>
<td>0.14**</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.04)</td>
<td>-</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.54***</td>
<td>0.51***</td>
<td>0.54***</td>
<td>0.51***</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.05)</td>
<td>(0.08)</td>
<td>(0.28)</td>
</tr>
</tbody>
</table>

**Fixed Effects**

- Yes
- Yes
- Yes
- Yes

**Robust Clustered Errors**

- Yes
- Yes
- No
- No

**Block Bootstrapped Clustered Errors**

- No
- No
- Yes
- Yes

**N**

- 69
- 69
- 69
- 69

**Pr > F**

- 0.0046
- 0.0000
- 0.0930
- 0.0010

**Note:** Coefficient estimates for Models 6-1 and 6-2 with robust standard errors clustered on committee, and estimates for Models 6-3 and 6-4 with block bootstrapped standard errors clustered on committee. All models use fixed effects for committee. Significance tests for Percent Hearing/Markup and Hearing/Markup x Groups are one-tailed. All others significance tests are two-tailed. *p<0.10, ** p<0.05, *** p<0.01.
Figure 3.3: Marginal Effect of Percent Referred as Log of Number of Groups Increases with Reforming Group
should shrink the pro-USCC coalition size in the reforming environment, the opposite is expected in the protecting environment. This is the focus of the analysis in the next section.

Protecting Group Models

Table 3.9 shows the four estimated models testing the Protecting Group Hypothesis and the Interest Group Environment Hypothesis, and, as in the previous section, use Percent Pro-USCC Coalition as the independent variable. The expectations for the key theoretical variables in the protecting group models is the reverse of the expectations confirmed in the reforming group models. Model 7-1 uncovers the expected relationships, and does so more robustly than previously. Using one-tailed significance criteria, Percent Referred is in the expected negative direction and significant at the one-percent level ($p < 0.00$), supporting the Protecting Group Hypothesis. In words, the data show that as cooperative capacity increases (Percent Referred increases), policy ends up further from the legislature’s preferences (Percent Pro-USCC Coalition decreases). Further, as the interest group environment surrounding a bill becomes more competitive, measured through the number of groups that lobbied a bill ($\log \text{# of Groups}$ increases), the magnitude of the effect shrinks, as shown through the positive sign on the model’s interaction term (Percent Referred $\times$ Groups), and is significant at the ten-percent level ($p < 0.06$). However, unlike in the reforming group models, the lowest value of $\log \text{# of Groups}$ is not zero (2.71), and therefore we cannot take the significant results at face-value. The marginal effect of Percent Referred when $\log \text{# of Groups}=2.71$ is -0.42, and the standard error of the marginal effect is 0.12, which makes a z-score of -3.51. Using the one-tailed criteria, this is significant at the one-percent level ($p < 0.01$). This finding provides support for the Interest Group Environment Hypothesis.

Again, there are concerns in any basic econometric model about confounding
Table 3.9: USCC Protecting Group Models with *Percent Referred*

<table>
<thead>
<tr>
<th></th>
<th>Model 7-1</th>
<th>Model 7-2</th>
<th>Model 7-3</th>
<th>Model 7-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Referred</td>
<td>-0.57***</td>
<td>-0.53***</td>
<td>-0.57**</td>
<td>-0.53*</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.15)</td>
<td>(0.26)</td>
<td>(0.37)</td>
</tr>
<tr>
<td>Log of # of Groups</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.03)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Referred x Groups</td>
<td>0.03*</td>
<td>0.04*</td>
<td>0.03</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.02)</td>
<td>(0.05)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Suspension of Rules</td>
<td>-</td>
<td>0.06**</td>
<td>-</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>- (0.02)</td>
<td>-</td>
<td>- (0.04)</td>
<td></td>
</tr>
<tr>
<td>Multiple Referral</td>
<td>-</td>
<td>0.02</td>
<td>-</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>- (0.02)</td>
<td>-</td>
<td>- (0.03)</td>
<td></td>
</tr>
<tr>
<td>111th Congress</td>
<td>-</td>
<td>0.01</td>
<td>-</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>- (0.01)</td>
<td>-</td>
<td>- (0.03)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.58***</td>
<td>0.51***</td>
<td>0.58**</td>
<td>0.51**</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>(0.07)</td>
<td>(0.20)</td>
<td>(0.24)</td>
</tr>
</tbody>
</table>

*Fixed Effects*  
Yes   Yes   Yes   Yes

*Robust Clustered Errors*  
Yes   Yes   No   No

*Block Bootstrapped Clustered Errors*  
No   No   Yes   Yes

*N*  
44   44   44   44

*Pr > F*  
0.0195  0.0060  0.0055  0.1070

**Note:** Coefficient estimates for Models 7-1 and 7-2 with robust standard errors clustered on committee, and estimates for Models 7-3 and 7-4 with block bootstrapped standard errors clustered on committee. All models use fixed effects for committee. Significance tests for *Percent Referred* and *Referred x Groups* are one-tailed. All others significance tests are two-tailed. *p<0.10, ** p<0.05, *** p<0.01.
Figure 3.4: Marginal Effect of Percent Referred as Log of Number of Groups Increases with Protecting Group
factors. As before, the basic control variables are added to a new model, and the estimates are presented in Model 7-2.\textsuperscript{20} The results of this test continues to support the hypotheses with the same level of robustness. Finally, again as before, the Huber-White method of estimating robust standard errors is prone to problems given so few committees. Bootstrapping techniques estimate the errors without concerns about the number of committees, and the models that use this technique (Models 7-3 and 7-4) continue to support the hypotheses, though in a somewhat weaker manner.\textsuperscript{21} Figure 3-4 shows exactly how weak is this interactive relationship, where is seems we cannot conclude that an interactive relationship exists.

Similar to before, Table 3.10 shows the results from the models estimated using the alternative measure Percent Hearing/Markup. However, unlike before, none of the models show any level of statistical significance for the models, and hence none of the hypotheses are supported.

Interpretation of Results for Reforming and Protecting Models

Substantive Effect

For discussion of the size of the substantive effects, I will focus on the models that use Percent Referred as the independent variable. Starting with the reforming models, using the coefficients from Model 5-2, a change in Percent Referred from the 25th to the 75th percentile (0.07 to 0.59) when only the USCC lobbied the bill, the size

\textsuperscript{20}None of the bills under analysis in this sample were from the 109th Congress. Therefore the omitted category is now the 110th Congress and results are reported for the binary variable recording if the bill was in the 111th Congress.

\textsuperscript{21}Model 7-4 shows significance for Percent Referred at the ten percent level, but no significance for the interaction term. However, discussed above, since the lowest value of Log # of Groups is not zero. This requires a calculation of the marginal effect at the lowest level of Log # of Groups (2.71) to see if that margin effect is significantly different from zero. When Log # of Groups=2.71, the marginal effect of Percent Referred is -0.42, and the standard error of the marginal effect is 0.23, making a z-score of -1.79. Using the one-tailed criteria, this is significantly different from zero at the five-percent level ($p < 0.037$).
Table 3.10: USCC Protecting Group Models with Percent Hearing/Markup

<table>
<thead>
<tr>
<th></th>
<th>Model 8-1</th>
<th>Model 8-2</th>
<th>Model 8-3</th>
<th>Model 8-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Hearing/Markup</td>
<td>-0.20</td>
<td>-0.17</td>
<td>-0.20</td>
<td>-0.17</td>
</tr>
<tr>
<td></td>
<td>(0.30)</td>
<td>(0.32)</td>
<td>(0.39)</td>
<td>(0.67)</td>
</tr>
<tr>
<td>Log of # of Groups</td>
<td>0.02</td>
<td>0.01</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.02)</td>
<td>(0.02)</td>
</tr>
<tr>
<td>Hearing/Markup x Groups</td>
<td>0.03</td>
<td>0.05**</td>
<td>0.03</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
<td>(0.05)</td>
<td>(0.06)</td>
</tr>
<tr>
<td>Suspension of Rules</td>
<td>-</td>
<td>0.08***</td>
<td>-</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.02)</td>
<td>-</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Multiple Referral</td>
<td>-</td>
<td>0.03</td>
<td>-</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.02)</td>
<td>-</td>
<td>(0.02)</td>
</tr>
<tr>
<td>111th Congress</td>
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<td>0.02</td>
<td>-</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>(0.02)</td>
<td>-</td>
<td>(0.05)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.33***</td>
<td>0.26**</td>
<td>0.33**</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>(0.11)</td>
<td>(0.11)</td>
<td>(0.15)</td>
<td>(0.23)</td>
</tr>
</tbody>
</table>

**Fixed Effects**
- Yes
- Yes
- Yes
- Yes

**Robust Clustered Errors**
- Yes
- Yes
- No
- No

**Block Bootstrapped Clustered Errors**
- No
- No
- Yes
- Yes

<table>
<thead>
<tr>
<th>N</th>
<th>44</th>
<th>44</th>
<th>44</th>
<th>44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pr &gt; F</td>
<td>0.0229</td>
<td>0.0005</td>
<td>0.2360</td>
<td>0.2090</td>
</tr>
</tbody>
</table>

**Note:** Coefficient estimates for Models 8-1 and 8-2 with robust standard errors clustered on committee, and estimates for Models 8-3 and 8-4 with block bootstrapped standard errors clustered on committee. All models use fixed effects for committee. Significance tests for Percent Hearing/Markup and Hearing/Markup x Groups are one-tailed. *p<0.10, ** p<0.05,*** p<0.01.
of the pro-group coalition increases about 21 percentage points. Compare this with
when the number of groups is at the average for this sample, and the same change
in Percent Referred the size of the pro-group coalition still increases, but only by 12
percentage points. This shows that the effect of capacity on a bill with no other group
competition is greater than a bill with an average level of competition.

The same is true for bills that the USCC is trying to ameliorate the magnitude
of the reform, or where they are trying to protect the existing status quo. Using
the coefficients from Model 7-2, the marginal effect of Percent Referred at the lowest
level Log of # of Groups(2.71) is -0.42. Using this calculation, a change in Percent
Referred from the 25th to the 75th percentile (0.26 to 0.86) decreases the pro-USCC
coalition size by about 26 percentage points. When the number of groups moves to
the average level for this sample, this same calculation shows that the coalition size
shrinks by 19 percentage points.

Robustness Concerns
As always in regression analysis, there is a concern that the effect found in these tests
is spurious due to some omitted variable. The main concern is that there is some
variable not in my analysis that is correlated to Percent Referred and/or Percent
Hearing/Markup, and that variable increases the size of the winning coalition. The
most plausible argument against my analysis is that bills delegated to subcommittees
are the least controversial, and these bills are likely to get large majorities in the
floor vote, and so the capacity variables I use simply capture the likelihood that the
particular bill under analysis was sent to a subcommittee because it is not contro-
versial. This problem is easy enough to address by simply adding a control variable
for whether or not the bill was itself referred to a subcommittee. This is the aim
of the models in Table 3.11. Here I take Models 5-2 and 5-4 and Models 7-2 and
7-4, and simply add a binary variable that captures whether or not the bill under
analysis was referred to a subcommittee. As is clear, the *Subcommittee Referral* is never statistically significant, and the capacity variables in three of the four models remain statistically significant. This alleviates some of the concern for this particular omitted variable leading to spurious conclusions.

**Conclusion**

In this chapter I derive hypotheses from the theoretical model presented earlier, and test these hypotheses on two unique datasets. These tests were not meant to be causal tests of the theory’s predictions, not even definitive tests of the theory’s propositions. The aim of this chapter was to provide the best quantitative evidence, given the available data, of the theory’s viability. With this standard, I argue the chapter achieved its goal.

The models estimated on datasets comprised of bills lobbied by the U.S. Chamber of Commerce, using two versions of the key theoretical independent variable, multiple methods of standard error estimation, and a number of different segmentations of the data, show fairly consistent results that support the hypotheses. Though clearly the results for the AFL-CIO bills give no support. More needs to be done to gather alternate measures of capacity, new data, and case studies that highlight the mechanisms. However, I argue the analysis in this chapter is a good first step that confirms further empirical work is warranted.

While the analysis of this chapter is a solid test of the model’s comparative statistics, there is reason to question one particular component of the theory. Namely, the model’s treatment of cooperative capacity, or the capacity of the group and the legislature to work together, is treated as exogenous. This assumption may be appropriate within a single Congress, though it is not likely to be true over time. Relaxing this assumption, and making capacity endogenous to the model, and a choice variable of
Table 3.11: USCC Models with \textit{Percent Referred} and Subcommittee Referral Control

<table>
<thead>
<tr>
<th></th>
<th>Model 9-1</th>
<th>Model 9-2</th>
<th>Model 9-3</th>
<th>Model 9-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textbf{Percent Referred}</td>
<td>0.40***</td>
<td>0.40*</td>
<td>-0.53***</td>
<td>-0.53</td>
</tr>
<tr>
<td></td>
<td>(0.13)</td>
<td>(0.31)</td>
<td>(0.15)</td>
<td>(0.49)</td>
</tr>
<tr>
<td>\textbf{Log of # of Groups}</td>
<td>0.03</td>
<td>0.03</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.05)</td>
<td>(0.01)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>\textbf{Referred x Groups}</td>
<td>-0.04</td>
<td>-0.04</td>
<td>0.04*</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.07)</td>
<td>(0.03)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>\textbf{Suspension of Rules}</td>
<td>0.03</td>
<td>0.03</td>
<td>0.05**</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.06)</td>
<td>(0.02)</td>
<td>(0.05)</td>
</tr>
<tr>
<td>\textbf{Multiple Referral}</td>
<td>-0.07</td>
<td>-0.07</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
<td>(0.05)</td>
<td>(0.02)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>\textbf{110th Congress}</td>
<td>0.06*</td>
<td>0.06*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.03)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>\textbf{111th Congress}</td>
<td>0.16***</td>
<td>0.16**</td>
<td>0.01</td>
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</tr>
<tr>
<td></td>
<td>(0.04)</td>
<td>(0.07)</td>
<td>(0.01)</td>
<td>(0.04)</td>
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<td>\textbf{Subcommittee Referral}</td>
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<td>-0.01</td>
<td>-0.00</td>
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</tr>
<tr>
<td></td>
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<td>(0.03)</td>
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<td>0.45***</td>
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<tr>
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<td>(0.05)</td>
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</table>

\textit{Fixed Effects} \hspace{2cm} Yes \hspace{2cm} Yes \hspace{2cm} Yes \hspace{2cm} Yes

\textit{Robust Clustered Errors} \hspace{2cm} Yes \hspace{2cm} No \hspace{2cm} Yes \hspace{2cm} No

\textit{Block Bootstrapped Clustered Errors} \hspace{2cm} No \hspace{2cm} Yes \hspace{2cm} No \hspace{2cm} Yes

\textit{N} \hspace{2cm} 69 \hspace{2cm} 69 \hspace{2cm} 44 \hspace{2cm} 44

\textit{Pr > F} \hspace{2cm} 0.0000 \hspace{2cm} 0.0149 \hspace{2cm} 0.0008 \hspace{2cm} 0.3795

\textit{Note:} Coefficient estimates for Models 9-1 and 9-2 with robust standard errors clustered on committee, and estimates for Models 9-3 and 9-4 with block bootstrapped standard errors clustered on committee. All models use fixed effects for committee. Significance tests for \textit{Percent Referred} and \textit{Referred x Groups} are one-tailed. All others significance tests are two-tailed. *p<0.10, ** p<0.05, *** p<0.01.
the legislature, leads to predictions about how Congress would change cooperative capacity in response to interest groups. This is the focus of the next chapter.
CHAPTER 4

EXPLAINING THE LONG-RUN EVOLUTION OF
CONGRESSIONAL COMMITTEE STRUCTURE

This chapter takes a step back from the level of analysis used in the previous chapters both theoretically and empirically. In Chapter 2, I developed a theory to understand how groups and Congress would interact if groups had the ability to subsidize legislative action, and if Congress valued this subsidy. The focus of the model and its extensions in that chapter was static, that is, they focused on how cooperative capacity affects individual bills, one at a time, attempting to hold all other factors constant. Relatedly, the model treated cooperative capacity as exogenous, even though it is meant to capture a salient feature of the institutional structure of Congress which one might expect to be malleable. Chapter 3 tested some predictions from that model and its extensions with empirical observations. Relaxing this assumption and trying to understand how Congress may change the institutional structure of committees in response to changes in the interest group environment is the focus of this chapter.

This is achieved by imagining a situation where the legislature can influence capacity before they bargain with groups, or more formally, by adding a stage to the game structure used in Chapter 2 where the legislature can choose the level of cooperative capacity in the policy area relevant to the group. This simple extension shows clearly that the legislature always prefers to increase capacity when it has two or
more groups competing with each other, as leverage moves entirely to the legislature in this circumstance. The following section presents the equilibrium of this model in detail, followed by an empirical analysis of this prediction in Section 3, and a short concluding section.

**Endogenous Capacity Equilibrium**

In the “endogenous capacity equilibrium” (ECE), the level of cooperative capacity set by the legislature for policy area $A$, the position of the group proposal, and the agenda decision by the legislature all depend on the relative distances of the status quo policies $(a_q, b_q)$ from the legislature’s ideal policy position $(\ell)$, the exogenous level of cooperative capacity in policy area $B$ $(\delta_B)$, and the number of groups and their preferred policy position ($g$ or $g_1$ and $g_2$). The logic here is that for some combinations of the status quos and cooperative capacity for policy area $B$, the legislature will prefer to give a low level of capacity for policy area $A$, while for other combinations they wish to have a high level of capacity. The reason for this distinction is that sometimes the legislature has leverage over the group in the bargain over policy, in which case higher capacity helps the legislature, and in other cases the reverse is true. However, when there are two groups competing for the attention of the legislature, any single group never has leverage, or the legislature always has leverage because they can play one group off another. In this circumstance with competing groups the legislature always prefers to set capacity in policy area $A$ as high as possible.

With this model structure, there exists a unique subgame perfect Nash equilibrium that can be separated into three environments. These three environments are:

1) **Low Urgency with One Group:** If $|a_q| \in [0, 1)$, then the group may make no proposal on $a_q$ that will be given a high priority. If $g \notin (0, |a_q|)$, then the group will make a proposal that makes the legislature indifferent between accepting the
proposal or rejecting it, and therefore the expected utility for the legislature is the same no matter the level of capacity, so $\delta_A^* = [0, 1]$. However, if $g \in (0, |a_q|)$, then the group’s proposal will be strictly preferred to $a_q$, which leads the legislature to set capacity to $\delta_A^* = 1$.

2) **High Urgency with One Group:** If $|a_q| \geq 1$, then action on $a_q$ is important to the legislature as well as the group. However, since in this model extension the level of capacity in policy area $A$ is a choice of the legislature, they have a choice as to whether there is a “low capacity” or “high capacity” environment. The legislature’s choice as where to set $\delta_A$ is dependent on what the group will propose in response, which itself is determined by the position of the group’s ideal position relative to the $a_q$ and $\ell$. When the group wants to “reform” the status quo in policy area $A$ ($a_q \notin (\ell, g)$), in the high capacity environment it will propose $\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q|$, and if it is “protecting” $a_q$ ($a_q \in (\ell, g)$), then it will propose $|a_q| - \frac{1 - \delta_B}{1 - \delta_A}$. However, in the low capacity environment, with a sufficiently distant $g$, the group will propose $\delta_B$ no matter the position of $a_q$ or $\ell$. When the legislature compares its expected utility in the low capacity environment to each of the high capacity environments, it finds that it prefers high capacity ($\delta_A^* = 1$) when the group wants to reform the status quo, and low capacity ($\delta_A^* = (0, \frac{|a_q| - 1}{|a_q| - \delta_B})$) when the group is protecting the status quo.

3) **Competing Groups:** If there are two groups with preferred policy positions on opposite sides of the legislature’s ideal position, or $\ell \in (g_1, g_2)$, then the equilibrium proposal from each group is the legislature’s ideal position. Therefore, the equilibrium level of capacity in this environment is $\delta_A^* = 1$.

Derivations for all equilibria are given in **Appendix E**.

This chapter is focused on what the legislature would choose to do if it had the power to set the level of capacity for various combinations of parameters. The model
shows that in the *Low Urgency Environment* the legislature is indifferent, except when the group has preferences close to the legislature, to the level of capacity for policy area $A$ because it has no effect on the position of the proposal or the likelihood of enactment. However, in the *High Urgency Environment*, the group has a preference for low levels of capacity when the group is looking to reform the status quo, and high levels of capacity when the group wants to protect the status quo.

Most important for the empirical section of this chapter is how the legislature reacts when there are competing interest groups. In this situation the legislature knows that the groups will compete for a position on the agenda, and in doing so will bid each other’s proposal down so that they each propose exactly what the legislature wants. A clear prediction of the model is the legislature will want to have as high a capacity as possible in the policy area with competing groups. This is the focus of the next section.

**Proposition and Hypothesis**

**Proposition 4: Endogenous Capacity Hypothesis.** *All else equal, the legislature will increase cooperative capacity when the interest group environment becomes competitive.*

The logic of this proposition is clear. In the model, when there are two or more interest groups with divergent preferences over the status quo policy – i.e. they want to move the status quo policy in opposite directions – the groups compete for a place on the legislature’s agenda. That competition drives each group to make a proposal at the legislature’s ideal policy position. Given this dynamic, if the group could choose the level of capacity before the groups make proposals, they would choose the highest capacity possible.
If we took the model literally this would mean that for any individual bill, if there was two or more groups that competed with proposals, and the legislature knew this would be the case, then the legislature would increase the capacity for the committee with jurisdiction over the bill in anticipation of the competition. This is unrealistic for two reasons. First, it does not seem likely that the legislature would fully know how competitive the group environment would be for any particular bill before deliberation began. Second, and most importantly for the analysis in this chapter, it is not believable that the legislature could change something like cooperative capacity so quickly. It seems more likely that changes to capacity would be a more long-term undertaking.

For this reason I abstract from the model and think of the prediction in the Endogenous Capacity Hypothesis in terms of sessions of Congress rather than on a bill-by-bill basis. Specifically, the empirical analysis in this chapter looks at how the variation in cooperative capacity for committees in a session of Congress are predicted by levels of interest group competitiveness. The steps needed to complete this analysis are presented in the next section, along with the results.

Empirical Analysis

To test the Endogenous Capacity Hypothesis I need a sample of committees with variation in the level of competitiveness among groups and cooperative capacity. I also need to collect data on some relevant confounding factors. This section begins with a discussion of how I operationalized group competitiveness.

Operationalizing Group Competitiveness

The first step in operationalizing group competitiveness is to identify which groups are involved in the legislative process with particular committees. To do this I used
the categorization of political action committees (PACs) provided by the Center for Responsive Politics (CRP) to identify the policy interests of individual PACs. The CRP has combed through all the PACs registered with the Federal Election Commission and identified which industry they represent, doing so for the 101st through the 111th Congresses.

I then took those PAC categories and connected them to a congressional committee based which committee had jurisdiction over the PAC’s industry (see Table 4.1 for an exact accounting). Given the industry categories from the CRP, and the nature of the policy jurisdictions of the congressional committee in the U.S. House of Representatives, I identified four committees with clear and unique connections to the CRP’s categories of PACs. These four committees are the Agriculture Committee, the Financial Services Committee, the Natural Resources Committee, and the Transportation and Infrastructure Committee.¹

After connecting PACs to committees, I need an action by PACs within committees that I can use to characterize group competition. The action I chose to analyze is PAC contributions to members of congressional committees. This requires that I identify the members of the four committees for the eleven Congresses, and matched them with the FEC records for PAC contributions. I chose to match members with PAC contributions in the previous election. For example, for the 104th Congress, which began its term in January of 1995, I identified the members of the committee and then matched them to the FEC contribution records for 1994 election cycle (contributions made in 1993 and 1994). This gives me a listing of all contributions to existing committee members from related industry PACs, and I then summed up all

¹There are of course other PACs that have interests in the policy under the jurisdiction of other committees. However, these four committees had the clearest connection to the PAC categories outlined by CRP. In future work I will explore the level of interest group competitiveness in these other committees. Also, the names of the committee used here are their names in the 111th Congress.
<table>
<thead>
<tr>
<th>Committee</th>
<th>Industry Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture Committee</strong></td>
<td>Crop production and basic processing; Tobacco; Dairy; Poultry and eggs; Livestock; Agricultural services and products; Forestry and forest products; Misc agriculture</td>
</tr>
<tr>
<td><strong>Transportation and Infrastructure Committee</strong></td>
<td>General Contractor; Home builders; Construction services; Special trade contractors; Building materials and equipment; Air transport; Automotive; Trucking; Railroads; Sea transport; Misc transport</td>
</tr>
<tr>
<td><strong>Resources Committee</strong></td>
<td>Oil and gas; Mining; Electric utilities; Waste management Fisheries and wildlife; Environmental services; Misc energy</td>
</tr>
<tr>
<td><strong>Financial Services Committee</strong></td>
<td>Securities and investment; Insurance; Real estate; Accountants Savings and loans; Commercial banks; Credit unions Finance and credit companies; Misc finance</td>
</tr>
</tbody>
</table>
the contributions in a member-PAC pair. What I end up with is the total contributions every PAC has given every committee member from the two years prior to the election where a committee member was elected or re-elected.

This approach has the advantage of capturing the interest group environment prior to the Congress where capacity is set. The disadvantage of this approach is that for newly elected members I collect data on PAC contributions before they are assigned to a committee. Basically, I am assuming that these circumstances do not affect the overall measure of competitiveness enough to cause concern.

By analyzing the patterns of these contributions in a particular way, I argue we can characterize how competitive groups are in a particular committee. It is not obvious how to take contribution patterns and translate them into a measure of group competitiveness. The next section describes how I went about this task.

**Method of Measurement**

The key idea in my measure is to analyze how similar or dis-similar are the patterns of contributions from interest groups to members of a congressional committee. If different industry PACs contribute markedly different amounts to markedly different legislators, then this is taken as evidence that the PACs have different or conflicting agendas. In contrast, if the PACs spread their contributions similarly – in the same amounts to the same members – then this is thought to be evidence of broad agreement.

Before moving on, I want to note a legitimate disagreement with this approach. There is a logical objection to be made that my approach is actually capturing the exact opposite of what I propose. One could argue that similar patterns of contributions are actually evidence of PACs vigorously competing for the attention of members. However, given the literature on interest group lobbying practices, this seems unlikely. There is a large body of scholarship establishing the observed pattern
of groups lobbying their allies almost exclusively. In fact this has been a puzzle that interest group scholars have spent a lot of energy trying to explain.

Also, an alternative to my approach that some might argue for is to use existing measures of “market competition” to capture competitiveness among groups. The most widely used of these types of measures is the Herfindahl-Hirshman Index (HHI). Basically, the HHI captures the share a particular company has in a particular market. If a company is the only one in a market, then the score is a 1.00, and conversely if there are a large number of companies and each has an equal market share, then the the score is 0.00. Low scores signal high competition and high scores signal low competition. The problem with using HHI to capture competition in politics is that it would only capture variation in the group giving, but not in the targets of the groups. That is, a political version of HHI would capture how much of total contributions a group gave to a committee, but it could not capture who they gave that money to. Giving all money to only one set of members, versus spreading the same amount of money to all members are two very different things in terms of political competition. However, the HHI would not capture this, which is why I decided to create another measure. The following section explains how this measure is constructed.

**Construction of Competitiveness Measure**

Imagine a hypothetical interest group environment with two active groups ($G_1$ and $G_2$), each with a PAC, and two committee members ($M_A$ and $M_B$) in a particular committee. The measure I want to construct should characterize how alike the groups are in how they contribute to the two members, with similar patterns signaling low competitiveness, and divergent patterns signaling high levels of competitiveness. For example, if $G_1$ contributed only to $M_A$, and $G_2$ contributed only to $M_B$, then it seems clear that $G_1$ and $G_2$ have, at the least, different priorities, and at the most, opposing priorities. In contrast, if both the groups contributed in equal amounts to each of the
members then this would signal that at least they feel comfortable contributing to
the same members. Translating this contribution pattern into a summary measure of
group competitiveness is done as follows.

Taking the above example, where both groups have fully divergent contribution
patterns, we can quantify the difference by comparing the share of a group’s total
contributions for each member, one at a time. So if \( G_1 \) gave all its contributions to \( M_A \),
and \( G_2 \) gave no contributions to \( M_A \), then we can quantify that with \(|100 - 0| = 100\).
Further, we can do the same thing for the other committee member, \( M_B \), which would
be \(|0 - 100| = 100\). A more general form of this comparison is \(|g_j^i - g_k^i|\) where \( g_j^i \) and
\( g_k^i \) are the share of contributions given by group \( j \) and \( k \), respectively, to committee
member \( i \). Adding \(|g_j^i - g_k^i|\) for \( i = A, B \) would be \(|100 - 0| + |0 - 100|\), adding up
to 200. In contrast, if we look at the scenario where the groups give equally to each
member, then \(|g_1^A - g_2^A| = |50 - 50|\) and \(|g_1^B - g_2^B| = |50 - 50|\), which of course would
add up to zero. Taking the further step to normalize the sum of the contribution
comparisons by the total of possible comparisons, in this case 200, then we have a
measure between 0 and 1, where \( \frac{|50 - 50| + |50 - 50|}{100 + 100} = 0 \), showing a low level of
competitiveness, \( \frac{|100 - 0| + |0 - 100|}{100 + 100} = 1 \) showing a high level of competitiveness.

This example used group contributions in terms of share of contributions to each
member, but the measure also generalizes to absolute levels of contribution. This
generalization allows the measure to be weighted by differences in the scale of the
contribution between groups. For example, assume \( G_1 \) gave $1000 and \( G_2 \) $100 to
\( M_A \), and then \( G_1 \) gave $500 and \( G_2 \) $50 to \( M_B \). If we scored this level of competitiveness
based on the share of contributions, then it would be \( \frac{\left|\frac{1000}{1500} - \frac{100}{150}\right| + \left|\frac{500}{1500} - \frac{50}{150}\right|}{\frac{1000}{1500} + \frac{150}{150}} = \frac{|\frac{2}{3} - \frac{1}{2}| + |\frac{4}{3} - \frac{1}{2}|}{1 + 1} = \frac{0 + 0}{2} = 0.00 \), which signals a low level of competitiveness. However, a score of 0.00 does not seem to capture the hypothetical situation presented
adequately. For this reason I argue it is best to generalize the same measure to accommodate absolute contributions. Recalculating with absolute contributions would be
\[
\frac{(|1000 - 100|) + (|500 - 50|)}{1000 + 500 + 50 + 100} = \frac{1350}{1650} = 0.82.
\]
The higher score for competitiveness reflects more divergence in preferences as weighted by the size of contributions.

This move to the more general measure with absolute contributions does require the implicit assumption that a lack of contribution by a PAC is a meaningful action. To see this more clearly, take the above example, but assume that \( G_2 \) now contribute nothing to either member. Therefore, the last calculation would be changed to
\[
\frac{(|1000 - 0|) + (|500 - 0|)}{1000 + 500} = \frac{1500}{1500} = 1.00.
\]
In other words, if the all contributions were dominated by one group, then my measure would interpret that as competitiveness. Essentially, two groups contributing to completely different members is, according to my measure, exactly the same in terms of competitiveness as one group not making any contributions at all.\(^2\)

Finally, as more groups are added, the number of pairwise comparisons also increase, requiring a further normalization. Namely, to keep the scores between 0 and 1, the measure needs to be divided by \( n - 1 \) where \( n \) is the number of groups. This leaves the most general form of the equation used to measure competitiveness as
\[
GC = \frac{1}{n - 1} \frac{\sum_{i=1}^{n} |g_j - g_k|}{\sum_{j \neq k} G_{jk}}
\] where \( n \) is the number of PACs that made contributions to at least one committee member.

This process was run on all the totals contribution from all active PACs to committee members for the 44 committee-Congress pairs. The next section describes how this measure varies for each committee across Congresses.

\(^2\)In practical terms, this is not a problem since there are numerous PACs making contributions to many members in my data.

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Description of Competitiveness Measure

Figure 4.1 shows the competitiveness measure for the four committees for the 101st to the 111th Congresses. From this we can see that there are real differences between the committees. The most stable committees were the Transportation and Infrastructure Committee with a range between 0.8888 and 0.9010, and the Agriculture Committee with a range of 0.8291 to 0.8565. In contrast, the Resources Committee shows a lot of variation, ranging from 0.8082 to 0.9040, with the two lowest scores in the 101st and 111th Congresses. Finally, the Financial Services Committee shows a fairly consistent movement downward, with a score of 0.9156 in the 101st Congress and 0.8465 in the 111th Congress.

This measure is the key independent variable in the analysis. The Endogenous Cooperative Capacity Hypothesis claims that Congress will adjust how committees are structured to cooperate with groups in response to level of competition in the interest group environment. The next section discusses the operationalization of the dependent variable, cooperative capacity.

Operationalizing Cooperative Capacity

Cooperative capacity is a parameter representing how open and able committees are to working with interest groups. For my measure, I simply use the measure from the previous chapter, Percent Referred, which is the total number of bills from a committee that receive floor action and record the fraction of those bills that were referred to at least one of the primary committee’s subcommittees.³ This measure is meant to capture cooperative capacity based on the assumption that referring bills

³In Chapter 3 I used both Percent Referred and Percent Markup/Hearing as operationalizations of cooperative capacity. Due to the cost of collecting the data across eleven Congresses, I chose to only collect the data for Percent Referred in this chapter, but will collect the data for Percent Markup/Hearing at a later time.
Figure 4.1: Group Competitiveness by Committee and Congress
to a subcommittee provide interest groups greater access and increase the potential for cooperation.

**Figure 4.2** shows the measured level of *Percent Referred* across all Congresses. From the figure it is clear that there is significant variation in the measure both across and within committees. No committee showed zero variation, though the Transportation and Infrastructure Committee and the Resources Committee show the least variation, followed by the Agriculture Committee, and then the highly variable Financial Services Committee. For three committees there does not seem to be much of trend in this measure of capacity over time, but the Financial Services Committee shows a long-term trend towards lower capacity. The peak of the level of capacity for this committee was the 104th Congress, at just over 90 percent of bills referred to a subcommittee, to a low of 3 percent in the last Congress observed, the 111th.

**Confounding Factor**

I include one control variable in the analysis, namely if the observation is in a Congress where the Republicans controlled the House of Representatives. This variable is designed to account for the dramatic change in the committee system that came with the switch to Republican control of the House of Representatives in the 104th Congress. With the takeover, the Republicans made changes to the committee system, all designed to bring committees under greater control of the majority party leadership (Deering and Smith 1997). Most salient to this study is that the Republican leadership changed the importance of seniority in determining committee leadership. There is no clear expectation which direction the effect on the dependent variable would be. It is plausible that either the Republican leadership would rely on subcommittees less because committee chairs are more loyal, or that the leadership’s hold reaches down past committee chairs to subcommittee chairs. Either way it is prudent to control
Figure 4.2: Cooperative Capacity by Committee and Congress
Table 4.2: Descriptive Statistics

<table>
<thead>
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<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Referred</td>
<td>0.71</td>
<td>0.18</td>
<td>0.03</td>
<td>0.91</td>
</tr>
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<td>Group Competitiveness</td>
<td>0.87</td>
<td>0.03</td>
<td>0.81</td>
<td>0.92</td>
</tr>
<tr>
<td>Republican Majority</td>
<td>0.55</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
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</table>

for the effect of this change in leadership tactics. Descriptive statistics can be seen in Table 4.2.

**Data Structure and Statistical Models**

My data is panel data, that is I have repeated observations on the same committees over time. This type of data presents concerns about heterogeneity among the committees. That is, the analysis needs to take into account any committee-specific effects so that any finding of effects for group competitiveness is not simply due to correlation of competitiveness with committee. Yet given that I have significant variation in the competitiveness within each committee, this is less of a problem than it was previously. Even so, I use fixed effects for committees in multiple models to help alleviate this concern.

Further, the data presents another barrier to effective estimation. The data I have is known as a “long panel,” where the number of time periods is significantly larger than the number of identities in the data. This is the type of data often used in studies of countries or firms which are observed over a number of time periods. With the type of data there is substantial concern that the errors are autocorrelated over time for each committee. To correct for this requires techniques that will take the
possible autocorrelation into account. After some basic models that use conventional
techniques to provide an baseline analysis, I use three types of models that each take
this issue into account: feasible generalized least squares with modeled autocorrela-
tion, panel corrected standard errors model with modeled autocorrelation, and fixed
effects regression with modeled autocorrelation. Together, these two sets of models
are used to test the Endogenous Cooperative Hypothesis.

Results

Table 4.1 shows the results of three models designed to provide a basic analysis of
the relationship between group competitiveness and cooperative capacity. The ex-
pected relationship is that as Group Competitiveness increases, or the interest group
environment for a particular committee get more competitive, the level of cooper-
ative capacity, operationalized as Percent Referred, will also increase. Also, given
the directional expectations, one-tailed significance criteria are for tests of Group
Competitiveness.

Model 1-1 is a simple bivariate ordinary least squares regression with robust stan-
dard errors, and it finds the expected relationship. Specifically, for every unit change
in Group Competitiveness we can expect a three-unit increase in Percent Referred.
Model 1-2 adds fixed effects for the committee to the model, and finds the expected
relationship remains. Finally, Model 1-3 adds the Republican binary variable to
the fixed effects model, and while the control variable is not statistically significant
($p < 0.12$), the correlation between Percent Referred and Group Competitiveness
remains.

However, as discussed previously, the structure of my data causes concerns about
correlation in the errors over time. Table 4.4 presents the results for the three
different models meant to adjust the estimates for this possible autocorrelation. The
first model, Model 2-1, uses feasible generalized least squares with errors corrected for heteroskedasticity and autocorrelation related to committee. The estimates continue to confirm the Endogenous Cooperative Capacity Hypothesis. The model estimates that for every unit increase in competitiveness, capacity increases by 1.95 units, and is statistically significant at the one-percent level using one-tailed criteria. Model 2-2 uses a panel corrected standard errors model, with autocorrelation and finds that same magnitude relationship as Model 2-1, though the level of statistical significance falls to the five-percent level. The final model, Model 2-3, uses fixed effects with a correction for autocorrelation and finds that expected relationship is still in the correct direction, but no longer statistically significant at the ten-percent level ($p < 0.14$).

Substantively, using the smallest coefficient for Group Competitiveness of the six models (1.23 in Model 2-3), and taking its value at plus and minus one standard deviation from the mean (0.84 to 0.90), the expected increase in the percentage of
Table 4.4: Endogenous Capacity Models with Modeled Autocorrelation

<table>
<thead>
<tr>
<th></th>
<th>Model 2-1</th>
<th>Model 2-2</th>
<th>Model 2-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Competitiveness</td>
<td>1.95***</td>
<td>1.97**</td>
<td>1.23</td>
</tr>
<tr>
<td>(0.51)</td>
<td>(0.96)</td>
<td>(1.10)</td>
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</tr>
<tr>
<td>Republican</td>
<td>0.08***</td>
<td>0.10**</td>
<td>0.15***</td>
</tr>
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</tr>
<tr>
<td>Pr &gt; F</td>
<td>0.0000</td>
<td>0.0148</td>
<td>0.0185</td>
</tr>
</tbody>
</table>

Note: Significance tests for Group Competitiveness are one-tailed. All others significance tests are two-tailed.
*p < 0.10, ** p < 0.05, *** p < 0.01.

bills a committee refers to subcommittee is 7%. Using the largest coefficient (3.38 in Model 1-3), and the same range for the independent variable, the expected increase is 20%. With so few observations, the validity of the statistical inference is difficult to take as conclusive. However, the models suggest a relationship does exist between my measures of group competitiveness and cooperative capacity. Further, given the uniqueness of the prediction and the novelty of the measures, there is enough evidence to take the model and its prediction seriously.

Conclusion

This chapter’s aim was to better understand how Congress would respond to interest group lobbying in the long-run. More specifically, it explores the possibility that
Congress may alter the structure of one of its most important institutions, namely legislative committees, to best take advantage of the resources groups offer. An existing game-theoretic model suggested that Congress would want to bring committees and groups closer together when there was significant competition among groups. This prediction was tested and supported using a new dataset of committee action and interest group competition over eleven Congresses.

However, no matter how preliminary these findings are, they suggest that Congress may be altering committee structure in response to the interest group environment. While this paper only measures one way committee structure varies, a useful direction of future research would be to look at other possible ways Congress tries to mediate the relationship between groups and committees. In particular, the infrequent, but dramatic, changes in the committees’ relationship with the floor or majority party leadership we have witnessed in the post-reform Congress, and the theoretical explanations for those changes, may need to be revisited. In the end, the move to explain the evolution of institutional organization in the U.S. Congress as more than a story of the internal struggle for power and policy seems natural, and I argue an important place to start exploring external influences is with the dynamic between interest groups and committees.
CHAPTER 5
CONCLUSION

The core question I wanted to answer with this dissertation was this: how do interest groups influence the policies that Congress passes? There have been many answers given by scholars as well by politicians, journalists, activists, and all manner of actors in the American political system. Among non-academics, it is generally thought to be clear that the influence organized interests hold is a function of the money they provide to members of Congress and the two major political parties.

Scholars of interest group politics in the American system are skeptical of this claim. Empirical analyses of the relationship between the money provided to legislators and their subsequent actions are handicapped by the near impossibility of establishing the direction of causality. Are groups giving money to the members to influence their votes, or do previous votes draw money to friendly members? And even if we ignored the causality dilemma, the data show that contributions are only weakly correlated with subsequent votes by members.

This challenge of studying interest groups and their influence in congressional politics places more responsibly on interest group theorists. I argue that it will only be through theory that we can ever hope to get a handle on the mechanisms that allow groups to have influence. Specifically, only through evermore subtle theoretical models, ones that create unique and testable predictions, will we be able to discriminate between competing explanations.
The theoretical literature moved from the early systemic perspective of pluralist theorists, to simple transaction models where legislative actions were bought and sold in a number of ways, and then to the more complicated persuasion models where groups provide information strategically. Most recently, theories that viewed groups as subsidizing Congress and its members in their legislative work have entered the scholarly debate. I argued in the introduction to this dissertation that these “subsidy” theories have, at their core, a simple but powerful idea. The idea of groups providing a subsidy is a clear and direct, and possibly observable, mechanism that scholars can model intuitively. Further, a subsidy could encompass a whole range of actions by groups. With only a slightly broad interpretation, a subsidy could be both the material resources the exchange theorists imagine, or the information persuasion theories focus on, which makes subsidy theories a possible unifying theoretical framework. The problem is, for reasons discussed in the review of the subsidy literature earlier in this dissertation, existing works with the subsidy idea at its core are underdeveloped. The aim of this dissertation, and my contribution to the study of interest group politics in the U.S. Congress, was to provide a more solid theoretical foundation for the subsidy idea.

This concluding chapter will begin with a discussion of the development of my theory, and then move on to discussing it main lessons. Next, there will be a discussion of other interesting predictions from the theory not tested in the empirical analysis, and finally paths for future work will be presented.

Developing the Theory

When I set out to develop my theory I looked to the existing theoretical and empirical literature to decide on the features it needed to include. First, it had to be a theory of strategic bargaining. It is obvious to observers of Congress, that strategy, bargaining,
and often manipulation, are core features of how law and policy are made in the body. The early pluralist works were foundational, and still guide our thinking today about American politics. But in today’s political environment where the government relations industry is so organized and professionalized, direct interactions between groups and government plays a much larger role than it ever has, and arguably plays a bigger role than the external exertion of “pressure” central to pluralist theories.

Second, the theory had to be amenable to two clear features of the modern interest group environment. The first feature is that it needed to distinguish between groups that prefer policies to stay as they are and those that have a preference for the status quo. The second, and related, feature is that it had to be able to model situations where there was little competition among groups, as well as vigorous competition. Once groups get the policy they want enacted, they will protect it fiercely. Each Congress hundreds, if not thousands, of legislative initiatives are started with all but a handful being enacted. Without question some of these bills never had a chance to pass, offered up symbolically or victims of changed circumstances. However, when one looks at the reports filed by professional lobbyists citing which issues and bills they worked on it is clear a lot of work was done on bills that failed. It seems safe to conclude that some initiatives fail, at least in part, because of interest group pressure to keep existing policies intact. Further, even in situations where a set of interests do want to change policy, more often than not there is another set of interests that does not want to change policy, or at least wants it to move in a different direction. This second feature of the modern interest group environment, group competition, also needed to be reflected in my model.

Finally, I wanted my theory to incorporate a role for congressional committees. So much legislative work is done in committees, that I argue any theory where groups subsidize the capacity of Congress to generate legislation must have a role for the
legislative institution where that work is done. Further, a quick reading of the literature on congressional committees makes it clear that committees are different from one another, and one of the ways they vary is in their openness to groups. For a variety of reasons – the nature of the policy area in its jurisdiction, the salience of the policy, the partisan complexion of the committee, etc. – some committees are able to work with groups very easily, and others are not. If groups subsidize congressional work, then in most cases there will have to work through committees to do so. This mediating role for committees is central to my theory.

**Lessons from the Theory**

After developing the structure of the theory, taking into account each of these goals, I went about exploring its implications. The model suggests that there are number of important factors that interact to determine how able groups are to influence policymaking in Congress. The main factors explored in this dissertation are whether or not a group wants to protect or reform the status quo policy, the capacity of groups to work with the committee with jurisdiction over the relevant policy area, and if there is competition among interest groups for the attention of Congress. When a group is protecting existing policy then a greater working relationship with the relevant committee works to the advantage of the group, giving them more say in how policy is changed. However, when a group wants to reform policy, then the relationship switches, and the capacity to cooperate with the committee advantages Congress. However, a group can only have leverage when there are no other groups with competing priorities, since with group competition comes full control for Congress.

One lesson from these findings is that we are right to fear committees that work closely with organized interests when those groups want to protect the status quo. Perhaps committees that tend to be non-partisan and heavily constituency oriented
are exactly where this problem might be largest. Specifically, the Committee on Agriculture comes to mind. Generous subsidies and trade protections for agricultural interests have been in place for many years, with legislators of both parties, predominantly from agricultural districts and states, having worked hard to keep those privileged policies.

However, another lesson from the model is that when groups agree with Congress that policy should change, we may want committees not to be insulated. These are likely to be less consistent occurrences than those when groups want to protect the status quo. But when there is broad agreement that policy must change, these are also likely to be the times when we need large-scale policy reform, like with tax policy. If the working relationship between groups and committees is weak, because of insulation imposed to combat the times when groups don’t want reform, then Congress and the country may be hurt. Finally, another a clear lesson from the model is when there are groups competing within a policy area, insulation hurts Congress as well, though this time not in the content of the final policy but the capacity of Congress to act on that or other policies.

More generally, the theory shows that keeping groups from working closely with committees is not an unalloyed good, and that if possible Congress should try to cultivate cooperation in some circumstances and discourage it in others. In fact, when the theory is extended to include the ability of Congress to choose the capacity of groups to cooperate with committees, it tells us that, as expected, Congress should cultivate cooperation when there is competition. Competition gives Congress control over the position of policy, and hence in this circumstance insulating committees from groups is always bad.

I was able to test some of the model’s predictions with data from bills in the 109th through 111th U.S. House of Representatives, and found general support. These tests
were by no means ideal, as is it tremendously difficult to get data with the appropriate measures. The conclusions from the analysis rely on a number of assumptions that warrant caution. However, given the difficulty of designing the proper tests, any support was welcome and encouraging. In the near future, I will attempt to expand that data I collected to other interest groups and policy areas, as well as work to construct alternative measure of my key theoretical variables. If tests from this new data and alternative measures show the same relationships and the tests in this dissertation, then I will be more comfortable in determining the theory valid.

Other Predictions from the Theory

The Effect of Changes in Partisan Control

There are a number of interesting predictions from the model that I only mentioned in passing in Chapter 2, and spent no time testing in the the later chapters. The first set of predictions deals with the congruence between the preferences of groups and Congress. The model assumes there is always some difference between what the group and Congress wants, as this is necessary to generate non-trivial predictions. However, the distinction between “protecting” and “reforming” groups, and the difference in behavior from each, has interesting implications for the effect of a change in the majority party.

Other works have provided theories for why, over time, policies get funneled into a more and more narrow range, and provide empirical evidence for this (Krehbiel 1998, Brady and Volden 2006). It seems that with a stable power structure, policies that are reformed get moved closer to the preferences of centrist members of Congress. After a while, there are fewer and fewer policies amenable to reform. The only thing that can break the gridlock are changes in the power structure, such as a change in
party control of the House, the Senate, or the White House. My theory provides a new perspective to this dynamic.

If we could separate various interest groups according to the relationship with the two political parties, then there would be some interesting predictions about which policies will be prioritized in the legislative agenda when power switches. Specifically, some policies are likely to have bipartisan support (such as agricultural policies), while others are likely to have a partisan divide (such as oil and gas policies). My theory suggests that changes in party control of the House and/or Senate would affect policy reforms in each of these areas differently.

When the preferences of the group are quite distant from the preferences of Congress, say with policies involving the oil industry with a Democratic House, and the status quo position is between these two sets of preferences, then the model predicts that there will be a policy change, but that it will be a low priority agenda item. This is because the oil industry will subsidize the legislative action, but does so strategically so it gets that low priority. The magnitude of the policy change could be quite dramatic, but it will be a low priority nonetheless. If this dynamic is really what happens, then it means that there is a consistent pattern of giving bills where Congress and organized interests disagree a low priority on the agenda. It might not be the case that groups are killing action on certain policy areas by themselves, but they are partners with Congress itself, even when Congress and the groups disagree.

**The Effect of Policies in Other Areas**

The next set of predictions deal with how the positions of the status quo policies, both in the area where both the group and Congress have preferences and in area where the group has no preferences. In the baseline model it clear that, again, whether or not the group wants to protect or reform policy dramatically changes how the
various policy positions matter. When there is a group that wants to protect the hard-won policies in a particular area, the more distant the current policy is from what Congress ideally wants, the more limited the group’s ability to make demands. Meanwhile the opposite is true when the group wants to reform this status quo. This matches basic intuition, where we would expect Congress to be more forceful when when the status quo of the policy under negotiation is evermore distant from what the Congress wants.

However, the theory also tells us how the current position in other policy areas affect negotiations between groups and Congress. When a group is trying to protect the policies in place in one policy area, then its leverage over Congress grows as other policies become more distant from Congress’ ideal position. In contrast, when a group wants to reform a policy, just as Congress does, then distance between the position of other policies and what Congress wants hurts the group’s ability to make demands. The logic for each of these findings is not too complicated, but to my knowledge this theory is the first one that connects how changes in other policies directly affecting policymaking in other areas.

**Future Extensions to the Theory**

My theory provides a number of interesting predictions, but it is amenable to further extensions. There are two in particular that I would like to highlight. The first is variation in the salience of policy to the legislature. The model presented here does allow for a situation where Congress is more concerned about one policy area more than the other – in fact it relies on it – but this distinction is a function of the relative position of the status quos, which I labelled “relative urgency.” However, another way to make the legislature care about one policy more than the other is to make it care more or less about one policy area relative to the other intrinsically. Specifically, this
can be done by simply adding a parameter to the utility function of the legislature that weights the outcomes in the two policy areas differently.

Taking the baseline utility structure where the legislature cares about both policies equally, we can simply add a parameter that ranges from zero to infinity. If the baseline utility is formally presented as $u_\ell = -|y^A - x_\ell| - |y^B - x_\ell|$, then the version with relative salience, with salience represented as $\alpha$, would be $u_\ell = -\alpha|y^A - x_\ell| - |y^B - x_\ell|$. Therefore with $\alpha = 0$, we would have a situation where the legislature does not care about policy area $A$ at all relative to policy area $B$, and with $\alpha = \infty$, the legislature would care only about policy area $A$. How this would change the model’s predictions in unclear. But an interesting question would be how changes in relative salience affects the model differently than changes in the relative position of the status quo. That is, what is the difference between relative urgency and relative salience in terms of policy outcomes?

The second extension to the model I will pursue is to allow there to be multiple interest groups that care about different policy areas. At one point in my research I extended the baseline model in this way and found that it acted much like the competing groups model. That is, competition between two groups that care about different policy areas for a place on the agenda comes to the same conclusion as if they both cared about the same policy, but wanted that policy to move in different directions. However, I have not solved this sort of model with heterogenous capacities. Extending the heterogenous capacities model in this way could be informative. Specifically, it would be interesting to see exactly how the model reacts differently to competition over movement of a particular status quo policy versus competition over a place on the agenda.
Conclusion

I chose the topic of this dissertation because I think it is arguably the most important question in American politics. With the number of policy issues Congress must deal with becoming ever greater, and the complexity of those issues becoming evermore complicated, the capacity of Congress to deal with these changes is in question. While the media and the public express growing concern about the influence of organized interests in policymaking, it is not entirely clear how groups actually wield influence. From the perspective of subsidy theories, especially my version of a subsidy theory, group influence is not always a bad thing. In fact, in some circumstances, group interaction with Congress is clearly positive. At the very least, since it seems likely that Congress will rely on groups more in the future, we should have a better idea about how groups are wielding their influence. Hopefully this dissertation is a small step toward that goal.
Appendix A

PROOF FOR BASELINE MODEL

Definitions

Definition 1-1: “High Priority” Interval

The first interval necessary to define the equilibria shows the policy space where a proposal from the group must be if it is to be given a high priority by the legislature. This interval follows from the legislature calculating the space where it is better off accepting a group’s proposal and giving it a high priority rather than rejecting the proposal outright. The “high priority” interval is formally defined as:

\[
H(a_q, b_q, \delta) = \begin{cases} 
[-\delta|b_q|, \delta|b_q|] & \text{if } \frac{|a_q|}{|b_q|} > 1 \\
\emptyset & \text{otherwise}
\end{cases}
\]

The logic of this definition is as follows. First, if \( b_q \) is further from the legislature’s ideal policy than \( a_q \), the legislature will never make any proposal on \( a_q \) a high priority because dealing with \( b_q \) is so urgent, and therefore the available interval is empty (\( \emptyset \)). However, when \( b_q \) is less distant from the legislature’s ideal policy, the group must take into account the legislature’s ability to address \( a_q \) itself and make an appropriately balanced proposal. This balance is met when \( EU_\ell(a_q, b_\ell) \geq EU_\ell(a_\ell, \emptyset) \), or specifically, when \(-|a_q| - \delta|b_\ell| - (1-\delta)|b_q| \geq -|a_\ell| - |b_q|\). Here the legislature balances the expected
disutility of giving a high priority to the group’s proposal ($-|a_q|$) and gambling with its own proposal on $b_q$ ($-\delta|b_q|-(1-\delta)|b_q|$), against rejecting the group’s proposal on $a_q$ outright, make its own proposal($a_\ell$) and accepting that $b_q$ will remain in place. Since the legislature’s own proposals, $b_\ell$ and $a_\ell$, will always be at its ideal policy position, the expected utility calculation can be simplified to $-|a_q|-(1-\delta)|b_q| \geq -|b_q|$. Solving for $|a_q|$ provides the maximum distance that a proposal from the group could be from the legislature’s ideal policy if it is to be given a high priority, and thereby the boundaries of the “high priority” interval. The size of the interval varies with $\delta|b_q|$. When $\delta = 0$, the interval is the ideal point of the legislature, 0, and grows linearly with $\delta$ to the maximum width of $2|b_q|$ when $\delta = 1$.

Definition 1-2: “Low Priority” Interval

The second interval necessary to define the equilibrium is when the legislature will accept the proposal by the group, and give it a lower priority on the legislative agenda. This interval is the space where a policy proposal from the group with a low priority makes the legislature better off than rejecting it and addressing the status quo policies on its own. The “low priority” interval is formally defined as:

$$L(a_q, b_q, \delta) = \begin{cases} 
-|a_q|, |a_q| & \text{if } \frac{|a_q|}{|b_q|} \leq 1 \\
-\frac{1}{\delta}|b_q| + \frac{1-\delta}{\delta}|a_q|, \frac{1}{\delta}|b_q| - \frac{1-\delta}{\delta}|a_q| & \text{otherwise}
\end{cases}$$

First, if $b_q$ is more distant from $\ell$ than $a_q$ the “low priority” interval is defined by $a_q$ and its reflection with the legislature’s ideal policy. Simply, the legislature will always prioritize a proposal of its own on $b_q$ over any proposal on $a_q$, so the group has the freedom to propose anything that makes the legislature indifferent between accepting or rejecting the proposal. Anything between $a_q$ and its reflection point from
ℓ is strictly better for the legislature to accept and give a lower priority than outright rejection, hence the defined interval.

When \( a_q \) is further from \( \ell \) than \( b_q \), a successful proposal must be such that \( EU_\ell(b_\ell, a_g) \geq EU_\ell(a_\ell, \emptyset) \). Specifically, this is when \(-|b_\ell| - \delta|a_g| - (1 - \delta)|a_q| \geq -|a_\ell| - |b_q|\), which again, knowing that the legislature will always propose its ideal policy, can be simplified to \(-\delta|a_g| - (1 - \delta)|a_q| \geq -|b_q|\). Here the legislature can accept \( a_g \) but give it a low priority and gamble that it will be enacted rather than retaining the status quo policy \( b_q \), or reject the group’s proposal and address \( a_q \) on its own, leaving \( b_q \) in place.

The interval is defined by proposals that balances the disutility the legislature experiences with certainty if it rejects the group’s proposal on \( a_q \), and makes its own proposal on \( a_q \), therefore abandoning action \( b_q \), with the expected disutility of putting the group’s proposal second on the agenda and getting \( a_g \) with probability \( \delta \) and the status quo \( a_q \) with probability \( 1 - \delta \). Specifically, the legislature solves for maximum distance between \( a_g \) and its own preferred policy position such that it must be less than or equal to \( \frac{1}{\delta}|b_q| - \frac{1 - \delta}{\delta}|a_q|\).

This shows that the legislature will accept a proposal at a lower priority if the proposal is not as far as the combination of the distances from the the legislature’s ideal point as the position of the two status quo policies, each weighted by a function of the cooperative capacity. This distance subtracted and added to the position of the legislature’s ideal point defines the “low priority” interval in these circumstances.

**Definition 1-3: “High or Low” Interval**

Definition 1-1 defines when a legislature will accept a proposal and give it a high priority rather than reject the proposal outright, and Definition 1-2 defines when the legislature will accept a proposal and give it a low priority rather than reject it
outright. However, what is not yet defined is when the legislature decides to give a proposal a low priority rather than a high priority. Understanding that a proposal being in the “high priority” interval is a sufficient condition for giving it a high priority, and that the “low priority” interval is only a necessary condition for a proposal getting a low priority, then it is clear that for a proposal to be given a low priority, $EU_t(a_g, b_t)$ must be wider than $EU_t(b_t, a_g)$ for some combination of the parameters. Definition 1-3 defines when this is true. The “high or low” interval is formally defined as:

$$HL(a_q, b_q, \delta) = \begin{cases} 1 - \frac{|a_q|}{|b_q|}, \frac{|a_q|}{|b_q|} - 1 & \text{if } \frac{|a_q|}{|b_q|} > 1 \\ \emptyset & \text{otherwise} \end{cases}$$

To find this interval we need to solve $-|a_g| - \delta|b_t| - (1 - \delta)|b_q| \geq -|b_t| - \delta|a_g| - (1 - \delta)|a_q|$, for $|a_q|$. Simplifying each side of the inequality gives us $-|a_g| - (1 - \delta)|b_q| \geq -\delta|a_g| - (1 - \delta)|a_q|$, and solving for $|a_g|$ yields $\frac{|a_q|}{|b_q|} - 1$. Therefore, Definition 3 defines the interval where a proposal must be if the legislature prefers to give the group’s proposal a high priority and its own proposal a low priority, over the reverse.

**Definition 1-4: Capacity Threshold**

Definition 1-1 defines when a legislature will accept a proposal and give it a high priority rather than reject the proposal outright, Definition 1-2 defines when the legislature will accept a proposal and give it a low priority rather than reject it outright, and if each of these definitions are satisfied, then Definition 1-3 tells us if the legislature will give the proposal a high or low priority. However, what is not yet defined is when the legislature decides to give a proposal a low priority rather than a high priority. Understanding that a proposal being in the “high priority” interval is a sufficient condition for giving it a high priority, and that the “low priority” interval
is only a necessary condition for a proposal getting a low priority, then it is clear that
for a proposal to be given a low priority, \( L(a_q, b_q, \delta) \) must be wider than \( H(a_q, b_q, \delta) \)
for some combination of the parameters. Definition 1-4 defines when this is true.

To find this threshold we need to solve \( \frac{1}{\delta} |b_q| - \frac{1 - \delta}{\delta} |a_q| > \delta |b_q| \), which is when \( L(a_q, b_q, \delta) > H(a_q, b_q, \delta) \), for \( \delta \). Getting rid of the the denominators on the left-hand-side leaves us \( |b_q| - (1 - \delta)|a_q| > \delta^2 |b_q| \), and rearranging terms gives us \( (1 - \delta^2)|b_q| > (1 - \delta)|a_q| \). After isolating \( \delta \) on the left-hand-side, we know that \( \frac{1 - \delta^2}{1 - \delta} |b_q| > |a_q| \), then factoring \( 1 - \delta^2 \) into \( (1 - \delta)(1 + \delta) \) and canceling terms, we can reduce the inequality to \( \delta > \frac{|a_q|}{|b_q|} - 1 \). This tells us that the legislature will only give an appropriate proposal
on \( a_q \) a low priority if \( \delta \) is greater than \( \frac{|a_q|}{|b_q|} - 1 \). For example, if \( \frac{|a_q|}{|b_q|} > 2 \), or the
distance between \( a_q \) and 0 is twice as large as between \( b_q \) and 0, then there is no
level of capacity that will make the legislature give a proposal on \( a_q \) a low priority.
In contrast, if \( \frac{|a_q|}{|b_q|} < 1 \) then a proposal on \( a_q \) will always get a low priority. For
intermediate levels of \( \frac{|a_q|}{|b_q|} \), the threshold level is uniquely defined (ex. \( \frac{|a_q|}{|b_q|} = 1.5 \)
leads to a threshold of \( \delta = 0.5 \)).

Therefore, Definition 1-4 shows at what particular level of \( \delta \) the group has the
option to make a proposal on \( a_q \) that the legislature will consider giving a low pri-
ority, and it defines this threshold as a function of the distance between \( a_q \) and the
legislature’s ideal policy position. When \( \delta < \frac{|a_q|}{|b_q|} - 1 \), I label this “low capacity,”
while \( \delta > \frac{|a_q|}{|b_q|} - 1 \) is “high capacity.”

With \( H(a_q, b_q, \delta) \), \( L(a_q, b_q, \delta) \), \( HL(a_q, b_q, \delta) \), and the capacity threshold for \( \delta \) de-
fined, the necessary definitions to characterize the equilibrium actions of the group
and the legislature are available. Given the sequential structure of the game, the
equilibrium concept used is subgame perfect Nash equilibrium. The equilibrium ac-
tions are then a function of the given preferences of the actors \( (\ell, g) \), the positions
of the status quo policies in each policy area \( (a_q, b_q) \), and the cooperative capacity \( \delta \).
Baseline Model Equilibrium

The baseline model equilibrium (BME) is a subgame perfect equilibrium that is a double \((a_g^*, \pi^*)\), which is composed of an optimal group proposal \(a_g^*(X) \in [X, \emptyset]\), and an optimal agenda formation \(\pi^*(a_g) \in [(\emptyset, \emptyset), (a_{\ell}, \emptyset), (a_g, b_{\ell}), (b_{\ell}, a_g)]\). Working backwards, the optimal agenda \(\pi^*\) is a response to the proposal by the group. Therefore, the group makes its optimal proposal, \(a_g^*\), given \(\pi^*\). The structure of the optimal proposal and agenda decision rely on Definitions 1-1, 1-2, 1-3, and 1-4 presented previously.

Low Urgency Environment

In the “low urgency” environment, where \(\frac{|a_q|}{|b_q|} \in [0, 1)\), equilibrium behavior is given by:

\[
a_g^*(a_q, \delta) = \begin{cases} 
\emptyset & \text{if } a_q \in (0, g) \\
|a_q| & \text{if } a_q < 0 \text{ and } g \notin (0, |a_q|) \\
g & \text{if } g \in (0, |a_q|)
\end{cases}
\]

\[
\pi^*(a_g, a_q, \delta) = \begin{cases} 
(b_{\ell}, \emptyset) & \text{if } a_g \notin (-a_q, a_q) \text{ or } a_g = \emptyset \\
(b_{\ell}, a_g) & \text{if } a_g \in (-a_q, a_q)
\end{cases}
\]

If \(b_q\) is further from the legislature’s ideal policy position than \(a_q\), and \(a_q\) is between 0 and \(g\), then the group will make no proposal (\(\emptyset\)) since they know the legislature will leave policy area \(A\) alone to focus on area \(B\), which the group would prefer. Second, if \(b_q\) is again further from 0 than \(a_q\), but not between 0 and \(g\), then the group will propose a bill at the reflection point \(-a_q\), which makes the legislature indifferent to
rejecting the proposal. However, if the group has an ideal policy position between each of these points then they will propose their own ideal point, which the legislature strictly prefers.

The equilibrium agenda decision made by the legislature depends on the proposal by the group. If the group makes no proposal \(a^*_g = \emptyset\) then the legislature chooses to act on the most distant status quo policy, \(b_q\), and has no choice but to put it first on the agenda \((a^* = (b_l, \emptyset))\). However, if the group wishes to make a proposal \(a^*_g = -a_g\), then the equilibrium action by the legislature is still to act on \(b_q\), give it a high priority, and put the group’s proposal on the agenda with a low priority \((a^* = (b_l, a_g))\).

The cooperative capacity plays no role in equilibrium action in this environment since there is no proposal that the group can make on \(a_q\), even if the group proposes the legislature’s ideal policy, that will move the legislature to give it high priority. Therefore the group proposal is only compared against the “low priority” interval.

**High Urgency-Low Capacity Environment**

In the “high urgency-low capacity” environment, where \(\frac{|a_q|}{|b_q|} \geq \delta + 1\), equilibrium behavior is given by:

\[
 a^*_g(a_q, b_q, \delta) = \begin{cases} 
 \delta|b_q| & \text{if } g \notin (0, \delta|b_q|) \\
 g & \text{if } g \in (0, \delta|b_q|) 
\end{cases}
\]

\[
 \pi^*(a_g, a_q, \delta) = \begin{cases} 
 (a_l, \emptyset) & \text{if } a_g \notin H(a_q, b_q, \delta); \text{ or } a_g = \emptyset \\
 (a_g, b_l) & \text{if } a_g \in H(a_q, b_q, \delta)
\end{cases}
\]
Here the cooperative capacity is low relative to the urgency of addressing $a_q$, so the group is limited in its ability to offer a proposal that would be accepted but given a low priority by the legislature’s concern over the possibility of $a_q$ remaining in place. Hence the group chooses to make a proposal that will get a high priority, which is as close to the group’s preferences as possible within the legislature’s “high priority” interval. However, if the group has an ideal policy position within the high priority interval they will propose their own ideal point, which the legislature strictly prefers.

Again, the equilibrium agenda decision made by the legislature depends on the proposal by the group. Figure 4 shows the equilibrium agenda for a continuum of group proposals, and the various thresholds that delineate agenda actions. In this case the group will make a proposal at the border of the high priority interval ($a_q^* = \delta |b_q|$), given the cooperative capacity is sufficiently low as defined by Definition 4 ($\delta < \frac{|a_q|}{|b_q|} - 1$) and the position of the status quo on policy areas $A$ and $B$. In response to the offer, the legislature puts the group’s equilibrium proposal on the agenda with a high priority ($\pi^* = (a_q, b_q)$).

**High Urgency-High Capacity Environment**

Finally, in the “high urgency-high capacity” environment, where $\delta \geq \frac{|a_q|}{|b_q|} - 1$, the equilibrium behavior is given by:

$$a_q^*(a_q, b_q, \delta) = \begin{cases} 
|a_q| - |b_q| & \text{if } a_q < 0 \text{ and } g \notin (0, |a_q| - |b_q|) \\
\frac{1}{3}|b_q| - \frac{1-\delta}{6}|a_q| & \text{if } a_q \geq 0 \text{ and } g \notin (0, \frac{1}{3}|b_q| - \frac{1-\delta}{6}|a_q|) \\
g & \text{if } a_q < 0 \text{ and } g \in (0, |a_q| - |b_q|) \\
or \\
& \text{if } a_q \geq 0 \text{ and } g \in (0, \frac{1}{3}|b_q| - \frac{1-\delta}{6}|a_q|)
\end{cases}$$
\[
\pi^*(a_g, a_q, \delta) = \begin{cases} 
(a_\ell, \emptyset) & \text{if } a_g \notin H(a_q, b_q, \delta) \text{ or } a_g = \emptyset \\
(a_g, b_\ell) & \text{if } a_g \in HL(a_q, b_q, \delta) \\
(b_\ell, a_g) & \text{if } a_g \in H(a_q, b_q, \delta) \text{ and } \notin HL(a_q, b_q, \delta)
\end{cases}
\]

Here the cooperative capacity is high relative to the urgency of addressing \(a_q\). With the switch to the high capacity environment, the thresholds that define how the legislature will respond to a proposal from the group, in terms of agenda decisions, also switch. Figure 5 shows this new situation and characterizes the equilibrium agenda decisions for any group proposal.

Unlike in the previous two environments, the position of the group’s ideal policy becomes a factor in the group’s proposal and the legislature’s agenda choice. When the group is on the same side of the legislature’s preferences as the status quo policy they care about, \(a_q\), then the group can be thought to be “protecting” the status quo of policy area \(A\). If the group has a preferred policy on the opposite side of the legislature’s preferences as \(a_q\), then the group is attempting to “reform” the status quo policy. Each of these situations leads to distinct predictions about the group’s proposal and the legislature’s agenda.

Assume, without loss of generality, that we are in a “protecting” environment where \(\ell = 0 < \delta |b_q| < \frac{1}{\delta} |b_q| - \frac{1 - \delta}{\delta} |a_q| < a_q < g\). The question is what is the optimal action taken by the group in this situation. The group has three options: 1) do nothing \((a_g = \emptyset)\), 2) make a proposal the legislature will give a high priority \((a_g = |a_q| - |b_q|)\), or 3) make a proposal the legislature will give a low priority \((a_g = \frac{1}{\delta} |b_q| - \frac{1 - \delta}{\delta} |a_q|)\).

If the group makes a proposal that the legislature will give a high priority \((a_g = |a_q| - |b_q|)\), then the expected utility of the group is \(-|a_q| - |b_q| - g\). If, on the other hand, the group makes a proposal that the legislature gives a low priority
\(a_g = \frac{1}{\delta} |b_q| - \frac{1 - \delta}{\delta} |a_q|\), then the group’s expected utility is \(-\delta \frac{1}{\delta} |b_q| - \frac{1 - \delta}{\delta} |a_q| - g| - (1 - \delta)|a_q - g|\).

We know from definitions 1-1 and 1-2 that making some proposal is better than making no proposal. Therefore the issue is whether or not the group prefers a high or low priority given the proposals they can make. They will prefer to make a proposal that gets a high priority when \(-|a_q| - |b_q| - g| > -\delta \frac{1}{\delta} |b_q| - \frac{1 - \delta}{\delta} |a_q| - g| - (1 - \delta)|a_q - g|\).

Given the assumed ordering, we know that if the group’s proposal is given a low priority, and the proposal is not enacted with probability \(1 - \delta\), then the utility from that outcome is \(-|g - |a_q||\), or the disutility in the distance between the status quo in policy area \(A\) and the group’s ideal point. This means the group’s utility calculation can be represented by \(-||a_q| - |b_q| - g| > -\delta \frac{1}{\delta_A} |b_q| - \frac{1 - \delta}{\delta} |a_q| - g| - (1 - \delta)|g - |a_q||\).

This can be rearranged to \(\delta < \frac{|g - |a_q|| - ||a_q| - |b_q| - g|}{|g - |a_q|| - |\frac{1}{2} |b_q| - \frac{1 - \delta}{\delta} |a_q| - g|} \). Since the claim is that the group will never want to make the proposal that will get a high priority \((a_g = |a_q| - |b_q|)\), then if this fraction is never greater than zero, which can never be greater than \(\delta\), then the group will never make this type of proposal. This fraction \(\frac{|g - |a_q|| - ||a_q| - |b_q| - g|}{|g - |a_q|| - |\frac{1}{3} |b_q| - \frac{1 - \delta}{\delta} |a_q| - g|}\) is greater than zero only when \(||a_q| - |b_q| - g| < |g - |a_q||\), which is never true. This shows that in the “protecting” environment the group always wants to propose \(a_g = \frac{1}{\delta} |b_q| - \frac{1 - \delta}{\delta} |a_q|\). In response to the offer, the legislature puts the group’s proposal on the agenda with a low priority \((\pi^* = (b_r, a_g))\).

In contrast, when the group is “reforming” the status quo, where the ordering is \(a_q < \ell = 0 < \delta |b_q| < \frac{1}{\delta} |b_q| - \frac{1 - \delta}{\delta} |a_q| < g\), the group makes a slightly different calculation than above. Specifically, the disutility that would come from the status quo staying in place would change to \(-||a_q| + g||\), such that the relevant inequality calculation would be \(-||a_q| - |b_q| - g| > -\delta \frac{1}{\delta_A} |b_q| - \frac{1 - \delta}{\delta} |a_q| - g| - (1 - \delta)|g + |a_q||\).

This simplifies to \(\delta < \frac{|g + |a_q|| - ||a_q| - |b_q| - g|}{|g + |a_q|| - |\frac{1}{3} |b_q| - \frac{1 - \delta}{\delta} |a_q| - g|} \). Since the claim is that the group will always want to make the proposal that will be given a high priority
\( (a_g = |a_q| - |b_q|) \), then the question is whether this fraction is always greater than 1. 

\[
\frac{|g + a_q| - |a_q| - |b_q| - g|}{|g + a_q| - |\frac{1}{\delta} |b_q| - \frac{1 - \delta}{\delta} |a_q| - g|}
\]

is greater than 1 when \( \frac{1}{\delta} |b_q| - \frac{1 - \delta}{\delta} |a_q| - g| > |a_q| - |b_q| - g| \), which is always true in “high relative capacity” environment. Therefore, in the “reforming” environment, the group prefers to propose \( a_g = |a_q| - |b_q| \) which will be given a low priority.
Appendix B

PROOF FOR HETEROGENEOUS CAPACITIES MODEL

Definitions

Definition 2-1: “Relative High Priority” Interval

The first interval necessary to define the equilibria shows the policy space where a proposal from the group must be if it is to be given a high priority by the legislature. This interval follows from the legislature calculating the space where it is better off accepting a group’s proposal and giving it a high priority rather than rejecting the proposal outright. The “high priority” interval is formally defined as:

\[ H(a_q, \delta_B) = \begin{cases} 
[\delta_B, \delta_B] & \text{if } |a_q| > 1 \\
\emptyset & \text{otherwise}
\end{cases} \]

The logic of this definition is as follows. First, if \( b_q \) is further from the legislature’s ideal policy than \( a_q \), the legislature will never make any proposal on \( a_q \) a high priority because dealing with \( b_q \) is so urgent, and therefore the available interval is empty (\( \emptyset \)). However, when \( b_q \) is less distant from the legislature’s ideal policy, the group must take into account the legislature’s ability to address \( a_q \) itself and make an appropriately balanced proposal. This balance is met when \( EU_{\ell}(a_q, b_\ell) \geq EU_{\ell}(a_\ell, \emptyset) \), or specifically, when \(-|a_q| - \delta_B|b_\ell| - (1 - \delta_B)|b_q - \ell| \geq -|a_\ell| - |b_q - \ell|\). Here the legislature balances the
expected utility of giving a high priority to the group’s proposal \((a_q)\) and gambling with its own proposal on \(b_q\) \((-\delta_B|b_\ell - (1 - \delta_B)||b_\ell - \ell|\)), against rejecting the group’s proposal on \(a_q\) outright and accepting that \(b_q\) will remain in place. Since \(|b_q - \ell|\) was normalized to 1, and the legislature’s own proposal, \(b_\ell\), will always be at its ideal policy position, the expected utility calculation can be simplified to \(-|a_q| - (1 - \delta_B) \geq -1\).

Solving for \(|a_q|\) provides the maximum distance that a proposal from the group could be from the legislature’s ideal policy if it is to be given a high priority, and thereby the boundaries of the “high priority” interval. The size of the interval varies with \(\delta_B\). When \(\delta_B = 0\), the interval is the ideal point of the legislature, 0, and grows linearly with \(\delta_B\) to the maximum width of 2 when \(\delta_B = 1\).

**Definition 2-2: “Relative Low Priority” Interval**

The second interval necessary to define the equilibrium is when the legislature will accept the proposal by the group, and give it a lower priority on the legislative agenda. This interval is the space where a policy proposal from the group with a low priority makes the legislature better off than rejecting it and addressing the status quo policies on its own. The “low priority” interval is formally defined as:

\[
L(a_q, \delta_A) = \begin{cases} 
-|a_q|, |a_q| & \text{if } |a_q| \in [0, 1) \\
\left[ -\frac{1}{\delta_A} + \frac{1 - \delta_A}{\delta_A} |a_q|, \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q| \right] & \text{otherwise}
\end{cases}
\]

First, if \(b_q\) is more distant from \(\ell\) than \(a_q\) \((a_q \in (-1, 1))\), the “low priority” interval is defined by \(a_q\) and its reflection with the legislature’s ideal policy. Simply, the legislature will always prioritize a proposal of its own on \(b_q\) over any proposal on \(a_q\), so the group has the freedom to propose anything that makes the legislature indifferent between accepting or rejecting the proposal. Anything between \(a_q\) and its
reflection point from \( \ell \) is strictly better for the legislature to accept and give a lower priority than outright rejection, hence the defined interval.

When \( a_q \) is further from \( \ell \) than \( b_q \), a successful proposal must be such that \( EU_\ell(b_\ell, a_g) \geq EU_\ell(a_\ell, \emptyset) \). Specifically, this is when \(-|b_\ell| - \delta_A|a_g| - (1 - \delta_A)|a_q| \geq -|a_\ell| - |b_q - \ell|\), which again, given some simplifying assumptions, the expected utility calculation can be reduced to \(-\delta_A|a_g| - (1 - \delta_A)|a_q| \geq -1\). Here the legislature can accept \( a_g \) but give it a low priority and gamble that it will be enacted rather than retaining the status quo policy \( b_q \), or reject the group’s proposal, address \( a_q \) on its own, and leave the the policy in area \( B \) at \( b_q \) with certainty.

The interval is defined by proposals that balances the disutility the legislature experiences with certainty if it rejects the group’s proposal on \( a_q \), and makes its own proposal on \( a_q \), therefore abandoning action \( b_q \), with the expected disutility of putting the group’s proposal second on the agenda and getting \( a_q \) with probability \( \delta_A \) and the status quo \( a_q \) with probability \( 1 - \delta_A \). Specifically, the legislature solves for maximum distance between \( a_g \) and its own preferred policy position such that it must be less than or equal to \( \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q| \).

This shows that the legislature will accept a proposal at a lower priority if the proposal is not as far as the combination of the distances from the the legislature’s ideal point as the position of the two status quo policies, each weighted by a function of the cooperative capacity. This distance subtracted and added to the position of the legislature’s ideal point defines the “low priority” interval in these circumstances.

**Definition 2-3: “Relative High or Low” Interval**

Definition 2-1 defines when a legislature will accept a proposal and give it a high priority rather than reject the proposal outright, and Definition 2-2 defines when the legislature will accept a proposal and give it a low priority rather than reject it.
outright. However, what is not yet defined is when the legislature decides to give a proposal a low priority rather than a high priority. Understanding that a proposal being in the “relative high priority” interval is a sufficient condition for giving it a high priority, and that the “relative low priority” interval is only a necessary condition for a proposal getting a low priority, then it is clear that for a proposal to be given a low priority, $EU_\ell(a_g, b_\ell)$ must be wider than $EU_\ell(b_\ell, a_g)$ for some combination of the parameters. Definition 3 defines when this is true. The “high or low” interval is formally defined as:

$$HL(a_q, \delta_A, \delta_B) = \begin{cases} 
\left\lceil \frac{1-\delta_B}{1-\delta_A} - |a_q|, |a_q| - \frac{1-\delta_B}{1-\delta_A} \right\rceil & \text{if } |a_q| > 1 \\
\emptyset & \text{otherwise}
\end{cases}$$

To find this interval we need to solve $-|a_q|-\delta_B|b_\ell|-(1-\delta_B)|b_\ell-\ell| \geq -|b_\ell|-\delta_A|a_g|-(1-\delta_A)|a_q|$, for $|a_q|$. Simplifying each side of the inequality gives us $-|a_q|-(1-\delta_B) \geq -\delta_A|a_g| - (1 - \delta_A)|a_q|$, and solving for $|a_q|$ yields $|a_q| \geq \frac{1 - \delta_B}{1 - \delta_A}$. Therefore, Definition 3 defines the interval where a proposal must be if the legislature prefers to give the group’s proposal a high priority and its own proposal a low priority, over the reverse.

**Definition 2-4: Relative Capacity Threshold**

Definition 2-1 defines when a legislature will accept a proposal and give it a high priority rather than reject the proposal outright, Definition 2-2 defines when the legislature will accept a proposal and give it a low priority rather than reject it outright, and if each of these definitions are satisfied, then Definition 2-3 tells us if the legislature will give the proposal a high or low priority. However, what is not yet defined is when the legislature decides to give a proposal a low priority rather than a high priority. Understanding that a proposal being in the “relative high priority”
interval is a sufficient condition for giving it a high priority, and that the “relative low priority” interval is only a necessary condition for a proposal getting a low priority, then it is clear that for a proposal to be given a low priority, \( L(a_q, \delta_B) \) must be wider than \( H(a_q, \delta_A) \) for some combination of the parameters. Definition 2-4 defines when this is true.

To find this threshold we need to solve

\[
\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q| > |a_q| + \frac{1 - \delta_B}{1 - \delta_A},
\]

which is when \( L(a_q, \delta_A) > H(a_q, \delta_B) \), for \( \delta_A \). Distributing \( \delta_A \) to the righthand-side of the inequality gives us

\[
1 - |a_q| + \delta_A |a_q| > \delta_A |a_q| + \frac{\delta_A - \delta_A \delta_B}{1 - \delta_A},
\]

which can be rearranged to

\[
1 - |a_q| - \delta_A |a_q| > \delta_A - \delta_A \delta_B.
\]

Solving for \( \delta_A \) yields

\[
\delta_A > \frac{|a_q| - 1}{|a_q| - \delta_B}.
\]

Definition 2-4 shows at what particular level of \( \delta_A \) the group has the option to make a proposal on \( a_q \) that the legislature will consider giving a low priority, and it defines this threshold as a function of the distance between \( a_q \) and the legislature’s ideal policy position. When \( \delta_A < \frac{|a_q| - 1}{|a_q| - \delta_B} \), I label this “low relative capacity,” while \( \delta_A \geq \frac{|a_q| - 1}{|a_q| - \delta_B} \) is “high relative capacity.”

With \( H(a_q, \delta_A), L(a_q, \delta_B), H L(a_q, \delta_A, \delta_B) \), and the capacity threshold for \( \delta_A \) defined, the necessary definitions to characterize the equilibrium actions of the group and the legislature are available. Given the sequential structure of the game, the equilibrium concept used is subgame perfect Nash equilibrium. The equilibrium actions are then a function of the given preferences of the actors \((\ell, g)\), the positions of the status quo policies in each policy area \((a_q, b_q)\), and the cooperative capacity for policy areas \(A\) and \(B\) \((\delta_A\) and \(\delta_B)\).

The heterogeneous capacities model equilibrium (HCE) is a subgame perfect equilibrium that is a double \((a_g^*, \pi^*)\), which is composed of an optimal group proposal \(a_g^*(X) \in [X, \emptyset]\), and an optimal agenda formation \(\pi^*(a_g) \in [(\emptyset, \emptyset), (a_\ell, \emptyset), (b_\ell, \emptyset), (a_g, b_\ell), (b_\ell, a_g)]\). Working backwards, the optimal agenda \(\pi^*\) is a response to the proposal by the group. Therefore, the group makes its optimal proposal, \(a_g^*\), given \(\pi^*\).
The structure of the the optimal proposal and agenda decision rely on Definitions 2-1, 2-2, 2-3, and 2-4 presented previously.

**Heterogenous Capacities Equilibrium**

**Low Urgency Environment**

In the “low urgency” environment, where $|a_q| \in [0, 1)$, equilibrium behavior is given by:

$$a^*_g(a_q, \delta_A, \delta_B) = \begin{cases} 
\emptyset & \text{if } a_q \in (0, g) \\
|a_q| & \text{if } a_q < 0 \text{ and } g \not\in (0, |a_q|) \\
g & \text{if } g \in (0, |a_q|)
\end{cases}$$

$$\pi^*(a_g, a_q, \delta_A, \delta_B) = \begin{cases} 
(b_{\ell}, \emptyset) & \text{if } a_g \not\in (-a_q, a_q) \text{ or } a_g = \emptyset \\
(b_{\ell}, a_q) & \text{if } a_g \in (-a_q, a_q)
\end{cases}$$

If $b_q$ is further from the legislature’s ideal policy position than $a_q$, and $a_q$ is between 0 and $g$, then the group will make no proposal ($\emptyset$) since they know the legislature will leave policy area $A$ alone to focus on area $B$, which the group would prefer. Second, if $b_q$ is again further from 0 than $a_q$, but not between 0 and $g$, then the group will propose a bill at the reflection point $-a_q$, which makes the legislature indifferent to rejecting the proposal. However, if the group has an ideal policy position between each of these points then they will propose their own ideal point, which the legislature strictly prefers.

The equilibrium agenda decision made by the legislature depends on the proposal by the group. If the group makes no proposal ($a^*_g = \emptyset$) then the legislature chooses
to act on the most distant status quo policy, \( b_q \), and has no choice but to put it first on the agenda \((a^* = (b_\ell, \emptyset))\). However, if the group wishes to make a proposal \((a_g^* = -a_q)\), then the equilibrium action by the legislature is still to act on \( b_q \), give it a high priority, and put the group’s proposal on the agenda with a low priority \((a^* = (b_\ell, a_g))\).

The cooperative capacity plays no role in equilibrium action in this environment since there is no proposal that the group can make on \( a_q \), even if the group proposes the legislature’s ideal policy, that will move the legislature to give it high priority. Therefore the group proposal is only compared against the “relative low priority” interval.

**High Urgency-Low Relative Capacity Environment**

In the “high urgency-low capacity” environment, where \( |a_q| \geq \frac{1 - \delta_A \delta_B}{1 - \delta_A} \), equilibrium behavior is given by:

\[
a_g^*(a_q, \delta_A, \delta_B) = \begin{cases} 
\delta_B & \text{if } g \notin (0, \delta_B) \\
g & \text{if } g \in (0, \delta_B)
\end{cases}
\]

\[
\pi^*(a_g, a_q, \delta_A, \delta_B) = \begin{cases} 
(a_\ell, \emptyset) & \text{if } a_g \notin H(a_q, \delta_B) \text{ or } a_g = \emptyset \\
(a_g, b_\ell) & \text{if } a_g \in H(a_q, \delta_B)
\end{cases}
\]

Here the cooperative capacity is low relative to the urgency of addressing \( a_q \), so the group is limited in its ability to offer a proposal that would be accepted but given a low priority by the legislature’s concern over the possibility of \( a_q \) remaining in place. Hence the group chooses to make a proposal that will get a high priority, which is
as close to the group’s preferences as possible within the legislature’s “high priority” interval. Definitions 2-1 and 2-3 outline the two intervals where the legislature will give the group’s proposal a high priority. Which interval has a boundary further from the legislature’s ideal position will determine the proposal. The question is then which position is further: \( A \) or \( B \). Using the inequality \( \delta_B > |a_q| - \frac{1 - \delta_B}{1 - \delta_A} \), and solving for \( \delta_A \) shows this is true when \( \delta_A < \frac{|a_q| - 1}{|a_q| - \delta_B} \), or when we are in the “low relative capacity” environment, in which case the optimal group proposal will be \( a_g^* = \delta_B \). If the group has an ideal policy position within the high priority interval they will propose their own ideal point, which the legislature strictly prefers. In response to the offer, the legislature puts the group’s equilibrium proposal on the agenda with a high priority \( (\pi^* = (a_g, b_\ell)) \) (See Figure 6).

**High Urgency-High Relative Capacity Environment**

Finally, in the “high urgency-high relative capacity” environment, where \( |a_q| \in [1, \frac{1 - \delta_A\delta_B}{1 - \delta_A}) \), the equilibrium behavior is given by:

\[
a_g^*(a_q, \delta_A, \delta_B) = \begin{cases} 
|a_q| - \frac{1 - \delta_B}{1 - \delta_A} & \text{if } a_q < 0 \text{ and } \ell \notin (0, |a_q| - \frac{1 - \delta_B}{1 - \delta_A}) \\
\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q| & \text{if } a_q \geq 0 \text{ and } \ell \notin (0, \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q|) \\
g & \text{if } a_q < 0 \text{ and } \ell \in (0, |a_q| - \frac{1 - \delta_B}{1 - \delta_A}) \\
\text{or} & \\
& \text{if } a_q \geq 0 \text{ and } \ell \in (0, \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q|) 
\end{cases}
\]

\[
\pi^*(a_g, a_q, \delta_A, \delta_B) = \begin{cases} 
(a_\ell, \emptyset) & \text{if } a_g \notin L(a_q, \delta_A) \land \ell \notin H(a_q, \delta_B) \land \ell \notin HL(a_q, \delta_A, \delta_B) \\
(a_g, b_\ell) & \text{if } a_g \in HL(a_q, \delta_A, \delta_B) \\
(b_\ell, a_g) & \text{if } a_g \in L(a_q, \delta_A) \land \ell \notin HL(a_q, \delta_A, \delta_B) 
\end{cases}
\]
Here the cooperative capacity is high relative to the urgency of addressing \( a_q \). First, since we are in the “high relative capacity” environment, and therefore \( \delta_A > \frac{|a_q| - 1}{|a_q| - \delta_B} \), we know that \( |a_q| - \frac{1 - \delta_B}{1 - \delta_A} < \delta_B \). However, the proposal must be within \( HL(a_q, \delta_A, \delta_B) \) to be given a high priority, so if the group wants a high priority the best it can propose is \( |a_q| - \frac{1 - \delta_B}{1 - \delta_A} \). Second, we need to see when the group is allowed by the legislature to make a proposal on \( a_q \) that is given is a low priority. Or formally, when \( H(a_q, \delta_B) \subset L(a_q, \delta_A) \). To find this we solve \( \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q| > |a_q| - \frac{1 - \delta_B}{1 - \delta_A} \) for \( \delta_A \) which yields \( \delta_A > \frac{|a_q| - 1}{|a_q| - \delta_B} \). This tells us that whenever we are in the “high relative capacity” environment, the group has the option to make a proposal that goes second. Given this, if the group prefers to make a proposal that will be given a low priority, it can propose \( a_g^* = \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q| \). Otherwise, if it wants to make a proposal that is given a low priority, its proposal is \( a_g^* = |a_q| - \frac{1 - \delta_B}{1 - \delta_A} \).

Unlike in the previous two environments, the position of the group’s ideal policy becomes a factor in the group’s proposal and the legislature’s agenda choice. When the group is on the same side of the legislature’s preferences as the status quo policy they care about, \( a_q \), then the group can be thought to be “protecting” the status quo of policy area \( A \). If the group has a preferred policy on the opposite side of the legislature’s preferences as \( a_q \), then the group is attempting to “reform” the status quo policy. Each of these situations leads to distinct predictions about the group’s proposal and the legislature’s agenda.

Analogous to the proof for the baseline model, assume that we are in a “protecting” environment where \( \ell = 0 < \delta_B < \frac{1}{\delta_A} - \frac{1 - \delta_B}{\delta_A} |a_q| < a_q < g \). The question is what the optimal action taken by the group in this situation. The group has three options: 1) do nothing \((a_g = 0)\), 2) make a proposal the legislature will give a high priority \((a_g = |a_q| - \frac{1 - \delta_B}{1 - \delta_A})\), or 3) make a proposal the legislature will give a low priority \((a_g = \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q|)\).
If the group makes a proposal that the legislature will give a high priority \((a_g = \delta_B)\), then the expected utility of the group is \(-||a_q| - \frac{1 - \delta_B}{1 - \delta_A} - g\mid\). If, on the other hand, the group makes a proposal that the legislature gives a low priority \((a_g = \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q|)\), then the group’s expected utility is \(-\delta_A\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q| - g| - (1 - \delta_A)|a_q - g|\).

We know from definitions 2-1 and 2-2 that making some proposal is better than making no proposal. Therefore the issue is whether or not the group prefers a high or low priority given the proposals they can make. They will prefer to make a proposal that gets a high priority when \(-|a_q| - \frac{1 - \delta_B}{1 - \delta_A} - g| > -\delta_A\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q| - g| - (1 - \delta_A)|a_q - g|\), or when \(EU_q(a_g = |a_q| - \frac{1 - \delta_B}{1 - \delta_A}) > EU_q(a_g = \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q|)\).

Given the assumed ordering, we know that if the group’s proposal is given a low priority, and the proposal is not enacted with probability \(1 - \delta_A\), then the utility from that outcome is \(-|g - |a_q||\), or the disutility in the distance between the status quo in policy area \(A\) and the group’s ideal point. This means the group’s utility calculation can be represented by \(-||a_q| - \frac{1 - \delta_B}{1 - \delta_A} - g| > -\delta_A\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q| - g| - (1 - \delta_A)|g - |a_q||\).

This can be rearranged to \(\delta_A < \frac{|g - |a_q|| - |a_q| - \frac{1 - \delta_B}{1 - \delta_A} - g|}{|g - |a_q|| - |a_q| - \frac{1 - \delta_B}{1 - \delta_A} - g|}\). Since the claim is that the group will never want to make the proposal that will get a high priority \((a_g = |a_q| - \frac{1 - \delta_B}{1 - \delta_A})\), then if this fraction is never greater than zero, and therefore never greater than \(\delta_A\), then the group will not make this type of proposal. This fraction \(|g - |a_q|| - |a_q| - \frac{1 - \delta_B}{1 - \delta_A} - g|/|g - |a_q|| - |a_q| - \frac{1 - \delta_B}{1 - \delta_A} - g|\) is greater than zero only when \(||a_q| - \frac{1 - \delta_B}{1 - \delta_A} - g| < |g - |a_q||\), which is never true. This shows that in the “protecting” environment the group always wants to propose \(a_g = \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q|\). In response to the offer, the legislature puts the group’s proposal on the agenda with a low priority \((\pi^* = (b\ell, a_g))\).

In contrast, when the group is “reforming” the status quo, where the ordering is \(a_q < \ell = 0 < \delta < \frac{1}{\delta} - \frac{1 - \delta}{\delta}|a_q| < g\), the group makes a slightly different calculation than above. Specifically, the disutility that would come from the status quo staying in
place would change to \(-|a_q| + g\), such that the relevant inequality calculation would be changed to
\[-|a_q| - \frac{1-\delta_B}{1-\delta_A} - g > -\delta_A \frac{1}{\delta_A} - \frac{1}{\delta_A} |a_q| - g - (1 - \delta_A)g + |a_q|.\]
This simplifies to \(\delta_A < \frac{|g + |a_q|| - |a_q| - \frac{1-\delta_B}{1-\delta_A} - g}{|g + |a_q|| - |a_q| - \frac{1-\delta_B}{1-\delta_A} - g}\). Since the claim is that the group will always want to make the proposal that will be given a high priority \((a_g = |a_q| - \frac{1-\delta_B}{1-\delta_A})\), the relevant question is whether this fraction is always greater than
\[1. \frac{|g + |a_q|| - |a_q| - \frac{1-\delta_B}{1-\delta_A} - g}{|g + |a_q|| - |a_q| - \frac{1-\delta_B}{1-\delta_A} - g}\]
is greater than 1 when \(\frac{1}{\delta_A} - \frac{1}{\delta_A} |a_q| - g > |a_q| - \frac{1-\delta_B}{1-\delta_A} - g\), which is always true in “high relative capacity” environment. Therefore, in the “reforming” environment, the group prefers to propose \(|a_q| - \frac{1-\delta_B}{1-\delta_A}\) which will be given a low priority.
Appendix C

PROOF FOR COMPETING GROUPS MODEL

Competing Groups Equilibrium

This case is when there are competing groups with preferred policies on opposite ends of the legislature’s ideal policy. The outcome is similar to the canonical median voter result, where each group bids each other to the legislature’s ideal policy. This changes the comparative statics greatly and simplifies them. The equilibrium proposal from the groups \((a_1 \text{ and } a_2)\) do not vary with any the parameters, and is always at the legislature’s ideal policy position. Further, the legislature’s decision to prioritize the group’s proposal varies only in the relative position of \(a_q\) and \(b_q\).

A subgame perfect equilibrium for a competing group environment is a triple \((a_1^*, a_2^*, \pi^*)\). Equilibrium behavior is given by:

\[
a_1^*(a_q, \delta_a, \delta_B) = \begin{cases} 
0 & \forall a_q, \delta_A, \delta_B 
\end{cases}
\]

\[
a_2^*(a_q, \delta) = \begin{cases} 
0 & \forall a_q, \delta_A, \delta_B 
\end{cases}
\]
If $|a_1| < |a_2|$:

$$
\pi^*(a_1, a_2, a_q, \delta_A, \delta_B) = \begin{cases} 
(a_\ell, \emptyset) & \text{if } a_1 \notin L(a_q, \delta_A); \notin H(a_q, \delta_B) \text{ or } a_1 = \emptyset \\
(a_1, b_\ell) & \text{if } a_1 \in H(a_q, \delta_B) \\
(b_\ell, a_1) & \text{if } a_1 \notin H(a_q, \delta_B); \in L(a_q, \delta_A)
\end{cases}
$$

If $|a_1| > |a_2|$:

$$
\pi^*(a_1, a_2, a_q, \delta_A, \delta_B) = \begin{cases} 
(a_\ell, \emptyset) & \text{if } a_1 \notin L(a_q, \delta_A); \notin H(a_q, \delta_B) \text{ or } a_2 = \emptyset \\
(a_2, b_\ell) & \text{if } a_2 \in H(a_q, \delta_B) \\
(b_\ell, a_2) & \text{if } a_2 \notin H(a_q, \delta_B); \in L(a_q, \delta_A)
\end{cases}
$$

If $|a_1| = |a_2|$, with probability 0.5:

$$
\pi^*(a_1, a_q, \delta_A, \delta_B) = \begin{cases} 
(a_\ell, \emptyset) & \text{if } a_1 \notin L(a_q, \delta_A); \notin H(a_q, \delta_B) \text{ or } a_1 = \emptyset \\
(a_1, b_\ell) & \text{if } a_1 \in H(a_q, \delta_B) \\
(b_\ell, a_1) & \text{if } a_1 \notin H(a_q, \delta_B); \in L(a_q, \delta_A)
\end{cases}
$$

Or with probability 0.5:

$$
\pi^*(a_2, a_q, \delta_A, \delta_B) = \begin{cases} 
(a_\ell, \emptyset) & \text{if } a_2 \notin L(a_q, \delta_A); \notin H(a_q, \delta_B) \text{ or } a_2 = \emptyset \\
(a_2, b_\ell) & \text{if } a_2 \in H(a_q, \delta_B) \\
(b_\ell, a_2) & \text{if } a_2 \notin H(a_q, \delta_B); \in L(a_q, \delta_A)
\end{cases}
$$

Here each group must consider what the other group will propose, and understand that the legislature will choose the proposal that maximizes its own utility. For any combination of the exogenous parameters, the two groups are forced to propose the ideal policy position of the legislature. This follows from each group being able to marginally outbid the other group, and if the choice by each group, in the model, are
made simultaneously, the subgame perfect equilibrium proposal is the legislature’s preferred policy. Any deviation from this proposal position is not stable because it can be countered by the opposing group.

To illustrate this, assume that \(|a_1| = |a_2|\), but neither equals 0. The legislature will randomly choose which proposal to accept, and optimally put it on the agenda. Therefore the expected utility of each group is equivalent to 

\[-0.5|a_1| + 0.5|a_2| - g_{1,2}\], where with \(a_1 = a_2\), is equivalent to 

\[-|a_{1,2} - g_{1,2}|.\] However, each group has incentive to deviate so that the proposal \((a_1' \text{ or } a_2')\) is slightly better than the opposing groups, enticing the legislator to choose their proposals making their expected utility 

\[-|a_1' - g_1| \text{ or } -|a_2' - g_2|\] for the first and second groups respectively, which is strictly better than \(-|g_{1,2}|). This incentive exists for all proposals except when \(a_1^* = a_2^* = 0\).
Appendix D

PROOF OF PROPOSITIONS

Proposition 1

Proposition 1 presents the comparative static for how far the group’s proposal is from the legislature’s ideal position as a function of cooperative capacity with a group that wants to protect the status quo. As $\delta_A$ increases, so does the distance of $a_g$ from 0, or $\frac{\partial |a_g|}{\partial \delta_A} > 0$.

This is a global statement, in that this is at least weakly true across the three different equilibrium environments. This can be seen by taking each of the equilibrium proposals in the three environments, and confirming how the proposal changes as $\delta_A$ changes. First, in the LU environment, $a_g^* = 0$ if $a_q \in (0, g)$, $a_g^* = |a_q|$ if $a_q \notin (0, g)$, and $a_g^* = g$ if $g \in (0, |a_q|)$. None of the proposals are a function of $\delta_A$, and so in the LU environment $\frac{\partial |a_g|}{\partial \delta_A} = 0$.

In the HULC environment, $a_g^* = B$ if $g > 0$, and $a_g^* = g$ if $g \in (0, \delta)$. From this it is clear that as $\delta_A$ increases nothing happens to $|a_q|$, or $\frac{\partial |a_g|}{\partial \delta_A} = 0$.

Finally, in the HUHC environment, when $a_q < 0$ the equilibrium proposal works as above in the HULC environment. However, when $a_q \in (0, g)$, then $a_g^* = \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q|$. If we take equilibrium proposal $\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A} |a_q|$ and rearrange the terms, we get $\frac{1}{\delta_A} (1 - |a_q|) + \delta_A |a_q|$. Since $1 - |a_q| < 0$ is always true in both high urgency environments, then $\frac{1}{\delta_A} (1 - |a_q|)$ is strictly negative. Holding $(1 - |a_q|)$ constant, as
\(\delta - A\) increases, \(\frac{1}{\delta_A}(1 - |a_q|)\) becomes less negative and therefore \(a_g^*\) is further from 0. Add this to the fact that \(\delta_A|a_q|\) is increasing in \(\delta_A\), and it is clear that \(\frac{\partial|a_g|}{\partial \delta_A} > 0\) in the HULC environment. Taken globally across environments, then, \(\frac{\partial|a_g|}{\partial \delta_A} \geq 0\).

**Proposition 2**

Proposition 2 presents the comparative static for how far the group’s proposal is from the legislature’s ideal position as a function of cooperative capacity with a group that wants to reform the status quo. As \(\delta_A\) increases, the distance between \(a_g\) from 0, or \(\frac{\partial|a_g|}{\partial \delta_A} < 0\).

This, again, is a global statement, in that this is at least weakly true across the three different equilibrium environments. In the LU environment it is still true that \(\frac{\partial|a_g|}{\partial \delta_A} = 0\), and in the HULC environment, \(\frac{\partial|a_g|}{\partial \delta} = 0\), is also still true. But in the HUHC environment, when \(a_q > 0\) the equilibrium proposal is \(a_g^* = |a_q| - \frac{1 - \delta_B}{1 - \delta_A}\).

Taking the derivative with respect to \(\delta_A\), we see that \(\frac{\partial a_g^*}{\partial \delta_A} = \frac{\delta_B - 1}{(1 - \delta_A)^2}\), which, given that \(\delta_B - 1\) is always negative, it is clear that \(\frac{\partial a_g^*}{\partial \delta_A} \leq 0\). Taken globally across environments, then, \(\frac{\partial|a_g|}{\partial \delta_A} \leq 0\).

**Proposition 3**

Since the equilibrium proposal by both groups in the CGE is \(a_g^* = 0\), and does not include \(\delta_A\), it is clear that \(\frac{\partial|a_g|}{\partial \delta_A} = 0\).
Appendix E

PROOF FOR ENDOGENOUS CAPACITY MODEL

The endogenous capacity model equilibrium (ECE) is a subgame perfect equilibrium that is a triple \((\delta^*_A, a^*_g, \pi^*)\), which is composed of an optimal level of cooperative capacity \(\delta^*_A(X) \in X\), optimal group proposal \(a^*_g(X) \in [X, \emptyset]\), and an optimal agenda formation \(\pi^*(a_g) \in [(\emptyset, \emptyset), (a_\ell, \emptyset), (a_g, b_\ell), (b_\ell, a_g)]\). Working backwards, the optimal agenda \(\pi^*\) is a response to the proposal by the group, which in turn is a response to the capacity in policy area \(A\), \(\delta^*_A\), set by the legislature. Therefore, the legislature optimally sets capacity given \(a^*_g\), which is set given \(\pi^*\). The structure of the the optimal proposal and agenda decision rely on Definitions 2-1, 2-2, 2-3, and 2-4 presented previously.

Endogenous Capacity Model

Low Urgency Environment

In the “low urgency” environment, where \(|a_q| \in [0, 1)\), equilibrium behavior is given by:

\[
\delta_A^*(a_q, \delta_B) = \begin{cases} 
1 & \text{if } g \in (0, |a_q|) \\
[0,1] & \text{otherwise}
\end{cases}
\]
\[ a_g^*(a_q, \delta_A, \delta_B) = \begin{cases} 
\emptyset & \text{if } a_q \in (0, g) \\
|a_q| & \text{if } a_q < 0 \text{ and } g \notin (0, |a_q|) \\
g & \text{if } g \in (0, |a_q|) 
\end{cases} \]

\[ \pi^*(a_g, a_q, \delta_A, \delta_B) = \begin{cases} 
(b_{\ell}, \emptyset) & \text{if } a_g \notin (-a_q, a_q) \text{ or } a_g = \emptyset \\
(b_{\ell}, a_g) & \text{if } a_g \in (-a_q, a_q) 
\end{cases} \]

When \(|a_q| \in [0, 1)|), there is no proposal on \(a_q) that the legislature will give a high priority on the agenda. This means that any proposal that group makes that at least makes the legislature indifferent between it and \(a_q) will be accepted and given a low priority. The interval that defines where the legislature is weakly indifferent is the status quo position itself and its reflection, called \(LU(a_q)\) by **Definition 2-1**.

The legislature has a expected utility of \(EU_{\ell} = -|b_{\ell} - \ell| - \delta_A|a_g - \ell| - (1 - \delta_A)|a_q - \ell|\). Assuming \(b_{\ell} = \ell\) and \(\ell = 0\), then when \(a_q = a_q\) the expected utility of the legislature is \(-|a_q|\), or the expected utility of the legislature is indifferent to \(\delta_A\). The group will propose \(a_q\) when it wants to reform the status quo \((a_q < 0)\). Any proposal on the interior of \(LU(a_q)\) is strictly preferred by the legislature to \(a_q\), and therefore the legislature will set \(\delta_A\) to the highest possible level, or \(\delta_A = 1\). The group will make a proposal in the interior of \(LU(a_q)\) when it has a ideal position in the interior \((g \in (0, |a_q|))\).

**High Urgency Environment**

In the “high urgency” environment, where \(|a_q| \geq 1\), equilibrium behavior is given by:
\[ \delta_A^*(a_q, \delta_B) = \begin{cases} 
1 & \text{if } a_q < 0 \\
\left(0, \frac{|a_q| - 1}{|a_q| - \delta_B}\right) & \text{if } a_q > 0 \text{ and } g \notin (0, \delta_B) 
\end{cases} \]

\[ a_g^*(a_q, \delta_A, \delta_B) = \begin{cases} 
\delta_B & \text{if } \delta_A \leq \frac{|a_q| - 1}{|a_q| - \delta_B} \text{ and } g \notin (0, \delta_B) \\
|a_q| - \frac{1 - \delta_B}{1 - \delta_A} & \text{if } \delta_A > \frac{|a_q| - 1}{|a_q| - \delta_B} \text{ and } a_q < 0 \text{ and } g \notin (0, \frac{|a_q| - 1}{|a_q| - \delta_B}) \\
\frac{1}{\delta_A} - \frac{1 - \delta_B}{\delta_A}|a_q| & \text{if } \delta_A > \frac{|a_q| - 1}{|a_q| - \delta_B} \text{ and } a_q > 0 \text{ and } \\
g & \text{if } \delta_A \leq \frac{|a_q| - 1}{|a_q| - \delta_B} \text{ and } g \in (0, \delta_B) \\
or & \delta_A > \frac{|a_q| - 1}{|a_q| - \delta_B} \text{ and } a_q < 0 \text{ and } g \in (0, \frac{|a_q| - 1}{|a_q| - \delta_B}) \\
or & \delta_A > \frac{|a_q| - 1}{|a_q| - \delta_B} \text{ and } a_q > 0 \text{ and } \\
g \in (0, \frac{1}{\delta_A} - \frac{1 - \delta_B}{\delta_A}|a_q|) 
\end{cases} \]

\[ \pi^*(a_g, a_q, \delta_A, \delta_B) = \begin{cases} 
(a_{\ell}, \emptyset) & \text{if } a_g \notin H(a_q, \delta_B) \text{ or } a_g = \emptyset \\
(a_g, b_{\ell}) & \text{if } a_g \in H(a_q, \delta_B) \\
(b_{\ell}, a_g) & \text{if } a_g \in L(a_q, \delta_A); \notin HL(a_q, \delta_A, \delta_B) 
\end{cases} \]

In this environment, the legislature can choose the level of capacity for policy area \( A \) such that they can create a “low capacity” or “high capacity” environment. So then the question is when the legislature would prefer either of these environments. The factor that determines this is what the group will proposal given the level of capacity, which is a function of group preferences. Specifically, it is determined by whether the group is “protecting” the status quo for policy area \( A \) (\( \ell \notin (a_q, g) \)) or is “reforming” \( a_q \) (\( \ell \in (a_q, g) \)).
Knowing what the group will propose given its position relative to $a_q$ and $\ell$, the legislature simply calculates whether or not they would prefer low or high capacity with each type of group. Assuming a situation with a reforming group, then we know the proposal will be $a_g = \delta_B$ with low capacity, and will get a low priority, and $a_g = |a_q| - \frac{1 - \delta_A}{1 - \delta_B}$, which will get a high priority from the legislature. Therefore the legislature is calculating which is better, $-|\delta_B - \ell| - \delta_B|b_\ell - \ell| - (1 - \delta_B)|b_q|$, or $-|a_q| - \frac{1 - \delta_A}{1 - \delta_B} - \ell| - \delta_B|b_\ell - \ell| - (1 - \delta_B)|b_q|$. Since, by assumption, $b_\ell = \ell = 0$, and $|b_q - \ell| = 1$, then these can be simplified to $-1$ and $-|a_q| - \frac{1 - \delta_A}{1 - \delta_B} - (1 - \delta_B)$. Solving $-1 > -|a_q| - \frac{1 - \delta_A}{1 - \delta_B} - (1 - \delta_B)$ for $|a_q|$, we find that if $|a_q| > \frac{1 - \delta_A\delta_B}{1 - \delta_A}$, then for any $\delta_B < 1$, the legislature will always prefer a “high capacity” environment, and in turn will always prefer the highest level of capacity, or $\delta_A = 1$. If the ideal position of the group is sufficiently close, the group will propose $g$ and the legislature will still want to create a high capacity environment.

If, on the other hand, the group is such that it is protecting the status quo, then its proposal will be $a_g = \frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q|$, and the calculation where the legislature decides if it prefers low or high capacity is $-|\delta_B - \ell| - \delta_B|b_\ell - \ell| - (1 - \delta_B)|b_q| > -|b_q - b_\ell| - \delta_A\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q| - \ell| - (1 - \delta_A)|a_q - \ell|$. Again, with some simplifying assumptions, this can be reduced to $-1 > -\delta_A|\frac{1}{\delta_A} - \frac{1 - \delta_A}{\delta_A}|a_q|| - (1 - \delta_A)|a_q|$. With some rearranging we get $\delta_A|a_q| < |1 - |a_q| + \delta_A|a_q||$, which is equivalent to $\delta_A|a_q| < |1 - |a_q|| + \delta_A|a_q|$, or $|1 - |a_q|| > 0$, which is always true. Therefore, when there is a group that wants to protect the status quo, then the legislature will prefer to create a low capacity environment. The expected utility is in this environment is always $-1$, so the legislature is indifferent with any $\delta_A \in (0, \frac{|a_q| - 1}{|a_q| - \delta_B})$.  

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Competing Groups Environment

A subgame perfect equilibrium for a competing group environment is a quadruple \((\delta^*_A, a_1^*, a_2^*, \pi^*)\). Equilibrium behavior is given by:

\[\delta^*_A(a_q, \delta_B) = \begin{cases} 1 & \forall \ a_q, \delta_B \end{cases}\]

\[a_1^*(a_q, \delta_A, \delta_B) = \begin{cases} 0 & \forall \ a_q, \delta_A, \delta_B \end{cases}\]

\[a_2^*(a_q, \delta) = \begin{cases} 0 & \forall \ a_q, \delta_A, \delta_B \end{cases}\]

If \(|a_1| < |a_2|:\)

\[\pi^*(a_1, a_2, a_q, \delta_A, \delta_B) = \begin{cases} (a_\ell, \emptyset) & \text{if } a_1 \notin L(a_q, \delta_A); \notin H(a_q, \delta_B) \text{ or } a_1 = \emptyset \\ (a_1, b_\ell) & \text{if } a_1 \in H(a_q, \delta_B) \\ (b_\ell, a_1) & \text{if } a_1 \notin H(a_q, \delta_B); \in L(a_q, \delta_A) \end{cases}\]

If \(|a_1| > |a_2|:\)

\[\pi^*(a_1, a_2, a_q, \delta_A, \delta_B) = \begin{cases} (a_\ell, \emptyset) & \text{if } a_1 \notin L(a_q, \delta_A); \notin H(a_q, \delta_B) \text{ or } a_2 = \emptyset \\ (a_2, b_\ell) & \text{if } a_2 \in H(a_q, \delta_B) \\ (b_\ell, a_2) & \text{if } a_2 \notin H(a_q, \delta_B); \in L(a_q, \delta_A) \end{cases}\]
If $|a_1| = |a_2|$, with probability 0.5:

$$
\pi^*(a_1, a_q, \delta_A, \delta_B) = \begin{cases} 
(a_{\ell}, \emptyset) & \text{if } a_1 \notin L(a_q, \delta_A); \notin H(a_q, \delta_B) \text{ or } a_1 = \emptyset \\
(a_1, b_{\ell}) & \text{if } a_1 \in H(a_q, \delta_B) \\
(b_{\ell}, a_1) & \text{if } a_1 \notin H(a_q, \delta_B); \in L(a_q, \delta_A)
\end{cases}
$$

Or with probability 0.5:

$$
\pi^*(a_2, a_q, \delta_A, \delta_B) = \begin{cases} 
(a_{\ell}, \emptyset) & \text{if } a_2 \notin L(a_q, \delta_A); \notin H(a_q, \delta_B) \text{ or } a_2 = \emptyset \\
(a_2, b_{\ell}) & \text{if } a_2 \in H(a_q, \delta_B) \\
(b_{\ell}, a_2) & \text{if } a_2 \notin H(a_q, \delta_B); \in L(a_q, \delta_A)
\end{cases}
$$

If there are two or more groups competing over a place on the agenda, they are each forced to make proposals exactly at the ideal position of the legislature, no matter the level of urgency on $a_q$. Therefore the group has two proposals – either of the group’s on $a_q$, and their own on $b_q$ – exactly at their ideal position. They choose the agenda order according to urgency, and choose to set capacity for policy area $A$ at $\delta_A = 1$. 
Appendix F

ADDITIONAL TABLES

Table F.1: List of Symbols for Theory

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$a_q; b_q$</td>
<td>status quo positions for policy areas A and B</td>
</tr>
<tr>
<td>$x_e; x_g$</td>
<td>ideal policy position for legislature and group</td>
</tr>
<tr>
<td>$a_e; b_e$</td>
<td>proposal by legislature for policy areas A and B</td>
</tr>
<tr>
<td>$a_g$</td>
<td>proposal by group on policy area A</td>
</tr>
<tr>
<td>$\pi(\star, \star)$</td>
<td>agenda priority</td>
</tr>
<tr>
<td>$\delta_A; \delta_B$</td>
<td>cooperative capacity for policy areas A and B</td>
</tr>
</tbody>
</table>

Table F.2: List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>USCC</td>
<td>U.S. Chamber of Commerce</td>
</tr>
<tr>
<td>AFL-CIO</td>
<td>American Federation of Labor - Congress of Industrial Organizations</td>
</tr>
<tr>
<td>BE</td>
<td>Baseline Equilibrium</td>
</tr>
<tr>
<td>LU</td>
<td>Low Urgency</td>
</tr>
<tr>
<td>HULC</td>
<td>High Urgency-Low Capacity</td>
</tr>
<tr>
<td>HUHC</td>
<td>High Urgency-High Capacity</td>
</tr>
<tr>
<td>HCE</td>
<td>Heterogenous Capacities Equilibrium</td>
</tr>
<tr>
<td>CGE</td>
<td>Competing Groups Equilibrium</td>
</tr>
<tr>
<td>EGE</td>
<td>Endogenous Capacity Equilibrium</td>
</tr>
<tr>
<td>CRP</td>
<td>Center for Responsive Politics</td>
</tr>
<tr>
<td>PAC</td>
<td>Political Action Committee</td>
</tr>
<tr>
<td>HHI</td>
<td>Herfindahl-Hirschman Index</td>
</tr>
</tbody>
</table>


*American Political Science Review* 84: 797-820.


Leech, Beth. 2011. “Lobbying and Interest Group Advocacy.” In Eric


