

**Beyond the Ballot:
The Influence of Direct Democracy on Interest Group
Behavior**

Thesis by

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Dedication

To my family and Valentina.

Acknowledgments

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Abstract

This dissertation examines the impact of the initiative process on state interest group mobilization, characteristics and lobbying tactics and behavior. I develop a mathematical model of how access to the initiative process influences interest groups' decisions. Key aspects of the model include the examination of the effect of uncertainty about voters' preferences and the influence of the initiative on groups' ability to lobby the legislature directly. Using the model I develop three predictions about how initiative states should differ from non-initiative states. The remainder of the dissertation tests these predictions and related implications in a variety of data. First, I find that initiative states are more likely to adopt policies than non-initiative states through event history analyses of capital punishment and casino-style gaming adoptions. Second, I find that initiative states have more interest groups than non-initiative states and that the additional groups come from traditionally under-represented areas. Third, through a survey analysis of interest groups in four states, I find that initiative state groups have larger membership and less resources, on average. These differences in resources are reflected in their lobbying tactics as initiative state groups tend to rely more on outside lobbying tactics. Fourth, I find that, even after controlling for resource differences, initiative state groups still rely more on outside lobbying and less on inside lobbying. These tests confirm the predictions of the model, provide insight into how state interest groups behave and demonstrate the sizable effect of institutions on state interest group politics.

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Chapter 1 Introduction

The debate on direct legislation, by the press and from the platform, produced no lasting contributions to political theory. It consisted of pictures of the promised land by the advocates and forecasts of chaos by the opponents, and both prophecies were liberally spiced with personal denunciations approaching dangerously on libel.

— V.O. Key, Jr., and Winston Crouch

The Initiative and Referendum in California

In many ways, little has changed in the sixty years since Key and Crouch wrote this statement. The debate about the initiative process still focuses on gloom and doom predictions about the end of democracy in books with titles *Paradise Lost* (Schrag 1998) and *Democracy Derailed* (Broder 2000), and is still staunchly defended by its supporters as the only remedy for the ills of state government. The critics have generally focused on the growing importance of money in initiative campaigns, arguing that this restricts use of the initiative only to an elite set of interest groups, thereby subverting the intentions of the Progressive reformers who fought for its adoption as a recourse against wealthy economic interests that had seized control of state legislatures around the beginning of the twentieth century. Even the hallowed Tax Revolt of the late 1970s and early 1980s has come under attack as a “*faux* populist moment” (Smith 1998).

In many ways these negative assessments of direct democracy result from the failure of scholars to meet the first criticism leveled by Key and Crouch: there have been few advances in our theoretical understanding of how the initiative process influences politics. The evidence of the failure of direct democracy is often a handful of select initiatives chosen to highlight its shortcomings instead of systematic studies that assess the impact of the initiative on state politics. The observation that a few initiative campaigns are costly does not in itself constitute a valid reason to condemn the process.

Perhaps the lack of solid theoretical underpinnings has also led to this narrow view of the initiative process and its focus on the few items that voters are actually asked to decide at the ballot box. Stepping back from the process itself leads to a greater question about democracy and the role of institutions: how does the ability of citizens to circumvent the legislative process influence state politics? Changing the institutional structure individuals and groups face will alter which interests and characteristics are rewarded. For example, if membership-based citizen groups are better suited to using the initiative process to modify policy than economic interests, its presence may be a boon to them and they will be advantaged in states with the initiative. The balance of power will be tilted back towards them, even outside the narrow confines of the ballot, and they may prosper.

In this regard, this dissertation is as much about interest groups as it is about the initiative process. Recent work has suggested that groups are a product of their environment, so it stands to reason that they will respond to differences in it as fundamental as direct democracy. In short, this dissertation adds to the theoretical understanding of the initiative process by focusing on those that are most influenced by its presence: interest groups seeking to influence policy.

The main set of findings indicate that groups are indeed responsive to their institutional environment. Not only do they use the initiative process to influence policy, but they take this ability into account during their decision making. The process works as follows: access to the initiative process enhances the ability of groups to influence policy, leading more groups to mobilize and be active. Because different groups are able to use the initiative with different levels of effectiveness relative to the legislature, the groups that mobilize because of it have different characteristics than the groups that would have mobilized anyway. In particular, the average interest group in initiative states has more members, less financial resources and fewer paid employees. These differences in resources translate into different lobbying strategies as well: initiative state groups report that contacting agencies or legislators are less important activities than do groups in non-initiative states. Finally, the overall lobbying strategies that groups employ also differ, with groups in initiative states relying less on these inside lobbying strategies and more on outside strategies like protests and letter writing campaigns.

Clearly the effect of the initiative process is dramatically more pervasive than the few number of items voters are actually called to decide upon on any ballot. To determine the overall consequences of direct democracy for state politics, it is necessary to examine how it influences interest groups' behavior. The objective of this dissertation is not to defend the presence of the initiative process in the states that have it: rather I will expand the domain over which its consequences are evaluated. Rather than focusing on a select number of high profile initiatives or even policy areas, I consider the possible consequences of the fundamental change wrought by giving groups the ability to circumvent the legislative process, including how many groups successfully mobilize, what they look like and how they attempt to influence policy.

To accomplish this task, this dissertation is organized into seven main chapters. Chapter 2 develops the formal model upon which the empirical work is based. By developing a formal model I can make predictions about the wider consequences of the initiative process for interest groups' decision making, such as how it influences mobilization.

Building on the theoretical predictions derived in Chapter 2, the next chapter goes into detail developing the predictions that will form the basis for the empirical tests in the rest of the dissertation. Since these three predictions cover different phenomena such as policy adoptions, interest groups' mobilizations and lobbying decisions, I also discuss the data required to test each of them. By examining the predictions in different data sets representing dramatically different aspects of interest groups' behavior, I provide a stronger test of the predictions and also demonstrate how the effect of the initiative process extends to many different aspects of state politics.

The first set of empirical tests examines the influence of the initiative process on policy adoptions. Chapter 4 uses the model's predictions about which states interest groups will target first for policy change. I find that initiative states are significantly more likely to adopt both casino-style gaming and capital punishment and that the outcomes in initiative states are responsive to voters' preferences. The use of the initiative process also has implications for diffusion processes as well: I find evidence that for policies where voters' preferences are uncertain, there is a positive diffusion effect between initiative states, but not elsewhere.

After demonstrating that interest groups can use the initiative process to influence policy

outcomes, I move on to determining if this is reflected in interest groups' decisions regarding mobilization and lobbying techniques in the ways predicted by the model. Chapter 5 tests the resulting prediction that there should be more interest groups in initiative states due to initiative mobilizations. I examine the total number of groups in each state and find that there are indeed more interest groups in initiative states. I also find evidence that groups that are generally viewed as less successful in the legislature are disproportionately mobilized by access to the initiative, leading initiative states to have more diverse interest group populations.

To examine the effect of direct democracy on interest groups' characteristics I conduct survey analysis of groups in initiative states and non-initiative states. Chapter 6 discusses the survey design and instrument and studies the average characteristics of respondents. The additional groups found in the previous chapter lead initiative states to have groups with more members and less financial resources, on average. I explore many other characteristics and then show how these differences translate into differences in lobbying strategies: groups with different assets will use different methods to achieve their goals.

Beyond these shifts in lobbying strategies resulting from distributional changes in group characteristics, the process of initiative mobilization may lead to groups that lean more heavily on strategies associated with ballot campaigns rather than those associated with the legislature. Before moving on to this analysis in Chapter 8, though, I discuss the importance of confronting selection bias in survey data and develop a method that allows me to correct for it in Chapter 7. This chapter also includes Monte Carlo analysis of the proposed two-stage estimation procedure and introduces the model by examining the causes of interest groups' use of the initiative process.

Following this, the next chapter is comprised of two components. The first uses factor analysis to construct lobbying scores for different strategies. I find evidence of a shift in strategies from a simple inside/outside dichotomy to a new professionalized inside lobbying which uses select outside lobbying techniques to supplement traditional inside ones accompanied by an outside lobbying dimension. I also find evidence of a new, third strategy, which I refer to as the issue entrepreneur dimension. The second component is an analysis of the determinants of interest groups' strategies, which examines whether the presence of

the initiative is an important determinant of whether a group emphasizes inside strategies such as contacting legislators and agencies relative to outside strategies. This is in fact the case: groups in initiative states do use outside strategies more and inside ones less. Groups that are involved in initiatives, though, are able to use this leverage to increase their ability to inside lobby, though, as the model predicts. Finally I summarize the findings and provide conclusions and a discussion of their implications.

Chapter 2 Modeling the Initiative Process

The stepping stone in this dissertation's attempt to understand how interest groups use the initiative process to influence state policy outcomes and the broader implications this has for their decisions regarding mobilization and lobbying techniques is a model of interest group behavior that attempts to incorporate the basic environment these groups face. Rather than focus on understanding any one specific initiative campaign or interest group, the objective is to understand patterns that can be investigated in detail. The patterns that are sought out and what influences their appearance will depend on what it is that interest groups are trying to accomplish and what resources they can employ in their endeavors, so in this chapter I start by setting down these assumptions and then using them to derive predictions about how interest groups can use the initiative process and how this influences their behavior in general. What do we learn from this effort about the initiative process' influence on interest groups? The end result of this chapter is a set of empirical predictions about interest group behavior that will be tested throughout the rest of this dissertation.

2.1 The Interest Group's Environment

The spread of the initiative process is an outgrowth of the Progressive era in American politics around the turn of the twentieth century. As citizens grew dissatisfied with the increasing power of business and machine party politics, they sought to reform government to return control of representatives to the common man rather than the wealthy elite. As one of several reforms, including recall, referendum, direct election of Senators and managerial-style government, the initiative process was seen as a way to allow citizens to directly implement new legislation if their elected officials would not. Between 1898 and 1918, seventeen states adopted the direct initiative process. While its popularity waned in the middle of the century, recent anti-government sentiment has led many states since 1970 to consider adopting the

initiative, with three states adopting between 1968 and 1978 and one more doing so in 1992.¹

While the initiative process allows groups to propose legislation on their own, a model of it must start with the legislature. As the seat of policy making power, legislatures are generally the primary focus of any interest group that wishes to influence policy. They attempt to do this through persuasive methods, including testifying at hearings, generating grassroots public support or by offering campaign contributions to key legislators. When they are not successful they may turn to other parts of government, including the courts or the governor's office, but for the purposes of the model developed here, all policy making will be performed by the legislature. Further, the interest group's sole objective will be to achieve its policy goals. Certainly this is not the only objective that interest groups might have: some could be interested in increasing their membership or building a reputation or increasing access to officials, but here these are all viewed as methods or resources used to influence policy.

Standing in the way of these desires is the legislature, which also cares about policy. Since the legislature has a monopoly over policy making at this point, the outcome might seem easily predicted: the legislature just picks its preferred policy and the interest group goes home. Without the initiative process at its disposal, the interest group can not stop the legislature from doing as it pleases. While this may seem an overly simple model of policymaking, it is, in fact, what previous models of the initiative process have assumed (Gerber 1999; Matsusaka and McCarty 1998). Interest groups do, however, have the ability to try to influence which policy the legislature chooses. By offering some resource that legislators might find useful, such as money, the group can seek to obtain policy concessions.

So in states with or without the initiative process, the interest group will have the ability to offer monetary benefits, in the form of campaign contributions, to the legislature in exchange for its preferred policy.² Since the interest group may not be willing to give up as much as the legislature requires, or may not have enough available, it may not be able to influence policy in the end. In states that do have the initiative process, of course, the interest

¹For more detailed discussions of the Progressives and the initiative process, see Mowry (1951), Magleby (1984) or Cronin (1990).

²The degree to which groups can influence legislators' votes through monetary contributions is an area of extreme empirical debate. See Baumgartner and Leech (1998) for a discussion of the various findings.

group will then be able to take recourse by circumventing the legislature and proposing an initiative to be submitted to the voters for approval. In all states, there is a cost to doing this, mainly comprised of gathering a certain minimum number of signatures and writing the proposed legislation. If the group incurs this cost, its initiative will be placed on the ballot and voters will decide whether it passes or fails.

Ironically, in other models of the initiative process, this stage is never reached since the legislature and interest group both know in advance whether the initiative will pass or not. This knowledge allows them to strike a suitable bargain when they know it will pass since the legislature can choose a policy that makes it not worthwhile for the group to spend the money to propose an initiative (Gerber 1999). More realistically, the interest group and legislature are uncertain about what would happen should an initiative reach the ballot. In a rather scathing statement about how informed voters are, Magleby (1984) supports the presence of uncertainty by referring to direct legislation outcomes as “electoral roulette.” The addition of uncertainty also allows the model to make predictions about the role of information in interest group decisions about how to influence policy and whether it is even a feasible objective in certain circumstances.

The final key aspect of the interest group’s environment is related to the cost of an initiative campaign. Certainly when there is a well-organized and well-funded opposition, the initiative campaign runs the risk of becoming extremely costly, which may reduce its appeal. The group will take this possibility into account when it considers proposing the initiative and in its attempts to persuade the legislature to move policy. Bringing together all of these factors, the next section develops the model in more detail.

2.2 The Influence of the Initiative Process

As a starting point for the model, consider the initial circumstances: there is an interest group (P) that is unhappy with the current status quo, which is at zero in policy space. The interest group prefers policy at a different point in the policy space, labeled one, and would gain utility of one if policy were to move. On the other hand, the legislature (L) is quite happy with the current status quo and sees no policy-based reason to move it, since it would

lose utility of β from doing so.³ For example, consider a group that supports legalization of marijuana for medicinal purposes. In most states it is illegal, so the current policy dictates that medicinal uses are illegal, which translates into zero in the policy space. The group would like to change this to a policy of one, or legalization of medicinal marijuana use. The group interested in this change is Americans for Medical Rights and they have fought, often successfully, to change this law in many states. In all cases they faced a recalcitrant legislature and their only successes have come through the ballot box. There are some examples where they have tried to work through the legislature, though, so this option must also be considered.⁴

The group thus has at least two choices: it can offer to transfer $\$t$ to the legislature in the form of campaign contributions, or it can do nothing. In direct democracy states, there is also the option of proposing an initiative to the voters. To get this on the ballot, the group will have to pay the fixed cost, $\$c$, of drafting the initiative and gathering the necessary signatures and then will wage an initiative campaign against another group (R) that is expected to react to the initiative on the ballot by spending some amount $\$s_R$, to counter which the proposing group will choose to spend some amount $\$s_P$. These costs can often be astronomical. After the campaign, the state's voters will decide if the initiative passes. Once the ballots are counted, the new policy is one if a majority of votes cast are in favor, otherwise it stays at zero.

Since the outcome of the initiative vote is a determining factor in how access to the initiative process influences the strategies of the interest group and the legislature, it is important to specify exactly what the actors know about the voters' preferences. Since there are only two possible policy choices, the outcome of the initiative vote will be determined by which policy is preferred by more voters. In particular, it is the location of the tie-breaking voter that matters: if more than fifty percent of voters have ideal points at zero, then the initiative will fail, but if more than fifty percent prefer one, it will pass. This allows me to

³I write the utility difference to the legislature as β so that the intensity of its preferences relative to the interest group can be varied, which will influence when and whether successful bargaining can be carried out.

⁴Attempts through the legislature have occurred in non-initiative states, including New York and New Mexico, as well as in initiative states such as Wyoming (Armentano 1997).

focus on one voter, V , often referred to as the median voter (who is in this case also the modal voter), whose vote completely determines the outcome of the election. The problem, from the interest group and legislature's point of view, is that it is not known whether the median voter prefers zero or one, so the outcome of the initiative vote is uncertain until election day.

This uncertainty could result from many factors. Voters might not yet have made up their mind about which policy outcome they prefer when the interest group qualifies the initiative, there might be uncertainty about exactly which voters will turn out (possibly influenced by other campaigns) or their opinions could shift during the campaign period. The interest groups and the legislature will have some information about what might happen, though, possibly through polls or experience from previous initiatives — even a roulette wheel comes up red forty-seven percent of the time. In the context of the model, the actors will know the probability, λ , that the median voter will support the initiative.

2.2.1 When the Initiative Matters

The outcome of the game is best understood by considering what happens if the group proposes an initiative and then by using this information to backwards induct how the legislature would respond at the lobbying stage. The group knows that based on the probability that the median voter supports the initiative, labeled λ , and the effect of campaign advertising, there is some probability, π , that the initiative will pass.⁵ By altering the amount that it spends and knowing how much the other group will spend to counter it, the proposing group knows that it gains the policy benefit of the initiative only if it passes, but spends the advertising cost and the signature gathering cost, $s_P + c$, for sure. Since the costs do not vary — the qualifying cost is fixed and the advertising spending does not depend on λ — but the expected benefits increase with the probability of passage, as λ increases the expected value of proposing an initiative also increases. For very low values, the expected benefit is too small to justify the expense, but as the probability of success increases, there will be some point, λ^* , above which the group will always propose an initiative and below

⁵I let the probability of passage be the convex combination of the campaign effects and the probability the median voter supports the initiative: $\pi(\lambda, s_P, s_R) = \alpha \frac{s_P}{s_P + s_R} + (1 - \alpha)\lambda$.

which it will not. This critical value is solved for by setting the expected benefit equal to the cost.⁶

As outside support for the model, return to Magleby's discussion of state signature requirements and passage rate. If groups are being strategic, then as the fixed cost of proposal, c , increases, the minimum probability above which they will propose an initiative also increases. This means that initiatives with lower probabilities of passage are not cost-effective from the group's point of view and will not reach the ballot. Magleby's breakdown of passage rates by signature requirements shows that states with higher hurdles also have higher passage rates, providing preliminary support for the model.

In the case where λ is below λ^* , the interest group does not propose an initiative. Essentially, this is equivalent to the group being in a non-initiative state and thus does not influence the contributions that the group makes to the legislature. This is not surprising: when a group is not willing to propose an initiative based on its own merits, then the option of proposing it does not affect the outcome. Either the group offers sufficient campaign contributions to the legislature and policy is moved to one, or it does not and policy stays at zero.

In the other case, when $\lambda \geq \lambda^*$, the initiative is a credible threat for the interest group. Since the legislature now has to worry about an initiative being proposed and passing if it refuses the contributions offer, the initiative process also influences the interest group's ability to lobby.⁷ When an initiative at one is successful, the legislature loses its preferred policy of zero and gets no contributions in return, so it may be willing to move policy to one itself in exchange for some compensation. As the probability of the initiative passing increases, the amount that the legislature would accept decreases since it becomes more likely that policy will move anyway.

⁶The derivation of the formal results is presented in Appendix A for the interested reader. In this chapter, I provide an overview of the model and its predictions.

⁷It is a threat at equality since it may induce the legislature to prefer to bargain. The interest group may be indifferent between the status quo and the initiative, but may benefit from forcing the legislature to bargain.

2.2.2 The Effect of the Initiative on Contributions

In the case where the interest group does not propose an initiative, the legislature must get its full utility loss, β , from moving policy from zero to one, so if the gain is not worth at least this much to the interest group (whenever $\beta > 1$), policy does not move. If it is worth this much — the interest group gains more than the legislature loses — the exact amount of the transfer is determined by bargaining. The only issue to be determined is how much money changes hands, so I apply the Nash Bargaining solution, which dictates that the bargainers split the net gain evenly, or the interest group gives the legislature the exact minimum that it requires and then half of whatever more it is willing to pay on top of that.⁸ While this influences the amount of money that may change hands, it does not affect when successful policy influence is achieved through the legislature.

When the initiative becomes cost-effective for the interest group, the amount that it is willing to pay the legislature goes down. Because of this, the amount that the legislature gets from the interest group decreases. Simultaneously, the utility that the legislature expects to receive if it ignores the group goes down as well since if the initiative passes the legislature will get its less preferred policy. This reduces the minimum amount the legislature would accept, making the contributions even smaller still. These two forces constitute the indirect effect of the initiative process: the legislature has to take into account what might happen if it refuses the contributions, so it is willing to move policy for a relatively smaller amount. As this quantity decreases, it crosses a point where the interest group is willing to offer contributions rather than propose an initiative. Since the expected benefit of the initiative depends directly on the probability that one would pass, the critical contribution level can be translated into a probability of passage, λ^P .

A similar argument can be made for the legislature, which also has a critical probability *above* which it accepts the contributions and below which it risks the initiative. Successful bargaining only occurs when it is mutually beneficial, which happens when λ is smaller than both actors' critical values. Since the interest group's critical point is always higher than the legislature's, or $\lambda^P \geq \lambda^L$, the pivotal factor in determining if the outcome is an initiative

⁸See Morrow (1994) for a discussion of Nash Bargaining.

or successful legislative contributions is whether λ is less than the interest group's critical value, λ^P .

2.2.3 Equilibrium Behavior

Combining the decisions that the actors make, as discussed in the previous section, allows me to solve for the equilibrium of the game and use the solution to make predictions that can be tested in later chapters. Since some of the key parameters can vary in different situations, I express the equilibrium as a function of the probability that an initiative would pass. Intuitively, when this probability is very low the ability to use the initiative has little effect and when the probability of passage is very high it influences what groups and legislatures will do. In between, the interest group makes a successful offer of contributions, convincing the legislature to move policy to one.

Proposition 1 (Equilibrium) *The legislature always chooses to set policy at its ideal point initially. If $\lambda_i < \lambda_i^*$ the group does not propose an initiative and bargaining happens when $\beta < 1$. When $\lambda_i^L \leq \lambda_i < \lambda_i^P$ the legislature and the interest group successfully bargain to move policy, otherwise the group proposes an initiative (when $\lambda^* \leq \lambda < \lambda_i^L$ or $\lambda^P \leq \lambda \leq 1$).*

Proof

See Appendix A.

So when initiatives are not likely to pass, the ability to propose one does not influence the outcome. As they become more likely to pass then groups find it beneficial to propose them and the legislature takes the risk of one passing. As this probability gets even larger, the legislature does not want to take this risk and the groups are able to bargain. It is this behind-the-scenes lobbying that can make the median voter worse off. This is true even if advertising does not influence her vote since the uncertainty over her ideal point creates incentives for the legislature to accept contributions.⁹ These incentives decrease as the probability that voters would support an initiative decreases, so the group is often not

⁹The potential decrease in utility for the median voter occurs when the legislature accepts contributions and moves policy to one when it is more likely that voters prefer zero ($\lambda < 0.5$) since a proposed initiative would not be expected to pass.

be able to use proposal as leverage in its lobbying attempts.¹⁰ Finally, when the probability of passage is near one, the group will not offer the legislature contributions greater than the cost of the initiative since both avenues implement its preferred policy with virtual certainty.

This relationship between the contributions required to move policy and the probability of voters passing new policy provides the intuition behind the next result, which demonstrates the effect of the initiative on the proposing group. In short, an interest group seeking policy changes prefers to operate in a state that allows initiatives since it anticipates spending less to get the policy it prefers.

Proposition 2 *The presence of the initiative process makes the proposing interest group weakly better off in expectation.*

Proof

See Appendix A.

Propositions 1 and 2 are summarized in Figure 2.1, which presents the equilibrium transfer and outcome as a function of λ , the probability of an initiative passing. In the case without initiatives, the outcome is necessarily independent of λ and depends only on whether $\beta < 1$, in which case the group offers contributions and policy is moved. Similarly, even with initiatives, when $\lambda < \lambda^*$, the outcome is the same since proposing an initiative is not a credible threat. Once λ increases above λ^* , the initiative becomes a credible threat. Since the policy space is binary, this means that the equilibrium suddenly shifts from bargaining to the group proposing an initiative in the cases where the legislature is not willing to bargain due to the low probability of success at the ballot box. When λ rises slightly above λ^L the probability of an initiative passing becomes large enough that legislature is no longer willing to ignore the threat.¹¹ The legislature moves policy itself in exchange for contributions, the equilibrium amount of which is decreased by the threat of the initiative. The benefit for the group of access to the initiative process is reflected by the distance between the upper,

¹⁰Since this depends crucially on the set of probabilities where bargaining occurs rather than proposal, how often it occurs depends on the cost of proposal. When the cost is very high, there is never bargaining since initiatives are never worthwhile. As the cost gets very small, λ^L and λ^P converge and initiatives are always preferred by the group over bargaining (since they are costless).

¹¹Since the derivation of λ^L is done under the assumption that the initiative poses a credible threat ($\lambda^* \leq \lambda$), it follows that $\lambda^* \leq \lambda^L$, otherwise the equilibrium would still be the same as in non-initiative states.

non-initiative equilibrium contributions line and the lower, initiative equilibrium line. The lower slopes downward since as the probability of the initiative passing increases, the group offers less contributions. When $\beta < 1$, the group is better off since the contributions required to move policy are less when the initiative is a credible threat. When $\beta \geq 1$ the group is better off since without the initiative, policy would not move at all and now the threat of proposing an initiative makes this possible.

(Figure 2.1 here)

Lastly, when the probability is greater than λ^P , the outcome is an initiative proposal. When the probability of an initiative passing is near one, it is now the group that favors proposing initiatives over lobbying: the cost of the initiative is less than the cost of the contributions made in the bargaining outcome. Since a proposal is almost certain to pass, the group uses the possibility of proposing an initiative to its advantage, meaning that the ability to propose initiatives makes it better off; it would not propose one otherwise.

Interestingly, this means that the initiative process increases the relative effectiveness of each dollar spent on contributions since fewer contributions are required for the group to accomplish its goals. This means that there are two diametrically opposed effects of the initiative process on campaign contributions. Being able to propose initiatives sometimes leads groups to substitute this method of policy influence for direct legislative lobbying. This obviously reduces contributions made since whenever an initiative is proposed and $\beta < 1$ the group would have successfully bargained with the legislature. The other effect results when $\beta \geq 1$ and no contributions would be made without the initiative process. Since the ability to propose initiatives decreases the minimum amount the legislature will accept, it creates circumstances where the group now makes the contributions since the amount required is now less than one. Remember that bargaining still occurs for some probabilities of passage in Figure 2.1 when the initiative is a viable threat (when $\lambda^L \leq \lambda < \lambda^P$). In this case, the initiative increases the amount of contributions.

While the net effect on total contributions received can be either positive or negative, depending on whether more successful contributions are added or more are lost to initiative proposals, this is an important result because it means that the initiative process increases the ability of groups to work with the legislature. Rather than merely creating an avenue for

dissatisfied groups to seek redress for their unmet policy goals, it also makes the legislature more responsive to their goals. As I pointed out earlier, this behind-the-scenes bargaining can sometimes make voters worse off on average, but there are also cases where legislature's increased willingness to work with groups can benefit voters. While the net effect is not clear, some interesting results can be found. Since the two cut points for bargaining differ only with the cost of proposal, as this gets smaller there are fewer opportunities for behind-the-scenes bargaining. The cheaper initiatives are to propose, the more are on the ballot for voters to decide for themselves.

These conclusions provide important insights into the role of uncertainty over voters' preferences in determining policy outcomes. When the legislature is forced to take into account the possibility of an initiative passing, it is willing to move policy in exchange for smaller contributions. Another way to interpret this is from the point of view of a mobile interest group that, if faced with two states differing only in the presence of the initiative process, would choose to try to influence policy in the initiative state rather than the other: consider Scientific Games of Atlanta, which funded over 99% of California's 1984 lottery initiative's qualifying fees (p. 35 in Bowler, Donovan and Tolbert 1998).

So far I have assumed that there is no extra information about voters' preferences in the two states. In the next section I expand the information about voters' preferences available to the actors by allowing for similarities between states. This generates a particular type of diffusion pattern where information about voters' preferences can be transmitted between initiative states. This information may influence the equilibrium outcome since the expected probability that an initiative would pass goes up when a neighboring state adopts.

2.3 Information Diffusion and the Initiative

Since the probability that an initiative will pass is such a crucial variable in determining which strategy the interest group pursues, it makes sense that the players involved use whatever information they can to estimate this probability. The previous section only looked at internal characteristics of the state, but now I allow the players to use information about what happens in other states to learn about their own voters' preferences. If there is some

relationship between voters' preferences across states, then the outcome of the game in a neighboring state provides information for the current state that may influence the policy outcome.

By allowing information to pass across state borders, this model examines a particular type of policy diffusion: one based on the diffusion of information. By diffusion I refer to the process whereby one states' prior adoption of a policy influences the tendency of other states to adopt the same or similar policies. Because the information about what would happen if an initiative were proposed is only useful in initiative states, this type of diffusion should only be observed towards direct democracy states. The outcome of the game in non-initiative states provides no information about a possible initiative, though, so diffusion should come only *from* initiative states. This implies a very precise type of diffusion: from initiative states to initiative states but neither to nor from non-initiative states. When there is a positive relationship between voters' preferences (states where voters are more likely to support the policy change tend to be bordered by states that also favor it), then when one initiative state adopts a policy, actors in neighboring initiative states increase their expected probability of their states' voters passing an initiative, which influences their strategic choices and hence possibly the policy outcome in their state.

This is a more explicit model of diffusion than that provided by previous examinations of policy adoptions. In the recent policy adoptions literature that uses the event history approach, diffusion is assumed to be an "I want one too" phenomenon with one state's adoption somehow increasing the propensity of a neighboring state to adopt (for example, Berry and Berry 1990). While there are certainly reasons why this might be the case — diffusion can have different patterns if it results from economic competition rather than from information diffusion — these studies have not sought to incorporate a theoretical underpinning for their notions of diffusion.

In a much more general inquiry into the existence and nature of policy diffusion, Walker (1969) creates indices of policy leadership based on a century's worth of adoptions in eighty-eight policy areas. He finds that certain states tend to be policy leaders rather than followers and that there may exist many leader-follower clusters in different geographic regions of the country. He speculates that this could be a result of certain states being more prone

to adopt new policies due to political or socio-economic circumstances and that regional patterns may be decreasing in importance as state leaders interact on a more national level through institutionalized meetings. One possibly key variable is the presence of the initiative process, which was in the midst of its greatest lull in the middle of the century. The model here suggests that it might play a particular role in policy diffusion.

Since the equilibrium outcome in the previous results depends on the expected probability of an initiative passing, the actors' beliefs about this probability are crucial in determining if a state adopts the policy. Recall that in the original setup the precise value of λ is uncertain and groups form expectations about it before any actions are taken, which is why it could be treated as fixed in the previous section. In this section I look at how these beliefs are formed, which allows me to study the role of neighboring states' actions in determining the equilibrium in the current state. If voters' preferences are correlated across two states, then interest groups and the legislature gain information from neighboring states about how likely a proposal is to succeed in their state.

To allow for information to be transmitted by neighbors' adoptions, there must be some underlying relationship between voters' preferences across neighboring states. If the probability of an initiative passing in state i is fixed at λ_i , then nothing that happens in other states can influence it. To create the potential for information diffusion I need to modify the interpretation of λ . Instead of knowing the probability that this particular initiative would pass, the actors know that there are many different probabilities of an initiative on this issue passing, but do not know exactly which one applies to the current initiative.¹²

Without any other information, their best guess as to the probability that an initiative would pass is the average of all of these possible probabilities, $E[\lambda_i]$. In the previous results there was no variation in this probability: $E[\lambda_i] = \lambda$. Now, however, the relationship between states' voters' preferences implies that neighbors' adoptions reveal information about λ_j . As an example, consider the case where groups in state i know that state j just passed an initiative that would implement the policy change. This means that the probability of voters supporting the change, while not observed, must have been at least λ_j^* , or the interest

¹²Formally, let λ_i and λ_j be drawn according to some known pdf $f(x)$ with support on $[0, 1]$ and correlation ρ .

group would not have proposed the initiative in the first place. Since the group in state i now knows that voters in state j had at least a λ_j^* probability of passing the initiative, it eliminates all possible probabilities below it in Figure 2.1 and increases what it believes to be the average probability that the initiative would have passed. This increase in the expected probability of state j supporting an initiative, combined with the relationship between the states' voters' preferences, also influences the group's beliefs about how likely an initiative that it proposed would be to pass. When the correlation between preferences is positive, the group's estimate in its own state also goes up and when the correlation is negative, the estimate goes down.¹³ This then influences the outcome in state i .

Proposition 3 (Diffusion) *If voters' preferences are positively correlated, neighbors' adoptions increase policy adoptions in initiative states, but not in non-initiative states, and only if the neighboring state is also an initiative state.*

This means that of the four initiative/non-initiative state permutations, only one of them produces a positive diffusion effect: an initiative state with a neighboring initiative state that has adopted, such as Oregon adopting a policy shortly after Washington has already adopted it. Since no useful information is either revealed or gained by non-initiative states, they have no influence on policy diffusion. To see this more clearly, recall the nature of the equilibrium outcomes in the two types of states. Returning to Figure 2.1, notice that as λ_i increases, initiative states go first from retaining the status quo at low values to initiatives at middle values to adopting through the legislature at higher values to having initiatives at very high values. All that needs to be shown is that the expected value of λ_i is increased when a neighbor adopts. When the correlation between voters' preferences is positive, it is easy to show that $E[\lambda_i | \lambda_j > \lambda_j^*, \rho > 0] > E[\lambda_i | \lambda_j < \lambda_j^*, \rho > 0]$. This extra information may be enough to move the current state's estimate of λ_i from the non-adoption region to the adoption region.

In non-initiative states, adoption only depends on whether the interest group is willing to offer the legislature enough in contributions to convince it to move policy. Since there is

¹³Since it seems most likely that the correlation is positive, I state the result in terms of a positive relationship.

no threat of an initiative, the probability that voters would support one does not enter into either parties' calculation and thus has no effect on the outcome. While the result as stated uses the fact that the legislature only cares about policy outcomes and not about voters' utility, the direction of the result does not depend on this. Even if legislators care about both voters' utility and policy outcomes, initiative states will still be influenced at least as much by neighbors' adoptions. All that matters is λ_i crossing the initiative threshold, λ_i^* , which is independent of the legislature's utility.

This result suggests that an important component of policy diffusion results from interest groups and legislators learning about their voters' preferences through other states' adoptions, at least in initiative states. If the correlation between voters' preferences decreases as states are farther apart, then initiative states will play a distinctive and possibly dominant role in policy diffusion. This, along with the other predictions, forms the basis for the tests conducted in the next chapters.

2.4 Predictions

While the results in the previous section provide predictions about how the initiative process influences interest group behavior, it may not be straightforward to test them empirically. For example, Proposition 1 gives us exact predictions about what the outcome will be in any state once we know the relevant parameters: λ^* , c , β and α . Naturally, the real world of state politics is more complicated and harder to predict than the abstract model that I have used, though it attempts to capture the essential features of the initiative process. This means that for the empirical tests I view the model as a partial data-generating process and include other variables that may influence the observed outcome.¹⁴ To develop the empirical tests, I employ comparative statics analysis to generate predictions.

Prediction 1 (Policy)

1. *Interest groups wishing to alter policy are more likely to target initiative states rather than non-initiative states.*

¹⁴For a discussion of how formal models should inform empirical ones and what the assumptions of one mean for the other, see Morton (1999).

2. *Interest groups in initiative states are more likely to seek policy change since it is less costly.*

These predictions are based on Proposition 2, which says that interest groups have higher (expected) utility in initiative states. Interpreted literally, Proposition 2 states that an interest group prefers to try to influence policy in direct democracy states relative to non-initiative states. The above prediction is phrased in two parts to reflect the fact that policy change can be sought from two different types of groups. The first half refers to nationally-oriented interest groups who are interested in policy influence and can pick which states to target. Because of the advantages that it provides, the presence of the initiative process will lead groups to prefer direct democracy states: a group with a choice will target an initiative state. There are certainly examples of interest groups that choose states to seek their policy goals that are not the state they were founded in: two of these cases already mentioned are Scientific Games of Atlanta, which heavily funded California's lottery initiative, and Californians for Medical Rights, which sponsored initiatives and legislation in so many other states that it changed its name to Americans for Medical Rights.

Some interest groups may not have this choice: they may be tied for one reason or another to a particular state. So it may seem that single-state groups' activities might not be spurred by the presence of the initiative process. The second part of the prediction states that this is not the case, though. For some parameter values, the interest group knows it can not bargain with the legislature, so it will not pursue its policy goals actively. With the initiative process, though, the group not only gains leverage with the legislature, but it has another option at its disposal. This will lead some portion of the groups that had no reason to attempt to influence policy beforehand to seek it now.

These two processes have another consequence for interest group populations, also based on Proposition 2.

Prediction 2 (Mobilization) *Initiative states have more interest groups than non-initiative states.*

Since the expected utility of formation is greater, more groups mobilize. By providing another way for groups to influence policy, the initiative process leads to more groups being

active. Not only do they hope to use the initiative process directly, but they know that it increases their bargaining position with the legislature. These first three predictions lead directly to the next one, since these groups, as well as the ones that would have formed without the initiative process' added incentive, are looking for information to help them make decisions about when to try to influence policy.

Prediction 3 (Diffusion) *Information diffuses only from initiative states to other initiative states.*

Prediction 3 arises directly from Proposition 3, which shows how groups in initiative states use outcomes in neighboring states to calculate the probability that an initiative proposed in their state would pass. Because information about initiatives is useless to groups in non-initiative states, there is no diffusion to groups in these states and because outcomes in non-initiative states are independent of whether an initiative would pass, no information is provided by these states.

These three predictions are tested in the following chapters using different types of data since they apply to different phenomena. The first prediction is about policy outcomes and is tested by looking at which states adopt certain policies quickest. The second is about the size of state interest group populations and uses data on the number of groups in each state. The third is about policy diffusion and is examined along with the first in the context of policy adoptions. gather survey data on group lobbying techniques to test it. The next chapter discusses how I plan to test these predictions in more detail.

2.5 Conclusions

The model developed in this chapter makes specific predictions about where interest groups will focus their efforts to change policies they do not like. By offering them an explicit mechanism to circumvent the legislature's monopoly control on policy-making, the initiative process gives them a specific tool that they can use to appeal directly to voters for change. Beyond this direct effect, there is also an indirect effect due to the threat a potential initiative poses to the legislature, which makes it cheaper for the group to persuade the legislature to

move policy in exchange for campaign contributions. This second influence has the important implication that policy outcomes in initiative states can be influenced by the initiative without one ever being observed.

This result has implications for social welfare. Because of the perceived threat to itself, the legislature often agrees to move policy in cases where voters would have less than a fifty percent chance of passing an initiative. In these cases, voters are made worse off the majority of the time, whereas when they actually get to vote they are always better off, as long they are not unduly influenced by the campaign. This result differs from previous findings, which conclude that voters in direct democracy states are better off for it (Gerber 1999). By including direct interaction between groups and the legislature, the model here shows how behind-the-scenes lobbying can be detrimental to voters.

Another important finding also concerns uncertainty about voters' preferences, but focuses on what information interest groups and legislators look can use to reduce it. By allowing for similarities between voters across states, the model predicts a particular pattern of diffusion based on information flows. Because of the threat the initiative poses, when an initiative state successfully adopts the policy this information is used in neighboring initiative states to boost the expected probability that their voters would also support an initiative. Since information about a possible initiative is useless to interest groups in non-initiative states and is not provided by outcomes in non-initiative states, this particular type of diffusion occurs only between direct democracy states.

In the next chapter I use the predictions generated by the formal model to develop empirical tests. Rather than focus on one particular prediction or type of prediction I develop tests which study the implications of these predictions in different circumstances, including state policy adoptions, interest group mobilizations and interest group lobbying techniques. There are reasons, developed in this chapter, to believe that initiative states will differ with respect to all of these areas. By looking past the immediate presence of the initiative process on interest groups — observed campaigns — the rest of this dissertation will demonstrate that interest group populations are fundamentally different in direct democracy states.

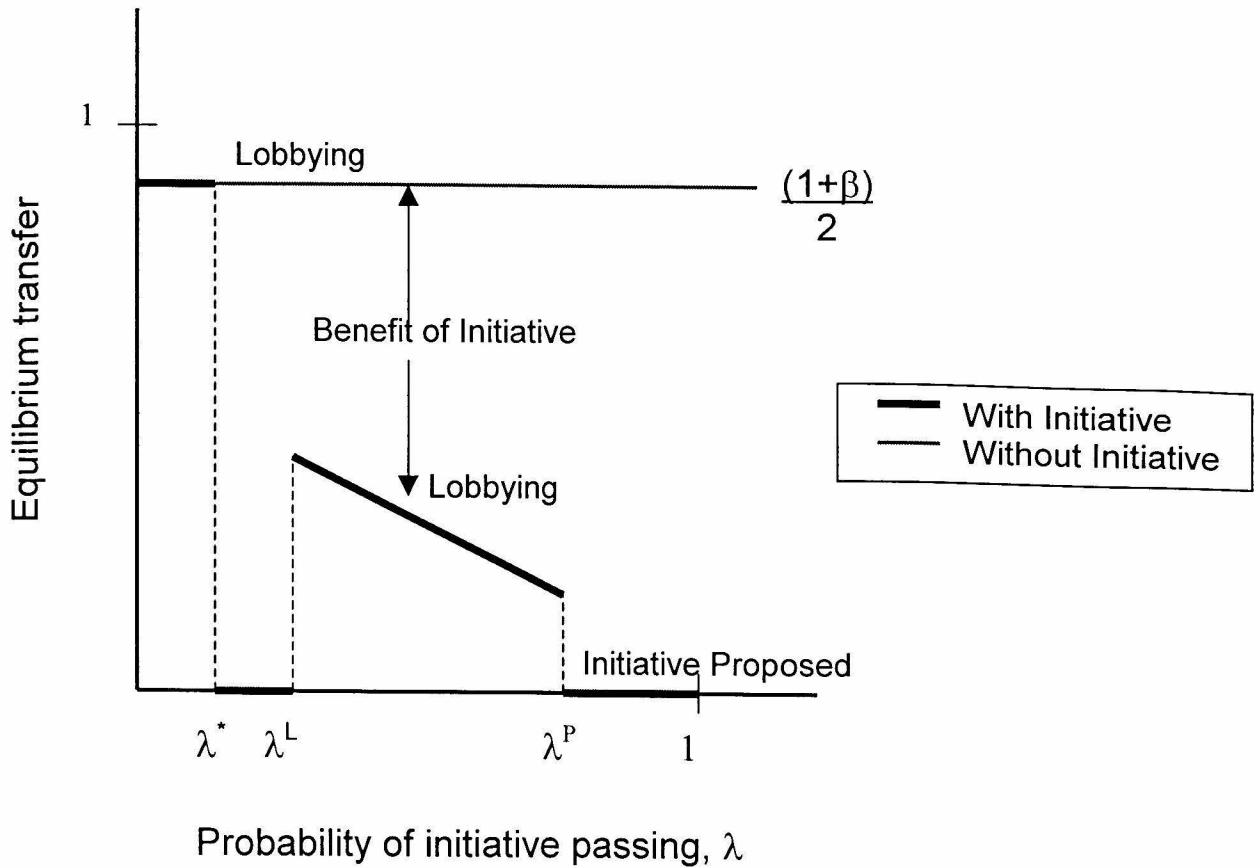


Figure 2.1: Equilibrium Outcome as a Function of the Probability of an Initiative Passing.

Chapter 3 Designing Empirical Tests

3.1 Model Testing

The model developed in the previous chapter has many implications for interest group behavior and state politics in general. The next question is how to test these predictions to provide support for the model and to increase our understanding of interest groups and institutions. By performing tests of the model based on the different predictions and in different types of data I can better assess its ability to inform our understanding of these areas, so this chapter lays out the three different types of tests that I conduct in the remainder of the dissertation.

One of the clear advantages of performing many different types of tests is demonstrating that the predictions of the model apply to a wide array of phenomena rather than just one particular type of data. Not only does this document how pervasive the influence of the initiative process is on state politics, it also provides strong cross-validation of the model. By consistently finding support for the predictions in a variety of different types of data I demonstrate strong support for their validity. As discussed earlier, it would be best to gather data that allows me to treat the model as a complete data generating process: given certain values of these parameters, the model makes specific predictions about whether and how a policy will be adopted.¹ This would imply assuming that the model is a complete description of reality and that measures of each parameter exist, however. While the first error would be a bit naive, the second point would assume that precise measures of most of the parameters could be found.

As developed in Chapter 2, one of the key parameters is a potential initiative's likelihood of passage. This is an extremely difficult concept to measure since the only initiatives we observe are ones that have a reasonable probability of passage or, in terms of the model, ones

¹Morton (1999) discusses the differences between complete and partial data generating processes and when each test is appropriate.

that exceed the proposal threshold λ^* . So even if initiatives were proposed in some states, not only does their observation make the model trivial to test, but it would be difficult to extrapolate probabilities to other states. Some of the other variables, such as legislative utility, voter responsiveness to advertising and the expected campaign expenditures by the reactive group, are also problematic to measure with any precision.

Because of these measurement issues I conduct empirical tests for patterns of behavior that are consistent with my predictions. Instead of examining the decisions of any one group in any one state, I look at the decisions of many groups. This gives me leverage on whether the initiative process influences group decisions on average rather than in one particular case.

To develop these tests and why they are appropriate in more detail, this chapter is organized as follows. First I review the hypotheses developed in the previous chapter. Then I discuss the type of data required to test each of them. This allows to more strongly focus on each prediction and develop empirical tests in detail, and also provides an opportunity to compare my tests to previous work. The first data discussed focuses on policy adoptions, which provides a test of the adoption and diffusion hypotheses; I then turn to testing the mobilization hypothesis with aggregate level interest group data; finally I discuss the survey data I gather to examine the mobilization and lobbying hypotheses. Along the way I draw out the predictions as appropriate to the data.

3.2 Review of Hypotheses

The previous chapter lays out the three empirical predictions that I test:

Prediction 1 (Policy)

1. *Interest groups wishing to alter policy are more likely to target initiative states rather than non-initiative states.*
2. *Interest groups in initiative states are more likely to seek policy change since it is less costly.*

These predictions are based on the fact that the initiative process gives groups another way to influence policy. Not only can they use the possibility of proposal to circumvent the

legislature, but they can also use it to make the legislature more responsive since it has to account for the threat that an initiative poses. This means that we do not have to observe initiatives on the ballot to demonstrate that the possibility of proposing one influenced policy outcomes in a state.

The prediction is phrased in two parts to highlight the advantage that direct democracy gives to groups and how this advantage functions differently in different policy areas. When groups are more national in orientation and seek to implement new policies that they may profit from, they have the opportunity to pick and choose which states to pursue reform in first. These groups are likely to turn to initiative states when possible. Besides the example of Scientific Games of Atlanta, which funded the 1984 California lottery initiative, there are similar stories from the expansion of casino gaming: groups such as Bally's and MGM Grand have been involved in initiative campaigns to legalize casino gaming in other states (Dombrink and Thompson 1990).

Americans for Medical Rights demonstrates this aspect of the initiative process, but it also conforms to the other part of the prediction. Before their name change, this group was known as Californians for Medical Rights as they pushed for legalization of medicinal marijuana in their home state before finally succeeding with Proposition 215 in 1996. The model indicates that groups like this are more likely to emerge in initiative states because of the expanded political opportunity structure.

Prediction 2 (Mobilization) *Initiative states have more interest groups than non-initiative states.*

Because of the ability to influence policy both directly and indirectly, access to the initiative process increases the expected utility of mobilization for interest groups. A group that is considering whether to become active and mobilize also considers its ability to influence policy. If the legislature is the only means at its disposal and the group knows that it would be hard-pressed to convince legislators to move policy it may decide that the benefits of mobilization are not worth the costs. Adding the initiative process gives it another shot at influence and increases its ability to work with the legislature. Some of the groups that would not have formed will now decide that the benefits exceed the costs. When these groups

begin an initiative campaign, it is also likely that other groups will form and get involved.

On the other hand, the initial intuition of the model suggests that if the group seeking policy changes is advantaged by the initiative process then other groups must be hurt and should be less likely to form. Consideration of their decision process indicates that this is not the case. If policy is already at the group's preferred point, then the group has no reason to consider formation unless it is threatened by the other groups' actions. In the model, this happens during the initiative campaign. Giving other groups the opportunity to propose an initiative can increase mobilizations even more by inciting opposition. If, on the other hand, the group already exists, then it has paid the costs of mobilization and would only disband when its policy is secure — not when it may be threatened by another group. In both cases, the tendency for the group to become or stay mobilized is greater with the initiative process.

Prediction 3 (Diffusion) *Information diffuses only from initiative states to initiative states.*

This prediction is based on how this information can be used and where it is provided. An initiative state's adoption of a policy provides information about how likely its voters would have been to support an initiative. Specifically, the probability of passage must have been above the critical threshold λ^* . This information, in conjunction with non-zero correlation between states' voters' preferences, increases the expected probability of adoption in the group's target state if it too has the initiative process.

While there are other possible definitions of how much information an interest group can have about voters' preferences in initiative states, I have generated the prediction that is most conducive to testing. Whether a state has adopted is the coarsest definition of information available in this setting. The model allows for more specific information to spread, but it still predicts that the pattern of information flow is between initiative states.

3.3 Developing Empirical Tests

While I have already briefly discussed the empirical requirements for testing these predictions, it is useful to reconsider them. First and foremost there will be consequences for interest groups' decision-making processes. This means that I need data to investigate the

effect of the initiative process on these decisions. There are two different levels at which the initiative process' influence will be detectable: the individual group level and the aggregate state level. If more groups are active because of direct democracy, then the total number of groups registered to lobby in each type of state will differ. The direct test of this uses aggregate data on state interest group populations.

Of course these differences are the result of actions by specific groups, so there are also important differences to be explored at the individual group level. Gathering specific details about groups allows me to explore more general aggregate level differences between initiative and non-initiative states. It also allows me to explore the effect on the individual groups themselves. Gathering detailed individual level data makes it necessary to survey groups directly, which raises many important issues.

The decision processes of the interest groups also have consequences for policy outcomes. A third type of data, therefore, explores whether initiative states experience policy changes sooner than non-initiative states. Policy adoptions also allow me test the diffusion hypothesis by examining how outcomes in one state influence outcomes in other states. I will now go through these three different types of data and how discuss they explicitly allow me test the three predictions.

3.3.1 Policy Adoptions

There are two ways the initiative process influences policy adoptions. First it gives groups an additional way to change policy, which can be employed when facing a recalcitrant legislature. Sometimes the threat of an initiative is not enough to motivate the legislature to move policy itself. In these cases there are initiatives on the ballot and voters decide what the final policy outcome is. Unfortunately for empirical testing, the initiative can influence policy outcomes without specific ballot items occurring. Because of the threat of an initiative proposal, the legislature may be more willing to bargain with the interest group, in the sense that it accepts offers of contributions that it would not have without the threat.

Because of this, I can not simply examine initiative campaigns to determine the effect of the initiative process. Policy can move because of the initiative process without initiatives

being observed. This means that the key factor is whether a state has the initiative process or not. Clearly interest groups do use the initiative process and since some of these initiative pass, state policy outcomes are affected. Of course it may not be the case that the final outcome differed, as maybe the legislature would have adopted the policy anyway — observing initiatives does not necessarily mean that policy outcomes are influenced, just as surely as not observing them does not necessarily imply that policy outcomes are not influenced.

The second way that the initiative influences policy outcomes is related to the leverage it creates for existing groups, but which occurs at a different stage of the interest group's decision-making process. In addition to giving existing groups another way to influence policy, it increases the incentives for groups to form in the first place. This means that there will be more groups trying to influence policy than in non-initiative states. If groups that are disadvantaged in the legislature benefit disproportionately from access to the initiative process, then the added groups may more often be in positions to seek policy changes. The presence of the initiative process results in a greater propensity for policy change because it creates the incentives for groups seeking change to become active.

The objective in the policy adoptions chapter is to determine how the presence of the initiative process, through facilitation of influence and inducement to get involved, alters state policy outcomes. Because of the direct and indirect nature of its influence the key variable is whether a state has the initiative process rather than if it is used in a particular case.

Selecting Policy Areas

An important consideration when testing the influence of the initiative process is to choose policy areas where its effect is not *ex ante* obvious. An obvious example where common wisdom suggests that the initiative played an important role is the tax revolt of the late 1970s and early 1980s. In fact, the adoption of these populist tax-cutting measures is synonymous with California's Proposition 13 in 1978. This period is also generally viewed as the birth of the modern period of the initiative process' resurgence:

(until) the late 1970s, the process of direct legislation was not seen as a political phenomenon of major significance. (...) In the 1970s, however, direct legislation began to expand. (...) What is more, interest in direct legislation grew and moved eastward from its traditional western base into virtually every state and the US Congress. Not since the Progressive reform movement during the first two decades of this century has there been such intense efforts to adopt direct legislation and expand its use (Magleby 1984).

Thus, while it would be useful to actually demonstrate the influence of the initiative process on the tax revolt, it seems to be a policy area where it *must* matter. Likewise, in some recent policy adoptions, the initiative has played a central role. The group Americans for Medical Rights has used the initiative process to legalize use of medicinal marijuana. After their successful campaign for Proposition 215 in California in 1996 and a similar one in Arizona, they also assisted in successful initiative campaigns in 1998 in Oregon, Washington, Nevada and Alaska. Ballot measures also passed that year in Colorado and the District of Columbia, but were nullified for procedural reasons.²

Since the only states that adopted medicinal marijuana reforms are initiative states, it seems quite clear that the initiative played an important role. Further, that they all adopted through the initiative itself suggests that legislators could not be persuaded with campaign contributions. If this is true for all of these initiative states, then perhaps other states are unlikely to adopt through the legislature.

Another policy area where the effect of the initiative process is well known is term limits. All but one of the states that have adopted term limits are initiative states and almost all initiative states have succeeded in imposing some form of limits. This is not surprising since this is a policy area where action through the legislature is extremely unlikely. Legislators would experience a loss in utility so they are loathe to pass these reforms themselves. Interest groups seeking changes are forced to circumvent the legislature by resorting to ballot initiatives. This is clearly another policy area where the initiative process has had a huge

²The Colorado ballot measure was nullified due to a judges' ruling that the initiative had not mustered enough signatures. Initially it was not known for sure that the District of Columbia measure passed, because the results were held up by the U.S. Congress since previous legislation had prohibited federal funds to be used on any district initiative that would legalize drugs (Shinkman 1998).

impact.

Rather than select one of these areas where the results would already seem to be in favor of the effect of the initiative process, though noting that they seem to provide anecdotal support for the model, it is preferable to choose a policy area where the initiative is less obviously important. In Chapter 4, I explore the effect of the initiative process on state adoptions of casino-style gaming and capital punishment. None of these areas is known for the use of the initiative process and previous empirical studies have not considered its possible importance. They are also areas that provide variation in the amount of uncertainty regarding voters' preferences. This is one of the keys to assessing the diffusion hypotheses, since as uncertainty about whether an initiative would pass decreases, less information can be gleaned from what happens in neighboring initiative states. Casino gaming also allows me to compare my predictions about diffusion with other possible patterns, in particular diffusion as a consequence of economic competition between states.

Timing of Influence

One important factor to consider is how the initiative process influenced policy adoptions. Previous studies have simply looked at the current frequencies of adoptions by policy area --- when initiative states have a higher adoption rate, it is attributed to that institution (Gerber 1999).³ A more detailed analysis posits that whether a state has adopted a particular policy depends on many characteristics of the state, including the initiative process. Using cross-sectional analysis in this setting can lead to incorrect inference, however, since the dependent variable is whether a state *has* adopted the policy in question and the independent variables are all measured in the current year. When the independent variables are constant over time, as is the case for the presence of the initiative process in most states for the last half century, then this is the correct way to proceed. When some of the variables change over the time period of adoptions, though, using current values to explain a phenomenon that may have occurred over twenty years ago is a flawed approach, but some previous work on the effect of the initiative process employs this method (Gerber 1999).

³Of course, the results may ultimately depend upon which year is chosen to make the comparison, especially if initiative states adopt relatively earlier than other states.

A more appropriate model studies the timing of adoption by examining the different factors influencing when a state adopts the policy. One approach might feature a dependent variable that measures the number of years that it took a state to adopt after the first such adoption in all states. Again, though, this would allow the measurement of independent variables in only one year or an average of them over different years. The appropriate model is one that examines whether a state adopts in each year that it could adopt and uses the current values of the explanatory variables in each of those years.

An approach that fits this description is a variant on the continuous-time Cox proportional hazards model: event history analysis. Previous authors have used this model to explain lottery adoptions (Berry and Berry 1990), casino-gaming adoptions (Von Herrmann 1998; Pierce and Miller 2000) and capital punishment adoptions (Lee and Mooney 2000), but none of these studies considers the role of the initiative process. Lee and Mooney do suggest one additional issue by examining repeal of capital punishment in the states. This has consequences for my model since if groups can use the initiative process to implement policy change in one direction, their opponents could turn the tables to undo the change.

This is unlikely to happen for two reasons. First of all, initiatives that have passed and have received a majority of votes are obviously going to be hard to repeal in the near future since the majority would have to reverse itself. If groups were uncertain about how likely an initiative would be to pass beforehand, they will be very unoptimistic about their chances for a reversal immediately after one passes. There are cases where groups have tried to revisit a recent initiative, such as Proposition 26 in California's 2000 election, which sought to overturn 1998's Proposition 10 that placed a fifty cent tax on cigarette packs, but these examples might require a group with the stature and wealth of the tobacco industry. Their failure also demonstrates how unlikely these about-faces might be to happen with short periods of time. That being said, there is no reason that after enough years, when the initiative's policy has become the status quo across the country, that groups can not use the initiative process to return to the previous status quo of many years ago. Capital punishment provides one such possible example (Lee and Mooney 2000). Secondly, in many states it is harder to repeal an initiative than to pass a new law. In California, for example, the legislature is unable to rewrite laws that result from initiatives. Other states more

typically maintain waiting periods of up to five years before legislative changes can be made.

Diffusion and Information

The second advantage of event history analysis is that its dynamic nature explicitly allows testing of the diffusion prediction. In particular, Prediction 3 makes specific statements about when and where diffusion should occur. Event history analysis allows me to approximate the formal model as well as possible in the empirical model by explicitly allowing a state's possibility of adoption to depend on other states' previous adoptions.

While the model focuses on the discrete nature of neighbors' adoptions, it is likely that the interest groups involved in a potential initiative have much more information than whether a neighbor has adopted. Besides knowing the actual vote outcome in that state, the group can conduct polls about public opinion in its target state or look at votes on similar policies. As the analyst, however, it is impossible to know exactly what information the group possessed as it began to move forward. For this reason, I will use the formulation developed in the formal model and focus on the number of neighbors adoptions.

The use of contiguous neighbors is a choice that abstracts from the model a bit more. In the model, all that matters is the level of correlation of voters' preferences between two states. Empirically, I expect that this correlation is likely to exist strongly between neighboring states. Walker (1959) finds strong regional patterns of diffusion across many policy areas, so there are already indications that this may be the case. Sticking with contiguity also allows me to explore diffusion within the context of previous work, which tries to model diffusion in a less specific fashion, so an additional benefit is that the initiative diffusion in Prediction 3 that occurs in one of the four types of state dyads is a subset of general diffusion occurring identically in all four.

Treating all states as equally informative is also slightly restrictive. Large states may be more informative than smaller ones, for example. Or states may more influenced by other states with similar demographic profiles or political tendencies. Again, however, it is best to maintain a structure similar to previous work in this area: without a theory about which states matter more for neighbors, consideration of equality seems the best starting point.

3.3.2 Group Population Characteristics

Prediction 2 is the most straightforward of the three predictions to test. Initiative states should have more interest groups than non-initiative states. All that is required is data on the number of interest groups in different states. Once this data is collected the comparison can be made both using simple averages across the institution and using more detailed regression analysis. The first issue that needs to be resolved, though, is how to measure the existence of an interest group. Is it a group that is actively lobbying government during the current year? Is it a group that can influence policy with its actions, but is able to utilize only certain methods of influence due to legal constraints? Is it a currently latent group whose mere potential existence influences legislators' actions because of the consequences its mobilization would entail?

While all of these definitions of a group have some appeal, the resolution is made somewhat easy by data availability. Clearly, constructing a measure of the number of existing and latent groups is near impossible: in the minds of the Pluralists, all possible interests should be expected to form when they have a grievance (Truman 1951, Dahl 1961). In reality, we know that certain interests are more likely to form than others (Schattschneider 1960, Olson 1965), so this is not the correct measure. Since the model considers the ability of groups to work with the legislature as well as to use the initiative process, it seems natural to consider groups that fit this bill. Since active lobbying requires a group to register with the state, I employ this as the definition of an interest group population in a state.

While the model does not directly confront how the additional groups will differ from pre-existing groups, it seems reasonable to expect that they might. In particular, the initiative process should provide extra appeal to groups that are left out of the legislative process. Given the higher hurdle that membership groups face in mobilizing due to the collective action problem (Olson 1965), it may provide enough added incentive to bring disproportionately more of them into the fold. This implies that the initiative process will tend to increase the diversity of representation in interest group populations as there is a well-documented bias in representation towards groups representing business interests (Schlozman and Tierney 1986).

Since the groups added by the initiative process are likely to come disproportionately from traditionally disadvantaged types of groups, I would also like to study precisely which groups are added. Unfortunately the data on registered interest groups that I use is only broken down into ten economic-oriented categories and includes no other information about membership, revenue or other useful characteristics. I use these ten categories to study the effect of the initiative process on diversity as much as possible, but a more in-depth study requires detailed data, which I collect via a survey of interest groups, discussed below.

A second way to test the effect of the initiative process on the number of interest groups in a state is to examine a single state before and after it adopts the initiative and see how the number of groups changes. So rather than focus on differences across states in one time period, this type of analysis would examine differences over time in states that adopted the initiative. In many respects this is a more appealing approach since it would hold constant as many influences as possible, ideally just varying the presence of the initiative. Two different types of problems emerge, though. The first is that there are only five states that have adopted the initiative since 1920 and but one of them since 1975. Because of the decreasing availability of data in the past, it is unlikely to be possible to construct a time series of registered group totals for any of these states. The second problem is related: the only available data on group-registration numbers covers the years 1975, 1980 and 1990 (with 1997 in the works), which overlaps only one change in institutional setting in Florida, which I discuss in detail.

3.3.3 Individual Group Characteristics

Gathering data on a (relatively) small number of groups does not allow me to explore Prediction 2 since there are not enough states included to conduct the appropriate analysis on the aggregate number of groups. If its prediction is true and there are indeed more interest groups in initiative states and they are drawn from a more representative population of groups, then examination of their characteristics should support this. Obtaining detailed information about interest group characteristics requires surveying the groups directly.

The first important determination is which groups to survey. Obviously, information is

needed about groups that are in initiative states. To determine the effect of the initiative on their decisions, though, it is also necessary to have the information about groups in non-initiative states. Previous surveys that investigate how groups use the initiative process and how users and non-users differ have focused on groups that were involved in initiatives that were successful in reaching the ballot (Gerber 1999). Besides introducing possible selection bias into the data by examining only groups that were involved in successful ballot initiatives, it does not allow for consideration of a broader impact beyond instances of actual use.

Inside versus Outside Lobbying

Besides allowing me to investigate how access to the initiative process alters the profile of state interest groups, the survey data also gives me the opportunity to explore how access to the initiative process influences groups' lobbying tactics and strategies. If interest groups are the initiative process as leverage in their dealings with the legislature, this should be reflected in their responses. Again, it is not clear how this increased efficacy will be balanced out by groups abandoning the legislative process to use the initiative process, but there are some possible ways to explore this. In particular I study whether it is merely the ability to propose initiatives that increases legislative responsiveness or whether groups must signal that plan to use the initiative that influences their ability to inside lobby.

On the other hand, groups in initiative states will be more likely to outside lobby than groups in non-initiative states. There are many possible reasons for this. First, if my expectation is correct and the groups that Prediction 2 claims are added are drawn more from under-represented groups, specifically non-business groups, then the additional groups will be more likely to employ outside lobbying techniques since that is where their comparative advantage lies (Kollman 1998). A larger, broader membership can be used to signal support for a possible initiative to the legislature and is also a useful resource when campaigning for its passage whereas revenue-heavy groups tend to use their financial advantages to protect the status quo (Gerber 1999).

Other Differences

A survey also gives me the opportunity to ask groups about many different types of activities and reasons for conducting them. Not only can I ask what types of lobbying activities, such as campaign contributions and organizing protests, they are involved in, but I can ask why they choose to use some of these strategies or why they get involved in a particular issue. If traditional inside lobbying groups have built up strong ties to legislators over the years, they should cite different reasons for contacting legislators than groups that are prone to use the initiative process. They would also indicate different reasons for their current issue involvement — initiative oriented groups may be motivated more by members concerns and a sense of public duty than traditional groups.

Survey Data and Response Bias

One of the natural concerns when gathering data directly from respondents is whether the set of groups that respond are representative of the entire sample of groups surveyed. This creates problems both when taking population frequencies and when conducting regression analyses. The first problem arises from a sample that is disproportionately weighted towards certain types of groups, which can be fixed by weighting the observed data by the true population frequency. The latter problem is considerably more serious in nature because it requires a more complicated correction. In Chapter 7, I develop a statistical model, based on previous work on selection bias, to correct for it.

At the heart of this correction is a survey instrument that features a double sampling procedure. The primary sample is administered the main survey questionnaire as in any other study. The secondary sample is administered a much smaller version of the survey comprised of five questions anticipated to be related to response bias. Further, it is administered over the phone, rather than through the mail, to a fraction of the number of groups selected for the primary survey. All of these features are designed to ensure a high response rate. This secondary data can then be used as an accurate measure of the true distribution of groups and characteristics in the overall interest group population. If the responses to the primary survey on the duplicate questions do not match those in the secondary one, the latter can

be used to correct for response bias, allowing me to make more accurate inferences.

Ultimately this attention to survey response proves quite beneficial, as there is strong evidence of response bias in the survey data, especially on the part of business groups. Not correcting for this leads to incorrect conclusions, particularly about the effect of the initiative process on groups' characteristics and lobbying strategies. Perhaps somewhat surprisingly, little attention has been paid to this problem in the interest group literature. Neither of the two most closely related studies — Nownes and Freeman's (1998) look at state interest groups and Gerber's examination of initiative users and non-users (1999) — makes any attempt to investigate the potential for bias in their survey data. The evidence here indicates that it is an issue worth serious consideration in any future survey of interest groups.

3.4 Moving Forward

After laying out the predictions and empirical tests in detail, the last step is to actually perform them. In the following chapters I accomplish this task. While there are other possible tests of the model, I believe these are the primary and interesting ones in terms of what they add to our understanding about interest groups and institutions. Chapter 4 shows how access to the initiative process increases the ability of interest groups to achieve their policy goals. While other studies have examined policy diffusion models, none of them has yet considered the role of the initiative process. They have also not modeled diffusion as a consequence of the initiative process' information provision aspects, so the analysis also adds to our understanding of policy diffusion.

The following chapter demonstrates how institutions influence interest groups' mobilization decisions and the consequences this has for the diversity of interests represented. The groups that are mobilized by the initiative process are traditionally under-represented as evidenced by the abundance of studies that find a bias in interest representation towards businesses. While adding broader based membership groups increases representational equality, there may be detrimental consequences from increasing the number of groups active in a state, including Olson's predictions about sclerosis in the political process (Olson 1984). Too many groups can hinder government's functions.

Chapter 6 continues in this direction by examining detailed information about interest group characteristics. The survey data I collect allows me to more deeply understand how the average interest group is influenced by the presence of the initiative process. Instead of exploring the diversity of interests as in the previous chapter, I directly examine if the additional groups are representative of a greater segment of society using group membership numbers. These groups suffer on other fronts, though, with decreased revenue available for political ends. These differences suggest that different lobbying strategies will be emphasized so I also show how initiative states are marked by different patterns of lobbying. Previous studies have not contained such detailed information about the effect of institutions on interest groups' characteristics and lobbying techniques.

After examining these average differences I continue the analysis by testing whether these groups' strategic calculations are influenced by the initiative process. Groups that owe their existence to the possibility of using an outside strategy like proposing an initiative should be more likely to rely on related strategies in times of need, even compared to identical groups in non-initiative states. The initiative process and experience with it may train groups to depend on outside lobbying techniques. This would constitute a fundamental alteration of a state's political culture.

In sum, then, these empirical studies perform two main functions. The first is to provide tests of the model developed in the previous chapter. By applying its predictions to many different types of phenomena I provide strong cross-validation of the model by showing that it provides insight into different areas of interest group behavior. The second function is to broaden our understanding of the role of institutions in politics. By focusing on the role of direct democracy in interest group behavior, it moves us further in our understanding of groups and state politics.

Chapter 4 State Policy Adoptions

4.1 Policy Areas

To study the effect of the initiative on adoptions, I have selected two notably different policy areas: casino-style gaming and capital punishment. The former has been viewed more as a tool of economic revitalization, no doubt to the benefit of proponents, while the latter is a social policy. The difference is useful since the dynamics of economic versus morality policy adoptions tend to be different (Mooney and Lee 1999), as do the nature of the interests involved. The major push for expansion of gaming has come from economic interest groups, including many existing out-of-state casino companies, who wish to expand their market. Capital punishment has been pushed by social groups and legislators in response to the Supreme Court's 1972 decision in *Furman v. Georgia*, which declared current versions of capital punishment unconstitutional. This left interest groups and legislators in a position to work quickly to examine public opinion in their state and move forward once a constitutional version of capital punishment was found.

By selecting two policy areas that differ on many dimensions, I provide a more robust test of the effect of the two policy adoption predictions discussed in the previous chapter. First, direct democracy states should be more likely to adopt both of these different policies faster than non-initiative states, Prediction 1. Second, I will argue in the next section that casino gaming is characterized by a greater degree of uncertainty about voters' preferences than capital punishment, which, in terms of Prediction 3, implies that there should be an opportunity for initiative-generated information diffusion in the former but not in the latter.

After discussing these two policy areas in more detail and presenting the timing of adoptions, I discuss the empirical model of policy adoption. By employing an appropriate model of adoptions, I can better determine the effect of the initiative process and explore dynamic processes like diffusion, something that other studies have failed to do. Following this I present the operationalization of the two predictions to be tested in this chapter along with

other control variables. I then present the regression results and discuss the findings, followed by a set of counterfactual analyses that highlight the effect of direct democracy on the probability a state adopts these two policies. Lastly, I present alternate model specifications to test various theories in different ways. Following this I offer discussion and conclusions.

4.1.1 Casino-Style Gaming

The sudden surge in legalization of casino gaming has proven a difficult question for scholars to answer. While the Nevada model has been available for other states to emulate since 1931, it was not until forty-five years later that New Jersey began its first attempt at adoption of legalized casino gaming. Another fourteen years passed before another state ventured forth, but it was not alone, as twenty others joined it in a three-year period (see Appendix B for adoption dates), though many states considered the possibility (Dombrink and Thompson 1990). In 1996, gambling-specific operating taxes on casinos alone generated over two billion dollars for state coffers, second only to the thirteen billion generated by lotteries (Christiansen 1998). The economic impact of these casinos is much larger, with casinos claiming revenues of \$550 billion in 1998 (von Herrmann 1999). My empirical test offers an evaluation of the diffusion and policy adoptions hypotheses, Predictions 1 and 3, but also explores the role it and other factors have played in casino gaming's expansion.

While the United States has had a lengthy history with gaming, there have been periods of adoptions followed by periods of appeal. Rose characterizes the current period of gaming adoptions, starting with New Hampshire's lottery adoption in 1963, as the third wave of gambling in this country (Dombrink and Thompson 1990). The second wave ended around the turn of the century, when federal court decisions effectively shut down the Louisiana state lottery by declaring it illegal for it to use the mail service, thereby cutting it off from almost all of its lucrative out-of-state business (Dombrink and Thompson 1990). This long span of time between the second two waves indicates that I can consider New Jersey, which adopted in 1976, as the first state to legalize casino-style gaming in the modern era.¹ Except for California's legalization of card rooms in 1988, no other state adopted casino gaming

¹For a discussion on the subject of choosing a sampling period, see Berry and Berry (1990).

until Iowa began to allow limited riverboat casinos to operate in 1989. After this, a large number of states began to experiment with various forms of gaming, with some, such as Missouri, adopting through the initiative process, but others through the legislative process. Figure 4.1 shows the trends of adoption in initiative and non-initiative states.² Ten of the eighteen states that adopt between 1989 and 1992 are initiative states.³

4.1.2 Capital Punishment

Capital punishment is also a useful area to apply the model to since the Supreme Court declared it unconstitutional in 1972 in its *Furman v. Georgia* decision. The ruling was based on the majority's belief that in its present form, capital punishment constituted cruel and unusual punishment. "All five agreed that the 8th Amendment prohibited capital punishment when it was imposed so rarely that it could not serve any valid social purpose, be it deterrence or retribution (Meltsner, 1973)."

While this decision rendered the states' current laws unconstitutional, it was not clear whether the death penalty could be reinstated if the states avoided the constitutional problems found by the Supreme Court. States then had the opportunity to reconsider whether to adopt it in an acceptable form. This created the opportunity for a new policy innovation process and allows me to analyze adoptions after the decision since all states were forced to enact new capital punishment legislation.⁴ In addition, this facilitates the choice of a starting date after which states can be considered potential adopters.

The trend in adoptions is best seen in Table 4.1.⁵ This graph shows the total number of states that had adopted by each year. All of the adoptions in the sample period are

²The adoptions data are taken from von Herrmann (1999) and include states that allow casino-style gaming off of Indian reservations: casinos, card rooms and video gaming devices, see Appendix B for adoption dates by state. These adoptions include a broader scope of gaming than that studied by Pierce and Miller (1999), who examine only large scale casino gaming adoptions.

³This period of rapid adoptions may have been triggered in part by Congress' 1988 Indian Gaming Regulatory Act which, in practice, authorized casino gaming on Native American lands (Christiansen 1988). I test for the effect of Indian tribes on state gaming adoptions and find no effect, but the recent use of the initiative process by Indian tribes in California (1998's Proposition 5 and 2000's Propositions 1A and 29) suggests it may be playing a role there as well.

⁴The basic change that states made was to separate the assessment of guilt and the punishment imposition phases of the trial. In its 1976 decision in *Gregg v Georgia*, the Court ruled that the death penalty was not unconstitutional per se and upheld the current format.

⁵See Appendix B for adoptions dates by state.

between 1972 and 1982, and 17 of the 34 total are in initiative states. These states are disproportionately adopting since only 19 of the 48 states analyzed have the initiative. There is a trend in this proportion that shows that initiative states also tended to adopt sooner. The percentage of adopting states that have the initiative declines from 100% in 1972 to 66% in 1973 until it reaches 50% in 1977 where it hovers at or above for the duration of the sample period, indicating that the initiative may have facilitated early adoption.

4.2 Empirical Models of Policy Adoption

To study these adoptions and test the predictions derived from the model, the approach taken here follows Berry and Berry's (1990) event history analysis of state lottery adoptions. This method allows them to study the effect of both internal state characteristics and external factors, such as other states' adoptions, on a state's choice of whether to adopt. I extend their analysis by considering the possible influences of the initiative, explicit types of diffusion, different types of divided government and by extending it to a similar policy area.⁶

Other scholars have studied the initiative's effect in different policy contexts. Comparing the percentage of initiative states that have adopted a policy to the percentage of non-initiatives that have adopted the same policy, Gerber (1999) finds that significantly different percentages of initiative states adopted the policy in five out of twenty-one areas, but only two of these cases feature a greater percentage of adoptions by initiative states. In more detailed cross-sectional regression analyses of capital punishment and parental consent laws, she finds that the initiative increases the responsiveness of policy to the median voter's preferences. The drawback to this study is its cross-sectional nature: the reasons for adoption are generally not likely to be captured by using independent variables that are measured up to twenty years after adoption, rendering her conclusions possibly invalid.

A different approach is taken by Matsusaka (1995), who conducts a panel study of state expenditures per capita over a thirty year period. He finds that initiative states spend about four percent less than non-initiative states, which he interprets as evidence that states

⁶Also see Caudill, Ford, Mixon and Peng (1995) for an event history analysis of lotteries, von Herrmann (1999) or Pierce and Miller (1999) for analyses of both lotteries and casinos and Mooney and Lee (1999) for an analysis of capital punishment.

spend more than the median voter prefers and the initiative process helps provide a check on legislative excess. This work is expanded by Matsusaka and McCarty (1998), who show that the effect of the initiative varies with uncertainty over voters' preferences and with legislators' preferences.

While the time-series cross-sectional approach these last two papers take is similar to that employed here, the underlying phenomenon being studied is decidedly different. The event history approach used here helps pinpoint the role that the initiative plays in the adoption and diffusion of new policies, as opposed to the marginal effect that it has on state expenditures, which could be the accumulation of the effects of particular initiatives over time. By increasing the incentives for groups to engage in lobbying and making it easier for them to move policy, the presence of the initiative process in a state should make it more likely to adopt policies. The nature of casino gaming also creates incentives for companies to try to expand their operations by trying to legalize gaming in other states, whereas capital punishment adoptions are likely to be spurred by within-state groups. The likely target or source of these groups would also be initiative states, according to Prediction 1. These two policy areas also provide contrasting tests of the diffusion hypothesis in Prediction 3. Gaming interest groups face uncertain voters for two reasons: the inherent variability of public opinion on gaming issues and the unfamiliarity engendered by their attempts at converting new states.⁷ Capital punishment supporters face the opposite circumstances. First, they are more likely to arise from within a state, increasing their familiarity with public opinion. Second, voters' opinions on their issue are more stable and well formed, so there is less uncertainty. This leads to a reduced role for information diffusion.

Because of the dynamic nature of Prediction 3, an empirical model that can account for neighbors' adoptions over time is required. As discussed in the previous chapter, I use event history analysis since it is better suited to this problem than the cross-sectional approaches taken in previous investigations of the effect of the initiative process on policy adoptions. This method allows me to gain more information than cross-sectional approaches

⁷As a means of reducing this uncertainty, campaign leaders in Florida brought in consultants from the successful New Jersey campaign, hoping that their prior experience would help in persuading voters. In the end, these attempts failed, partly because of the differences in the characteristics of voters (Dombrink and Thompson (1990).

by constructing a data set that measures the characteristics of the unit of observation, in this case a state, in all years in which it could experience a change in the relevant state, or policy. The model uses information from failure to make this change to improve the estimates of what did influence it to change.⁸ In this case the state variable is whether a state adopted casino gaming or capital punishment. Since the probability of adoption is not observable, I use an indicator variable that is zero until a state adopts, when it is coded as a one. This leads naturally to a logit or probit regression model.

4.3 The Initiative and Policy Adoptions

In the previous chapter I derived two predictions about the role of the initiative process in state policy adoptions. The first (Prediction 1) states that groups will seek to change policy in initiative states rather than in non-initiative states, since the expected cost of doing so is less but the benefit in terms of the policy adoption is the same. Not only can groups propose initiatives, but this possibility makes it easier to convince the legislature to move policy itself. The ability to accomplish this depends on the probability that a state's voters would pass an initiative, so I allow the effect of the initiative to depend on this as well.

To test Prediction 1 (that groups will seek to change policy in initiative states first), I include an indicator variable for whether a state has the direct initiative process. I expect this to have a positive effect on the probability of adoption. Prediction 1 shows how the effect varies with the expected probability that an initiative will pass, so I include measures of voter preferences with the expectation that more conservative states are less likely to support gaming and more likely to support capital punishment. I interact this variable with the initiative indicator and expect a positive coefficient.

The second relevant prediction, Prediction 3, is that initiative states should be more likely to adopt when neighboring initiative states have adopted. Further, it states that this effect should exist neither to nor from non-initiative states. This implies a very specific type of informational diffusion which differs from other possible diffusion patterns.

To test the diffusion hypothesis I include the number of neighboring states that have

⁸See Box-Steffensmeier and Jones (1997) and Allison (1984) for a discussion of the event history approach.

previously adopted. Since the effect is expected to exist only between initiative states I break this variable into four components: initiative states' neighbors' adoptions by whether they have the initiative or not and the two types of neighbors' adoptions for non-initiative states. Since I expect that there is a positive correlation between neighboring states' voters' preferences, the first of these four variables should be positive.⁹ The other three diffusion variables should have no discernible effect on the probability of adoption.

There are many other possible ways to code this variable, but I maintain the lagged contiguous neighbors format that is dominant in the literature. This allows for a direct test of initiative-related information diffusion relative to other conceivable patterns based on the four state-institution dyads, but it also contains the single lagged variable that previous studies have employed as a special case; if this is the true diffusion process then a test of all four dyad coefficients being identical distinguishes my results. More advanced, but noncomparable notions of diffusion could allow for variation in the location or importance of diffusion between any two states. Larger, more demographically or politically similar states may provide a more precise informational value than others.

There is important variation in the diffusion prediction by policy area, however. When there is little uncertainty about a states' voters' preferences, then there is no information to diffuse after adoption. So it is important to distinguish between the two policy areas under study in terms of the level of certainty about voters' preferences. There are strong reasons to expect a widespread uncertainty in the case of casino gaming and very little uncertainty in the case of capital punishment. While casino gaming was a relatively unfamiliar policy, voters had a more recent history with capital punishment.¹⁰ In their study of morality politics diffusion using capital punishment adoptions, Mooney and Lee (1999) state that "because these policies are often non-technical and highly salient to the public, citizens have both the incentive and the ability to make their views known to their representatives (p. 1)." In another, related study, they conclude that "moral value redistribution is likely to be even less confused by technicalities than is economic redistribution (Mooney and Lee, 1999. p.

⁹This expectation in no way influences the results. If the correlation is negative it will produce a negative coefficient — there are no restrictions in the estimation.

¹⁰This is not to say that casino gaming was unknown, just that voters had not been asked to consider it in many decades.

6)." For these reasons, it is likely that there is a much greater level of uncertainty regarding casino gaming adoptions than capital punishment adoptions. This implies that Prediction 3 would not predict significant diffusion patterns in the latter set of adoptions.

Besides the issue of uncertainty, there are other important factors to consider when studying diffusion. By not combining the other three state-institution dyads into one measure I test for other possible patterns and perform a stronger test of the diffusion hypothesis. Not only does it predict that the initiative state/initiative state dyad should have a positive diffusion effect, but that the other three should have none. Including them separately allows me to explicitly test initiative-related information diffusion against other plausible patterns. First among these is initiative signaling, whereby outcomes in initiative states provide information to policymakers in other states, be they potential initiative sponsors or government officials, that there is support for a particular policy. This type of diffusion would produce a pattern of information flow from adopting initiative states to all other states, independent of whether they have direct democracy. Two of the included variables would be significant under this type of diffusion. Of course, this process also depends on the extent of uncertainty about voters' preferences.¹¹

A second type of diffusion produces an even broader pattern. This can be thought of as a general pattern of diffusion from any state to any state. Possible causes could include general uncertainty about voters' preferences, which might be reduced by neighbors' adoptions in a fashion similar to that in the model in Chapter 2 or as a consequence of purely economic competition. In the case of casino gaming or other policy areas where reasonably large amounts of revenue are at stake, one state's adoption can drain revenue, jobs and taxes from neighboring states that have not implemented the policy yet. This loss of revenue and dwindling tax base can provide sufficient motivation for the state to adopt (Eadington 1999).¹² Both of these types of diffusion would produce identical coefficients for all four of the state dyad types, but there a possible difference across policy areas that can be used to

¹¹To some degree, this also provides of test of legislative uncertainty/responsiveness to public opinion. If legislators are both uncertain and responsive, neighboring states' adoptions will provide the same information to them as it does to potential initiative-using interest groups, leading to discernible diffusion pattern.

¹²As an example, Iowa's gaming revenue dropped from seventy million dollars in 1992 to fifty-four million dollars in 1993, believed to be because of the establishment of gaming in Illinois and the construction of casinos near the Iowa border in 1992 (Nichols 1998).

distinguish between them. While economic diffusion is not only plausible, but believed to be present in casino gaming adoptions, it is unlikely to be important in capital punishment adoptions.¹³

There is a separate reason to expect a general diffusion process in the case of capital punishment, though. Because of the uncertainty about the Supreme Court's decision and what provisions for the death penalty it would allow and under what conditions, states could gain information about the feasibility and wording of policy from other states' adoptions. There is little reason to believe that this type of diffusion would be based on contiguity, however, as policy hurdles with respect to the Supreme Court are essentially identical everywhere in the country.¹⁴ This would imply a time trend in adoptions based on the first state's policy, for which I later test.

I also include measures of other theoretically important variables in the model. To capture the legislature's preferences, I include measures of state financial need for gaming and crime rates for capital punishment. When financial times are tougher, the legislature will have to seek out sources of funding, of which gaming is one possibility. Besides the current year's budget deficit, measured as the difference between state general expenditures and revenue as a percentage of revenue, I also include a longer-run measure of state debt: the outstanding debt (including bonds) as a percentage of current year revenue. Even though states have balanced budget amendments, the outstanding bond issues must be paid off at some point.

While it is harder to measure legislators' preferences for executions, it makes sense to believe that as crime rates increase, legislators may look more favorably on stronger methods of deterrence. More specifically, I include the lagged state murder rate to capture this. I also included the financial variables to see if officials were more likely to prefer stricter crime laws when economic times were not in their favor.

I also need to capture the interest group's utility gain from a policy change, since that determines how much effort they are willing to make to obtain a new policy outcome. For casino gaming, this is relatively straightforward: proponent groups are most likely interested

¹³This is one reason that some states have attempted to place casinos near state borders, or on them in the case of riverboats (Eadington, 1999): to steal revenue from nonresidents.

¹⁴Though there could be some differences based on which appeals circuit a state is in.

in profits, which depend on the number of customers available and how much money they have to spend. These two motivations are captured by total state population and state real per capita income. As either increases, it becomes more valuable to the group to seek to legalize gaming, so I expect positive coefficients on both. Capital punishment again poses a problem since the benefits from a policy change are harder to measure. While there are certainly economic benefits from reducing serious crime, which will be partially captured by the lagged murder rates variables, it is not the case that they accrue directly to any one group. Other benefits are non-economic and come from increases in social welfare and, as such, are virtually impossible to measure.

I also include a measure to capture the effect of divided government on the ability to pass new legislation. Berry and Berry find that states with divided government may have a harder time passing revenue-related legislation and may be more likely to turn to the lottery as a source of new revenue. My measurement is finer than theirs since I interact the partisanship of the governor with the partisanship of the two legislative houses. This leads to a set of six indicator variables interacting Republican or Democratic control of the governorship with unified Republican, unified Democratic or split control of the legislature. These variables also provide another measure of legislative preference to go with the financial and social measurements.

To measure voters' preferences I employ Erikson, Wright and McIver's (1993) estimates of state ideology for casino gaming.¹⁵ I expect that more conservative states will experience greater opposition to gaming policies, which translates into a positive coefficient on ideology. In the capital punishment regression I use the percentage of a state's population that adheres to fundamentalist religious beliefs, also taken from Erikson, Wright and McIver (1993), and measured in 1972, the beginning of the sample period. Further, the model predicts that access to the initiative process should matter more when voters are more likely to support change, since the probability of an initiative passing is higher and lobbying is cheaper, so as both measures increase, I expect the effect of the initiative to be larger. Other studies have used more direct measures of voters' preferences, but due to the lack of sufficient observations

¹⁵I use ideology instead of the partisanship measure since it is more stable over their period of analysis (1976-1988).

in all states over time, they are also constant over the analysis. To the extent that public opinion on an issue that a state has already adopted is shaped by that adoption, it may be preferable to use the broader ideology measure.

4.3.1 Empirical Results

The estimates are the result of running probit regressions as described above to determine the effect the different variables have on the probability of legalizing gaming and capital punishment.¹⁶

Both of the hypotheses receive considerable statistical support in both policy areas and produce substantively large effects. The results for capital punishment are presented in Table 4.1 and those for casino gaming are in Table 4.2. Looking first at the non-initiative variables, there are some notable results. The measures of legislative utility produce positive and significant effects in both regressions. As a state's lagged budget deficit increases, it becomes more likely to adopt casino gaming, while as a state's lagged murder rate per capita increases it is more likely to adopt the death penalty. The first differences for these two variables are two and a half and twenty-one percent, respectively. Surprisingly, the other measures of government partisan preferences do not significantly influence adoption for either policy area. There is thus no evidence of any effect of divided government, either.

Insert Tables 4.1 and 4.2 here

Looking at the demographic variables next also produces some interesting findings. For capital punishment, there is a significant and negative effect of real per capita income, but no effect of state population. Since they measure potential demand, these two variables have a more straightforward interpretation in the casino gaming regression. In this case, real per capita income is positive and significant as expected: states with wealthier individuals are more appealing targets for gaming interests. Population, though, has an inverse relationship with the probability of adoption, but its coefficient is significant at only the ten percent level. The first differences, presented in the second columns, show that the effect of income

¹⁶ Alaska and Hawaii are excluded from both samples both because of the literature's focus on diffusion and the lack of measures of ideology in these states. Nevada is also dropped from the casino gaming analysis since it adopted in the 1930's.

is four times greater than that of population, so the gaming-demand argument seems to be reasonably borne out by the data. Increasing a state's income from one standard deviation below the average to one above increases the probability of adopting gaming by fifteen percent in each year.

The final non-initiative variables are the two measures of voters' preferences. They both perform relatively weakly across all states, as both are significant at only the ten percent level. More liberal states are, surprisingly, less likely to adopt casino-style gaming, though the first difference is only two-tenths of a percent. States with higher percentages of religious fundamentalists are less likely to adopt capital punishment and the first differences is a much larger seventeen percent.¹⁷

In both regressions, the effect of the initiative process is positive, as predicted. It is also increasing with the probability that voters would pass an initiative. While the initiative state indicators are both positive, only gaming produces a significant coefficient. The interaction with ideology in initiative states also produces a positive and significant coefficient, indicating that the initiative process has a greater effect in more liberal states. The mean shift produces a much greater effect than the variable portion: a nine percent per year increase in the probability of adoption compared to a three-tenths percent increase resulting from increased voter liberalism. The small effect of the initiative indicator on capital punishment adoptions, with a first difference of only three-tenths of a percent, must also be conditioned on the probability of an initiative passing. The interaction with percent fundamentalist religion produces a positive and significant coefficient, with a first difference of four-tenths of a percent. This means that the effect of the initiative depends on voters' preferences, as predicted.

Turning finally to the test of the diffusion hypothesis, it is also supported in the data. All but one of the eight coefficients is positive, indicating that diffusion works in a pro-adoption direction. Initiative-related information diffusion predicts that only the dual initiative states dyad should produce a significant effect and only when there is uncertainty about voters'

¹⁷The weak performance of these variables fits with recent findings in the literature: Mooney and Lee (1999), Pierce and Miller (1999) and Gerber (1999) all fail to find significant effects of ideology or religion on the probability of adoption, though Gerber also finds a significant effect in initiative states only.

preferences. This is the case since this coefficient is significant at the ninety-five percent level in the casino gaming results, but not in the capital punishment ones. In the former case, the estimated first difference is one and one-tenths of a percent. Not only does information diffusion seem to exist, but it also is only found in policies with greater uncertainty about voters' preferences, as expected.

The second step in confirming this hypothesis depends on the fact that none of the other six dyads produces a significant coefficient. This is further support because the model predicted that information from adoptions in initiative states would only be useful to interest groups in states with that institution as well, so the lack of other types of diffusion is strong confirmation of this prediction. It also suggests that other conceived diffusion patterns are not realized, including economic diffusion in the case of casino gaming, general policy information diffusion in the case of capital punishment or an initiative states-as-leaders type of diffusion.

4.3.2 Secondary Analysis

The coefficients of the probit regression are difficult to interpret in terms of how they influence the overall probabilities of adoptions. While the first differences give a good measure of how changes in one variable influence the overall probability of adoption, the total effect of the initiative process in a state depends on the combination of three variables: the initiative indicator, the ideology or religion interaction and the number of previous initiative state neighbors' adoptions. In this section I perform a series of counterfactual predictions that gives an idea of how these three components add up into an overall probability change.

To do this I generate predicted probabilities of adoption for a state with a specific profile and then add in the effect of the initiative and its ideology/religion interaction followed by incrementing the number of lagged neighbors' adoptions from none to four. The profile of this hypothetical state is merely the average value of the other independent variables for all initiative states. For the multi-component discrete variables, I take the modal value. I then use the coefficients in Tables 4.1 and 4.2 to predict the probability that this average initiative states would adopt the relevant policy, computing these probabilities at many different values

of the ideology and religion scale, evenly spaced from their maximum and minimum values for initiative states to show how the effect of the initiative depends on their value. This gives a set of predicted probabilities for the average initiative state across the ideological or religious spectrum.

Following this, I add in the effect of the initiative and its interaction term and recompute the probabilities across the same underlying scale. This gives the effect of the initiative when there are no lagged neighbors adoptions to use for informational purposes. The number of neighbors' adoptions is then incremented from one to four, recalculating the predicted probabilities of adoption each time. The summaries of this exercise, presented in Tables 4.3 and 4.4, give the effect of the initiative across a broad spectrum of possible combinations of these variables. To account for the uncertainty of the coefficients used to estimate these probabilities, I repeat the calculation 500 times, drawing the coefficients with mean equal to the point estimate from the event history analyses and variance calculated using the standard error of these coefficients. The tables present the average probability change over these 500 trials as well as the standard error of the average.

Turning first to the effect of the initiative on the probability of adoption capital punishment, the first column in Table 4.3 gives the percentage of religious fundamentalism used as the value of that independent variable, included both in the overall portion and in the initiative state interaction. The second column shows exactly what the regression coefficient and first differences demonstrate: as the religion variable increases, the probability of adoption drops from 2.7% at zero to 1.2% at 10 to effectively 0 above 40%. Since the interaction with the initiative produces a significant and positive coefficient on top of the initiative indicator, the other columns show an increase in the probability of adoption as religion increases. The third column depicts an initiative state with no neighbors adoptions. The probability of adoption at zero is 4.1%, greater than the probability without the initiative by almost 50%. With ten percent religious fundamentalists, the probability of adoption is 5.4%, a two hundred percent increase relative to non-initiative states. This trend continues as religion increases, with a 20% probability of adoption halfway up the scale and a 44% probability at the high extreme.

Insert Table 4.3 here

The effect of neighbors' adoptions just serves to magnify these differences. Adding just one neighbor increases the probability by 2.1% at the low end of the scale and 4.5% at the high end of the scale. The second neighbor leads to an increase relative to an initiative state with no neighbors of 5.4% at the low end, 7.5% at the average value of twelve percent religious fundamentalists and 9.1% at the high end. Looking at the last column, initiative states with four previously adopting neighbors, the probability of adoption at zero on the religion scale is 19.5% compared to 2.7% in the first column. At the ten percent level, these probabilities are 25.5% and 1.2%, respectively. Clearly this is a huge difference in the probability of adoption due to the initiative process.

The effect of the initiative process in casino gaming adoptions produces similar patterns, but the effect of the ideology variable is smaller than that for religion. The second column of Table 4.4 shows the effect of changing ideology on non-initiative states: the probability of adoption starts at 5.2% in extremely conservative states, moves to 0.7% in the middle of the scale and drops closer to zero in liberal states. Since the interaction with the initiative is positive, these probabilities move in the opposite direction for initiative states. When there are no initiative state neighbors that have adopted, the probabilities of adoption are identical at the conservative extreme, reflecting the fact that ideology decreases it while the initiative indicator increases it, cancelling each other out. Around the average ideology score of negative fifteen, initiative states are at 4.1%, compared to less than 1% for non-initiative states and at the liberal end of the scale, they are at 5.8%.

Insert Table 4.4 here

Focusing now on the effect of diffusion, adding one neighbor increases the probability of an initiative state adopting by 3.1% at the conservative end of the spectrum and by 5.8% at the liberal end. Two neighbors produces increases of 7.7% and 14.3% at the same points, respectively. Looking at the average initiative state, it increases from 4.1% with no neighbors to 7.4% with one, 12.6% with two, 20% with three and 29% with four. In perspective, adding the initiative increases the probability of adoption from one to four percent, so the diffusion effect quickly dominates this increase. At the very extreme, the probability of a very liberal non-initiative state adopting is 0.1%, but the same state with the initiative and four lagged neighbors' adoptions would have a probability of adoption of 38%! On top of that, these

are the predicted probabilities of adopting each year — the differences will only accumulate over many years since the probability of a state adopting the policy by some point depends on the probability of adoption in each previous year.

4.3.3 Alternate Specifications

Until now I have focused on including measures that are related to the theory developed in Chapter 2, or that at least are attempts to measure the relevant concepts. There are other possible specifications that should be considered as well, since they provide tests of alternate theories discussed in the literatures. They also provide a robustness test of the findings already presented. I also take this opportunity to provide further investigation of the diffusion hypothesis: as more neighbors adopt and the dual initiative dyad variable increases, there is additional information gained from each adoption. This implies that the marginal effect of neighboring initiative states' adoptions on other initiative state may be successively increasing.

Economic Growth and Gaming

One frequent appeal made by gaming proponents is that it would help revitalize state economies or could be used as tools to invigorate struggling areas of the state. This may help explain why New Jersey adopted in the 1970's, while subsequent campaigns in other states failed until the late 1980's. Dombrink and Thompson (1990) argue that this is one of the reasons that gaming campaigns failed in Florida: its economy was doing considerably better in 1978 than New Jersey's was doing in 1976. Further, the prime target of the casino gaming interests was the declining Miami Beach Area, similar to the push for Atlantic City. This suggests that states where the economy has been performing poorly may be preferred targets of gaming interests.

To test the economic growth hypothesis, I rerun the casino gaming analysis and include a variable which measures the lagged growth in gross state product. States with lower growth should be more likely to adopt, implying a negative coefficient. The results, presented in Table 4.5 show that this does not appear to be the case. The lagged gross state product

growth variable is not only positive, but is nowhere near conventional level of statistical significance. The interpretation of the other variables is not changed by the inclusion of this variable either, so the economic growth hypothesis can be rejected.

Insert Table 4.5 here

The Threat of Indian Gaming

In 1988, right before a large increase in the number of adoptions, Congress passed the National Indian Gaming Regulatory Act. This effectively allowed recognized Indian tribes to conduct gaming on tribal lands and forced state governors to negotiate compacts with these tribes. This increased threat of Indian gaming within a state's external borders may have increased the incentive to adopt within the state so that revenue would not be lost by the government.

To test this possibility, I include as an independent variable the number of federally recognized tribes in each state. More tribes should increase the probability of state-sponsored gaming for two reason. First, with more tribes, the probability of at least one of them adopting is greater. Second, if there is competition among the tribes, they may rush to adopt even faster when there are more possible competitors. This variable should then produce a positive coefficient.

The results in Table 4.6 reject this hypothesis strongly.¹⁸ The coefficient on the number of federally recognized Indian tribes is half its standard error and the first difference is effectively zero. Again, the interpretation of the variables is not changed as they retain their significant importance. The threat of Indian gaming does not influence the probability of adoption.

Insert Table 4.6 here

Accounting for Time

On a more statistical level, Beck, Katz and Tucker (1998) have argued that it is important to always account for time trends when analyzing cross-sectional time-series data. If there is

¹⁸Since none of them were significant I pooled the partisan measures into a divided government measure, which is also not significant.

an exogenous duration dependence not controlled for in the other variables, then incorrect interpretations can result. To implement their suggested method, I estimate both the casino gaming and capital punishment models as before, but also include a cubic spline, which fits a polynomial — in this case a third order polynomial — time trend. This is much more flexible than assuming a linear time trend.

Of course, it also requires assuming that there *is* an exogenous time trend in state policy adoptions. In the model developed here, there is an explicitly modeled diffusion process that occurs over time. Including an additional time trend variable may be problematic for estimating the time-dependent diffusion process.

The results for casino gaming, presented in Table 4.8 indicate that this is the case. All three of the time trend variables are significant at the ninety-five percent level, with the linear and cubed terms positive and the squared term negative. Many of the other variables lose their previous significance levels: both per capita income and population are now insignificant. The initiative indicator, the interaction with ideology and ideology overall are now also insignificant. The first two of these would pass a one-tailed test at the ninety percent level, though. Surprisingly, it is the diffusion coefficient that remains significant: the initiative state-initiative state pairing is still positive and significant and the other three diffusion variables are still insignificant. Since the probit regression leads to perfect predictions for one hundred and fifty five of the non-adopters, I also ran a logit regression on this specification and the results are similar, but the initiative indicator now passes a two-tailed test at the ninety percent level.

Insert Table 4.8 here

The results in Table 4.7 for capital punishment adoptions are decidedly different. None of the three time trend variables is significant. The initiative process interacted with religious fundamentalism is still positive and significant at the ninety percent level, a slightly weaker performance than before, but still in the correct direction as the theory predicts. None of the diffusion variables are significant, replicating the earlier findings and confirming the diffusion prediction in policy areas with little uncertainty about voters' preferences. While lagged murders per capita is still an important variable, most of the power is in real per

capita income, which is positive and has a first difference of three percent.¹⁹

Insert Table 4.7 here

Further Adventures in Information Diffusion

The final issue to be explored focuses on the diffusion hypothesis. As detailed in Chapter 2, diffusion is observed when one state's adoption increases a group's estimate of the probability of adoption enough that it passes the threshold that make initiative proposal cost-effective. Depending on the distribution of the prior probabilities of passage, this could just as easily be accomplished when the third neighbor adopts as when the first does. The cumulative probability of influencing adoption is greater for the third neighbor, though. This suggests that each additional neighbor's adoption between initiative states may have a larger effect. To test this extension of the information diffusion hypothesis, I include separate indicator variables for each of the different numbers of initiative-initiative neighbors' adoptions: one indicator for all of these pairings with one adoption, another for all with two adoptions, and one for those cases with three or more previous neighbors' adoptions.²⁰ This modification is only run on the casino gaming adoptions since that is where diffusion is predicted and found.

If the effect of increased neighbors' adoptions is to increase the probability that the initiative becomes cost effective, then initiative states should be more likely to adopt at each successive neighbor's adoption. This implies that the impact of each successive number of neighbors' adoptions should be greater than the previous one. The results of the regression in Table 4.9 provide some support for this. All three of the initiative state diffusion pairings produce positive coefficients that are increasing with the number of neighbors' adoptions that they represent: one neighbor's adoption produces an increase in the probability of adoption of three-tenths of a percent, though it is insignificant; two produces an increase of eight percent and is significant at the ninety percent level; three or more previous neighbors' adoption increases the probability of adoption by twenty-two percent and is significant at

¹⁹The first differences also indicate that this regression may be problematic as they all fall precipitously, except for income.

²⁰There are only two cases with more than three lagged neighbors' adoptions and both are four. Including this as a separate variable caused both observations to be dropped, so I pooled these two cases with the three-neighbor variable.

the ninety-five percent level.

Insert Table 4.9 here

The interpretation of the other variables is virtually unchanged, though population and ideology are no longer significant at the ninety percent level, as it was in Table 4.2. The initiative indicator and its interaction with ideology are both still positive and significant at the ninety-five percent level. The results for the dual initiative neighbors variables not only reconfirm the earlier findings, but provide a more detailed view into the diffusion of information. Having one initiative neighbor adopt does not seem to provide enough information to make initiative proposal a credible threat. Having two or at least three neighbors with casino gaming does seem to provide sufficient information. This is reflected in the probability of adoption, which increases eight percent with the second neighbor's adoption and an additional thirteen and one-half percent with the third or greater neighbor's adoption.

4.4 Conclusions

The results in this chapter provide the first confirmatory test for the predictions developed in Chapter 2. Both the policy adoption and diffusion hypotheses have found support in two notably different policy areas: casino-style gaming and capital punishment. States that have the initiative process are significantly more likely to adopt both of these policies and this increase is magnified when neighboring states provide information through their prior adoptions. With the the ability to influence policy securely established, I can continue to investigate the effect that this has on interest groups' decision regarding mobilization and lobbying.

The magnitude of the effect is also considerable. Performing a series of counterfactual predictions, the increase in the probability of adoptions for the average initiative state are 500% for capital punishment and for casino-style gaming. This increase happens each year of the sample period, up until adoption, so the cumulative effect is much larger. This means that initiative states will disproportionately adopt much earlier than non-initiative states. Adding in the effect of diffusion shows that these probabilities double for capital punishment and triple for casino gaming with only two previous neighbors' adoptions.

The diffusion results provide strong support for the model, since not only does the initiative-initiative state pairing provide a positive and significant diffusion coefficient, but none of the other three pairings produce significant findings, indicating the lack of other patterns of diffusion. Secondly, there is no evidence of any diffusion in the capital punishment adoptions, which the model predicts would happen in circumstances where there is little or no uncertainty about voters' preferences. There is considerable reason to believe that this is an accurate characterization of capital punishment adoptions.

These findings suggest that the general diffusion effect found in Berry and Berry's (1990) analysis of lottery adoptions may be a function of initiative state diffusion effects entangled with the other possible state pairings. They only include one variable to measure the number of previous neighbors' adoptions independent of either state's institutional makeup. This is not to suggest that other types of diffusion do not occur, but the findings here indicate that the initiative process plays a unique role that may be detectable in their data as well, especially if casino gaming adoptions are similar enough to lottery adoptions.²¹

The findings here also have import for the initiative process in general. In both policy areas, there is either a statistically weak or non-existent relationship between ideology or religion and the probability of adoption in all the states. In initiative states, though, the effect is significantly different from this baseline and in the direction that is expected: more conservative states are more likely to adopt capital punishment and less likely to adopt casino gaming. Other studies have reached similar conclusions about the overall effect of voter ideology as well as those that have also examined the effect of the initiative.

²¹Rerunning the casino gaming regression with only the single lagged neighbors' adoptions variable produces a significant and positive coefficient in the casino gaming data.

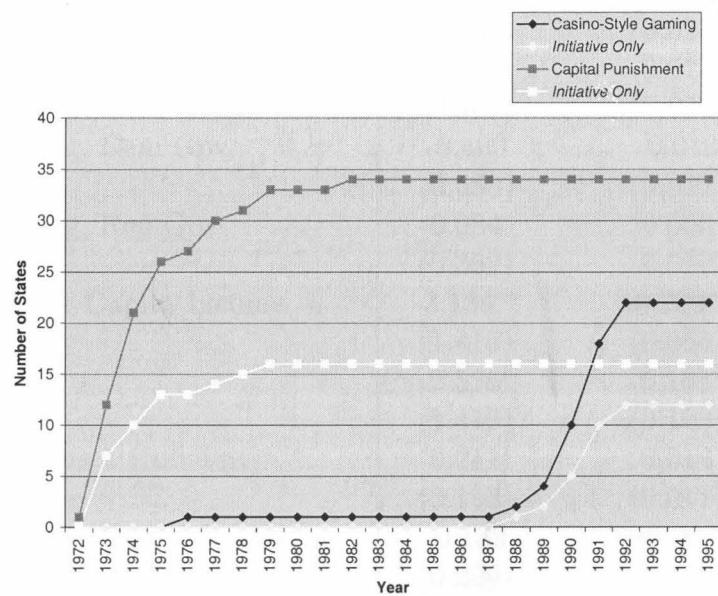


Figure 4.1: State Casino Gaming and Capital Punishment Adoptions
Source: see Appendix B.

Table 4.1: Event History Analysis of State Capital Punishment Adoptions

	Coefficient	First Difference
Initiative	0.038 (0.436)	0.003 (0.030)
Initiative*Religion	0.056** (0.022)	0.004** (0.002)
Population	-0.966 (0.651)	-0.064 (0.050)
Dem Leg, Rep Gov	-0.411 (0.356)	-0.022 (0.017)
Rep Leg, Rep Gov	-0.063 (0.335)	-0.004 (0.020)
Dem Leg, Dem Gov	0.186 (0.401)	0.014 (0.036)
Split Leg, Dem Gov	-0.400 (0.680)	-0.019 (0.022)
Split Leg, Rep Gov	0.084 (0.392)	0.006 (0.030)
Real Per Capita Income	-3.134** (1.413)	-0.209** (0.064)
Religion	-2.526* (1.419)	-0.168* (0.103)
Neighbors 1 (Init-Init)	0.211 (0.153)	0.014 (0.011)
Neighbors 2 (Init-No Init)	-0.132 (0.299)	-0.009 (0.021)
Neighbors 3 (No Init-Init)	0.028 (0.108)	0.002 (0.007)
Neighbors 4 (No Init-No Init)	0.137 (0.120)	0.009 (0.008)
Lagged Murder Rate	3.102** (0.866)	0.207** (0.090)
constant	-1.743** (0.379)	— —
N		388
Log likelihood		-84.03
LR χ^2		57.71**
Pseudo R ²		0.26

* Significant at 90% level.

** Significant at 95% level.

Table 4.2: Event History Analysis of State Gaming Adoptions

	Coefficient	First Difference
Initiative	1.484** (0.604)	0.090** (0.059)
Initiative*Ideology	0.085** (0.038)	0.003** (0.001)
Population	-1.358* (0.757)	-0.041* (0.023)
Dem Leg, Rep Gov	0.047 (0.320)	0.001 (0.010)
Rep Leg, Rep Gov	-0.072 (0.397)	-0.002 (0.011)
Dem Leg, Dem Gov	0.325 (0.367)	0.013 (0.019)
Split Leg, Dem Gov	-0.166 (0.483)	-0.004 (0.010)
Split Leg, Rep Gov	0.063 (0.333)	0.002 (0.011)
Lagged State Debt	-0.110 (0.758)	-0.003 (0.023)
Lagged State Deficit	0.838** (0.403)	0.025** (0.012)
Real Per Capita Income	5.021** (1.439)	0.152** (0.047)
Ideology	-0.055* (0.030)	-0.002* (0.001)
Neighbors 1 (Init-Init)	0.364** (0.180)	0.011** (0.006)
Neighbors 2 (Init-No Init)	0.326 (0.307)	0.010 (0.010)
Neighbors 3 (No Init-Init)	0.139 (0.199)	0.004 (0.006)
Neighbors 4 (No Init-No Init)	0.129 (0.272)	0.004 (0.008)
constant	-5.870** (1.188)	— —
N		821
Log likelihood		-82.50
LR χ^2		37.66**
Pseudo R ²		0.19

* Significant at 90% level.

** Significant at 95% level.

Table 4.3: Predicted Effect of the Initiative on the Probability of Capital Punishment Adoptions

Religion	No Initiative	Initiative with Number of Neighbors:				
		0	1	2	3	4
0	0.027	0.041 (0.04)	0.062 (0.05)	0.095 (0.09)	0.139 (0.13)	0.195 (0.18)
5	0.018	0.054 (0.05)	0.081 (0.07)	0.122 (0.11)	0.175 (0.15)	0.238 (0.2)
10	0.012	0.068 (0.06)	0.099 (0.08)	0.143 (0.11)	0.199 (0.15)	0.265 (0.2)
15	0.008	0.087 (0.08)	0.122 (0.11)	0.170 (0.14)	0.228 (0.18)	0.294 (0.22)
20	0.005	0.110 (0.11)	0.149 (0.13)	0.199 (0.17)	0.259 (0.2)	0.324 (0.24)
25	0.003	0.139 (0.14)	0.182 (0.16)	0.236 (0.19)	0.297 (0.23)	0.362 (0.26)
30	0.002	0.163 (0.16)	0.212 (0.18)	0.270 (0.21)	0.334 (0.25)	0.399 (0.27)
35	0.001	0.196 (0.20)	0.241 (0.22)	0.294 (0.24)	0.352 (0.27)	0.411 (0.29)
40	0.001	0.248 (0.24)	0.296 (0.26)	0.350 (0.28)	0.406 (0.30)	0.463 (0.31)
45	0.000	0.305 (0.27)	0.355 (0.29)	0.408 (0.3)	0.463 (0.31)	0.517 (0.32)
50	0.000	0.332 (0.30)	0.382 (0.31)	0.434 (0.32)	0.486 (0.33)	0.535 (0.34)
55	0.000	0.325 (0.30)	0.370 (0.32)	0.416 (0.33)	0.462 (0.34)	0.507 (0.34)
60	0.000	0.380 (0.31)	0.432 (0.33)	0.484 (0.34)	0.532 (0.35)	0.577 (0.35)
65	0.000	0.406 (0.34)	0.453 (0.35)	0.498 (0.36)	0.542 (0.36)	0.584 (0.36)
70	0.000	0.444 (0.36)	0.489 (0.36)	0.535 (0.36)	0.579 (0.36)	0.619 (0.36)

Standard errors in parentheses. Generated using coefficients from Table 4.1 sampled 500 times to generate average probability and standard error.

Table 4.4: Predicted Effect of the Initiative on the Probability of Casino Gaming Adoptions

Ideology	No Initiative	Initiative with Number of Neighbors:				
		0	1	2	3	4
-30	0.052	0.052	0.083	0.129	0.190	0.262
	—	(0.12)	(0.16)	(0.21)	(0.25)	(0.30)
-25	0.029	0.055	0.086	0.131	0.193	0.267
	—	(0.12)	(0.16)	(0.20)	(0.25)	(0.30)
-20	0.015	0.039	0.069	0.117	0.186	0.268
	—	(0.08)	(0.11)	(0.16)	(0.22)	(0.27)
-15	0.007	0.041	0.074	0.126	0.200	0.290
	—	(0.07)	(0.11)	(0.16)	(0.22)	(0.27)
-10	0.003	0.048	0.089	0.153	0.241	0.342
	—	(0.07)	(0.11)	(0.16)	(0.22)	(0.28)
-5	0.001	0.051	0.096	0.166	0.260	0.365
	—	(0.06)	(0.10)	(0.15)	(0.22)	(0.27)
0	0.001	0.058	0.106	0.181	0.280	0.389
	—	(0.07)	(0.10)	(0.15)	(0.21)	(0.26)

Standard errors in parentheses. Generated using coefficients from Table 4.2 sampled 500 times to generate average probability and standard error.

Table 4.5: Event History Analysis of State Gaming Adoptions: Economic Growth

	Coefficient
Initiative	1.461** (0.605)
Initiative*Ideology	0.084** (0.038)
Population	-1.348* (0.756)
Dem Leg, Rep Gov	0.047 (0.321)
Rep Leg, Rep Gov	-0.054 (0.397)
Dem Leg, Dem Gov	0.324 (0.367)
Split Leg, Dem Gov	-0.185 (0.491)
Split Leg, Rep Gov	0.069 (0.334)
Lagged State Debt	-0.177 (0.773)
Lagged State Deficit	0.856** (0.405)
Real Per Capita Income	4.926** (1.455)
Lagged GSP growth	0.899 (1.397)
Ideology	-0.053* (0.03)
Neighbors 1 (Init-Init)	0.366** (0.18)
Neighbors 2 (Init-No Init)	0.329 (0.308)
Neighbors 3 (No Init-Init)	0.143 (0.199)
Neighbors 4 (No Init-No Init)	0.143 (0.274)
constant	-5.786** (1.198)
N	821
Log likelihood	-82.32
LR χ^2	38.03**
Pseudo R ²	0.19

* Significant at 90% level.

** Significant at 95% level.

Table 4.6: Event History Analysis of State Gaming Adoptions: Threat of Indian Gaming

	Coefficient	First Difference
Initiative	1.362** (0.603)	0.078** (0.055)
Initiative*Ideology	0.080** (0.038)	0.002** (0.001)
Population	-1.546* (0.907)	-0.048* (0.028)
Divided Government	0.092 (0.227)	0.003 (0.007)
Lagged State Debt	-0.412 (0.723)	-0.013 (0.022)
Lagged State Deficit	0.860** (0.401)	0.026** (0.012)
Real Per Capita Income	4.708** (1.381)	0.145** (0.045)
Lagged Growth Rate	0.817 (1.374)	0.025 (0.043)
Ideology	-0.050* (0.030)	-0.002* (0.001)
Indian Tribes	0.005 (0.009)	0.000 (0.000)
Neighbors 1 (Init-Init)	0.359** (0.177)	0.011** (0.006)
Neighbors 2 (Init-No Init)	0.339 (0.312)	0.010 (0.010)
Neighbors 3 (No Init-Init)	0.163 (0.190)	0.005 (0.006)
Neighbors 4 (No Init-No Init)	0.172 (0.268)	0.005 (0.008)
constant	-5.539** (1.131)	— —
N		821
Log likelihood		-82.23
LR χ^2		38.19**
Pseudo R ²		0.19

* Significant at 90% level.

** Significant at 95% level.

Table 4.7: Event History Analysis of State Capital Punishment Adoptions: Cubic Spline

	Coefficient	First Difference
Initiative	0.261 (0.496)	0.000 (0.006)
Initiative*Religion	0.039* (0.023)	0.000* (0.001)
Religion	-0.562 (1.638)	-0.001 (0.01)
Population	-1.544** (0.737)	-0.002** (0.027)
Dem Leg, Rep Gov	-0.274 (0.394)	0.000 (0.004)
Rep Leg, Rep Gov	-0.014 (0.363)	0.000 (0.001)
Dem Leg, Dem Gov	0.271 (0.443)	0.001 (0.007)
Split Leg, Dem Gov	-0.162 (0.724)	0.000 (0.002)
Split Leg, Rep Gov	0.125 (0.422)	0.000 (0.003)
State Debt	-0.324 (0.436)	0.000 (0.006)
State Deficit	2.898 (2.549)	0.004 (0.050)
Real Per Capita Income	21.519** (9.846)	0.031** (0.372)
Neighbors 1 (Init-Init)	0.105 (0.181)	0.000 (0.002)
Neighbors 2 (Init-No Init)	-0.084 (0.349)	0.000 (0.002)
Neighbors 3 (No Init-Init)	-0.031 (0.139)	0.000 (0.001)
Neighbors 4 (No Init-No Init)	0.064 (0.164)	0.000 (0.001)
Lagged Murder Rate	2.958** (0.945)	0.004** (0.052)
Spline 1 (Linear)	0.012 (0.020)	0.000 (0.000)
Spline 2 (Squared)	0.000 (0.040)	0.000 (0.000)
Spline 3 (Cubed)	0.007 (0.055)	0.000 (0.000)
constant	-3.876** (0.981)	— --
N	388	
Log likelihood	-79.21	
LR χ^2	67.35**	
Pseudo R ²	0.30	

* Significant at 90% level.

** Significant at 95% level.

Table 4.8: Event History Analysis of State Gaming Adoptions: Cubic Spline

	Probit	Logit
Initiative	1.241 (0.803)	2.753* (1.670)
Initiative*Ideology	0.049 (0.051)	0.099 (0.105)
Population	-0.063 (1.049)	-0.754 (2.147)
Dem Leg, Rep Gov	-0.454 (0.449)	-0.991 (0.912)
Rep Leg, Rep Gov	0.128 (0.529)	0.403 (0.995)
Dem Leg, Dem Gov	0.685 (0.483)	1.622* (0.949)
Split Leg, Dem Gov	0.213 (0.617)	0.500 (1.223)
Split Leg, Rep Gov	-0.305 (0.413)	-0.785 (0.843)
Lagged State Debt	0.000 (1.069)	-0.798 (2.227)
Lagged State Deficit	1.803** (0.665)	3.546** (1.411)
Real Per Capita Income	0.028 (2.335)	1.417 (4.701)
Ideology	-0.007 (0.042)	-0.019 (0.093)
Neighbors 1 (Init-Init)	0.415* (0.237)	0.776* (0.438)
Neighbors 2 (Init-No Init)	-0.157 (0.510)	-0.328 (0.948)
Neighbors 3 (No Init-Init)	0.394 (0.276)	0.621 (0.559)
Neighbors 4 (No Init-No Init)	0.523 (0.405)	1.277 (0.790)
Spline 1: Linear	0.053** (0.019)	0.101** (0.036)
Spline 2: Squared	-0.105** (0.035)	-0.203** (0.066)
Spline 3: Cubed	0.083** (0.026)	0.163** (0.050)
constant	-3.292** (1.656)	-7.292** (3.621)
N	819	819
Log likelihood	-55.19	-54.83
LR χ^2	77.61**	78.33**
Pseudo R ²	0.41	0.38

* Significant at 90% level.

** Significant at 95% level.

Table 4.9: Event History Analysis of State Gaming Adoptions: Initiative Diffusion by Number of Neighbors

	Coefficient	First Difference
Initiative	1.454** (0.600)	0.088** (0.059)
Initiative*Ideology	0.084** (0.038)	0.003** (0.001)
Population	-1.036 (0.763)	-0.032 (0.024)
Divided Government	0.114 (0.225)	0.004 (0.007)
Lagged State Debt	-0.335 (0.744)	-0.01 (0.023)
Lagged State Deficit	0.853** (0.405)	0.026** (0.012)
Real Per Capita Income	4.334** (1.392)	0.134** (0.045)
Ideology	-0.046 (0.029)	-0.001 (0.001)
Neighbors 1 (Init-Init): First	0.099 (0.405)	0.003 (0.015)
Neighbors 1 (Init-Init):Second	0.955* (0.520)	0.082* (0.085)
Neighbors 1 (Init-Init): Third/Fourth	1.531** (0.650)	0.217** (0.192)
Neighbors 2 (Init-No Init)	0.341 (0.323)	0.011 (0.010)
Neighbors 3 (No Init-Init)	0.188 (0.191)	0.006 (0.006)
Neighbors 4 (No Init-No Init)	0.147 (0.263)	0.005 (0.008)
Lagged GSP growth	0.840 (1.387)	0.026 (0.044)
constant	-5.327** (1.120)	— —
N		821
Log likelihood		-81.88
LR χ^2		38.90**
Pseudo R ²		0.19

* Significant at 90% level.

** Significant at 95% level.

Chapter 5 Interest Group Mobilization Decisions

5.1 The Initiative's Interest Group Legacy

Two of the most famous users of the initiative process are Paul Jarvis and Howard Gann. The passage of Proposition 13, their 1978 tax limitation measure in California, is generally viewed as christening the modern era of the initiative process' history (Magleby 1982). The tax revolt era that swept across the country began an increase in the use of the initiative process and signaled its entry into high-profile politics. Scholars have blamed Proposition 13 for many of the problems that direct democracy states suffer, including the decline of public education in California and legislatures' inability to respond to public policy needs, but they have overlooked one of the more fundamental consequences of this and other initiative campaigns: the interest groups they leave behind.

Not only did Jarvis and Gann provide the catalyst for the tax revolt era, but during the years up to 1978 they created a large organization to back their efforts. An examination of interest groups today reveals another part of their legacy: the Howard Jarvis Taxpayers Association and Paul Gann's People's Advocate. These two groups and the many across the country that their success spawned are a direct consequence of groups mobilizing around the hope of successful initiative campaigns. While this is a high-profile example, there are many other groups that looked to the ballot box in their formative stages and decided that it offered enough hope for them to begin working towards their goals, including the groups that worked together to seek medical marijuana reform in many states.

Many of these groups are still either trumpeting their cause in the form of new legislation, persisting in their original battle or lending their organization and name to new fights — twenty-five years later in the case of the tax-revolt veterans. The accumulation of these groups might be expected to have some consequences for interest group politics in initiative states. First and foremost, direct democracy states should have more interest groups compared to other states. Secondly, these additional groups might differ from the average group

in important ways. The first consequence is a direct prediction of the model in Chapter 2, while the second requires further development. The Jarvis and Gann legacy, though, already suggests this second consequence of direct democracy: certain types of groups are given a disproportional boost by the initiative process. Groups that are potentially broad-based membership organizations may benefit more from the possibility of proposing an initiative than narrowly focused groups with few possible members or a captive membership, such as business associations or unions. This is not to say that these groups cannot benefit from the initiative, just that are likely to have formed anyway. Further, if broad-based groups are disadvantaged in the legislature, then the relative impact of access to the ballot will be greater. If this extension of the mobilization prediction is true, than these states will have a larger percentage of broad-based membership groups relative to non-initiative states.

From a representational point of view, this would be viewed as beneficial, since one of the most salient findings about interest group systems is an overwhelming bias towards businesses. Every population level study of groups since Schattschneider's (1960) path-breaking work has confirmed this bias, while others have sought to formulate a theoretical explanation. Most of their theories focus on individual level motivations for group activation, such how the costs of joining outweigh the individual contribution to the benefits for potential members of most types of groups. As in the case of many of the tax revolt groups, potential groups may also be responsive to the political opportunities presented to them. The model developed in Chapter 3 predicts that groups will take this potential resource into account, leading direct democracy states to have more groups than if they did not have the initiative process.

If this link between expected benefits and formation exists, then institutions such as the initiative process will have a direct impact on group mobilizations. Groups' ability to use the initiative process to obtain their goals was confirmed in the previous chapter, which demonstrated that groups use the initiative process either directly or indirectly (by pressuring the legislature) to alter state policy outcomes. With this evidence in hand, we can see if groups in initiative states are more likely to pay the costs of mobilization than groups in non-initiative states.

5.1.1 The Initiative and Bias

If the pro-business bias in representation is a result of broad-based membership groups' inability to overcome the collective action problem, then any political institution that increases the incentives for mobilization may ameliorate this bias. Since businesses and other groups that can fully capture the benefits of their actions are likely to have already formed, access to the initiative process may have a greater effect on groups whose goals provide collective benefits. This is not to imply that the collective action problem becomes irrelevant, only that the added groups in direct democracy states are likely to be more representative than the groups that would exist even without the initiative process.

These pre-existing group types may have a relatively easy time achieving their goals through the legislature and know that they will rarely have to resort to the ballot, so it plays a relatively small role in their formation decision, whereas groups that are relative outsiders to the legislative process will be greatly influenced by access to this additional method of policy influence. This variation in the initiative's influence will lead initiative states to have greater proportions of groups from certain categories and, given that businesses are generally inside-oriented groups who typically use the initiative to protect the status quo (Gerber 1999), the presence of these additional groups should serve to mitigate the observed bias in representation.

Returning to the theoretical explanations of group formation suggests another reason why initiative states might have more representative interest populations: groups that can internalize the benefits of their actions are more able to form since they do not suffer from the collective action problem (Olson 1965). In particular, these tend to be business groups since a subsidy for a particular industry only benefits members of that industry, whereas a beneficial change in social policy benefits everyone in society. When the benefits of a group's action can be shared by everyone, but the costs are borne only by its members, individuals have an incentive not to participate since their contribution to the groups' success is generally minuscule and they can enjoy the benefits even if they do not become members.

This is the primary force behind the bias in interest representation: the collective action problem makes individuals unlikely to join groups with broad benefits, leaving only those

groups able to fully capture the rewards of their actions. Combine with this the fact that it is easier for groups with fewer potential members to overcome the collective action problem and it becomes apparent why representation is skewed towards business interests. This also suggests that the initiative process should have a greater effect on non-business interests, since businesses are likely to form independent of its presence.

Because of its ability to increase the incentives for non-business interests to form more than for business interests, states with the initiative process should have more representative interest populations. So besides providing additional support for the model in Chapter 3 by testing Prediction 2, which says that groups should be more likely to form in initiative states, this chapter also examines how direct democracy influences bias in representation.

5.2 Incentives for Group Mobilization

Since bias in group populations is a result of certain types of groups mobilizing and others failing to do so, any explanation of this bias must focus on the incentives for groups to become active. The impetus to mobilize for every potential group is the desire to influence some element of its political environment, whether this means defending the status quo or fighting for new legislation. Whether a group becomes active will depend on how rewarding this benefit is relative to the costs and likelihood of achieving it. Of course for any one particular group there are a multiplicity of idiosyncratic circumstances and political entrepreneurs in the equation as well, but looking at aggregate group populations allows me to overlook these factors since they are unique to each group. Instead I focus on the common features for groups: what is at stake and how likely they are to influence it.

Besides the role of the initiative process, there are other forces at work at the aggregate level that might be expected to influence how many groups are active in a particular state. Olson's later work on interest group populations predicts that groups will tend to form in increasing numbers over time in stable societies (Olson 1982). As potential interests accumulate over time they become more likely to be active and, once the fixed costs of mobilization are incurred, they will tend to stay active. If anything, this theory could be extended to suggest that smaller groups, since they have the easiest time overcoming the

collective action problem, will tend to be the first to form followed by the larger groups, which lead to an increase in diversity and representativeness over time.

Of course, interest groups are not the only political actors involved. Legislators may have an incentive to encourage groups to form since they can benefit from the desire to influence policy — reelection campaigns require ever increasing amounts of money and groups can provide it if they expect to receive something in exchange. This is the model that was put forth by members of the Virginia School (Mueller and Murrell 1986; Coughlin, Mueller and Murrell 1990; Mitchell and Munger 1991): legislators offer policy concessions in exchange for electoral resources. States spend money to attract money. As the scope of government increases, groups have a greater incentive to become active and try to influence it: states with more government spending should have more interest groups involved.

5.2.1 Interest Groups and Natural Selection

One of the more detailed attempts to understand aggregate interest group populations adapts biological theories of species' diversity and density (Gray and Lowery 1996) to interest group populations. This model, dubbed the Energy-Stability-Area (ESA) model explains the number and type of interest groups in a state as a function of three key components: the energy available for consumption, which is government output; the stability of the environment, or how similar the political landscape looks from year to year; and area, a state's carrying capacity or total economic activity.

The underlying tenet of the model is that groups, like biological creatures, are competing for survival, the likelihood of which depends on the environment and the resources available. When animals enter into competition, however, the consequences are decidedly different: a resource consumed by one cannot be consumed by another. This sets up the selection process by forcing species and individuals to compete against one another. For interest groups, when one consumes a resource, another group is often not prohibited from also consuming it. Certainly a monetary contribution from an individual is a resource lost to all other groups, but that individual can still make a separate contribution wherever she chooses. In fact, some of the most important resources a group can posses are completely non-rivalrous —

consumption by one group does not inhibit another group from also consuming the same resource -- including membership and reputation. In general, many individuals are members of more than one group and can still join others if they wish.

Even if the underlying micro-foundations are not comparable, there are many predictions of the ESA model that are reasonable, though not unique to it. For example, states with more economic activity are likely to have more groups active since there are probably more businesses and industries involved in producing that output. Groups cannot be expected to form until all possible permutations of interests exist, though, and the logic of collective action suggests that this is virtually impossible anyway. So a state might be expected to have some tendency towards a certain a number of groups, controlling for the opportunities for formation as well as the political incentives, such as the initiative process and scope of government.

5.2.2 The Initiative as a Coordinating Device

Besides the explicit expected utility calculation already discussed, there is another way that the initiative process can influence state interest group populations. When an existing group successfully begins an initiative campaign, whether its proposal has reached the ballot or is still circulating to gather signatures, other, latent groups may see immediate benefits from mobilization or may emerge from the original group's campaign. This type of initiative mobilization is a direct result of the year-to-year cycles of the initiative process: groups are drawn into politics by the call to arms that initiative campaigns sound. Some of these groups may form to fight the proposal while others will band together in support of it.

In terms of the collective action problem, the initiative campaign serves as a coordinating device because it offers an obvious, tangible reason to band together. While it does not alter the logic of collective action, it provides a salient objective that individual effort can influence. While one person's vote may not prove decisive at the ballot box, a group that influences many person's votes might be. This short run goal can increase the incentives for people to join a group enough to allow latent groups to mobilize.

Once the campaign is either won or lost, though, the group faces a different situation: it

is now mobilized. With an internal structure established and a membership stabilized, the group may sustain itself as an entity. The initiative campaign that served as the coordinating device may have passed, but the motivation for existence may continue: perhaps the vote was not in accord with the group's position or perhaps it was and issues of implementation or court battles linger. Some of these groups will collapse after the campaign, but others will emerge as new political actors and continue to work for their current policy concerns as well as turning to other issues of importance.

There are more implications for diversity resulting from this process. Similar to the argument made previously, certain types of groups are likely to be influenced more by initiative campaigns and the added mobilization incentives it offers, which can mitigate the collective action problem. These are likely to be broader-based membership groups, which are historically those under-represented in the interest group universe. So the consequences of the expected utility calculation are reinforced by these initiative mobilizations, resulting in more diverse group populations.

5.3 Interest Group Populations

Direct democracy states are predicted to have more interest groups than other states for all of the reasons laid out above. To test this prediction I use data on the number of interest groups in each state in 1975, 1980 and 1990, taken from Gray and Lowery (1996), which constitute the most complete picture of state interest groups over time. Table 5.1 shows the average number of groups registered to lobby in initiative states and non-initiative states for each of the three cross-sections.¹ In 1975 there were one hundred and ninety-five groups per state, a number which almost triples fifteen years later to five hundred and sixty-nine.

Insert Table 5.1 here

The interesting comparison here, however, is between states with the initiative process and those without. In 1975, initiative states have an average of two hundred and thirteen

¹Because of missing data problems, there are six states for which these numbers are not available in 1975 and 1980. Following Gray and Lowery, they are excluded from the analysis. Also following Gray and Lowery, Florida is excluded as an outlier. Alaska is also excluded because of the unique nature of its government's finances.

groups while their counterparts only have one hundred and seventy-four, a difference of thirty-nine groups. The gap actually closes in 1980, but initiative states are still ahead by seventeen groups with a total of three hundred and forty-three groups. As might be expected from the dramatic increase in the use of the initiative process during the 1980s after Jarvis and Gann's Proposition 13 in 1978, the gap explodes over the next decade to six hundred and thirteen groups in direct democracy states and five-hundred and forty-two groups in non-initiative states. The standard errors of these averages, also shown in Table 5.1, are large enough that none of these differences is significant, however.² Still, the first look at the data suggests that potential groups are responsive to an increase in their arsenal of political weapons.

The data also provide information on which of ten economic categories these groups are in. This allows me to explore whether the initiative process has a different effect on different types of groups' decisions regarding mobilization, thereby altering the distribution of groups active in a state. If, as expected, the extra incentive that the initiative offers is more critical for potential groups that suffer from a more severe collective action problem, then some of the categories should be more influenced than others.

Inspection of Figure 5.2 gives preliminary support for this argument, but also shows an across the board increase in mobilizations in initiative states. In all ten of the subpopulations there are at least as many interest groups in direct democracy states as in other states. The categories with the largest differences are government, eighteen more groups; agriculture and social, six more groups; and services, five more groups.³ The categories that have a difference of no more than two groups are mining, construction, manufacturing, trade and finance. Transportation falls in between with four more groups, on average, per state.

Insert Table 5.2 here

Of these ten categories, broad-based membership groups are most likely to be in the government and social sectors, which have the first and second largest differences of the ten

²I performed *t*-tests on each of the three years and the overall numbers to test the hypothesis that initiative states have more interest groups and they all failed.

³*T*-tests on the difference in means, pooling all three years, indicate that the hypothesis that initiative states have more interest groups can be accepted at the ninety-five percent level only in the Government and Agriculture sectors.

subpopulations, respectively. The subpopulations that have no more than two more groups would not be expected to have many of these types of groups, so the relative similarity of the populations here provides support for the influence of the initiative process on interest group population diversity while simultaneously showing that all types of groups are at least somewhat responsive to political institutions.

One of these categories deserves special mention because of its somewhat unique nature: government groups have a particularly large benefit from the addition of the initiative process since the legislature may often be loathe to pass regulations on its own behavior. By allowing groups to circumvent the representative process, direct ballot access offers groups wishing to influence the rules governing legislators their only chance at success. This is keeping in line with one of the Progressives' original goals for direct democracy — to return control of corrupted state governments to the voters — so it is not surprising that group populations today might reflect that influence.

Looking at the absolute number of groups in each of the ten subpopulations does not give an accurate measure of diversity. If initiative states just had twice as many groups in each category or if the largest increase is in a category that is already over-represented, then it would be impossible to conclude that they were more diverse. To measure diversity, I use a statistic known as the Herfindahl index. It is calculated by taking the sum of the squared percentages of each subpopulation, which means that it ranges from a value of one in the case of perfect uniformity (all groups in one category) to a value of one tenth in the case of perfect diversity (groups spread evenly over all ten categories). This measure will allow me to explore issues of diversity in state interest group populations.

After converting the numbers in Table 5.2 to percentages, I calculate the Herfindahl indices for each year. Table 5.3 presents these numbers for initiative and non-initiative states. Three features of this data are of interest. First, initiative states are always a little bit more diverse. This is based on the fact that the average Herfindahl index in initiative states is 0.001 less than those for non-initiative states. While this is certainly a small difference, to put it in perspective note that since the minimum Herfindahl index with ten categories is one-tenth, the difference represents an increase in diversity of between three and four percent. Thus, preliminary support is provided for the initiative as an equalizing device.

Insert Table 5.3 here

The second salient feature is that diversity is actually found to be decreasing over time in all states. The Herfindahl indices for initiative states start at 0.125 in 1975, rise to 0.126 in 1980, and continue up to 0.129 in 1990. The difference over time is slightly larger than the difference between initiative and non-initiative states. The third salient feature is that all six of these indices indicate a great amount diversity. On a scale of possible values from one-tenth to one, none are greater than 0.130. In light of this, it may be hard to increase diversity much more since it would require a near-perfect balance of groups.

5.4 Evaluating the Role of Direct Democracy

While the findings on state group populations in the previous section support the model's predictions, it remains to be seen whether they are a result of the initiative process or some other factor. In this section, then, I conduct regression analysis of the total group populations and also the ten subpopulations. This allows me to determine the exact effect of the initiative process on group mobilization decisions. While I expect the initiative to increase the number of groups overall, its influence should be greatest among the subpopulations where it offers the greatest increase in the incentive to form. This is likely to be among groups that do not have an organizational advantage in overcoming the collective action problem.

Among the total group populations, as Table 5.1 indicated, it might be the case that the effect of the initiative on interest groups has changed over time. This could be true for a variety of reasons, but the simplest one is that the increased use of the initiative process has catapulted it to a greater role in state politics, particularly after the late 1970s and early 1980s, as Magleby (1984) suggests in his discussion of the consequences of Proposition 13. Among the states in the sample here, there are twenty-five ballots with initiatives on them from 1971 to 1975 and the average number per ballot is 2.3. From 1976 to 1980 there were forty-four ballots with an average of 2.7 initiatives and from 1986 to 1990 there was an average of 3.7 initiatives on forty ballots. If groups respond to an increase in the apparent efficacy of the initiative process, then the regression analysis should find that more groups became active as a result of its presence in 1990 compared to 1980 and 1975. To account for

this, I allow the effect of the initiative process to vary over time.

It also seems likely that a state such as South Dakota has less groups added by the initiative process than one such as California, since there are more possible groups to be added in the latter. To account for this I also interact the initiative indicators for each year with the logarithm of state population in the corresponding year. Larger states are anticipated to have more groups added by the initiative process than smaller states.

Besides the effect of the initiative process, the theories outlined in the previous section suggest other variables that need to be controlled for. Olson (1982) states that interest groups accumulate over time, so I include indicator variables for 1980 and 1990 to test for exogenous growth trends.⁴ The Virginia School's theory is implemented by the inclusion of state government spending and its square, to test for diminishing marginal effects. They predict that increased spending attracts more interest groups.⁵

The concept of diminishing marginal returns is discussed explicitly by Gray and Lowery (1996) in their ESA model. To test the role of a state's carrying capacity I follow their analysis and include gross state product and its square. Larger states can support more groups, but at a diminishing rate. I also include the logarithm of state population to see if increasing the number of potential members increases the number of groups.

5.4.1 Statistical Methods and Theory Testing

Since there may be other, state-specific influences on interest group populations, especially in the ten different subpopulations, I control for this possibility by utilizing a fixed effects regression model. As opposed to a least squares dummy variable model, which controls for these effects by including dummy variables for each unit, the fixed effects model transforms the data by subtracting the average over time of each variable for each unit from the values for that unit. In samples where the cross-section is large compared to the number of observations

⁴This also has the statistical benefit of implementing Beck, Katz and Tucker's (1998) suggestion of always controlling for time effects in time-series cross-section data, thereby producing more efficient standard errors.

⁵For more information on independent variables, see Table C.1.

over time, this has the advantage of greatly increasing efficiency.⁶

The use of the fixed effects model creates a potential problem for testing the formal models of the initiative process, which make predictions about the relative numbers of groups in a particular type of state, since the ultimate quantity of interest is the absolute number of groups added by the initiative process. If this shift is constant, then transforming the data in the way outlined above will remove any difference. What is estimated in the regressions, therefore, is the deviation from the mean, time-invariant effect of the initiative.⁷ This still allows me to examine how its effect varies according to time and state population.⁸

To examine the full effect of the initiative process, I need to combine the results from the fixed effects model with the time-invariant mean increase in the number of interest groups in initiative states. To study the latter effect, I estimate an ordinary least squares model on the untransformed data, leaving out the state indicator variables and combining the three initiative-year indicators into a single variable. This regression produces a consistent estimate of the time-invariant mean difference between initiative and non-initiative states, which can then be combined with the results from the fixed effects model to learn the overall effect.

⁶Mathematically, each of the non-indicator variables is transformed to

$$z'_{i,t} = z_{i,t} - \frac{\sum_{t=1}^T z_{i,t}}{T},$$

which results in a regression of the form

$$y'_{i,t} = \beta_1 x'_{i,t} + \beta_2 \delta_{i,t} + \epsilon_{i,t},$$

where δ represents a set of untransformed indicator variables. For a more detailed discussion of the fixed effects model, see Greene (1993) or Hsiao(1990).

⁷The least squares dummy variable model would solve this problem, but since I would be including indicator variables for the initiative and each state, it would not be identified.

⁸There is also evidence of some mild heteroskedasticity in the transformed data. The inclusion of the initiative variables removes much of it, but to fully control for it I also include indicator variables for five state-year observations. Most of the problem seems to be in large states that experienced big expansions in their interest group populations. Gray and Lowery (1996) also note this problem in their work. Running the models without these indicators does not change the significance level of any of the variables, however.

5.4.2 Aggregate Group Population Differences

Table 5.4 presents the results of the regression analysis of total state interest group populations. The empirical model does a good job of explaining the variation in group populations, with an R^2 of ninety-three percent.⁹ Because of the way the variables are transformed for the fixed effects regression model, interpretation of the coefficients in the table can be a bit difficult, so instead of discussing them in detail, I will make two observations and then move on to present the final results.

Insert Table 5.4 here

Looking at the initiative indicator variables in all three of the years suggests that there has been an increase in its importance over time, as the increased number of items on the ballot would suggest. The net increase from 1975 to 1990 is one hundred and sixty-one groups per initiative state. The effect also depends significantly on the logarithm of state population, so these numbers are not the complete story. Combining these coefficients with the time-invariant effect produces the overall effect of the initiative on group mobilizations, presented for each year in Figure 5.1.¹⁰

The estimates for each state in all three years are overwhelmingly positive: only nine of the forty-eight predicted increases are negative and most of those are barely so. In 1975, the average number of groups added by the initiative process is thirty-six, in 1980 it is twenty-one and in 1990 is it ninety-two. Clearly the influence of the initiative process has grown since the late 1970s and early 1980s; in relative terms, there were twenty percent more groups due to the initiative in 1975 and eighteen percent more in 1990. Besides the temporal confirmation of the shift in initiative use, there is also spatial movement that follows Magleby's assessment. For half of the states in the three figures, the influence of the initiative increases each year. With the exception of Montana, these are exclusively states in the Midwest region, an area that lagged behind the West Coast locus of frequent users of direct democracy. Between

⁹The F-test for model specification indicates that the fixed effects model outperforms the same model run in the standard OLS framework, with the latter rejected at the ninety-nine percent level. The value of $F_{125,233}$ is 3.35, calculated, following Greene (1993), from $\frac{(R_u^2 - R_p^2)/(n-1)}{(1-R_u^2)/(nT-n-K)}$, where u is the unrestricted model and p is the pooled model.

¹⁰The time-invariant effect is estimated to be sixty groups more for initiative states. This regression, while not the best model for the data, produces an R^2 of seventy-nine percent and, while some of the variables lose statistical significance, produces similar qualitative results.

1975 and 1980 the increases for these states are all less than forty, but between 1980 and 1990 they are all greater than eighty, peaking near one hundred and thirty in Ohio and Michigan. The western states are different in that they experienced a larger effect in 1975 and a smaller one 1980: except for Montana, they are all below the Midwest's minimum of eighty in 1990 and above its maximum of forty in 1975. It would appear that the locus of influence has drifted eastward over time.

Turning now to the evaluation of the other theories, the Virginia School's hypothesis that more government spending induces more groups to seek a share of it is confirmed by a positive coefficient on state government spending, but is seen to be decreasing since its square has a negative coefficient. Both of these coefficients are statistically significant. Gray and Lowery's (1996) predictions are supported as well by the significant and positive coefficient on spending, but also by the finding for state economic size: independent of government spending, wealthier states tend to have significantly more groups. The logarithm of population is estimated to have a positive effect, but is not significantly different from zero at any reasonable level.

Comparing these findings to those of Gray and Lowery (1996), it appears that pooling the data and using the fixed effects model alters some of their findings, especially the null ones. Analyzing the three years separately, they find no support for the Virginia School's predictions and actually estimate a negative coefficient for government expenditures in the one case where it is significant. They do have similar findings for gross state product. The results here indicate strong support for both the Virginia School's model and Gray and Lowery's (1996) ESA model since size of government spending plays an important role.

Olson's theory receives mixed support since the time trend shows an increase in the number of groups in 1980 and in 1990, but the latter is not significant at traditional levels. On average there were forty-three more groups per state in 1980 compared to 1970 and an additional twenty-one in initiative states, which suggests a general increase in group mobilizations. This reverses dramatically in 1990. The coefficient for the year indicator, fifty-one, is insignificant and slightly more than half the size of the initiative effect, ninety-two, for that year. This implies that much of the recent growth in group populations is disproportionately centered in initiative states and is indicative of its increased political role

in many of these states. How these influences vary in the ten different subpopulations is determined next.

5.4.3 The Initiative and Group Subpopulations

While the previous section demonstrated that direct democracy states' interest group populations are influenced by their expanded scope of political opportunities, it does not allow me to explore how these influences vary for different types of groups. Employing Olson's logic of collective action suggests that groups that have a relatively easy time mobilizing are less affected than broad-based groups that would incur a larger collective action problem, leading to a greater increase in the latter type of group relative to the former. By examining the ten subpopulations I investigate this possibility and use the findings to draw conclusions about how the initiative alters group diversity.

The use of these aggregate numbers does not precisely identify which categories contain membership groups. Examination of the ten categories of groups, though, indicates that broad-based groups are more likely to fall into the government and social categories, rather than construction, manufacturing and the rest. Of course, government groups also get the added strategic benefit of the opportunity to circumvent the legislature in seeking reforms, so they should be doubly influenced.

Since the other theories do not offer any guidance as to how their predictions might vary for different types of groups, I replicate the same regression model used earlier for each of the ten subpopulations and use these results to predict the number of groups added by the initiative process. Rather than discuss all ten results in detail, which are presented in Appendix C, Tables C.2 though C.11, I will summarize the findings in Figure 5.2.

Between the ten subpopulations over the three years, there are only six cases out of the thirty that have negative effects, and only one is less than five groups per state. In all the other cases, there are more groups added by the initiative process, with sixteen cases where there are at least five more groups and six cases with ten more groups. Over time, there is only one subpopulation, Construction, where the number of groups added in 1990 is not the largest of the three years.

Comparing across subpopulations provides some support for an asymmetric effect based on group type. Government groups seem to be the most responsive overall, going from a net loss of seven groups in 1980 to a net gain of seventeen in 1990. While the decrease in 1980 is surprising to some degree, the fact that there was such an explosion in this type of group in initiative states during the following decade fits well with descriptive evidence of how it was used during the eighties: Tolbert (1998) discusses the emergence of a New Populism since the tax revolt era in the late seventies and early eighties, when initiative states were more likely to adopt government reform legislation like term limits and restrictive tax increase regulations. These reforms may have given rise not only to the government-related groups that supported them or desired more reforms, but also to a set of groups trying to confront the web of regulations that resulted. While adding more groups in this area might seem beneficial, it does not necessarily make the interest group universe more representative since it is already the second largest subpopulation.

The huge increase in government groups during the eighties is in one of the areas where I expected initiative states groups to experience the greatest effect. Looking at the other such subpopulation, social groups, provides similar, though less dramatic findings. There were consistently five to ten more groups more, on average, in initiative states in this category. This puts it behind transport and finance, about equal with social and ahead of mining, construction, manufacturing, trade and service groups in terms of overall increase due to the initiative process, so it also provides some evidence of how the different types of groups respond to political institutions.

5.4.4 More Diversity or More of the Same?

While we can now safely conclude that initiative states do have more interest groups and that the marginal increase varies noticeably by subpopulation, the issue of representation has not been addressed. Certainly, having more groups active implies that more individuals are likely to be represented, so having more groups active is unlikely to be damaging. Given the tendency of group populations to over-represent certain interests at the possible expense of others, though, and the original intent of the Progressives to bring the common man back

into politics, it would be gratifying to them if direct democracy resulted in a more diverse set of interest being represented.

To explore this issue, I use the regression results for the ten subpopulations from the previous section to conduct a set of counterfactual analyses. By removing the effect of the initiative process on group mobilization, I predict how many groups would have been active in each subpopulation if a state did not have the initiative process. After doing this for each state, I re-create the Herfindahl indices presented in Table 5.3 using the estimated numbers of groups instead of the actual numbers. A direct comparison of the true and counterfactual indices provides an indication of whether the initiative process is making these states more or less diverse.

Examination of these Herfindahl indices, presented in Table 5.5, indicates that direct democracy does make a state's interest group population more diverse. In all three of the cross-sections, the counterfactual value is greater than the true value, indicating a decrease in diversity. The difference becomes slightly less pronounced over time, though. Even in comparison to non-initiative states, the counterfactual indices indicate that initiative states would have been slightly less diverse. As an alternate interpretation, I also present the change in diversity as a percentage of the maximum possible change, where perfect diversity would imply a Herfindahl index of one-tenth.¹¹ In 1975, states that have the initiative process are fifty-eight percent closer to perfect diversity than they would be without it. In 1980, they drop to twenty-five percent close and in 1990 they are eighteen percent closer.

Insert Table 5.5 here

To show that these results are consistent across the states, Figure 5.3 presents these percentages for all states in each year. In only two cases are states less diverse with the initiative process: Arizona and South Dakota in 1980. In all but three other states, the change in diversity decreases from 1975 to 1980 and again from 1980 to 1990. As interest group populations get larger, adding a few groups in under-represented areas will have a smaller effect on overall diversity. Even though there are more groups added in 1990 than in 1975 in most of the subpopulations, the overall growth may make it harder to change

¹¹Mathematically, this number is calculated for each state-year, i and t respectively, as $\frac{H_{i,t}^C - H_{i,t}^T}{H_{i,t}^C - 0.1}$, where T indicates the true Herfindahl index' value and C is the estimated counterfactual value.

diversity.

5.4.5 Institutional Change in Florida

There is also evidence for what would happen if a state adopted the initiative process, since Florida did just that in 1978.¹² As Gray and Lowery (1996) indicate, the phenomenal growth rate in Florida makes it an outlier: from 1975 to 1980 its interest group population increases by fifty percent and from 1980 to 1990 it increases by two hundred and fifty percent! Compare these numbers, from Table 5.6, to those in Table 5.1, where the average number of groups increased by seventy percent from 1975 to 1980 and seventy-one percent from 1980 to 1990. Even among initiative states the latter period's growth rate is only eighty percent. Clearly *something* happened in Florida. Without putting too much weight on its role, given the many demographic changes Florida went through during the 1980s, the addition of the initiative probably played a part in this massive increase.

Insert Table 5.6 here

Examining the ten different sectors gives some indication of where the growth occurs. Manufacturing, trade, service and social groups experienced growth rates over three hundred percent after the initiative was added. Government groups have the fourth greatest increase in growth rates from the first period to the second. There is also a reversal of the tendency of the Herfindahl index to increase over time. From 1975 to 1980 it increases from 0.146 to 0.148, but the addition of the initiative may have helped to increase diversity since it drops to 0.147 in 1990, moving in the opposite direction of the rest of the states. Without more data, however, it is hard to determine the exact role of the initiative process in the history of Florida's interest group population, but it provides an interesting opportunity to explore the effect of changing political institutions.

¹²Magleby (1984) lists Florida as adopting in 1978 whereas Cronin (1990) lists it as 1968 and the Initiative and Referendum Institute's Web site lists it as 1972. Since these dates are all relatively close to the data I have, it makes sense to investigate the effect whichever year adoption actually occurred, since the increased mobilizations will happen over time rather than all at once.

5.5 Conclusion

Interest groups are sensitive to the political and economic context in which their decision whether to become active is made. Not only do they respond to economic incentives, as previous theoretical and empirical work has shown, but they respond to the opportunities that political institutions offer them. As the model in Chapter 2 demonstrates, by giving groups another way to affect policy, the initiative process offers them an increased potential to achieve policy influence, which should then result in more groups being active. So not only is policy influenced by the initiative process, but so is a state's interest group population: direct democracy states have more groups than other states, and the difference increases from thirty-five per state in 1975 to ninety-two per state in 1990, with a slight dip to twenty-one in 1980. This translates into eighteen percent more groups in initiative states in 1990, a substantively large effect. Further examination of the effect in the different states produces an interesting pattern of influence: Western initiative states seem to have experienced their growth more towards the beginning of the analysis in 1970s, while their Midwestern counterparts have been catching up since the 1980s.

The results in this chapter also have implications for theories of interest group populations besides the one presented here, which focuses on the role of the initiative process. Strong support is found for the Virginia School's theories that interest groups are attracted to government spending. In the overall group populations and among the ten subpopulations, increased government spending leads more groups to form at a decreasing marginal rate. I also find support for Gray and Lowery's (1994) ESA model, which predicts that states have a unique carrying capacity which depends on the size of a state's economic activity. These variables also have a positive effect with a decreasing marginal influence.

5.5.1 Diversity and Discord in Political Discourse

The initiative also serves another role in these states: it increases the diversity of interest group populations. Analysis of ten subpopulations indicates that the effect of the initiative varies by group type and that government, social, finance and transport groups are particularly responsive to the increased incentives to mobilize. Theories of collective action suggest

that the magnitude of the increase in the first two is to be expected, since by increasing the potential benefits of mobilizing the initiative process disproportionately spurs membership oriented groups to form and dilute the business-heavy pool of groups. This is an important finding from a representational point of view: direct democracy states have more diverse interest group populations.

This is a prime example of what Walker (1991) meant by the trade-off between representation in the interest group universe and the ability to resolve political conflicts in a reasonable amount of time. Certainly diversity is a characteristic to be supported in interest group representation, but if the added groups clog the arteries of the political process, as Olson (1982) claims they do, then the net benefit for direct democracy states on this one dimension is unclear. More voices do not necessarily translate into more representative policies and they almost certainly do not speed up conflict resolution. The problem could actually be exacerbated by the very nature of the initiative process: if the additional groups serve to slow down the achievement of political resolutions, then these groups may turn in increasing numbers from the traditional center of conflict management — the legislature — to the initiative process itself. The correspondence between the growth in group numbers due the initiative and the expansion of its use is suggestive in this regard.

Further work on the role that the initiative process has on citizens' political participation rates will help to determine whether the net effect on representation is positive. If the initiative plays the same role among individuals that it plays among groups, and the theory and evidence here suggests that it should lead to more people being active, then the population of politically active people will be more diverse. To answer the diversity versus resolution question, measurements of the length of time spent debating issues or legislation could be devised to measure conflict resolution rates, allowing for a better indication of the trade-off being made. Whatever influence the initiative process has on individual participation rates, the conclusions in this chapter are central to our understanding of the role that political institutions play in interest group mobilization decisions. Future studies of state interest group populations need to account for the role of the initiative process and should explore the influence of other institutions.

5.5.2 A Closer Look

The data used in this chapter to successfully test Prediction 2 has left many questions unanswered. Without more detailed information on interest group characteristics, the results on how the influence of the initiative varies between broad-based membership groups and businesses currently rely on intuition about which subpopulations they are likely to reside in. While membership groups seemingly are disproportionately advantaged, more detailed data on membership and other characteristics such as revenue and staff resources allows me to gain a fuller understanding of the consequences of direct democracy for interest group populations. To gather this type of data I conducted a survey of interest groups in four states. The next chapter discusses the survey instrument and examines the characteristics of initiative state interest groups compared to non-initiative state groups in more detail.

Table 5.1: Average State Interest Group Populations by Year

	Initiative States	Non-initiative States	All States
1975	213 (134)	174 (84)	195 (106)
1980	343 (144)	326 (169)	332 (159)
1990	613 (332)	542 (293)	569 (306)

Source: Gray and Lowery (1996). Standard errors in parentheses.

Table 5.2: Average Number of Interest Groups in the Ten Subpopulations by Year

	Initiative States	Non-initiative States	All States
Agriculture	14	8	10
Mining	19	17	17
Construction	19	17	18
Manufacturing	36	35	36
Transportation	40	36	38
Trade	33	33	33
Finance	45	44	44
Services	63	58	60
Government	66	48	55
Social	55	49	52

Source: Gray and Lowery (1996).

Table 5.3: Herfindahl Index of Group Diversity

	Initiative States	Non-Initiative States
1975	0.125	0.126
1980	0.126	0.127
1990	0.129	0.130

Source: Interest groups in the ten subpopulations, from Gray and Lowery (1996).

Table 5.4: OLS Results for Total Groups, Fixed Effects Model

	Estimated Coefficient	Standard Error
Initiative States, 1975	-87.33**	26.76
Initiative States, 1980	-35.66*	17.78
Initiative States, 1990	74.00**	27.73
Initiative*(Log 1975 Pop)	-846.94**	281.51
Initiative*(Log 1980 Pop)	690.11	818.70
Initiative*(Log 1990 Pop)	-531.42*	265.30
1980	43.16*	19.11
1990	51.51	36.47
Logged State Population	42.45	173.47
Government Expenditures	37.49**	5.04
Government Expenditures squared	-0.32**	0.08
Gross State Product	4.79	1.97
Gross State Product squared	-0.01	0.004
Michigan, 1990	240.87**	59.20
Minnesota, 1975	-152.54**	55.38
Texas, 1975	-194.59*	59.72
Texas, 1980	139.76**	55.25
Pennsylvania, 1975	-207.17**	56.87
Constant	-26.24	18.29
Number of Obs.	126	
R ²	0.93	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 95% level.

** Significant at the 99% level.

Table 5.5: Estimated Effect of the Initiative on Group Diversity

	True Value	Estimated Counterfactual	Change as % of Maximum Change	Non-Initiative States
1975	0.125	0.156	58%	0.126
1980	0.126	0.134	25%	0.127
1990	0.129	0.136	18%	0.130

Source: Counterfactual subpopulation totals estimated using coefficients from the ten sectors regressions with the effect of the initiative set to zero. Resulting numbers then used to construct Herfindahl index in the usual fashion. Six negative values were set to zero in 1975 as well as three in 1980, but the interpretation is not changed.

Table 5.6: Florida's Interest Group Population by Year

	1975	1980	1990
Total	596	872	2969
Agriculture	16	26	65
Mining	16	30	54
Construction	61	48	125
Manufacturing	37	58	235
Transportation	42	80	257
Trade	39	44	234
Finance	50	92	231
Service	76	144	578
Government	153	232	647
Social	106	119	543

Source: Gray and Lowery (1996).

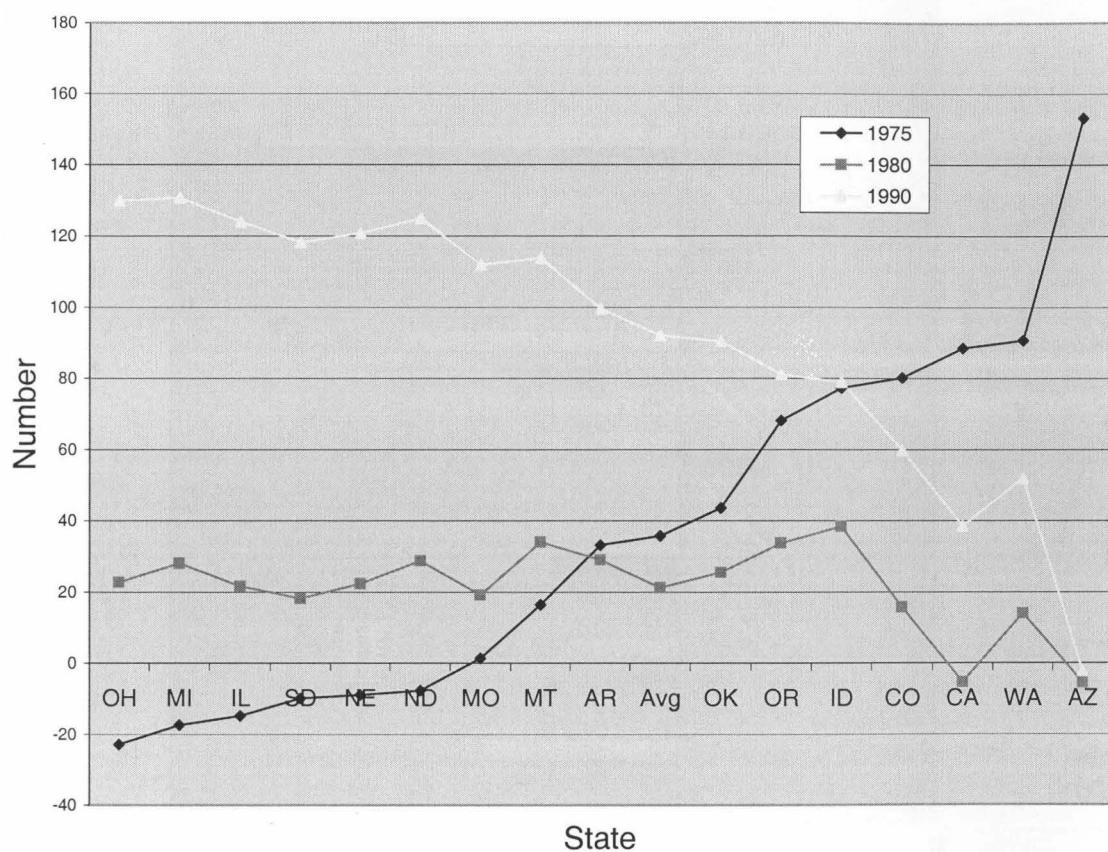


Figure 5.1: Total number of Groups Added by the Initiative Process
 Source: Counterfactual constructed by removing the effect of the initiative in Table 5.4 and adding the mean shift (see text for estimation of this part).

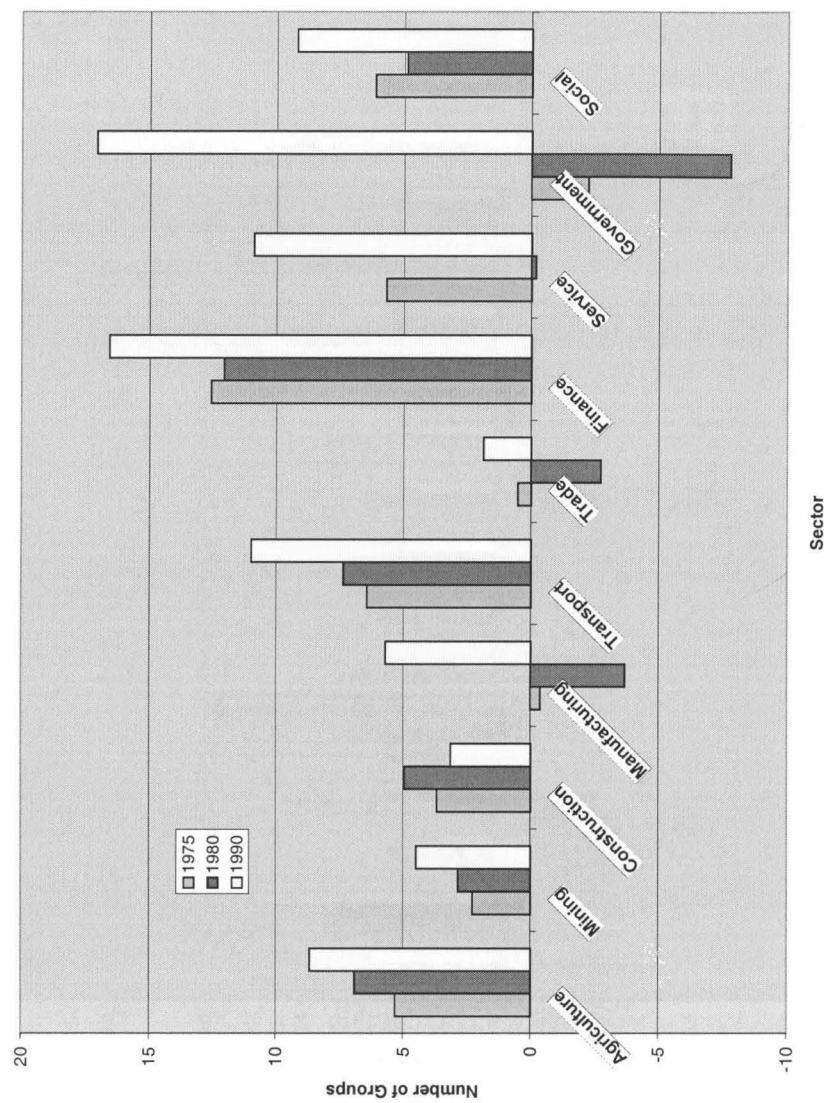


Figure 5.2: Number of Groups Added by the Initiative in the Ten Sectors
 Source: Estimated regression coefficients, Tables C.2- C.11.

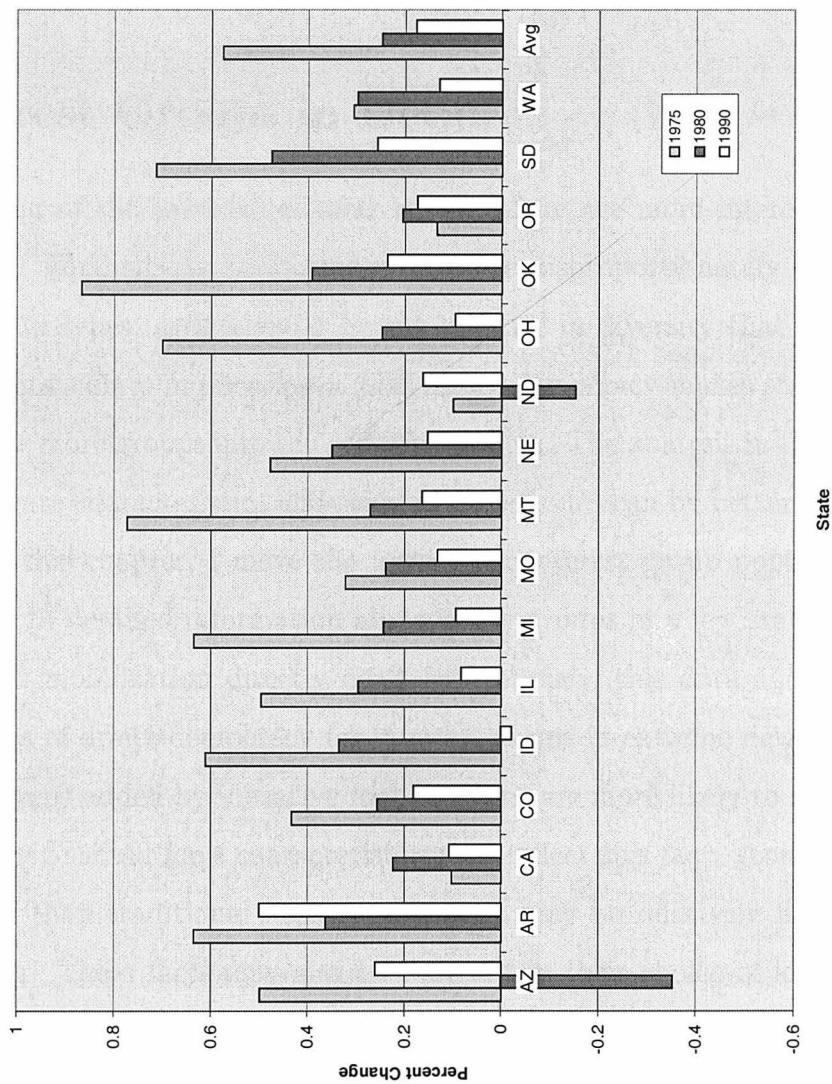


Figure 5.3: Estimated Change in Herfindahl Indices due to the Initiative as a Percentage of Maximum Possible Change

Source: Counterfactual indices calculated using estimated coefficients, Tables C.2- C.11. See text for calculation method. True Herfindahl indices from Gray and Lowery (1996).

Chapter 6 Survey Analysis of Interest Group Populations

6.1 Interest Groups in Detail

The main finding of the previous chapter is that there are more interest groups active in initiative states. Further, the additional groups are disproportionately drawn from under-represented group types, as evidenced by the increase in diversity that their mobilizations engender. The immediate implication is that direct democracy makes states more representative and brings more groups into the political process. The analysis in the previous chapter uses only aggregate characteristics and some of these issues can be better investigated at the group level. In this chapter, I move the focus from interest group populations in the fifty states over time to detailed information about many groups in a few states. With the question of increased mobilization directly dealt with already, this data allows me to examine the consequences of direct democracy for interest groups in extreme detail.

Since the groups added by initiative mobilizations are more likely to represent disadvantaged groups, they should have characteristics that reflect this fact: groups that turn to the initiative rather than traditional legislative politics may be relatively financially poor and membership rich. These facts may also be reflected in their choice of lobbying techniques, with a greater emphasis on outside lobbying strategies over inside lobbying ones. Again, these differences have implications for representation in and by interest groups. If institutions shape the mix of strategies groups employ, they may also alter the relative balance of power between different types of groups. A rise in the importance of outside strategies, like protests and mail campaigns, will tend to favor groups that can effectively utilize them (Kollman 1998). If legislators are responsive to their tactics then this will lead to a different set of policy outcomes that favor different sets of citizens.¹

¹The subject of how effective groups are in influencing policy is an area of considerable debate, see Baumgartner and Leech (1998) for a survey of the interest group literature, which contains a discussion of

Using individual level data on interest group characteristics and lobbying techniques as well as initiative involvement, I find that there are significant differences between groups in initiative states and those in non-initiative states, and the differences tend to be of the type expected: groups in initiative states tend to have more members, fewer employees and less revenue. They also tend to employ different lobbying techniques, relying less on typical inside strategies like contacting legislators or agencies and building legislative support for an issue. Even stronger differences emerge between direct democracy states groups based on whether they are initiative users. Groups not involved in initiative politics are relatively inactive with respect to almost all policy-influencing techniques.

This possibility has not been explored before, as almost all previous work on interest group characteristics examines those registered and active in Washington D.C.² Ever since Schlozman and Tierney's (1986) important work that quantified the extreme bias in interest representation, scholars have focused on groups in that one political arena. While this has moved our understanding of what interest groups look like and what they do forward, there is still much to learn. Turning to the states creates the opportunity to examine up to fifty interest group populations at once, all facing different environments and institutional constraints.

As Walker suggested, consideration of institutions is important: the results in the previous chapter show that direct democracy states' interest group populations swelled eighteen percent more in 1990 just because of the initiative process. The next step in studying the institutional consequences is to find out who these groups are, something that Gray and Lowery's data do not allow. A few other studies have examined state level interest groups, including Nownes and Freeman's survey (Nownes and Freeman 1998) and Gerber's interviews of groups that were involved in initiatives. The former study follows in the tradition of the Washington D.C. oriented surveys and only seeks to provide descriptive analysis of interest group populations in the states and does not take advantage of cross-state differences or explanations for what they find. In contrast, Gerber's study is clearly sensitive to this topic.

²A recent attempt is Gais's (1996) study of the effect of regulations on interest groups' representation in the PAC universe.

institutional setting.

A separate issue that has been overlooked by the researchers who rely on survey data is the representativeness of the groups that respond. Asking groups to voluntarily share information requires sensitivity to who will heed that request. This issue is dealt with initially in this chapter since it compares averages of responses and possible non-randomness is easily dealt with, but a more sophisticated technique will be developed for the regression analyses conducted in the following chapters. For now, though, the first task is to describe the survey itself: which groups were chosen to be contacted, what questions they were asked and how elements of the survey were designed to control for selection. After that I discuss the expected differences in interest groups in initiative versus non-initiative states and then present the evidence.

6.2 Interest Group Characteristics and Strategies

6.2.1 Initiative Mobilization

The role of the initiative in mobilizing groups does not fall neatly into previous theories and studies of group formation. For example, Walker (1991) posits three ways membership groups overcome the collective action problem: organization around occupations, encouragement from government through funding or tax breaks and organization during social movements. A brief consideration of state politics indicates that specific initiatives also often provide the necessary impetus for formation. The example in the previous chapter is the many tax reform groups that sprung up across the country after California's Proposition 13 in 1978, many of which are still active, including the Howard Jarvis Taxpayers Association and Paul Gann's Citizens Committee. These groups, having overcome the initial organizational hurdle, find it worthwhile to maintain their structure and continue to be politically active.

To distinguish between different types of influences, I will divide the effect of the initiative process on interest groups into two distinct types: population level effects and individual group effects. The former is a result of the effect of direct democracy on the distribution of group types, which shifts the distribution of strategies used. This will be manifested first in

the aggregate characteristics of group populations in direct democracy states, as witnessed in the previous chapter, and second in the translation of these characteristics into lobbying techniques. The latter type of effect acts directly on the choice of lobbying technique by selecting groups that successfully employ them. So while adding more groups with larger memberships may lead to a proportional increase in protests in any state, initiative states should have an even greater increase in protests if this strategy served groups well in previous initiative campaigns or if it helps send a signal to legislators about a possible future initiative.

Since groups of this type form specifically because of particular initiatives or the possibility of using the initiative process, I expect that they are less active, on average, than groups that became active primarily to inside lobby. If the comparative advantage of these groups is in techniques associated with successful initiative campaigns, then they should be less likely to engage in insider techniques, such as testifying before committees. They may also become overly reliant on initiative-related techniques as they develop familiarity with them during their formative years.³

If the initiative process often serves as a coordinating device for mobilization, once it has successfully implemented a group's policy desires, the incentive to stay active may disappear: initiative-mobilized groups may be more likely to exit the political arena, implying that those that stick around assimilate into, or are selected on the basis of, more traditional techniques. The effect of the initiative will then be greater among younger groups. As the previous chapter shows, the number of groups added in initiative states has increased over time, which could be due to the increased importance of the initiative process over recent decades. This might lead to a larger number of initiative groups among successively less mature cadres rather than as a result of younger groups specifically.⁴

³See Walker and Gais (1991) for a discussion of how and why groups may have problems switching strategic approaches.

⁴This could mean that the group level effects of the initiative process are less noticeable in older groups since it was less important (at least numerically) when they formed and their lobbying activities are somewhere between the typical inside lobbying group and the younger initiative-oriented groups.

6.2.2 Surveys of Interest Groups

By far the most consistent finding on Washington D.C. based groups is the dominance of business organizations. In one of the first broad studies of interest group populations, Schattschneider (1960) finds that about a disproportionate number of organized interests are corporations, business associations or professional associations. This bias is also reflected in Schlozman and Tierney's (1986) survey of District of Columbia groups that finds that these three types of groups comprise seventy percent of all groups and Walker's (1991) survey of membership groups, where he finds that a little over seventy-five percent of these groups represented business or occupational associations.

These two studies also find that strategies vary according to group type: citizen groups "tend to rely heavily on political strategies involving public persuasion and mobilization (Schlozman and Tierney 1986, p. 198)." Through factor analysis of group activities, Walker (1991) finds two distinct types of strategies revolving around inside and outside lobbying techniques. Regression analysis of the choice of these two strategies indicates that citizen groups and groups with members from the nonprofit sector are more likely to employ outside strategies (p. 116).

In a similar survey of interest groups in California, South Carolina, and Wisconsin, Nownes and Freeman (1998) claim that the inside/outside lobbying distinction is no longer useful, since they find little variation in what groups say they do. This may be a result of their measurement technique: they ask groups for binary responses to questions about activities. But since most groups indicate using many techniques, they suggest that a measure is needed that distinguishes more finely between strategies that were central to a group's efforts and those that were peripheral, but still employed to some degree. By employing such a measure, this survey allows me to investigate of the insider versus outsider view of lobbying in more detail and, using my measure, I find that groups still have strong tendencies towards one or the other, tendencies that are amplified by initiative mobilizations.

While the previous chapter explicitly considers the role of the initiative process in interest group mobilization decisions, the power of institutions in affecting interest group decisions about whether to enter the political process has been discussed in all the aforementioned

studies. As Schlozman and Tierney (1986) point out, the truth lies somewhere between the naive automatic formation of membership groups the Pluralists envisioned and the fact that most of them should not exist at all given Schattschneider (1960) and Olson's (1965) logics. Mobilization is affected not only by the groups' internal, organizational choices (Chong 1991; Walker 1991; Rothenberg 1992), but also by their institutional surroundings, which affect the ability and incentives to form.

Besides this macro-level influence, there should be a micro-level effect as well. Groups that can use the initiative effectively should emphasize different strategies. Direct use of the initiative process indicates a group's failure to accomplish its goals through more conventional insider techniques, so these groups will be forced to use different methods than successful groups, which have been relatively successful at obtaining and maintaining the status quo. Not only will groups with different characteristics, such as a broad membership, benefit from the threat of proposing an initiative, but these comparative advantages that are useful for initiative campaigns may spill over into legislative lobbying as groups use tactics that are familiar from these campaigns and have possibly been successful in the past.

6.3 Survey Data and Response Rate Correction

6.3.1 The Selection of Groups

To study the effect of direct democracy on interest group behavior I need data on groups in states that allow direct legislation and in those that do not. Taking into account other factors, such as diversity and density of group populations, I selected Arizona and Oregon as the two initiative states and New Mexico and Minnesota as the two non-initiative states.⁵ Arizona has experienced relatively less use of the initiative process. During the 1990s, there were twenty-two direct initiatives on the ballot in Arizona and only four in 1998, the last election year before the survey was administered. Over the same period, Oregon, one of the highest use states, had a total of fifty-six direct initiatives on the ballot, with sixteen each

⁵The selection of states was also limited somewhat by the availability of lobbying registration information from the states, see Appendix D for information on the sample.

in 1994 and 1996. 1998 is a below average year with only nine.⁶

Choosing states with different levels of initiative use means that the results are not likely to be biased in favor of the initiative by heavy usage states, such as California, which had fifty-nine initiatives on the ballot during the same decade, many of them producing high profile campaigns. The relative levels of usage for Oregon and Arizona during the last decade are consistent with historical usage rates, with Arizona averaging 1.67 per year since adoption in 1912 and Oregon averaging 3.13 per year since 1902.

The set of groups to be sampled in each state were obtained by contacting the Secretary of State in each case and obtaining the names and addresses of all the groups registered to lobby. Selecting groups based on lobbying registration provides a sample of all groups that can contact the legislature with respect to policy matters. This means that any groups that are systematically excluded are likely to be involved only in the initiative process, so inclusion would only strengthen any results.

There were a total of 1750 registered to lobby in Arizona, 672 in New Mexico, 565 in Oregon and 1280 in Minnesota, but they could not all be surveyed, so I selected random samples of five hundred groups from each state to receive the questionnaire, the maximum feasible number given financial constraints. A secondary sample of fifty groups was also randomly selected from those not chosen to receive the main survey. This secondary sample is used to correct for nonresponse in the primary survey.

6.3.2 Survey Content and Design

As described above, the survey is broken into two samples, one to receive the primary mail questionnaire and the other to be contacted by phone and administered the secondary survey. The primary questionnaire is comprised of four sections. The first asks groups about general characteristics such as revenue, group type or membership levels. The second section asks groups to pick a specific issue — to increase familiarity and avoid what Baumgartner and Leech (1998) term aggregation bias — and answer questions about why they got involved and what lobbying techniques they used. Aggregation bias occurs when groups give

⁶Initiative totals taken from the Initiative and Referendum Institute's Web page: <http://www.iandrinstitute.org/usage/byyear.html>.

responses that are averages across all their issue involvements. This can be problematic when attempting to make inferences since the variables may be measured at different levels of aggregation. For example, the relationship between the level of conflict and strategic choices by the group may not be the same averaged across all issue involvements as it is in each particular one. By asking respondents to keep a recent public policy issue in mind when answering questions, these problems are reduced and the respondent can select an issue that they are knowledgeable about. While for any one group, the issue selected may be atypical, these types of differences are expected to average out over all groups or can be controlled for with more information about the specific issue addressed. The third section was sent only to groups in initiative states and contained questions on level of initiative involvement and activities conducted to be answered only if the issue they use is associated with the initiative process. The final section asks for details about the respondent, to ensure they were knowledgeable about and had access to information about their respective organization.

After the mail survey was sent out, groups in the secondary sample were contacted by telephone and were read four questions to get an estimate of the true distribution of group characteristics in each state.⁷ There are only four questions in this part of the survey to maximize the response rate, which is extremely important since the primary function is to obtain information about a representative sample of state interest groups. This information is then contrasted with the responses from the returned mail questionnaires to determine how representative they are. These data are also used in Chapter 8 to deal with issues of selection bias.

6.3.3 Survey Responses

In this case, the design proves to be extremely useful since the response rate is a less than anticipated seventeen percent.⁸ By keeping the telephone questionnaire short, I achieve a

⁷Only groups in Oregon and New Mexico were called. Kolmogorov-Smirnov and Kruskall-Wallis tests for the equality of the underlying distributions across the mail respondents in these two states compared to all four led to rejection of different distributions for all of the characteristics explored in the phone survey.

⁸A pretest of the survey sent to fifty groups had a response rate of twenty-eight percent, which appears to be typical in the literature for these types of surveys (Gerber (1999) reports a response rate of 26%). To increase the information available, I added the pretest responses to the final survey responses whenever question wording permitted. Also encouraging is the fact that almost sixty percent of the surveys were filled

higher response rate of slightly less than eighty percent, which provides a reliable estimate of the true distribution of groups. If the distribution of groups in the phone survey mirrors that of the mail responses, then no correction is needed, but if different types of groups have different probabilities of responding, then this information is useful in the analysis. It is especially important in cases such as this where some of the hypotheses are tested using population averages: a misrepresentative sample will almost always lead to incorrect distributions of characteristics.

The additional effort proves useful in this case since there is dramatic heterogeneity in response rates across group types. In particular, businesses and corporations comprise ten percent of the returned responses in the mail survey, but are only one-third of the population as a whole in the phone survey.⁹ To correct for this I weight observations in the subsequent analysis to reflect their true proportion in the states.

6.4 Different Groups, Different Strategies

6.4.1 Differences across Institutions

The first comparison to make is across institutions, since if the initiative process alters groups' mobilization decisions then we should see different average characteristics even at the state level. These differences in group characteristics, like membership and revenue, are a result of population level shifts in group mobilizations and have an effect on the distribution of other attributes, including lobbying strategies employed and reasons for involvement. Combined with this shift there are also group level alterations in group behavior resulting from the institutional environment. Interests in initiative states may be more likely to employ outside lobbying techniques to signal member support for a possible initiative. This latter, group level effect is investigated in more detail with regression analysis in coming chapters, since it controls for the population level shifts in characteristics. For now, both effects are present.

out by the president or director of the organization.

⁹The weights were calculated by taking the ratio of the proportion in the pooled phone survey to the proportion in the mail survey, see Table D.2 in Appendix D for the frequencies and weights used. To correct for zero proportions in the phone survey (and non-zero in the mail survey), three groups were assigned weights of 0.25. See Appendix D for more details.

Group Characteristics

The average profile of an interest group is presented in Table 6.1. Except for group age, number of years active on the current issue and the number of government actors involved, the averages are all based on responses to a five, six, or seven point scale (see Appendix D for exact scales), so absolute values have little meaning. The relative values, however, indicate significant differences across state institutions. The average group in non-initiative states falls almost exactly at the second level of membership, or about fifty to one hundred members, while groups in initiative states have larger average memberships, falling about halfway between this and the one hundred to two hundred and fifty level. As expected, then, groups in initiative states have significantly more members on average. Particularly telling is the percentage of groups with no membership, which is forty-seven percent in non-initiative states and thirty-eight percent in initiative states. Examining the standard errors of these differences indicates that the averages are not significantly different, but the Pearson's χ^2 of the distribution of responses on the underlying scale indicates that they are from significantly different populations. It seems safe to conclude that the initiative process tends to help in the mobilization of membership-oriented groups.

Table 6.1 here

There are corresponding differences in group resources. A shift towards membership groups would indicate a decrease in business groups, which would suggest a decrease in revenue. Initiative state groups fall about halfway between the third and fourth levels of revenue, but non-initiative state group are above the fourth level, indicating they have more money at their disposal. The χ^2 again indicates that these differences are significant. A similar measure of group resources, number of paid employees, gives a similar interpretation: non-initiative state groups have significantly more paid employees. The same difference is not found for volunteer employees, most likely accounted for by the increased memberships that initiative state groups can draw volunteers from. These differences in resources translate into slightly more lobbying activity (higher numbers represent a lower frequency), with the average group falling between the weekly and monthly categories, but the difference here is not significant.

One of the reasons for these differences are initiative mobilizations, where groups mobilize around specific ballot measures. The need for this salient coordinating device should also lead to groups' existence being more fragile in the early years after the campaign has ended. The average age of a group provides some evidence for this possibility with the average non-initiative state group in existence for forty-one and a half years and the average initiative state group in existence for thirty-six years. The t test in the last column indicates that the hypothesis that initiative state groups are significantly younger is accepted at the ninety percent level. There is not, however, a corresponding difference in length of involvement with the current issue, with all groups averaging slightly less than fourteen years. Perhaps this results from initiative-mobilized groups staying involved with their original issue for a longer period of time, an issue which I will return to in the following section.

Interestingly, having interest groups with more revenue and staff does not translate into more groups involved on the same issue. There are, on average, halfway between 6-10 and 11-15 other groups involved in initiative states and non-initiative states alike. And while between sixty-five and seventy percent of the groups indicate that other government actors were involved on their issue, in non-initiative states the average number of these actors is about twelve and a half while in initiative states the average number is seven, though the t statistic indicates that these differences are not significant. This may result from a decrease in government actors in issues revolving around initiatives compared to those pursued in the legislature.

Lobbying Techniques

These shifts observed in group characteristics are also associated with shifts in lobbying strategies. Groups that have less money and more members are going to use the strategies they know and that work for them and these will disproportionately tend to be outside rather than inside strategies. For groups in non-initiative states, Table 6.2 shows that the four most important strategies on the five-point scale are contacting legislators, 4.81; building legislative coalitions, 4.24; contacting committees, 4.09; and contacting agencies, 3.76. These are all inside lobbying strategies which are traditionally used by interest groups to influence pol-

icy. Not surprisingly, all four of these techniques are employed significantly less by initiative state groups. The biggest difference is in building legislative coalitions, which drops to 3.78 in initiative states. The eleventh most important strategy, seeking endorsements, is also significantly less important in initiative states, dropping from 2.99 to 2.72.

Table 6.2 here

The only other significant differences are at the bottom end of the scale. The least important strategy, paid advertisements, increases from 1.3 to 1.49, probably reflecting the use of advertisements in initiative campaigns. While the difference in the second least important strategy, protests, is of the same magnitude, the distributions of responses are not significantly different. This is not the case for litigation, though. Initiative state groups indicate that it is more important, with an increase from 1.73 to 1.86. Early experiences outside traditional legislature-oriented lobbying increases the role that other extra-legislative strategies play for these groups. Experience with the courts is also increased by initiatives as well, as those that pass tend to be contested in the courts at a high rate.

Besides litigation and advertisements, though, there is no increase in the importance of outside strategies. While the average responses are larger for monitoring public opinion, organizing mail or phone campaigns, electioneering and organizing protests, the differences are not significant. Rather than an increase in outside lobbying techniques, initiative state groups find almost all inside lobbying techniques to be less important. Perhaps this is because more groups are shut out of the legislature or, less insidiously, because they mobilized around an initiative and have little or no experience inside lobbying.

Another way to test whether the initiative influences a group's ability to inside lobby is to look at the variation in the responses. If the initiative increases the ability of some groups to inside lobby, but only if they choose to do it, then there should be some groups listing these strategies as important and some as unimportant, implying a greater variation in responses in initiative states for the inside lobbying predictions. A t test for equality of standard deviations for contacting legislators shows that there is indeed greater response variability in initiative states.

Why They Get Involved

Groups that have different approaches to influencing policy and have access to different resources may also perceive their actions as motivated by different factors. More traditional inside lobbying oriented groups should get involved with an issue for different reasons than initiative-mobilized groups. Membership groups may have a harder time changing gears and switching issues, so their reasons for involvement may be based more on inertia than business groups. Examining the responses the groups gave for the importance of various factors in motivating their involvement suggests this is somewhat true.

As might be expected from the activities that groups indicate are important in Table 6.2, groups in non-initiative states state that legislative connections are significantly more important in motivating their involvement than groups in initiative states. The most important reason for activity in Table 6.3 in both types of states is, rather obviously, importance of the issue to the group. This consideration, however, is significantly more important in non-initiative states. The other factor which is significantly more important in non-initiative states is increasing the resources available. This may be due to the fact that these groups have more resources available to offer, as Table 6.1 demonstrates. The only reason that was significantly less important in non-initiative states is action by an opposing group, which drops from an average of 3.04 in initiative states to 2.57. This shows that initiative-mobilized groups are more likely to get involved not because of what they bring to the battle, such as legislative connections and resources, but because they are drawn in by other groups' activities.

Table 6.3 here

Amount of Legislative Activity

As a final differentiation between groups, I report the number of bills that groups say they devoted different levels of resources to and the reasons they cite for choosing which bills to make a top priority. Initiative state groups are involved with more bills at all levels of resource expenditure. Groups in initiative states devote any amount of resources to twenty-one bills whereas non-initiative state groups average eighteen bills. At a higher level of

resource devotion, initiative state groups are again involved with more bills, twelve to nine. The *t* statistic demonstrates that this difference is significant at the ninety percent level using a one-sided test. The same is true for those bills that groups make a top priority and devote a large amount of resources to, with initiative state groups outnumbering the rest four to three.

The groups are also asked to give the reasons that determined which bills would receive a large amount of resources. So when choosing from the nine bills they devote some resources to, non-initiative state groups indicate that resource constraints, importance of the policy and member support are the three most important reasons a bill becomes one of the three that receives a large amount of resources. Initiative state groups cite the same reasons in the same order. The only factor that produces significantly different responses is lack of another group's actions: initiative state groups are significantly more likely to push ahead on their own.

6.4.2 Differences By Initiative Involvement

The findings in the previous section provide consistent support for the population level effects of the initiative process on interest groups. Not only do their different resource profiles reflect the increased incentives for membership groups to form, but the significant decrease in inside lobbying techniques also reflects this. What is not observed, though, is how use of the initiative process determines these differences. If the entire profile of the average state interest group is affected by the *possibility* of using the initiative process, then this difference should be even greater among the groups that actually use it.

Examination of Table 6.5 suggests that the differences are consistent. By selecting out the groups that use the initiative process, it shows that they have significantly more members, with an average response of 100-250 members, compared to groups to 51-100 for groups not currently involved in an initiative. Tellingly, the average response for the latter groups is identical to that for groups not in initiative states. While groups involved indicate they have less revenue and lobby less frequently, these differences are not significant. They are for the categories of paid and volunteer employees, though, with groups involved having less of the

former and more of the latter.

Groups that are involved in initiatives are also older than those not involved, but slightly younger than those in non-initiative states. They have spent many more years, nineteen, on their current issue, however, and the difference in the averages is significant at the ninety-five percent level. Groups not involved have spent ten of their thirty years of existence on the current issue and those in non-initiative states have spent fourteen of forty-two years on the current issue. This is not surprising if initiative mobilizations occur: when a particular issue serves as a coordinating device, it is harder to move on to other issues, so groups spend more of the time fighting the same battle rather than branching out into others.

The table also indicates that while sixty-eight percent of groups report involvement of government actors, independent of initiative involvement, the average number of these government officials involved is significantly larger for groups involved in initiatives. They report an average of twelve government actors whereas groups not involved report an average of three. Either groups attempt to get government officials involved in their initiative campaigns or the pressure they put on legislators draws them in as a response.

Table 6.5 here

As before, these group characteristics differences translate into an emphasis on different lobbying strategies. Table 6.6 shows that groups involved in initiatives indicate that twelve of the twenty strategies are significantly more important and seven of these twelve are greater by than one half on a five point scale. The nature of these seven is telling: press releases, paid advertisements, drafting legislation, public opinion information, conducting mail or phone campaigns, election campaigning, and seeking endorsements. These are all outside lobbying techniques and are vital to any successful initiative campaign.

Table 6.6 here

Surprisingly, however, there are some inside strategies that these groups indicate are also more important, including contacting agencies and building legislative coalitions. Groups involved in initiatives, either for or against, are also significantly more likely to indicate that mobilizing members, responding to requests for information and monitoring policy are important strategies. The only method of lobbying that groups involved in initiatives consider significantly less important is again litigation.

The reasons for their involvement tell a different story than across states. While importance of the issue is still the most important reason for involvement, legislative connections and adding resources do not distinguish groups that are involved like they did groups in initiative states. Instead, Table 6.7 shows that groups that are involved in initiatives indicate that technical knowledge about the issue is the second most important reason for their involvement with an average score of 3.8. For groups not involved, the average score for this motivation is 3.4 and the underlying response distributions are significantly different. This is also the case for opposition's actions: groups involved are significantly more likely to get involved because of actions other groups have taken. The category that is less important for groups involved in initiatives is gaining current information, which drops from 3.4 to 3 on the five point scale.

Table 6.7 here

The final indicator of group activity is the number of bills to which they devoted resources. Table 6.4 shows groups involved in initiatives devote resources to more bills at all levels, and the differences are significant except for those bills that received a large amount of resources. These differences are driven by groups opposed to initiatives, as we will see shortly. When choosing the bills that they devote the greatest amount of their resources to, groups involved in an initiative are significantly less likely to indicate that it depended on a lack other groups' actions or on the presence of an opposing group.

Table 6.8 here

The Late Entry of Opposition

If a group is acting as an agenda setter by proposing an initiative or getting involved with helping one pass, it is likely to have been involved in the process for a while, whereas groups that emerge to fight these proposals may only get involved once the threat of an initiative appears. As Gerber (1999) finds, groups that oppose initiatives often succeed by spending large amounts of money, but this strategy is less successful for groups seeking to influence policy through the ballot. These differences are reflected in the types of groups that are involved in initiatives. Groups that support ballot measures have significantly less

revenue. Not surprisingly, they also have significantly more volunteers than groups opposed to initiatives, but they also have slightly more *paid* employees, though these differences are significant only at the ten percent level. The volunteer employees average goes from 2.7 for groups opposed to 3.6 for groups supporting, while paid employees only increases from 3.4 to 3.6. Groups supporting initiatives actually have more volunteers than paid employees!

Table 6.9 here

Groups that are supporting initiatives are also the youngest encountered so far, with an average age of thirty-four years, while groups opposing to initiatives have been around for fifteen more years. This difference is significant at the ninety percent level. In contrast, though, they have spent the majority of their existence on the same issue — twenty-one of their thirty-four years, or sixty percent — whereas groups opposed have spent significantly less at only fifteen of their fifty years on their current issue. Groups opposed to initiatives do seem to be drawn in by the proponent's actions, which seem to be part of a long struggle. While the greater length of existence seems to translate into more circumstances where other government actors were involved for groups opposed, there are many less of them involved in those cases. On average, there are three government actors involved with groups opposed to initiatives, but sixteen involved in the issue for groups supporting, a difference that is significant at the ninety percent level.

Turning to the average importance of lobbying strategies in Table 6.10, groups opposed to initiatives again seem to be drawn into the issue relatively late. That they did not get involved in the process early is indicated by their significantly lower scores for contacting legislators, doing policy research, generating press releases, contacting agencies, building legislative coalitions, seeking elected officials' endorsements and having influential citizens contact legislators. In their desperation, though, they did make use of the one resource they could mobilize quickly: money. Groups opposed indicate that making campaign contributions, releasing paid advertisements, election campaigning and organizing protests are all significantly more important than for groups in support.

Table 6.10 here

These differences are also supported by the reasons groups give for getting involved, shown in Table 6.11. Groups in support give an average score of 3.4 for legislative connections, while

groups opposed give an average score of 2.5. On the other side, groups opposed give an average response of 3.8 while those supporting initiatives give an average of 3.1 to increasing the number of groups who share their point of view. Neither of these differences is significant, however. Only public duty produces a significant difference and it is indicated to be more important to groups opposed to initiatives.

Table 6.11 here

Finally, groups involved in favor of particular initiatives spend their time on fewer bills than those opposed. At the lowest level of resource expenditure, Table 6.12 shows that groups opposed are involved with seven times as many bills: eighty-one to thirteen, though the difference is not significant. The ratio is similar, but significant at the ninety percent level, for the middle level of resources, fifty-two to eight. At the highest level of resource expenditure, the gap is still significant, but is somewhat smaller, with groups supporting an initiative averaging five bills per year and those opposed eleven. It does not appear to be the case that the late entry of these groups in terms of lobbying activities in Table 6.10 are a result of not paying attention to possible legislation. These groups pay more attention to politics, in terms of legislative bills, than any other type of group.

When considering which bills to devote the most resources to, groups opposed to initiatives are significantly more likely to indicate member support as an important reason. They are also significantly less likely to indicate legislators' actions or lack of another group's actions as important.

Table 6.12 here

6.5 The Initiative Cycle of Group Activity

To bring together all the previous results and pieces of information, consider the cycle of initiative mobilization. Groups coalesce around a particular initiative. Some of them manage to maintain their organizational structure and continue to be active — groups in initiative states are younger than groups in non-initiative states because there are disproportionately more nascent groups. These groups also have different resource profiles: groups in non-initiative states have about 50-100 members, groups in initiative states fall halfway between

his and the 100-250 level and groups involved in initiatives are squarely at the higher of these two levels. Using the middle value as an approximation, this means that groups involved in initiatives have about twice as many members as groups in non-initiative states.

Naturally, they lose out on other important resources. The average group supporting an initiative has almost \$350,000 while the average group in non-initiative states has about \$800,000. Even groups that are not currently involved in an initiative have less than the latter amount. Some of these groups are likely to have formed because of a past initiative, but are now relatively inactive as they attempt to stay mobilized. Their presence may be the force that pulls the average revenue of groups not involved in initiatives down to about \$600,000.

Further evidence of their young, transitive state is provided by their age. Groups not involved in initiatives are slightly younger than those involved and even younger still than groups in non-initiative states. They have also been involved in their current issue for only nine years, or about thirty percent of their existence. Groups supporting initiatives have been involved with that issue for sixty-one percent of their thirty-four years, while groups in non-initiative states have been around for forty-two years, but have spent only fourteen of them on their current issue. As recently formed groups that are not currently involved in initiatives are struggling to maintain their structure, it should also be reflected in their lobbying activity.

The average scores for the lobbying activities clearly indicate that groups not involved in initiatives do not consider most strategies to be nearly as important as their counterparts that are involved and those in non-initiative states. For eighteen of the twenty lobbying techniques inquired about, they give scores that are lower than those given by groups involved and twelve of these differences are significant. This is also true in comparison to groups in other states, which also give higher average scores on eighteen of the lobbying activities. The one strategy that uninvolved groups consider more important than both involved groups and groups in non-initiative states is litigation, possibly because their initiative battle has disintegrated into endless court appeals.

What happens to these groups is hard to determine in a single cross-section, but their relatively short life-spans indicates that many of them will disappear. The rest may suc-

ceed, especially if another initiative surfaces on their issue and they can use it as a rallying point, further evidenced by the fact that these groups tend to get pulled into politics by other groups' actions, whereas groups in non-initiative states get involved because of their legislative connections. Initiative-mobilized groups should thus experience a cycle of heightened activity around campaigns and then critical periods of dormancy from which they may emerge when another campaign galvanizes them. During the campaign their responses indicate that almost all strategies are more important than for groups in non-initiative states, but the exceptions are contacting legislators, testifying before agencies, testifying before committees and building support among groups of legislators. All of these are clearly inside strategies that initiative-mobilized groups may be less proficient at, even as they assimilate into state politics over time.

This indicates that the differences for state politics are more than just a few extra groups going through the initiative cycle of activity. The locus of power may reside less in outside strategies and the traditional lobbying groups that use them and more in outside strategies employed by the many groups involved in initiatives. If policy makers are responsive to the threat of an initiative, then these differences will increase the legislative clout of the latter type of group relative the former. This will provide a shift in representation in addition to the one caused by the reduction of bias engendered by broader mobilizations.

To assess how group characteristics translate into differences in lobbying strategies in more detail, the following chapters will examine how lobbying strategies are determined by group characteristics. Once these characteristics are controlled for, the distributional shift will be accounted for and the effect of the ability to use the initiative on groups' activities can be determined. This means that on top of the population level effect of the initiative for states, individual groups themselves are behaving differently. Before conducting this analysis, though, I go into more detail on the problem of selection bias in the next chapter.

Table 6.1: Average Group Characteristics by Initiative Possibility

	Non-initiative		Initiative		χ^2	T
	Average	Standard Error	Average	Standard Error		
Members	1.99	2.81	2.40	2.80	25.25**	—
Revenue	4.08	1.76	3.60	1.81	11.29**	—
Lobbying Frequency	2.51	1.50	2.33	1.45	6.20	—
Paid Employees	3.95	2.17	3.61	1.97	13.73*	—
Volunteer Employees	2.98	2.14	2.99	2.15	5.91	—
Group Age	41.53	36.15	35.17	29.39	—	1.56*
Years Active on Issue	13.59	16.36	13.97	19.25	—	-0.12
Other Groups Involved	3.43	1.87	3.39	1.65	8.80	—
Government Actors	0.65	0.48	0.68	0.47	0.24	—
Number of Govt Actors	12.59	52.84	7.12	27.65	—	-0.36

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

T statistic calculated for continuous response variables, unequal variance, and one-sided test.

Table 6.2: Average Importance of Strategies by Initiative Possibility

	Non-initiative		Initiative		χ^2
	Average	Standard Error	Average	Standard Error	
Contacting Legislators	4.81	0.54	4.5	0.95	12.9**
Policy Research	3.38	1.25	3.41	1.28	3.19
Press Releases	2.63	1.33	2.62	1.30	0.55
Litigation	1.73	1.17	1.86	1.17	9.52**
Comm Testifying	4.09	1.14	3.88	1.32	9.14*
Mobilizing Members	3.72	1.35	3.66	1.29	2.11
Campaign Cont	2.12	1.42	2.18	1.40	2.88
Paid Ads	1.30	0.77	1.49	0.98	8.19*
Supplying Info	3.74	1.22	3.73	1.16	2.85
Citizens Contact	3.19	1.52	3.20	1.36	6.05
Drafting Legislation	3.46	1.46	3.24	1.46	5.44
Contacting Agencies	3.76	1.40	3.55	1.19	19.06**
Public Opinion	2.45	1.34	2.56	1.48	5.36
Monitoring Policy	3.48	1.34	3.44	1.34	4.49
Mail/Phone Camp	2.51	1.58	2.59	1.56	1.09
Policy Implications	3.01	1.41	3.09	1.49	6.86
Electioneering	1.77	1.16	1.97	1.3	4.85
Protests/Dem	1.32	0.78	1.50	0.94	5.22
Seeking Endorsements	2.99	1.53	2.72	1.46	12.18**
Building Leg Coalitions	4.24	0.98	3.78	1.20	13.95**

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

Table 6.3: Average Reasons for Involvement by Initiative Possibility

	Non-initiative		Initiative		χ^2
	Average	Standard Error	Average	Standard Error	
Legislative Connections	3.98	1.33	3.23	1.57	16.31**
More Supporters	3.38	1.44	3.08	1.49	4.81
Adding Resources	3.27	1.48	2.79	1.35	10.81**
Issue's Importance	4.74	0.64	4.5	1.02	16.75**
Historical Involvement	3.55	1.31	3.53	1.45	7.39
Public Duty	3.32	1.45	3.2	1.40	4.34
Technical Knowledge	3.69	1.23	3.58	1.32	3.17
Opposition's Actions	2.57	1.61	3.04	1.50	12.63**
Gaining Information	3.07	1.39	3.21	1.44	2.9

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

Table 6.4: Average Number of Bills Involved With and Reasons by Initiative Possibility

	Non-initiative		Initiative		χ^2	T
	Average	Standard Error	Average	Standard Error		
Resources	3.42	1.45	3.48	1.42	3.70	—
Importance of Policy	4.52	1.07	4.60	0.93	4.07	—
Member Support	3.83	1.36	3.86	1.45	2.69	—
Public Support	2.61	1.27	2.81	1.27	2.97	—
Legislators' Actions	4.00	1.16	3.80	1.25	5.41	—
No Other Group	2.02	1.19	2.40	1.35	8.04*	—
No Other Opposition	1.76	1.01	1.97	1.11	3.25	—
Any Resources	17.62	52.94	21.43	68.93	—	-0.80
Some Resources	8.66	19.76	12.30	41.16	—	-1.40*
Many Resources	2.83	4.98	4.10	13.25	—	-1.44*

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

T statistic calculated for continuous response variables, unequal variance, and one-sided test.

Table 6.5: Average Group Characteristics by Initiative Involvement

	Not Involved		Involved		χ^2	<i>T</i>
	<i>Average</i>	<i>Standard Error</i>	<i>Average</i>	<i>Standard Error</i>		
Members	1.99	2.55	3.00	3.05	21.54**	—
Revenue	3.76	1.84	3.36	1.77	4.18	—
Lobbying Frequency	2.46	1.55	2.12	1.26	4.27	—
Paid Employees	3.67	2.07	3.51	1.83	12.32*	—
Volunteer Employees	2.81	2.04	3.24	2.29	14.18**	—
Group Age	32.29	28.81	39.49	29.98	—	-0.92
Years Active on Issue	9.69	9.03	18.60	25.49	—	-2.12**
Other Groups Involved	3.26	1.60	3.54	1.70	2.12	—
Government Actors	0.68	0.47	0.68	0.47	0.00	—
Number of Govt Actors	3.32	11.19	11.79	39.21	—	-1.62*

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

Table 6.6: Average Importance of Strategies by Initiative Involvement

	Not Involved		Involved		χ^2
	Average	Standard Error	Average	Standard Error	
Contacting Legislators	4.54	0.93	4.44	0.97	6.95
Policy Research	3.22	1.32	3.67	1.18	4.74
Press Releases	2.3	1.32	3.07	1.13	18.11**
Litigation	1.94	1.31	1.73	0.94	11.23**
Comm Testifying	3.84	1.37	3.94	1.24	10.87**
Mobilizing Members	3.53	1.34	3.85	1.20	10.57**
Campaign Cont	1.96	1.34	2.48	1.44	5.38
Paid Ads	1.20	0.54	1.89	1.28	19.66**
Supplying Info	3.57	1.24	3.96	0.99	13.46**
Citizens Contact	3.17	1.42	3.25	1.29	4.63
Drafting Legislation	3.02	1.57	3.55	1.23	9.44*
Contacting Agencies	3.54	1.27	3.57	1.09	4.61
Public Opinion	2.05	1.34	3.28	1.39	26.87**
Monitoring Policy	3.33	1.4	3.6	1.25	12.97**
Mail/Phone Camp	2.16	1.45	3.19	1.52	16.92**
Policy Implications	2.87	1.52	3.42	1.39	5.40
Electioneering	1.71	1.12	2.34	1.46	10.38**
Protests/Dem	1.33	0.72	1.75	1.14	6.86
Seeking Endorsements	2.45	1.51	3.11	1.30	13.42**
Building Leg Coalitions	3.76	1.24	3.79	1.17	8.78*

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

Table 6.7: Average Reasons for Involvement by Initiative Involvement

	Not Involved		Involved		χ^2
	Average	Standard Error	Average	Standard Error	
Legislative Connections	3.33	1.57	3.11	1.58	6.20
More Supporters	2.91	1.51	3.28	1.45	3.03
Adding Resources	2.80	1.44	2.78	1.25	4.71
Issue's Importance	4.47	1.17	4.55	0.81	9.88**
Historical Involvement	3.46	1.53	3.61	1.36	2.36
Public Duty	3.21	1.50	3.19	1.30	3.52
Technical Knowledge	3.40	1.46	3.80	1.10	10.68**
Opposition's Actions	2.59	1.49	3.57	1.34	16.15**
Gaining Information	3.39	1.39	2.99	1.49	9.05*

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

Table 6.8: Average Number of Bills Involved With and Reasons by Initiative Involvement

	Not Involved		Involved		χ^2	T
	Average	Standard Error	Average	Standard Error		
Resources	3.46	1.46	3.50	1.38	6.47	—
Importance of Policy	4.62	1.06	4.58	0.75	13.35**	—
Member Support	3.97	1.41	3.73	1.49	2.91	—
Public Support	2.85	1.31	2.76	1.23	2.09	—
Legislators' Actions	3.91	1.28	3.67	1.22	4.27	—
No Other Group	2.01	1.30	2.88	1.26	19.90**	—
No Other Opposition	1.97	1.19	1.98	1.00	8.44*	—
Any Resources	16.97	43.41	29.06	98.64	—	-1.42*
Some Resources	8.25	17.69	19.03	63.10	—	-1.54*
Many Resources	2.78	6.77	6.17	19.46	—	-1.06

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

T statistic calculated for continuous response variables, unequal variance, and one-sided test.

Table 6.9: Average Group Characteristics by Initiative Support

	Against Initiative		For Initiative		χ^2	T
	Average	Standard Error	Average	Standard Error		
Members	2.70	3.33	3.15	2.95	8.59	—
Revenue	3.67	1.12	3.2	2.02	18.34**	—
Lobbying Frequency	2.14	1.33	2.11	1.24	4.61	—
Paid Employees	3.42	1.26	3.55	2.07	11.62*	—
Volunteer Employees	2.70	2.29	3.57	2.27	11.75*	—
Group Age	49.57	19.62	34.18	33.24	—	1.59*
Years Active on Issue	14.54	14.68	20.93	29.97	—	-1.98**
Other Groups Involved	3.68	1.55	3.46	1.80	12.51*	—
Government Actors	0.76	0.44	0.64	0.49	0.67	—
Number of Govt Actors	2.94	4.23	16.34	47.84	—	-1.98*

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

T statistic calculated for continuous response variables, unequal variance, and one-sided test.

Table 6.10: Average Importance of Strategies by Initiative Support

	Against Initiative		For Initiative		χ^2
	Average	Standard Error	Average	Standard Error	
Contacting Legislators	3.79	1.29	4.76	0.56	12.31**
Policy Research	3.14	1.16	3.94	1.12	8.20*
Press Releases	2.62	0.99	3.29	1.15	8.16*
Litigation	1.71	0.93	1.74	0.96	0.74
Comm Testifying	3.53	1.37	4.13	1.15	5.50
Mobilizing Members	4.19	0.95	3.69	1.28	4.35
Campaign Cont	2.99	1.03	2.23	1.56	14.2**
Paid Ads	2.43	1.73	1.63	0.93	10.26**
Supplying Info	3.8	0.88	4.03	1.05	3.82
Citizens Contact	3.01	1.43	3.37	1.22	11.32**
Drafting Legislation	3.18	1.14	3.73	1.25	5.33
Contacting Agencies	3.00	0.74	3.84	1.13	12.96**
Public Opinion	3.04	1.41	3.39	1.39	2.14
Monitoring Policy	3.71	1.13	3.54	1.31	2.08
Mail/Phone Camp	3.84	1.35	2.89	1.52	5.16
Policy Implications	3.80	1.07	3.24	1.51	4.28
Electioneering	3.22	1.42	1.91	1.30	10.42**
Protests/Dem	2.15	0.91	1.56	1.20	16.54**
Seeking Endorsements	2.83	0.91	3.23	1.45	8.15*
Building Leg Coalitions	3.25	0.98	4.04	1.18	12.71**

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

Table 6.11: Average Reasons for Involvement by Initiative Support

	Against Initiative		For Initiative		χ^2
	Average	Standard Error	Average	Standard Error	
Legislative Connections	2.52	1.52	3.35	1.56	5.05
More Supporters	3.75	1.39	3.07	1.45	3.23
Adding Resources	2.64	1.18	2.84	1.29	0.91
Issue's Importance	4.51	0.63	4.56	0.89	3.97
Historical Involvement	3.85	1.15	3.5	1.45	3.27
Public Duty	3.56	0.86	3.04	1.43	21.49**
Technical Knowledge	3.63	1.09	3.87	1.12	5.92
Opposition's Actions	3.72	1.13	3.51	1.43	4.50
Gaining Information	2.51	1.32	3.21	1.53	4.65

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

Table 6.12: Average Number of Bills Involved With and Reasons by Initiative Support

	Against Initiative		For Initiative		χ^2	T
	Average	Standard Error	Average	Standard Error		
Resources	3.90	1.31	3.28	1.39	3.20	—
Importance of Policy	4.50	0.84	4.63	0.71	1.18	—
Member Support	4.45	0.74	3.32	1.65	9.61**	—
Public Support	2.94	0.96	2.66	1.37	4.43	—
Legislators' Actions	3.48	0.71	3.77	1.43	12.94**	—
No Other Group	2.53	0.92	3.08	1.39	9.00*	—
No Other Opposition	2.17	0.86	1.87	1.07	3.96	—
Any Resources	80.75	193.98	12.65	21.37	—	0.45
Some Resources	51.94	121.44	8.41	17.36	—	1.46*
Many Resources	10.53	23.49	4.76	18.09	—	1.50*

Source: Survey of state interest groups, calculated using weights, see Table D.2.

* Test statistic significant at 90% level.

** Significant at 95% level.

Pearson χ^2 calculated using response frequencies.

T statistic calculated for continuous response variables, unequal variance, and one-sided test.

Chapter 7 Correcting for Response Bias

As seen in the previous chapter, it is important to correct for response bias when analyzing survey data, especially when the information requested may induce certain individuals to be more likely to respond. While the approach taken in the previous chapter corrects for misrepresentativeness by reweighting observations to reflect their true population frequencies, this solution is not sufficient when estimating regression models, since reweighting does not account for how the selection process influences the relationship between the independent variables and the dependent variable.

One of the important issues left to explore in this dissertation is how the ability to propose initiatives influences interest group behavior. Chapter 6 examines lobbying choices by groups and finds that the averages for groups in initiative states reflect an increase in traditionally under-represented groups. Since the characteristics of the groups initiative states tend to differ from those of groups in non-initiative states, these differences in lobbying behavior may result merely from the shift in group characteristics and resources. This chapter controls for group-specific factors and finds the initiative process still influences the choice of lobbying tactics and strategies.

Interest groups that cut their teeth in initiative campaigns may carry these experiences forward with them if they continue to be politically active. The strategies that they grew familiar with during the campaign process may be strategies that they use in the future. Because of this, groups in initiative states may over-rely on outside lobbying strategies at the expense of inside lobbying strategies. To determine this requires moving beyond population frequencies to the analysis of individual groups' lobbying decisions. Before this can be studied, though, I must develop an empirical model which controls for response bias on the part of interest groups. If not controlled for properly, the inferences made based on the survey data cannot be trusted.

The rest of the chapter discusses the problem of selection bias and model estimation. After providing an overview of the problem and the proposed solution, I define the selection

problem in more detail, highlighting where previous solutions fail with limited dependent variables. I then develop a two-stage method which uses the data gathered in the phone survey to help understand which groups responded. I present simulation results demonstrating the method's usefulness. After that I apply the method to a problem of related substantive importance: which groups use the initiative process? This allows me to compute much of the relevant information that will be used in the following chapter, which analyzes the survey responses.

7.1 Selection Bias and Estimation

The fundamental goal of all selection models is to model not only the phenomenon that the researcher is interested in studying, such as interest group behavior, but to also develop a model of the response process. In this case, the model explains why certain groups responded to the mail survey they received and others did not. If there is no rhyme or reason to this process — perhaps there is some random probability of a survey getting lost for any group — then the selection model will have no explanatory power and there will be no selection bias to correct for. If the selection process is present and modeled correctly, though, the researcher can make accurate inference based on the results of the regression of interest.

When selection processes are not accounted for, certain critical assumptions are generally not met in the primary analysis that the researcher assumes *are* met. Unfortunately for those who guess incorrectly, the consequences can be serious: selection will bias the coefficients in an unknown direction. With no understanding of how the coefficients are affected, any inference based on models that incorrectly ignore selection problems is untrustworthy. For this reason, it seems wise to also model the selection process that may have determined which groups responded to my survey. One further obstacle awaits, however: standard models of selection bias are ill-equipped to function properly in the type of analysis I wish to conduct in the following chapter. Because of this, I will spend the remainder of this chapter developing and testing a method that I can utilize, after explaining where previous methods have problems.

For those less interested in reading this chapter, let me summarize the problem as suc-

cinctly as possible: since no data are observed for groups that do not respond, termed stochastic truncation, I must model the selection process without data for groups that do not respond, or with no variation in the dependent variable. Current procedures would have me resolve this by estimating the response process simultaneously with the quantity of interest, say whether an interest group lobbied the legislature or used the initiative process. This comes down to trying to get two pieces of information out of one piece of data, which is generally possible when that piece of information is sufficiently varied, such as PAC spending, but becomes very difficult when it is a yes or no response.

Since the problem is inherently one of a lack of information, to contend with it I do the obvious: gather more information. The survey was designed with two separate components: the mail survey which contains the quantities to be studied and the phone survey which contains information about a sample of all groups. This extra information was already used in the previous chapter to weights the responses so that they would accurately reflect the true population of all interest groups. The phone survey data will now be used to model the selection process and accurately estimate interest groups' lobbying choices.

7.2 The Stochastic Truncation Problem

In the classic selection problem analyzed by Heckman (1979), among others, there are two equations: the outcome equation, which is continuous, and the selection equation, which has a binary dependent variable that takes on the value of one when the other dependent variable is observed. We can write these equations as

$$Y_{1,i}^* = X_i\beta + \epsilon_{1,i}$$

$$Y_{2,i} = W_i\gamma + \epsilon_{2,i}$$

where $Y_{2,i}$, the dependent variable of interest is observed if and only if $Y_{1,i}^* \geq 0$. When selection bias occurs there is correlation between the errors in the two equations. To see

this, write the distribution of $\epsilon_{1,i}$ and $\epsilon_{2,i}$ as:

$$\begin{pmatrix} \epsilon_1 \\ \epsilon_2 \end{pmatrix} \sim N \left[\begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} 1 & \rho \\ \rho & \sigma^2 \end{pmatrix} \right]$$

The selection process will bias the estimates in the second-stage equation of interest when there is non-zero correlation, ρ , between the two error terms. This leads to observations in the equation of interest that are distinctive from the general population of possible observations in that they drew errors in the first-stage that are unique in some sense.¹ This produces a violation of the distributional assumption for the error in the second-stage, which results in inconsistent coefficient estimates.

The solution to this problem is to explicitly model the selection problem by conditioning on the fact that $Y_{1,i}^*$ is greater than one:

$$E[Y_{2,i}|Y_{1,i}^* \geq 0] = E[W_i\gamma + \epsilon_{2,i}|X_i\beta + \epsilon_{1,i} \geq 0].$$

As Heckman (1979) shows, this can be rewritten as

$$E[Y_{2,i}|Y_{1,i}^* \geq 0] = W_i\gamma + \rho \frac{\phi(X_i\beta)}{\Phi(X_i\beta)},$$

where the ratio in the last term is known as the Inverse Mills' Ratio. The dependence on ρ , the correlation between the two error terms, is apparent through this formulation: when there is none, the second-stage equation reduces to a more familiar form. It also suggests a method for estimating the equation of interest while dealing with the selection bias issue: include the Inverse Mills' Ratio as an independent variable. This requires estimating β , which can be accomplished by discrete choice regression analysis of the selection equation and using these estimates to calculate the Inverse Mills' Ratio. This produces consistent estimates of the parameters in the second-stage equation of interest and also provides a test for the presence of selection bias: if the coefficient on the Inverse Mills' Ratio is not

¹Individuals that select in are more likely to have positive errors, so any correlation with the second-stage means that these errors will be larger than zero on average, violating the unconditional distribution assumptions in the second-stage equation.

statistically distinguishable from zero, then the hypothesis that ρ is not zero can be rejected and analysis can proceed as usual.

Unfortunately, to estimate the first-stage selection equation requires observations on non-respondents, otherwise there is no variation in the (observed) dependent variable. In many political science applications, however, these data are either unavailable by its very nature or difficult to gather: nonrespondents are generally nonrespondents for a reason. Alternatively, it may be the case that researchers wish to work with data where selection bias is believed to be present, but the original sampling frame is unavailable. When this happens, the data are no longer censored, but truncated: there is no information whatsoever available about nonrespondents. This problem is known as stochastic truncation.

Since the Inverse Mills' Ratio cannot be estimated directly in this situation, another solution is needed. Brehm (1999) suggests three possible alternative methods of estimation. The first two involve use of aggregate data to account for the selection bias — one approach calculates a pseudo-Inverse Mills' Ratio that varies at some level of aggregation, such as which state a respondent resides in, while the other method creates 'dummy' nonrespondents: characteristics of the unit of aggregation are then used to predict the probability of response within that unit. For example, Brehm (1999) uses state level characteristics to predict the states' response rates using regression analysis.

These two methods both suffer from possibly aggregation problems since they require the causes of aggregate response to be the same as the causes of individual response. As Brehm (1999) notes, they work "only if the characteristics of the aggregate (e.g., the state) influence compliance by the individual respondent." If this assumption does not hold, then the correction will not solve the original selection bias problem and runs the risk of introducing even more problems.

Since the third method, full information maximum likelihood, does not suffer from this problem, I now describe it in more detail. Using the same error distributions as before leads to a likelihood function (for derivation, see Bloom and Killingsworth 1985 or King 1989) of

the form

$$L = \prod_{i=1}^n \phi \left(\frac{y_{2,i} - W_i \gamma}{\sigma^2} \right)^{y_{2,i}} \left(\frac{1 - \Phi(-X_i \beta - \frac{\rho}{\sigma^2} (y_{2,i} - W_i \gamma) / (1 - \frac{\rho}{\sigma^2}))}{1 - \Phi(-X_i \beta)} \right)^{1-y_{2,i}}.$$

The advantages of this approach are manyfold: it produces consistent estimates, is invariant to reparameterization and is efficient (Brehm 1999). It also has the advantage that it relies only on the observed respondents' data and requires no estimation of or assumptions about how aggregate characteristics relate to individual response patterns. For all these reasons it is preferred to the previous two methods. Brehm (1999) lists the restrictiveness of the distributional assumptions, the limited number of statistical packages available for estimation, sensitivity to model specification and failure to converge as the primary drawbacks of this approach.² Whenever possible, though, it should be used instead of the other methods due to its superior statistical properties. The aggregate response approaches can be employed when necessary, though. The likelihood function developed by Brehm (1999) applies to models where the dependent variable of interest is continuous. When the dependent variable is discrete, a different model is required. Many of the problems with the FIML estimation will remain, but the convergence issue will emerge as the primary obstacle. This motivates the derivation of the two stage method.

7.3 Stochastic Truncation with Limited Dependent Variables

The underlying model is virtually identical when both equations have binary outcome variables. Instead of observing the realization of $Y_{2,i}$, however, the researcher observes whether or not a certain action is taken or a certain response is given. This situation occurs often in survey response data in political science and the social sciences in general. The underlying model can be written as follows:

$$Y_{1,i}^* = X_i \beta + \epsilon_{1,i}$$

²He reports failure to converge in about 10% of his simulation tests.

$$Y_{2,i}^* = W_i\gamma + \epsilon_{2,i},$$

where the researcher only observes indicators for the two dependent variables, so the model becomes

$$Y_{1,i} = \begin{cases} 1 & \text{if } X_i\beta + \epsilon_{1,i} > 0 \\ 0 & \text{otherwise.} \end{cases} \quad (7.1)$$

$$Y_{2,i} = \begin{cases} 1 & \text{if } W_i\gamma + \epsilon_{2,i} > 0 \\ 0 & \text{otherwise.} \end{cases} \quad (7.2)$$

Where the error terms are assumed to be distributed as follows:

$$\begin{pmatrix} \epsilon_1 \\ \epsilon_2 \end{pmatrix} \sim N \left[\begin{pmatrix} 0 \\ 0 \end{pmatrix}, \begin{pmatrix} 1 & \rho \\ \rho & 1 \end{pmatrix} \right].$$

7.3.1 Full Information Maximum Likelihood Estimation

With discrete dependent variables, the Heckman (1979) correction is not valid since the solution uses the continuous nature of the second-stage dependent variable of interest to derive the selection correction. The full information maximum likelihood method discussed in the previous section, however, can be adapted to this problem. The quantity of interest to be estimated is the probability of observing a success in the second-stage equation, which can be written as

$$P(Y_{2,i} = 1 | Y_{1,i} = 1, X_i = x_i, W_i = w_i, \rho) = \frac{P(Y_{2,i} = 1, Y_{1,i} = 1 | X_i = x_i, W_i = w_i, \rho)}{P(Y_{1,i} = 1 | X = x)},$$

$$P(\epsilon_{2,i} > -W_i\gamma | \epsilon_{1,i} > -X_i\beta, X_i = x_i, W_i = w_i, \rho) = \frac{P(\epsilon_{2,i} > -W_i\gamma, \epsilon_{1,i} > -X_i\beta | X_i = x_i, W_i = w_i, \rho)}{P(\epsilon_{1,i} > -X_i\beta | X_i = x_i, W_i = w_i)},$$

where the numerator is the probability of jointly observing the second-stage data and it containing $Y_2 = 1$ and the denominator is the probability of observing the data (being a

respondent). This leads to the following likelihood function:

$$\mathcal{L} = \prod_{i=1}^n \left(\frac{1 - \int_{-\infty}^{-W_i\gamma} \int_{-\infty}^{-X_i\beta} \phi(\epsilon_{1,i}, \epsilon_{2,i}) d\epsilon_{1,i} d\epsilon_{2,i}}{1 - \int_{-\infty}^{-X_i\beta} \phi(\epsilon_{1,i}) d\epsilon_{1,i}} \right)^{y_{2,i}} \times \left(1 - \frac{1 - \int_{-\infty}^{-W_i\gamma} \int_{-\infty}^{-X_i\beta} \phi(\epsilon_{1,i}, \epsilon_{2,i}) d\epsilon_{1,i} d\epsilon_{2,i}}{1 - \int_{-\infty}^{-X_i\beta} \phi(\epsilon_{1,i})} \right)^{(1-y_{2,i})}. \quad (7.3)$$

$$\mathcal{L} = \prod_{i=1}^n \left(\frac{1 - \Phi(-W_i\gamma, -X_i\beta, \rho)}{1 - \Phi(-X_i\beta)} \right)^{y_{2,i}} \times \left(1 - \frac{1 - \Phi(-W_i\gamma, -X_i\beta, \rho)}{1 - \Phi(-X_i\beta)} \right)^{(1-y_{2,i})}, \quad (7.4)$$

where $\phi(x_i, y_i, \rho)$ is the bivariate normal cdf evaluated at (x_i, y_i) with correlation ρ . In principle this likelihood can be programmed in a statistical package and estimated as long as restrictions are made to ensure identification.³ In practice, though, it is unlikely for it to converge, even in highly favorable settings.⁴ This suggests that the model in this form is not empirically practical, an issue which I overcome by providing an alternate estimation procedure. The key to the method developed here is to estimate the parameters of the first-stage equation separately and then use them in the maximum likelihood function.

7.3.2 Two-Stage Estimation

The obvious problem with a two-stage estimation procedure is that there is no observed variance in the first-stage dependent variable: since we only have observations for respondents, it is impossible to estimate the parameters of this equation using regression analysis.⁵ The two stage procedures suggested by Brehm (1999) cannot be implemented in this double limited dependent variable setting (and engender the previously discussed aggregation problems). What is needed is information about the non-respondents. These data are obviously not available, however. To overcome this problem, the method I develop next estimates the first-stage parameters non-parametrically using auxiliary data about the population of

³The conditions for identification have not been established yet. Bloom and Killingsworth (1985) have determined for the continuous dependent variable case that virtually no identifying conditions are required.

⁴I ran simulations of this model in GAUSS and convergence was achieved in about fifty-eight percent of the trials. Even when it did converge, it was often at estimates far from the truth and near boundaries. See Table 7.1.

⁵This is how this setting differs from that in Dubin and Rivers (1989), who discuss methods of modeling selection bias in double limited dependent variable settings. They have observations on non-respondents, which would help in estimation.

potential respondents.

What I am interested in is the probability that $Y_{1,i} = 1$ given $X_{1,i}$. If X_1 is an indicator variable, I can summarize the data in the first-stage equation with a simple two-by-two table,

		Y_1	
		0	1
X_1	0	p_{00}	p_{01}
	1	p_{10}	p_{11}

where $p_{ij} = P(X_1 = i, Y_1 = j)$.⁶ While the selected data does not reveal any of these values, it does offer some information. The survey's response rate is $P(Y_1 = 1) = p_{01} + p_{11}$, while the conditional distribution of X_1 in the selected sample is given by $P(X_1 = 1|Y_1 = 1) = \frac{p_{11}}{p_{01} + p_{11}}$. To determine the marginal effect of a change in X_1 on Y_1 , though, I need to know the following two conditional probabilities:

$$\begin{aligned} P(Y_1 = 1|X_1 = 0) &= \frac{P(X_1 = 0|Y_1 = 1)P(Y_1 = 1)}{P(X_1 = 0)} \\ P(Y_1 = 1|X_1 = 1) &= \frac{P(X_1 = 1|Y_1 = 1)P(Y_1 = 1)}{P(X_1 = 1)}, \end{aligned}$$

which can be written using the cell probabilities as

$$P(Y_1 = 1|X_1 = 0) = \frac{p_{01}}{p_{00} + p_{01}} \quad (7.5)$$

$$P(Y_1 = 1|X_1 = 1) = \frac{p_{11}}{p_{10} + p_{11}} \quad (7.6)$$

The only pieces of information that I lack in my empirical application in equations 7.5 and 7.6 are the denominators. The numerators can be estimated nonparametrically as they are just sample frequencies based on the observed responses. They are calculated by taking the product of the conditional probabilities of X_1 in the selected sample and the response

⁶I present the two-by-two table for intuition: the results generalize to cases where there are many independent variables that take on many discrete values. Estimation with continuous variables is not possible directly, but by discretizing them appropriately, the method can be adapted to these cases as well.

rate:

$$\begin{aligned} P(X_1 = 1|Y_1 = 1)P(Y_1 = 1) &= (p_{01} + p_{11}) \frac{p_{11}}{p_{01} + p_{11}} \\ P(X_1 = 0|Y_1 = 1)P(Y_1 = 1) &= (p_{01} + p_{11}) \frac{p_{01}}{p_{01} + p_{11}}. \end{aligned}$$

To obtain these two probabilities I need to know the unconditional distribution of X_1 in the sample population.⁷ Often these data will be readily available, but sometimes they may require further data collection efforts. The advantage is in the small amount of data that needs to be gathered. While the initial data set may have observations on many different variables, only the ones that are believed to influence the selection process need to be observed here. For example, a small sample of the original population, as few as one hundred observations, can be drawn and the researcher can gather these data relatively easily.⁸

Once these data have been collected and the unconditional probability of $X_1 = 1$ is calculated, the next step is to derive estimates of the coefficients. Since the auxiliary data gathered in the secondary sample used to calculate equations 7.5 and 7.6 do not contain information about whether the group responded, these parameters cannot be estimated through regression analysis. The regression model, however, does contain the necessary information required to get estimates. To see this, write the estimation of $P(Y_1 = 1)$ as a function of the independent indicator variable, X_1 :

$$\begin{aligned} P(Y_1 = 1|X_1 = 0) &= \Phi(\alpha) \\ P(Y_1 = 1|X_1 = 1) &= \Phi(\alpha + \beta). \end{aligned}$$

The use of the normal cumulative distribution function, Φ , is based on the assumption that the errors are normally distributed, an assumption which the model relies upon heavily to get estimates. A standard probit would use the binary dependent variables to estimate

⁷Since the probability that X_1 is one in the selected sample is known, I could also gather data about the distribution of X_1 in the rest of the population (individuals that did not select in) and combine these two to get the unconditional probability.

⁸One of the issues that is confronted in the simulations is how the size of this secondary sample affects the parameter estimates in the second-stage equation of interest, and the results suggest that as few as fifty to one hundred observations may be enough in this simple setting.

the coefficients, but since I have already calculated the left hand side of these two equations, parameter estimates can be obtained by directly solving for α and β :

$$\alpha = \Phi^{-1}(P(Y_1 = 1|X_1 = 0)) \quad (7.7)$$

$$\alpha + \beta = \Phi^{-1}(P(Y_1 = 1|X_1 = 1)) \quad (7.8)$$

$$\beta = \Phi^{-1}(P(Y_1 = 1|X_1 = 1)) - \Phi^{-1}(P(Y_1 = 1|X_1 = 0)). \quad (7.9)$$

Note that β is calculated by taking the difference between α in equation 7.7 and the sum $\alpha + \beta$ in equation 7.8. The generalization of X_1 to multi-valued indicator variables can be readily be seen here. Another estimate, this one of $\alpha + 2\beta$, would be calculated and the information would be used to get a better estimate of the true β . For example, $\hat{\beta}$ could be calculated by taking a convex combination of the two estimates.⁹

Once this has been accomplished, I can insert these estimates back in to equation 7.4 and, using the pseudo FIML approach, estimate the parameters for the second stage equation of interest.¹⁰ In the next section I estimate this model and show that it is much more useful empirically since it has much better convergence properties. This is accomplished by using the auxiliary data gathered to estimate the unconditional probabilities in equations 7.5 and 7.6, which are then used to estimate the parameters of the selection equation, and not through a sidestepping of the estimation problems encountered for equation 7.4.

7.4 Simulation Results

To examine the properties of the two stage procedure developed in the previous section, I conduct Monte Carlo simulations of all five parameters (the two regression coefficients in each of the two equations and ρ), varying the amount of correlation between the error terms and the secondary sample size used to estimate the first-stage parameters. The models that

⁹A topic of future research is to determine what the optimal estimate of $\hat{\beta}$ would be in this setting.

¹⁰One problem not yet accounted for is the overconfidence in the parameters of interest that results from not taking into account the error in estimating the selection equation. One possible solution is to resample these parameters and re-estimate the equation of interest to account for this error. Even better would be a way to employ both samples in a FIML estimation.

are generated are given by

$$Y_{1,i} = \begin{cases} 1 & \text{if } -1 + X_i + \epsilon_{1,i} > 0 \\ 0 & \text{otherwise;} \end{cases} \quad (7.10)$$

$$Y_{2,i} = \begin{cases} 1 & \text{if } 0 - W_i + \epsilon_{2,i} > 0 \\ 0 & \text{otherwise,} \end{cases} \quad (7.11)$$

where x is an indicator variable that takes on the value of one in sixteen percent of the total population and zero in the rest. The error terms are distributed bivariate normal with means zero, variances one and correlation ρ . The total population has ten thousand individuals and the secondary sample contains five hundred observations. The selection equation generates slightly less than a twenty-one percent response rate, leading to about two thousand one-hundred observations in the equation of interest, while the number of successes in the second-stage equation will depend on the value of ρ . The model is then estimated on the same data set with one hundred draws of the errors for each of the different parameter configurations.

Turning first to the nonparametric estimates of the first-stage selection equation's parameters, since they do not vary with ρ , and starting with five hundred observations in the secondary sample and $\rho = 0.5$, it is apparent that the model does a good job of estimating these parameters. Keeping in mind that the true value of α_1 is negative one and the true value of β_1 is one, Figure 7.1's first two graphs show kernel density plots of the estimated parameter values for the one hundred trials. The vertical line is placed at the true value of the parameters.

The intercept parameter is estimated very precisely, with almost all of the predicted values falling within 0.05 of the true value and the peak of the distribution at the true value, negative one. The slope parameter's density plot is much more diffuse, with most of its values lying within 0.25 of the truth. The modal value is still at one, though. One of the issues to be explored in these simulations is how small this secondary sample can be before the parameter estimates become extremely unreliable. The second two plots in figure 7.1 show the same graphs, but with each trial's estimates generated using only one hundred

observations in the secondary sample as opposed to the 500 used in the first two. Both α_1 and β_1 are still consistently estimated, but there is much more variance in the predicted values. The slope coefficient has a distinct skew towards the right, though not much of the weight is located in this tail. The mean estimate of β_1 is 1.13 with a standard deviation of 0.43. The intercept still has a tight distribution around the truth, with a mean estimate of -1.002 and a standard deviation of 0.03. Ten total simulations were run that decrease the secondary sample size from five hundred to fifty by increments of fifty. The resulting mean estimates and their standard deviations are shown in Table 7.2.

(Figure 7.1 here.)

As can be seen from the average parameter estimates, α_1 is estimated very accurately — with the mean never farther than 0.005 from the true value and a standard deviation that never exceeds 0.04. There is clearly no loss in information in this coefficient due to decreased sample size, even at fifty observations. The results for β_1 are not quite as strong, but the average estimate is never significantly different from the truth and only gets more than 0.04 away from the truth with sample sizes of one hundred and fifty. For the sample sizes greater than these, the standard deviation of these mean estimates is always below 0.3 and only reaches 0.43 for one hundred observations. This is encouraging because it means that resources can be expended to generate a high response rate in the primary sample since since as few as one hundred observations need to be gathered for the secondary sample.

(Figure 7.1 here.)

Of course, the quantities of interest are not the first-stage parameter estimates, but the second-stage ones. Table 7.3 displays the corresponding average values of the second-stage coefficients and ρ from the same simulation as the first-stage coefficients. The results are even more encouraging. Both α_2 and β_2 are very close to their true values at all sample sizes. The former never gets more than 0.03 away from zero and the latter never gets more than 0.022 from one. There is an increase in the standard errors of these averages with diminishing samples, though the effects are more pronounced for the slope coefficient. Going from the largest sample size of 500 to the smallest of 50 doubles the standard error for α_2 from 0.13 to 0.27. The corresponding change for β_2 also doubles the standard error, but this time from a smaller 0.05 to 0.09.

Similar results obtain for ρ . The average estimate is always within 0.016 of the truth, 0.5. The standard error of this average also doubles from its value at a sample size of 500, 0.08, to its value at a sample size of 50, 0.16, with over a third of this increase occurring with the change from 50 to 100. Thus there are no seriously detrimental effects for the second-stage coefficients resulting from reducing the amount of data to estimate the first-stage coefficients, an especially important result since these are the coefficients of interest.

(Table 7.3 here.)

Figure 7.2 shows the kernel density plots for these three variables when the auxiliary sample sizes are 500 and 100, with each variable shown over the same range of values. The top row shows that α_1 and ρ are the least precisely estimated variables, with all values falling within 0.5 of the truth, whereas the middle plot for β_2 shows that almost all of its values fall within 0.125 of the truth. The second row of graphs show similar results, although the range of the estimates is about twice as large. Still, the results do not show much loss of precision or increase in variation even when the auxiliary sample is only 100 observations.

(Figure 7.2 here.)

Another concern is the degree to which increased selection problems influence the estimates. Using the same parameter values I now estimate the log likelihood function in Equation 7.4 using the first-stage coefficients estimated as in Equations 7.7 and 7.9. For this simulation I hold the secondary sample size fixed at 500 and vary the amount of selection by letting ρ increase from zero to nine-tenths by increments of one-tenth.

First, focus on the first row of results in Table 7.4 where there is no selection, or $\rho = 0$. The coefficient best estimated in this case appears to be β_2 , with all of the trials producing values within 0.015 of the true value of negative one. The average value is -1.003 with a standard deviation of 0.04. This is encouraging since the slope estimate is the most important one for testing hypothesis about political behavior. The intercept coefficient, α_2 has a bit more spread, but all of the values are within 0.33 of the truth, zero, with a mean of -0.007 and a standard deviation of 0.125. The correlation between the error terms, which measures the degree of selection, is slightly better estimated, with all of its estimated values within 0.25 of the truth. The average estimate of ρ is 0.003 with a standard deviation of 0.095.

The next step is to see how the estimates vary as the degree of selection increases.

Table 7.4 shows how the parameter estimates are affected as ρ increases by increments of one-tenth, starting at zero. While there seems to be a slight decrease in the precision with which the slope coefficient is estimated, the standard deviation of the estimate across the one hundred trials only increases from 0.04 to 0.057 as ρ changes from zero to one-half, with no drift in the mean value. The same holds for α_2 , with a slight increase in the standard error from 0.12 to 0.14. The correlation parameter's mean is always within 0.013 of its true value and the standard deviation hovers just below 0.01. There do not seem to be any detrimental effects to the estimation as the amount of selection bias increases.

(Table 7.4 here.)

7.5 Applying the Correction

The true test of the model will be how well it works on real world data, so before I begin applying it to questions of interest group behavior in the next chapter, I will present an empirical example of its application to a related question: which interest groups are likely to be involved in initiatives? This is clearly an important component of how the initiative process influences interest group behavior. Groups that are likely to be involved in initiatives can tell us where the effect on mobilization and lobbying may be greatest. It should be kept in mind, however, that use of the initiative process is not necessary for it to influence certain group types. This exercise is also useful because in the course of estimating the use of initiative process model I will also be deriving the first stage coefficients that will be used in the next chapter.

7.5.1 Interest Group Use of the Initiative Process

An important question that has not been addressed in political science concerns which interest groups use the direct initiative process to try to achieve their policy goals. One of the primary reasons for the lack of attention is the data requirements: to understand what causes groups to use the initiative, we need to sample all groups that are possible candidates and observe which use it. Focusing just on groups that are involved in ballot campaigns

obviously does not introduce any variation in use, but even if this is combined with a sample of non-users, it still runs the risk of researcher-induced selection bias since it focuses only on groups whose campaigns have resulted in a successful initiative on the ballot.¹¹ What is needed is a random sample of all groups in a state and the knowledge of whether they tried to conduct an initiative campaign.

Obtaining a random sample of state interest groups is not a problem, since they are generally required to register with the state if they wish to lobby. Getting the data on which of them considered using the initiative process to their advantage is much harder since there may be no official records of their efforts until they reach a certain level of success, such as filing the official language of the ballot item or submitting signatures, so the best way to get this information is to use survey data such as that discussed in the previous chapter. Using this data runs the risk of introducing selection bias, however, since certain types of groups seem to have been more likely to respond than others.

7.5.2 Causes of Response

The important modeling step to be made is determining the causes of nonresponse. In this case, there is one strong difference between the set of groups that responded to the mail survey and those that were interviewed over the phone: groups that considered themselves to be businesses or corporations make up twelve percent of the mail responses and thirty-three percent of the phone responses.¹² Clearly businesses were unlikely to respond; possible reasons might be gleaned from the experience with the phone survey: businesses were more likely to refuse to respond outright, citing “company policy” in two cases, and they were also more likely to not know who to contact internally to respond to the questions, increasing the chances that the survey got lost in the shuffle. Since there is also evidence that professional associations were over-represented in the mail survey, I also include this as an explanatory

¹¹Focusing on groups whose have submitted signatures would be just as problematic.

¹²Another benefit of doing the dual sample survey is the information it provides about what the selection process might be through comparison of the responses to the two surveys.

variable in the response equation:

$$P(Y_{1,i} = 1|X) = P(\alpha_1 + \beta_1 * Business_i + \beta_2 * ProfAss_i + \epsilon_{1,i} \geq 0).$$

The application of the method requires computing this probability for groups that are neither businesses or professional associations and then for each of the two types of groups. The frequency of these types of organizations among the mail survey respondents and in the overall population is given in Table 7.5. These probabilities are then used according to equations 7.5 and 7.6, extended to the three parameter case in the response equation:

$$\begin{aligned} P(Y_1 = 1|Other) &= \frac{P(Other|Y_1 = 1)P(Y_1 = 1)}{P(Other)}, \\ P(Y_1 = 1|Business) &= \frac{P(Business|Y_1 = 1)P(Y_1 = 1)}{P(Business)}, \\ P(Y_1 = 1|ProfAss) &= \frac{P(ProfAss|Y_1 = 1)P(Y_1 = 1)}{P(ProfAss)}. \end{aligned}$$

Substituting the estimated probabilities in Table 7.5 produces the following probability estimates:

$$\begin{aligned} \hat{P}(Y_1 = 1|Other) &= 0.220, \\ \hat{P}(Y_1 = 1|Business) &= 0.065, \\ \hat{P}(Y_1 = 1|ProfAss) &= 0.340, \end{aligned}$$

the first of which is $\Phi(\alpha)$, the second of which is $\Phi(\alpha_1 + \beta_1)$ and the third of which is $\Phi(\alpha_1 + \beta_2)$. Inverting the cdf at the probability estimates and solving for the parameters of interest give the following values for the coefficients:

$$\begin{aligned} \hat{\alpha}_1 &= -0.772 \\ \hat{\beta}_1 &= -0.748 \\ \hat{\beta}_2 &= 0.358. \end{aligned}$$

These parameters are then inserted into the likelihood equation given in equation 7.4, where use of the initiative is assumed to depend on the type of group, the number of years the group has been in existence, the amount of revenue the groups has, the number of members in the group, the relative frequency of government lobbying by the group, the total number of groups involved in the current issue, and whether or not the group has an associated political action committee.

Because use of the initiative process requires a certain amount of capital, it is hard to say whether increased revenue will increase use. Wealthy groups may be advantaged in legislative lobbying, but in the case that it fails, they are well suited to use the initiative. Most likely this will be balanced out by the poorer groups who are more likely to be blocked in the legislature in the first place. Frequency of lobbying activity should have a similar effect: groups that are outside the traditional lobbying sphere may have a harder time getting things done there when they occasionally attempt to. Groups with greater membership should also find the initiative advantageous, so may be more likely to use it as well. Of course, if it serves as a threat to the legislature, the largest groups may not actually have to resort to the initiative, so the effect of this variable may be reduced. Finally, when more groups are involved on an issue, it may be harder to achieve resolution within the legislature, making initiatives more likely. The sheer number of groups will also increase the chances that one of them is dissatisfied with the outcome and has the wherewithal to propose an initiative.

7.5.3 Results

Using the parameter values for the first-stage selection equation I estimate the log likelihood in equation 7.4 to test the effect of the independent variables discussed in the previous section on the probability of initiative usage. I also estimate the model without accounting for the selection bias for comparison. The results of these analyses are presented in Table 7.6.¹³

(Table 7.6 here.)

The conclusions to be drawn from the two-stage results are relatively straightforward. Compared to businesses and corporations, trade and professional associations are signifi-

¹³To confront issues of item nonresponse, I also employed multiple imputation on the incomplete data set, which means that the results in Table 7.6 are the coefficients from this procedure (King et al. 2000).

cantly less likely to use the initiative process, but this is not the case for either government associations or other groups. Secondly, as more groups get involved in a particular issue, they become more likely to turn try to turn to the initiative process for resolution. Lastly, and in a result that one might not expect from looking only at initiatives that successfully made the ballot, as groups become wealthier they are significantly less likely to use the initiative process. Surprisingly, groups that have larger memberships are not more likely to try to use the initiative process. The measure of correlation between the errors in the response equation and the use-of-initiative equation, ρ , is estimated to be 0.31, but is not significantly different from zero.¹⁴ As is often the case in selection models, accounting for the selection does not always produce a significant estimate of this parameter, but it is still the correct way to proceed if one believes a selection process is at work.

Comparing these results to the naive probit results produces some important differences. Government associations now join trade and professional associations as significantly less likely to use the initiative process. The magnitude of the impact of the other two significant variables, group revenue and the number of groups involved, changes dramatically as well. Since the probit coefficients are not straightforward to interpret, I compute the predicted probability of using the initiative process for each of the underlying values of these two variables. In doing this, I set the other parameters to their mean or modal values, meaning that the predictions are for a business group that has been in existence for thirty-seven years, has between one hundred and two hundred fifty members, lobbies the government weekly and does not have a political action committee.

Once the difference in the coefficients is translated into a difference in probabilities, the interpretation of the effect of the underlying variables is altered. In the case of the number of groups involved in the current issue, shown in Figure 7.3, the probability of using the initiative goes from sixty-nine percent when there are no other groups involved to seventy-

¹⁴This variable is not significant due to its high standard error. I have employed different optimization routines and starting points to better understand why this and other variables have higher standard errors in the two-stage model compared to the naive probit. While there was some variation across routines, none produced a significant correlation. I believe part of the reason is the high correlation of the coefficients for ρ and the constant. On the positive side of the ledger, these different algorithms produced virtually identical parameters values. The large standard error may result from the fact that there is little variation in the first-stage index, as it only takes on three values. Future work can attempt to determine how sensitive ρ is to this variation.

four percent when there are more than fifty other groups involved, while the results from the two-stage selection correction method start at forty-eight percent and rise to eighty-six percent. Clearly the marginal impact of increasing the number of other groups involved is much greater when the selection process is accounted for, and the differences are significant at the lowest two values on the scale.¹⁵

(Figure 7.3 here.)

In the case of the coefficient on revenue, shown in Figure 7.4, the results are similar, but much more pronounced. Again, the naive probit results show a much smaller impact of changes in the underlying variable. The predicted probability of initiative use starts at seventy-four percent for a group with less than \$50,000 and drops slightly to sixty-seven percent for the same group with more than \$10,000,000. In the corrected probit, the probability starts a bit higher at eighty-one percent and then drops precipitously to thirty-one percent. The standard errors for these probabilities show that the differences are significant at the lowest and at the two highest categories of revenue. Again, the interpretation of the influence of the underlying variable is altered.

(Figure 7.4 here.)

7.6 Conclusions

This chapter has accomplished two goals. The first is to lay out the problems that selection bias can introduce when analyzing interest group response data and to develop a method which allows me to estimate the effect of the initiative process and related factors on interest group strategies. With this understanding and method in hand, I proceed to study how access to the initiative process filters into group populations beyond mere distributional shifts to act on the individual groups' behavior.

Second, and more practically, the chapter has provided an introduction to the application of the method, which eases the exposition in the next chapter. By applying the correction

¹⁵The standard errors on these predicted probabilities were generated separately by randomly drawing the coefficient of interest from a normal distribution (with the appropriate mean and variance), computing the predicted probability for each draw and then computing the mean probability and its standard error for each value of the independent variable.

to a related substantive problem, which interest groups are observed using the initiative process, I have constructed the parameters necessary for the correction. I demonstrate that applying the correction can influence the substantive conclusions made: in particular, the effect of group revenue and the number of other groups involved have a much larger marginal impact on the use of the initiative process than the naive probit indicates. I find that trade and professional groups are significantly less likely to turn to the initiative process.

There are two important considerations to keep in mind when considering the effectiveness of the correction. Given the nature of the survey data and the low response rate, it is likely that there is selection bias even though the analysis in this chapter finds no evidence in terms of a significant correlation between the two errors. Partly this may be due to the fact that only half of the data, totaling one hundred forty-eight observations, are used here (only groups in initiative states are eligible to use the initiative), but it may also be partly due to the econometric challenge of using rather limited data to separate out the two processes. The second consideration is theoretical rather than empirical: since there is reason to believe selection bias exists, it makes sense to correct for it. There is clearly evidence that the interpretation of key variables is highly influenced by accounting for the response process, so it would be unwise to ignore this in the following analysis.

In a more general sense, it should be noted that the method developed here has applicability beyond the current study it was developed for. Any analysis of limited dependent variable equations that may suffer from selection bias should find it of use. Besides offering a means of practically estimating the full information maximum likelihood model, it also offers the ability to more fully understand the selection process by implicitly gathering data about groups or individuals that do not respond and using it to develop a model that takes this process into account.

Table 7.1: Frequency of Failure to Converge for FIML Selection Equation

Trial Number	Iterations Until Failure
1	0
2	0
3	1
4	3
5	4
6	1
7	1
8	1
All Trials	1.38 (42% failure)

Trials done in GAUSS with 10,000 observations per trial, incrementing the seed by one after each failure. The parameter values are the same as those used for Tables 7.2 and 7.3, discussed in the text.

Table 7.2: Average First-Stage Coefficient Estimates, Varying Auxiliary Sample Size

Sample Size	α		β	
	Average	Standard Error	Average	Standard Error
500	-1.000	0.02	0.992	0.15
450	-1.000	0.02	1.012	0.16
400	-1.000	0.02	1.013	0.17
350	-1.000	0.02	1.013	0.19
300	-0.999	0.03	1.013	0.21
250	-0.999	0.03	1.032	0.27
200	-0.999	0.03	1.031	0.29
150	-0.997	0.03	1.022	0.29
100	-1.002	0.03	1.128	0.43
50	-1.004	0.04	1.291	0.83

Parameters estimated with 100 trials at the specified sample size, and with $\rho = 0.5$. Standard errors are for the estimated coefficients across the 100 trials.

Table 7.3: Average Second-Stage Coefficient Estimates, Varying Auxiliary Sample Size

Sample Size	α_2		β_2		ρ	
	Average	Standard Error	Average	Standard Error	Average	Standard Error
500	-0.017	0.13	-0.985	0.05	0.507	0.08
450	-0.005	0.13	-0.989	0.05	0.501	0.08
400	-0.006	0.14	-0.988	0.05	0.501	0.08
350	-0.009	0.15	-0.987	0.06	0.503	0.09
300	-0.014	0.16	-0.985	0.06	0.505	0.10
250	-0.010	0.17	-0.985	0.06	0.503	0.10
200	-0.013	0.18	-0.984	0.07	0.504	0.11
150	-0.027	0.20	-0.978	0.07	0.511	0.12
100	0.009	0.23	-0.987	0.08	0.491	0.13
50	0.019	0.27	-0.985	0.09	0.484	0.16

Parameters estimated with 100 trials at the specified sample size, and with $\rho = 0.5$. Standard errors are for the estimated coefficients across the 100 trials.

Table 7.4: Average Second-Stage Coefficient Estimates, Varying ρ

ρ	α_2		β_2		ρ	
	Average	Standard Error	Average	Standard Error	Average	Standard Error
0	-0.007	0.12	-1.003	0.04	0.003	0.10
0.1	0.003	0.12	-1.003	0.04	0.097	0.09
0.2	-0.009	0.12	-1.000	0.04	0.205	0.09
0.3	-0.018	0.12	-0.996	0.05	0.313	0.09
0.4	-0.013	0.13	-0.998	0.05	0.410	0.08
0.5	-0.006	0.14	-1.001	0.06	0.505	0.08

Parameters estimated with 100 trials at the specified sample size, and with the secondary sample size fixed at 500. Standard errors are for the estimated coefficients across the 100 trials.

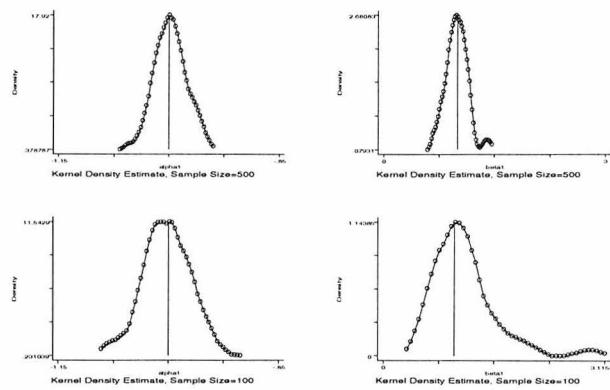


Figure 7.1: Kernel Density Plots of First-Stage Parameters, Varying Auxiliary Sample Size

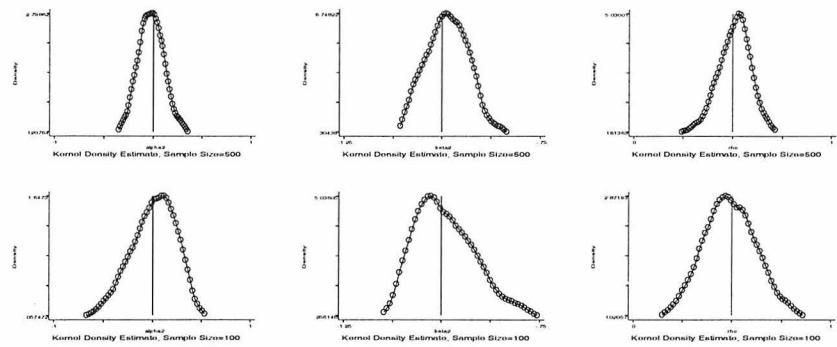


Figure 7.2: Kernel Density Plots of Second-Stage Parameters, Varying the Auxiliary Sample Size

Table 7.5: Frequencies of Groups Characteristics in the Two Samples

	Mail Respondents	Phone Respondents
Business or Corporation	0.12	0.33
Professional Association	0.15	0.08
All Others	0.73	0.60

Frequencies do not add to one due to rounding.

Table 7.6: Probit Analysis of Interest Groups' Use of the Initiative Process

	Two-stage	Probit
Trade/Professional Group	-1.245* (0.722)	-1.337** (0.513)
Government Association	-0.749 (1.122)	-0.971* (0.586)
Other Groups	-0.416 (0.999)	-0.626 (0.497)
Group Age	0.593 (0.606)	0.005 (0.005)
Yearly Revenue	-1.856** (0.823)	-0.276** (0.088)
Membership	0.653 (0.966)	0.021 (0.028)
Lobbying Frequency	-0.833 (0.623)	-0.147 (0.093)
Other Groups Involved	1.261* (0.662)	0.186** (0.083)
Political Action Committee	-0.543 (0.390)	-0.560 (0.375)
constant	0.006 (2.589)	0.638 (0.644)
ρ	0.308 (1.201)	— —
Average Log-likelihood		

N=148.

Standard errors in parentheses.

* Significantly different from zero at the 0.90 level.

** Significantly different from zero at the 0.95 level.

Coefficients reported are constructed using the AMELIA (Honaker et al. 2000) multiple imputation program for missing data and are averages of coefficients and standard errors across five imputed data sets. See King et al. (2000) for information on multiple imputation.

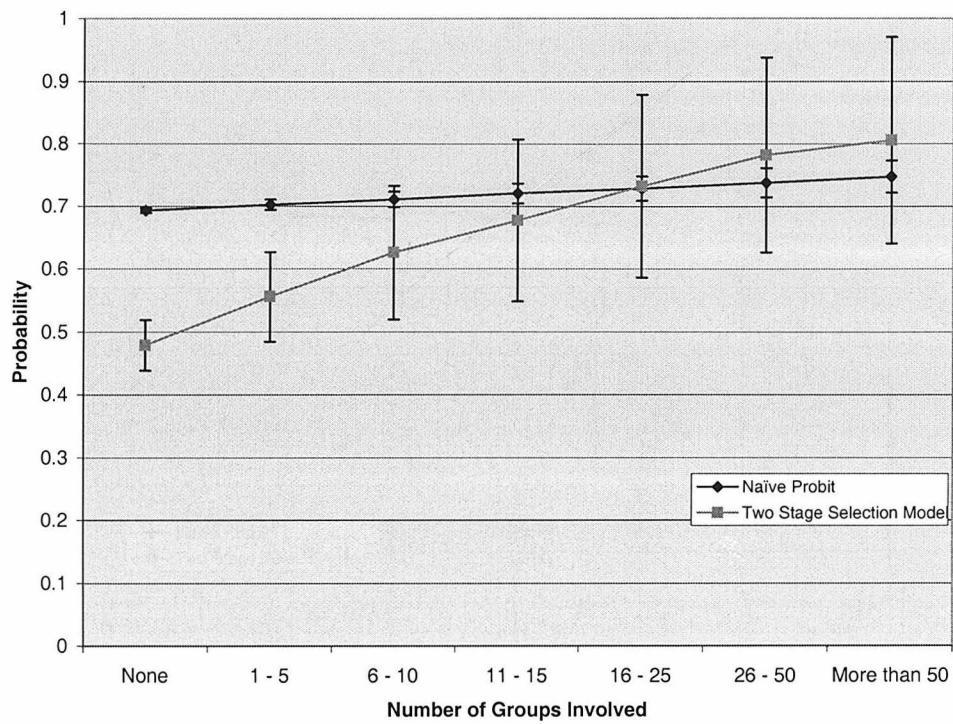


Figure 7.3: Interest Group Involvement and Probability of Initiative Use: Naive Probit Predictions versus Two-Stage Selection Model Predictions

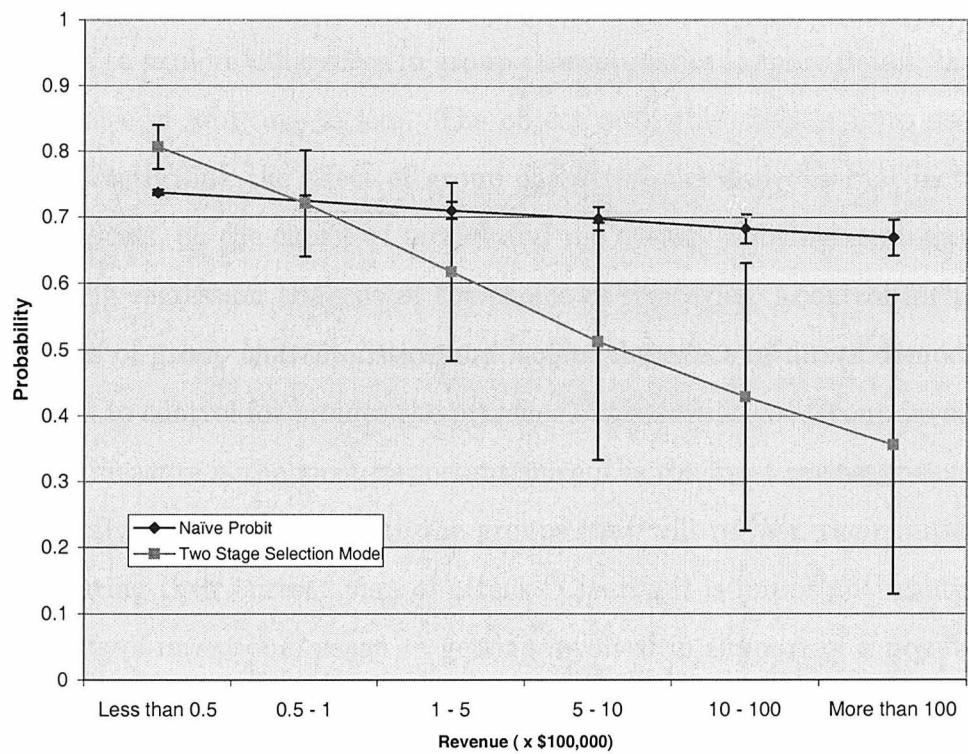


Figure 7.4: Interest Group Revenue and Probability of Initiative Use: Naïve Probit Predictions versus Two-Stage Selection Model Predictions

Chapter 8 The Choice of Lobbying Techniques

The final step in the study of the effect of the initiative process on interest groups is to examine how it influences their lobbying tactics and strategies. Chapter 5 shows that the initiative process leads to increased interest group mobilizations and that the initiative mobilized groups come from traditionally under-represented categories. Following that, Chapter 6 uses survey data to explore differences in group characteristics in more detail, then extended this to their choice of lobbying tactics. The objective of this chapter is to use my survey data to more directly link the effect of group characteristics and external factors, such as the initiative process, on the choice of tactics and the overall lobbying strategy.

By conducting regression analysis of the choice of strategies, I control for the distributional differences of group characteristics and isolate the effect of direct democracy. There are many factors to control for besides the presence of the initiative. Group involvement in a potential ballot measure is the most important since it is the most precise measure of which groups are directly affected. These are the groups that will rely on their initiative experiences in formulating their current plan of attack. Clearly, it is important to investigate the differential effects of intentional usage — getting involved in support of a possible initiative — and reactive involvement — groups that have been forced to respond to another group's possible usage.

This analysis also allows for a better determination of the validity of whether the threat of the initiative process can increase the ability of groups to inside lobby by making the legislature more responsive. Because the group has to pose a real threat at the ballot box, this may not work for all groups. Further, they have to actually use their leverage, or it cannot be observed. The analysis of group decisions using the survey data allows me to first determine the overall effect of the initiative on inside lobbying and then determine if it is heightened when proposal is more credible, or when interest groups have begun the process of generating an actual proposal.

To better determine the effect of the initiative on lobbying strategies, this chapter is or-

ganized into two main sections. The first examines the choice of particular lobbying tactics, such as contacting legislators or organizing protests. This allows me to fully examine the effect of the initiative. It is also important to distinguish between different lobbying strategies as well. A strategy is determined by the set of tactics employed by a particular group, so it reflects the overall pattern of lobbying better than any one tactic.¹ An exclusively outside lobbying strategy might consist of tactics such as organizing mail or phone campaigns, generating press releases and organizing protests, whereas an inside lobbying strategy would entail contacting legislators directly, testifying before committees and helping to draft legislation.

The different approaches for attempting to achieve influence have important implications for the process and outcomes of state politics. Inside lobbying allows groups to work with legislators and make their case in detail over an extended period of time, creating opportunities for compromise. Outside lobbying essentially amounts to creating a public hue and cry about the issue, making it harder to focus on detailed specifics of possible policies. Outside lobbying can also be used by groups who need to, in essence, advertise their position and activity for their membership and to attract new supporters.²

According to the initiative theory of mobilization, interest groups that form due to the added incentives provided by direct democracy are more likely to depend on the outside lobbying strategies that are required to run ballot campaigns. If, as Gais and Walker (1991) argue, it is difficult for groups to change the direction of their lobbying strategies once they have become active, then groups in initiative states will rely on outside strategies disproportionately more than groups in non-initiative states. Since this influences the dynamic of political discourse, initiative states may differ on how they aggregate all these concerns into policy outcomes and who the policy outcomes favor.

To study how the initiative influences outside lobbying relative to inside lobbying, the second section performs factor analysis to isolate patterns of lobbying. Ultimately, this isolates the effect of the possibility and involvement with the initiative process on interest group lobbying strategies. I also study the effect of other variables on groups' choice of

¹This division of tactics and strategies follows Gais and Walker (1991).

²This is an interpretation of Gais and Walker's (1991) discussion of membership and group lobbying strategies.

inside or outside lobbying strategies, including the level of conflict they face, membership and financial resources and organizational characteristics.

This chapter contains several significant findings for our understanding of interest groups. First, it is very important to account for institutional context when explaining interest group activities, at least at the state level. The presence of the initiative process is an important determinant for the use of particular lobbying tactics. Involvement in potential initiatives is also important in determining the tactics used. The differences also carry over when considering the general lobbying strategies — combinations of tactics — that groups use; while the presence of the initiative process decreases the importance of inside lobbying, groups involved in potential initiatives use it more. Groups opposed to specific initiatives use whatever advantage they can, whether it be inside or outside lobbying.

Second, the factor analysis also leads to important findings. Rather than demonstrating the traditional inside/outside lobbying dichotomy, it suggests this dichotomy is in need of modification. Outside lobbying is still an important strategy, as is inside lobbying, but the latter seems to have expanded to include select elements of outside lobbying. This follows recent work on when interest groups can use outside lobbying to their advantage (Kollman 1998, Wilson 2000) and suggests the development of a modernized inside lobbying. There is also evidence that a third type of lobbying strategy is emerging, which seems to comport with the rise of issue entrepreneurs.

8.1 Determinants of Specific Lobbying Techniques

Chapter 6 shows that group characteristics differ as expected in initiative states relative to non-initiative states. These differences also translate into different lobbying techniques, with initiative involvement producing a dramatic increase in the number of strategies used, especially among outside techniques. To test the hypotheses about the role of the initiative process in shaping groups' lobbying techniques, I include four variables. The first thing to control for is current involvement in an initiative, which is the case for one-third of initiative

state groups, since that should have a direct impact on strategic choice.³ Groups currently involved in initiatives are likely to cite outside lobbying strategies as important, but it may be the case that the threat of an initiative will also increase their ability to inside lobby. Groups opposed to initiatives have been more successful in defending their turf through the legislature and so may also indicate a greater importance for inside strategies, but since they are currently fighting a ballot proposal they may adopt the requisite outside techniques, as the previous chapter indicated. The literature also suggests that groups opposed to initiatives tend to defeat them with large spending campaigns (Gerber 1999); even while many of these initiatives have not reached the ballot yet, these groups may resort to the more expensive strategies like advertising.

The third variable included measures the role of access to the initiative process independent of current involvement. If different types of groups mobilize then merely being active in an initiative states should lead groups to utilize different strategies. This should be the case not only because of the different set of skills that is rewarded in initiative states, but because groups that focus on initiatives hone these skills and are more likely to turn to them even when inside lobbying. Since it is likely that successful groups will eventually become more effective at inside lobbying as they make connections and develop as a group, I interact the years of existence for a group with the initiative indicator to see if younger groups look lobby differently by relying on familiar techniques. This also captures any attrition effects among initiative-oriented groups who may have a more difficult time staying organized when there is not a relevant issue on the ballot to coordinate them. As Gais and Walker (1991) point out, though, it may be difficult for groups to switch gears and use new lobbying strategies, so the primary effect may arise from attrition rather than learning. To truly sort out these two processes would require data on groups over time rather than in just one time period.

8.1.1 A Summary of the Results for All Twenty Strategies

Since there are twenty regressions containing thirteen variables to present, I summarize the overall findings and then focus in on two particular strategies: contacting agencies and

³This is likely a slight overestimate of the percentage of groups involved in initiatives since they were encouraged to use that as their issue if they were involved in one recently.

organizing mail or phone campaigns. Across all the categories, by far the most consistent finding is, as Nownes and Freeman (1998) noted, groups that are involved consider a wide variety of strategies important. In sixteen of the nineteen equations, a decrease in lobbying frequency is associated with a decrease in the importance of that strategy.⁴ It does not seem that groups that are less active emphasize different tactics when they decide to contact government officials or affect policy.

Revenue, surprisingly, does not affect strategies very much. Wealthier groups tend to consider research and drafting legislation less important and paid advertisements as more important.⁵ Groups with more members are more likely to cite public opinion work, mail or phone campaigns, and mobilizing members as more important and contacting legislators is less important. Longer involvement with a particular issue leads to an increase in the importance of litigation, campaign contributions, and contacting agencies while longer group existence is associated with greater importance for monitoring policy, and a decrease in the importance of litigation, paid advertisements, contacting agencies, and electioneering.

Turning to the different types of organizations, with businesses and corporations as the omitted category, all four group types are more likely to cite mail and phone campaigns as important and all but government associations responded that policy research and litigation are less important. The categories of contacting legislators, issuing press releases, testifying before committees, mobilizing members, responding to requests for information, discussing policy implications, and electioneering show no variation in response by the different groups.

The strategic environment also has an important influence on groups' strategies. When the number of groups involved is associated with a significant effect, the importance of the influenced variable is increased by it. The particular areas of increase are policy research, mobilizing members, public opinion work, monitoring policy and election work.

Examining the tests of the various hypotheses put forth leads to confirmation in most cases. Groups in initiative states are less likely to cite mobilizing members, having influential

⁴There are only nineteen categories at the moment since being a business is a perfect predictor of not organizing protests or demonstrations. For the purpose of hypotheses testing, I use the ten percent level of significance for a two-tailed test in this portion of the paper.

⁵Again, the number of strategies that meet some minimum importance threshold might be influenced more by revenue than the importance of any one particular strategy.

citizens contact, contacting agencies and electioneering as important. As a measure of the size of the effect I compute the average change in the predicted probability of responding with an importance of five resulting from changing the underlying variable to zero. This is similar to a first-differences calculation where the difference between the probabilities of the dependent variable being a one is calculated for a representative individual. The largest effect of having the initiative is a twenty-five percent increase for contacting agencies. The only activity groups claim is more important is seeking elected officials' endorsements. So it appears that groups in initiative states find most strategies less important, especially strategies that involve direct connections to people or policy-making.

I also expect that these discrepancies will be magnified among younger groups since they are more likely to have been drawn in by initiatives (which is also happening at an increasing rate) and not have left yet. In three of the four cases where groups in initiative states are significantly less active, there is also a positive and significant effect of age. So as groups in Oregon and Arizona become more mature and decide to stay involved in policy, the interinstitutional differences in tactics decline. The one exception is mobilizing members, which may be evidence of learning in initiative states: the threat of an initiative is likely greater when larger numbers of voters indicate support. The magnitude of the three effects range from 1.7 percent more likely to indicate five for mobilizing members, 8.5 percent less likely for having citizens contact and 10.5 percent less likely for contacting agencies. These counterfactual choice probability differences are summarized in Table 8.1.

Insert Table 8.1 here

Interestingly enough, three of these four strategies — litigation, contacting agencies, and electioneering — are generally considered less important with age in the population overall. As groups enter in initiative states they emphasize different tactics, since they are a different type of group. Over time, or at least among the older groups, they either disappear or assimilate into the general population and behave more like interest groups in non-initiative states. If this trend holds up over time, as the number of groups mobilized by initiatives increases with the rise in its use, the effect on direct democracy states could be quite noticeable.

Initiative involvement also influences groups in the way expected. They are significantly

more likely to claim many of the outside strategies as important, in particular policy research, press releases, paid advertisements, responding to requests for information, monitoring public opinion, mail or phone campaigns and election campaigning. None of the strategies are indicated to be less important. As might be expected, groups opposed to initiatives are also more likely to use paid advertisements, monitor public opinion and conduct mail or phone campaigns. They are also less likely to find drafting legislation as important (perhaps this is by definition).

The comparative static evaluation shows that, for the categories mentioned above, removing their involvement for an initiative would lead to a decrease in the probability of responding five of almost 22 percent for mail/phone campaigns, 7.5 percent for monitoring policy and 5.5 percent for paid advertisements with the others between 10 and 15 percent, except for election campaigning, which would increase by a little over 1 percent. For the groups against initiatives, the effect is much larger, with a decrease of about 30 percent for both mail or phone campaigns and paid advertisements and 17 percent for public opinion work. There would also be an increase of 25 percent in the probability of choosing five for drafting legislation.⁶

The same holds for the interaction of the initiative with group age. Again, none of the strategies is seen as more or less important by older groups in initiative states. For groups involved for initiatives, three more significant findings are added to the previous four (which are important in both weighting schemes), while for groups opposed to initiatives, four more findings are added to the previous two, one of which becomes marginally insignificant. To see this in greater detail and to highlight the influence of the independent variables on lobbying technique I now focus on two cases representing inside and outside lobbying techniques.

⁶It is also worth mentioning the impact of the weighting scheme on these findings since it is considerable. The auxiliary information used in the weighting scheme leads to many of the discoveries. I reran all of the equations assuming that the distribution of responses accurately reflected the true distribution in the population. The conclusions for most of the variables remain the same, but the exceptions tended to be in the areas most useful for testing the hypotheses. Without the weight correction, none of the strategies is significantly influenced by the possibility of using the initiative process. This would have lead to a null finding on its indirect effect.

8.1.2 A Detailed Analysis of Two Cases

To examine the causes of lobbying techniques in greater detail I now present the results for contacting agencies and organizing mail or phone campaigns. These categories represent inside and outside lobbying strategies and provide an excellent opportunity to examine the many roles of the initiative process. If groups want to use the initiative process effectively to pressure legislators then they need to be able to use voter support to their advantage, so mail or phone campaigns should be more prevalent among groups involved in initiatives and possibly even among the rest of the groups in these states. Contacting agencies is a decidedly inside strategy that groups in initiative states should rely on less.

Examining the coefficients in Table 8.2 it is apparent that the initiative process is crucial in understanding a group's lobbying choices. Looking at the coefficients for contacting agencies, given in the first column, reveals that groups in initiative states are significantly less likely to cite this as an important strategy, but that this effect disappears over time, evidenced by the positive coefficient on the initiative interacted with a group's age. This then also supports the hypothesis that, over time, groups assimilate into more traditional legislative politics and look more like groups in non-initiative states. Strangely, groups in non-initiative states indicate that contacting agencies is less important among older groups. The size of the shift in initiative states is sufficiently large, though, that two groups started in the same year would have to stick around for six decades to cross each other on this effect.

Insert Table 8.2 here

The importance of being a group in an initiative state outranks all of the organization type categories, though they are important as well. Being a trade or professional group, a government association, or groups in the other category makes it more likely that contacting agencies is an important strategy, compared to business groups. The first two coefficients are significant at the five percent level, while the latter is significant at the ten percent level. The other variable that achieves significance is the number of years that groups have been involved in an issue. As groups spend more time in one issue area they become, unsurprisingly, more likely to claim that contacting agencies is an important strategic component in their current policy involvement on that issue. This is the direction that theories of agency capture would

suggest.

The variables that are crucial in determining the importance of mail or phone campaigns are different than those for contacting agencies, except the group type variables. All four of the categories give significantly different responses than business groups with all but the other types claiming this strategy was more important. Business groups would have a hard time persuading legislators that large campaigns of this type were anything more than expensive “astroturf” lobbying (Kollman 1998). In the same vein, groups with larger memberships are more likely to use this to their advantage and are significantly more likely to claim that mail or phone campaigns are important. Groups that lobbied less often during the recent year are significantly less likely to use this outside strategy.

Here, the importance of the initiative process rests in its use: groups involved in initiative campaigns, both for or against, are significantly more likely, at the ten percent level, to organize mail or phone campaigns. While being in an initiative state does not produce a significant change in the response, the impact of involvement is substantively large: groups involved for initiatives are fourteen percent more likely to answer five on the five point scale while groups opposing them are thirty-two percent more likely (from Table 8.1).

To see these differences more clearly, I take parameter values for a representative group and calculate the probability that groups of different ages would select five on the importance scale for each of the two strategies. I then vary the presence of the initiative and involvement and show the counterfactual probabilities in Figure 8.1 and Figure 8.2. First, add just the possibility of an initiative to a group’s strategy set: this produces no statistically distinguishable effect for the importance of mail or phone campaigns, but it does for contacting agencies. The latter difference is most pronounced among younger groups and then disappears as the lines cross for groups that are sixty years old. Initiative state groups have a relatively constant probability of responding five at all ages — around thirty percent — while non-initiative state groups start out at fifty-five percent and drop to half of this in seventy-five years.

Insert Figure 8.1 here

Insert Figure 8.2 here

Looking next at how initiative involvement affects this probability, Figure 8.1 shows that

young groups go from a sixty percent to a seventy-seven percent probability of indicating five for mail or phone campaigns when they support initiatives. These probabilities are statistically invariant to group age, so there is no selection or learning over time. They increase all the way to a ninety percent probability when opposing initiatives. Both of these increases are statistically significant. While we see changes of similar magnitude for the contacting agencies responses in Figure 8.2, they are not statistically significant for initiative involvement, though the fact that groups involved in initiatives are more likely and those opposed less likely than those not involved demonstrates the overall pattern of activity for these types of groups. Groups opposed to initiatives do not consider any inside tactics important and groups supporting them find almost all of them important.

The findings from these two different types of strategies, coupled with those for the other seventeen, analyzed in the previous section, support all of the different hypotheses put forth about the role of the initiative in shaping group strategies and reveal that these differences are not merely distributional effects, but more fundamental shifts in how groups attempt to influence policy. Clearly the most important effect is involvement in an initiative campaign, which makes groups more active in areas that are relevant to successful initiative campaigns: policy research, press releases, paid advertisements and mail or phone campaigns are among those categories that are more important among these groups. Those opposed experience similar, but more dramatic strategic shifts. These groups are much more likely to use expensive outside techniques like paid advertisements and mail or phone campaigns to slow their opponents' progress.

8.2 Interest Group Lobbying Strategies

After examining the influence of the initiative process on interest groups' reliance on particular lobbying activities, the next step is to study how it influences their overall strategies. Besides providing a more succinct description of the differences between interest groups in different states, it also allows me to determine how pervasive these differences are. By using factor analysis to generate scores on different lobbying strategies, I assess whether institutional differences aggregate beyond particular lobbying activities to groups' overall lobbying

approaches.

The inside/outside dichotomy is relatively recent, but different types of lobbying strategies have been discussed before. The early focus in the interest group literature was on groups' ability to work within iron triangles, where the use of inside strategies was the preferred tactic. There was also some attention to the use of outside lobbying, where groups try to pressure legislators to act or vote a certain way by demonstrating the existence of broader public support, but a real division of lobbying into inside and outside strategies has been a more recent development. Gais and Walker (1991) conduct factor analysis on survey data of Washington D.C. based interest groups and find that their eight strategies are best explained by two dimensions: one composed of legislative lobbying, administrative lobbying, litigation and electioneering; the other including working with the mass media, protests or demonstrations, providing speakers and sponsoring lay conferences. They conclude that "organizations tend to choose strategies that are compatible with their organizational form (p. 117)." In particular, citizen groups and decentralized groups are more likely to utilize outside strategies.

Recent work has brought even more attention to this dichotomy and the factors that influence which direction a group will take. Building on Gais and Walker's (1991) finding that groups involved in greater levels of conflict are more likely to supplement their inside lobbying activities with outside lobbying, Kollman conducts in-depth interviews with groups in specific policy areas to better understand the outside lobbying choice. He finds that groups will go outside primarily to expand the conflict arena, especially at the agenda setting stage or before prominent votes. These groups generally need certain minimum amounts of favorable public opinion to do this, but there is increasing evidence of false grassroots campaigns — "astroturf" lobbying — conducted by groups to signal non-existent support among constituents to legislators.

Both of these studies use data on Washington D.C. based groups, so an important question is whether outside lobbying has spread to groups at the state level and how the initiative process influences it. One study that has examined interest group lobbying activity at the state level was conducted by Nownes and Freeman and concludes that "group politics in the states is now similar to group politics in Washington (p. 109)." Because this implies that

traditional inside groups are increasingly using outside techniques and vice-versa, they conclude that “the ‘inside/outside’ lobbying dichotomy should be rethought: ...the line between ‘inside’ and ‘outside’ is hazy at best (p. 102).”

Part of this conclusion seems valid: professional and business groups are increasingly using outside lobbying to their advantage, “astroturf” or not. On the other hand, it seems premature to conclude that the distinction is of little use. One factor that may cause its apparent decline in their data is the coarse measure that they employ: groups are merely asked whether they engaged in a host of activities. The current data, by asking for responses across a five point scale, allow for a finer view of group activities.

8.2.1 A New Typology of Lobbying Strategies

To investigate the current validity of the inside/outside dichotomy, I follow Gais and Walker’s lead and construct factor scores from the groups’ responses to the twenty lobbying activities on the survey. These lobbying tactics are designed to elicit information about inside strategies, such as contacting legislators, agencies, or committees, and outside lobbying strategies such as organizing protests or letter and phone campaigns. The responses are on a five point scale where a one indicates that the strategy was not considered important and a five indicates that the group considered it to be very important. The number of responses varies from two hundred and seventy-five for election campaigning to two hundred and ninety for contacting legislators. The latent dimensions were computed using principle components and the observations were weighted to reflect the true sample distribution of groups using the information gained in the secondary sample.

The results of this analysis are quite interesting. While the two most important factors fall along the previous inside/outside division, there is evidence that some modification is indeed in order. Table 8.3 shows the loadings of each of the lobbying activities on the retained factors. The first difference of interest is the presence of three factors: the first two appear to be a modified inside lobbying dimension followed by an outside lobbying dimension while the third is in an interesting area between them. This third dimension seems to represent a growing trend in state politics: the rise of issue entrepreneurs.

Insert Table 8.3 here**Modern Inside Lobbying: Professionalized Group Strategies**

The first dimension has high loadings for all the traditional inside lobbying techniques: contacting legislators, doing policy research, contacting agency officials, testifying before committees, responding to requests for information, having influential citizens contact policymakers, monitoring policy, building support among groups of legislators, and seeking public endorsements. Clearly these are groups that have strong ties to the legislature and are able to work within it to further their policy goals. As Nownes and Freeman suggest, though, these groups are also spreading out into some outside techniques. Activities that also load high on this dimension include press releases, mobilizing members, public opinion information, and organizing mail and phone campaigns.

There is strong evidence, then, that traditional groups have taken advantage of some aspects of outside lobbying and have incorporated it into their bag of tricks. It is no longer sufficient to stick with the old methods of inside lobbying; groups have been forced, or have decided, to go outside as a regular part of their lobbying strategies.

Traditional Outside Lobbying

The second dimension indicates that there is still a large set of groups that utilize traditional outside lobbying strategies. These are groups that may have trouble accessing the legislature and are forced to use their comparative advantages in organizing protests and other tactics to further their goals. This dimension has high loadings for activities such as campaign contributions, paid advertisements, organizing mail and phone campaigns, election campaigning, and organizing protests. It also has reasonably high loadings for public opinion and litigation.

Unlike the first dimension, there are many factors with strong negative loadings for the outside dimension. As might be expected they are all inside tactics: contacting legislators, testifying before committees, responding to requests for information, drafting legislation, contacting agency officials, and building support among groups of legislators. These are

all activities that loaded high on the first dimension, so the clearest demarcation between these two dimensions is that the second relates to groups that cannot get access for some reason. Groups that are excluded from policy decision makers do their best to utilize a host of outside lobbying techniques. The inside/outside dichotomy is not dead, as Nownes and Freeman have suggested, it is just that the inside groups have expanded their repertoire while the outside groups have not been able to: going outside may be easier than getting inside.

The Issue Entrepreneur

While previous studies have focused on the existence of only two dimensions that explain the choice of lobbying activities, the data gathered for this study indicate that there may be a third dimension emerging. The fact that it seems to fit with some recent developments in state politics suggests that it may not have been detected in previous studies for three reasons: times have changed in the last decade, state politics, rather than Washington politics, provides the right environment or researchers did not look for it.⁷

This third dimension, while less important overall than the first two, produces a pattern which is interpretable and important in the context of state politics. It loads high on some factors in common with the inside dimension: contacting legislators, seeking endorsements, and building support among groups of legislators. On other strategies it looks similar to the outside lobbying dimension: large and negative on policy research, responding to requests for information, drafting legislation, seeking officials' endorsements, and building support among groups of legislators. On still other tactics, it has distinct loadings: positive on litigation, press releases, and having influential citizens contact; large and negative on mobilizing members and pointing out other important policy implications. It fails to load at all on contacting committees, campaign contributions, contacting agencies, public opinion, election work, and protests.

This pattern suggests a type of group that has some connections, but not a large constituency to back it up. It also suggests that the group is focused on a single issue, scoring low on other policy implications and monitoring policy. The combination of these considerations

⁷On the latter point, Gais and Walker state that they assumed there were only two dimensions: inside and outside lobbying (p. 110).

suggests that these are single issue entrepreneurs using their connections and resources to influence policy. These single issue groups could be non-legislative government actors pursuing their goals or individual policy entrepreneurs. Recent work has discussed the role of the latter in state politics. Mintrom's work on policy entrepreneurs' effect on states' adoptions of new education policies show how they can influence policy outcomes (Mintrom 1997). Inspection of the groups that score high on the factor, but not on the other two indicate that these are indeed non-commercial groups that are single issue oriented. If indeed there is a new type of lobbying strategy emerging then it could engender a shift in whose voices are heard by legislators.

8.2.2 Determinants of Strategies

After determining the existence of these three different types of lobbying strategies: modern inside, excluded outside and issue entrepreneur, the next step is assess which group characteristics and external factors influence their usage. Groups that have access to resources and contacts will tend to utilize inside techniques most of the time, whereas newer, broad-based membership groups may have to operate on the outside without access. The initiative process should also have an effect on which strategy is chosen.

Because of the threat to the legislature that initiative process poses, groups in initiative states may find the legislature more responsive to their inside lobbying activities when they choose to go inside and bargain rather than propose an initiative. The difficult task was to determine the net effect: some groups will propose initiative and some will use them as leverage, but the final effect in initiative states will depend on how many fall into each category.

The initiative theory of mobilization suggests that groups that mobilize because of particular initiative campaigns are more likely to use their experience in the campaign to inform their future patterns of lobbying. This means that, even controlling for group-specific attributes such as total membership, groups in initiative states are more likely to score high on the outside lobbying dimension. The presence of the initiative process may also increase groups' score on the issue entrepreneur scale, since the initiative process may increase the

number of these small, issue-oriented groups.

Other important factors to control for include both group-specific ones and external ones. The first category includes resources such as revenue, which should be useful for inside lobbying and entrepreneurs, but less important for outside lobbying.⁸ Membership is clearly important for outside lobbying and should have a positive effect there, but may also increase the use of modern inside lobbying. By definition, however, issue entrepreneurs are likely to not have a large membership, so it should have a negative impact there.

Another important group characteristic is the age of the group and the number of years it has been involved on a particular issue. Older groups may be more likely to have achieved access to legislators and have built up political capital and know-how over time, leading them to rely more on inside lobbying than outside lobbying. As relative newcomers on a focused issue, the issue entrepreneur scale may not be influenced much by group age as these groups may come and go when their interest is peaked. The number of years that a group has had on a particular issue should produce a similar effect as groups accumulate knowledge about a particular issue area.

Besides the initiative process, the other external group factor is how many other groups are simultaneously involved with the same issue. One of the reasons that groups may choose to go outside is to signal public support for their position (Kollman 1998), but the incentive depends on the presence and type of other groups involved (Wilson 2000). This suggests that groups will be more likely to go outside as the number of groups involved increases. As Kollman (1998) and Nownes and Freeman (1998) have found, traditional inside groups have been forced to expand their political repertoire so that they can use whatever tactics are available to pressure legislators at key moments in the policy making process. How this variable might influence the use of the entrepreneurial strategy is less clear, though their lack of attention to broader issues and circumstances may lead them to be involved on issues with narrower appeal, implying a possibly negative effect.

One possible consequence of initiative mobilizations is that younger groups have a harder

⁸Clearly, some forms of outside lobbying do require revenue, but groups that possessed large amounts of revenue would likely not use the exclusively outside strategy, but rather would use the modern inside strategy.

time maintaining their political structure and may be more susceptible to breaking up once the coordinating effect of an initiative fades. This means that groups in initiatives states may begin to behave more like groups in non-initiative states as they get older. In particular, the use of the inside lobbying strategy may increase over time as groups assimilate into modern inside lobbying strategies. They may also forgo the outside lobbying strategy if their initiative experience gains them credibility, but they may also rely on it more due to positive experience there, especially since groups that survive for many years may have been successful.⁹

8.2.3 The Effect of the Initiative

Considering first the effect of the initiative process on interest group strategies, the results in Table 8.5 show that the presence of the initiative process has an important effect on both inside and outside lobbying dimensions, but not on the issue entrepreneur dimension.¹⁰ For the outside lobbying dimension, groups in initiative states score significantly higher than those in non-initiative states and the coefficient is significant at any reasonable level. Turning to the inside lobbying technique, the effect of the initiative process is still significant, but is now negative: groups in initiative states use the inside lobbying strategy less than those in non-initiative states. The negative sign indicates that the net effect of the initiative on inside lobbying is negative and is not outweighed by the gain in leverage that the initiative provides.

Insert Table 8.5 here

Examining the group-specific characteristics, these follow familiar patterns for the most part as well. Groups with greater membership are more likely to use the inside lobbying strategy and the outside lobbying strategy. The latter is significant at the five percent level,

⁹Of course, it is difficult to ascertain whether these differences result from an aging process, or are the product of the political environment older groups were founded in.

¹⁰The regression results reported are calculated using multiple imputation to account for item nonresponse on the part of groups. The multiple imputation was implemented in Amelia (King et al. 1999) after calculating the factor scores for groups on which data are available and then imputing those that could not be directly calculated (due to missing observations for at least one of the twenty activities) since it is recommended that all transformations should be carried out before imputation (King et al. 1999). The regressions were also weighted to make the responses reflect the sampling distribution — see Appendix D for calculation of these weights.

but the former narrowly misses achieving significance at the ten percent level. That membership comes even close to increasing the use of the inside lobbying technique is evidence that times seem to have changed for inside lobbying. The effects are of almost identical magnitude, though slightly smaller than the effect of the initiative indicator. Also as expected, there is a negative effect of membership on the entrepreneurial strategy, but this also barely misses the ten percent level of significance.

Revenue is expected to have opposite influences in all but the inside strategy and this is somewhat confirmed by the regression analysis. For all three strategies, the effect of increasing revenue is negative, but only the entrepreneur dimension has anything near a significant effect. Both the length of involvement on the current issue and a group's age are insignificant in all three of the regressions, indicating little evolution of strategies over time or involvement, even though there is evidence for the evolution of particular lobbying techniques over time in the previous section. The specific organizational type indicators also are generally insignificant with one notable exception: labor groups are much more likely to score high on the outside lobbying dimension.

The final variable accounts for the strategic context that a group finds itself in by controlling for the number of groups involved in the current debate. As more groups get involved, there should be a tendency to expand the stage of conflict to outside lobbying and to more intense efforts in general. This is strongly confirmed in the data. The scores on both the modern inside and outside lobbying strategies are greatly increased as more groups become active. The effect is twice as large for the inside dimension as the outside dimension and the coefficients are significant at the five percent and ten percent level, respectively. This means that groups that utilize traditional inside lobbying techniques may have learned to supplement them with specific outside lobbying techniques when faced with increasing competition, creating the modern inside lobbying group. For the issue entrepreneurs, there is a slightly smaller, negative effect of more groups, but it is not significant.

Consideration of Initiative Involvement

The first set of regressions demonstrated the effect that the possibility of the initiative process has on interest group's utilization of the three lobbying strategies. Some of the strategies, though, are likely to be influenced by groups' current involvement in a potential initiative campaign. By controlling for whether groups were currently supporting or opposing a particular, potential initiative, I can better determine the effect on the use of the three strategies. Specifically, while the overall effect of the ability to propose an initiative is negative for the inside strategy, involvement in an initiative may increase the salience of the threat of proposal, thereby allowing the group leverage for inside lobbying tactics.

To determine how initiative involvement influences its effect, I re-run the regressions from Table 8.5, but add variables which indicate whether a group was currently supporting or opposing a potential initiative. Both of these should lead to an increased use of outside lobbying techniques, possibly more so among groups opposing initiatives, since their modus operandi is to defeat them with large sums of money (Gerber 1999). It also would be the case that if groups use the initiative as leverage against the legislature support for an initiative should increase the effectiveness of inside lobbying strategies. While groups opposing initiatives may have come into the game a bit late and not be able to use the initiative as leverage, if opposition comes primarily for groups that are defending a satisfactory status quo, then perhaps it was achieved through their own successful efforts.¹¹ This implies that they may be successful at inside lobbying and might try to pressure the legislature to help them out.¹²

I also test to see if there is an assimilation process among groups in initiative states by interacting the logarithm of a group's age with the initiative indicator. If initiative mobilization draws in traditionally underrepresented groups, then as time passes they may behave more like non-initiative groups, either through attrition of those unable to adapt or through learning and expansion of their strategies. There is also a possibility that groups that are successful with the initiative process may actually rely more on outside strategies

¹¹The survey data also indicate that all of the groups opposing initiatives are businesses or corporations, who are the quintessential inside lobbiers.

¹²It should be remembered that most of these possible initiatives have not reached the ballot, so there is ample reason to work with the legislature to achieve at least a compromise.

since they have been successful in the past. This would lead to an increase in the outside lobbying dimension and a decrease, or at least no change, in the inside lobbying one, but the results from the analysis of individual tactics do not suggest a clear pattern.

The results of this analysis, shown in Table 8.6 are virtually identical to the previous ones, with most of the change occurring in the initiative and involvement variables. Increased lobbying frequency still leads to a significant decrease in the inside dimension and an increase in the outside dimension. Being involved in an issue with more groups still leads to a significant increase in both strategies, though the effect on the outside dimension is now significant at only the ten percent level. The primary difference is that increased membership is no longer associated with an increase in the modern inside lobbying score. It still significantly increases the use of the outside lobbying strategy, but it also now significantly decreases the use of the issue entrepreneur dimension, as was originally anticipated. Revenue now also significantly influences this third dimension, and it has a positive effect. Groups that fall into either the other or government association category also score higher on this dimension, though coefficients narrowly miss statistical significance at the ninety percent level. Overall, though, this fits the portrait of the groups that would use this strategy as small, wealthy groups focused on one issue.

Insert Table 8.6 here

The inclusion of the initiative involvement variables has removed the effect of the initiative process itself. There are strong effects of involvement, though. Groups that support initiatives are significantly more likely to score high on the inside strategy, though not on the outside strategy. This may indicate that since many of these proposals have not yet reached the ballot, the groups are using them as a threat to spur legislative action. Opposing an initiative also has a significant effect on both the inside and outside dimensions. Groups that are threatened by an initiative may be forced to battle in the legislature, or may do so because they are protecting their hard-won status quo. The effect on the outside strategy is two-thirds again as large, implying that groups opposed to initiative resort to any and all techniques to defend their policy. This also fits with Gerber's finding that large, expensive outside campaigns can be quite successful at defeating initiatives. The present result also suggests that groups may do this to diffuse them as well.

That inclusion of the initiative involvement variables removes the impact of the presence of the initiative process is not surprising for two reasons. First, the involvement variable captures any group that is considering using the initiative process, not just those involved with measures on the ballot. The two variables account for one-third of all interest groups in initiative states, so include many of the potential users. Second, the initiative cycle of mobilization implies that groups that are not currently involved in initiatives are relatively inactive as they await their next period of heightened activity. The presence of these groups will also alter the effect of the possibility of usage when current involvement is controlled for.

The Variation of Group-Specific Characteristics

As a final exploration of the influence of the initiative process on inside lobbying, I examine whether groups that may be able to pose a greater threat at the ballot box are able to use this to increase the effectiveness of their inside lobbying tactics. As Gerber (1999) explains, groups need both money and resources to run a successful initiative campaign, so the effect of these resources may be greater on the inside lobbying strategy in initiative states. Increasing the amount of both may expand the perceived threat to the legislature and lead it to be more responsive to modern inside lobbying. Having more members may also lead groups in initiative states to utilize familiar outside lobbying techniques as well, so it should have a positive effect there.

To test this, I re-run the previous regression, but add a term that interacts membership with the initiative state indicator. Again, Table 8.7 shows that most of the other results remain unchanged, though the effect of initiative involvement, both for or against, is slightly increased on the first two dimensions. Increased membership is now significantly and positively associated with an increase in the inside lobbying dimension in all states, but it is cut to a quarter of its previous value for the outside lobbying technique and is not significant. The effect of members in just initiative states has the opposite effect: it is actually negative, though not significant, for groups in initiative states and it is positive and significant for the outside lobbying technique. The coefficient for the latter dimension is now almost twice as

large as that from the previous regression for all states.¹³

Insert Table 8.7 here

These results demonstrate that groups in initiative states are different than those in non-initiative states, even after controlling for current involvement. The increase in the outside lobbying technique in initiative states as groups gain more and more members suggests that groups do learn from their initiative experience and that they use outside lobbying more when they have a greater membership. Combined with the fact that there is no concordant increase in inside lobbying as membership increases, the implication is that initiative mobilized groups use their resources to pressure the legislature from outside at a greater rate than groups in non-initiative states. Since membership and other group-specific characteristics have already been controlled for, the positive effect here, buttressed by the results in Table 8.5, suggests that outside lobbying is a more important phenomenon in initiative states, as we might expect.

8.3 Conclusions

This chapter has provided the most direct exploration of the initiative process' influence on interest group lobbying behavior. I have shown how access to the initiative process and involvement in potential initiatives influences the use of specific lobbying techniques by interest groups. In almost all of the twenty lobbying activities groups were asked about on the survey, the initiative influenced their response in some form: either involvement, access, or through assimilation.

I then used these responses in a factor analysis of interest group lobbying strategies. The factors had important implications for group behavior and state politics. I find evidence that while the inside/outside lobbying dichotomy is still useful, its definition is in need of updating. Outside lobbying appears to be relatively unchanged, consisting of tactics that groups that cannot get inside are forced to use. The inside lobbying strategy has been expanded to encompass some particular outside lobbying techniques. This suggests that

¹³I ran the same regressions adding a revenue-initiative state interaction and the effect of revenue was extremely weak. I also interacted revenue and membership, as Gerber (1999) states that the combination of both are required for successful initiative use, but again there was no significant influence.

groups are no longer able to merely exploit access to key legislators or agencies and are often forced to supplement their inside lobbying activities with outside ones when circumstances dictate, particularly when there are more groups involved in a policy debate. Besides outside lobbying and modern inside lobbying, I also find evidence of the emergence of a third strategy which resonates with the rise of issue entrepreneurs in state politics. It appears to be used by groups with smaller membership, large bank accounts and personal political capital in the form of access to key legislators and important citizens.

Using these three dimensions of lobbying, I construct factor scores for each group and conduct regressions analyses to determine the effect of the initiative on group strategies. The effect of access is important for both the modern inside and outside lobbying strategies, increasing the score on the latter and decreasing it on the former. This provides support for the initiative cycle of mobilization: groups that form because of old initiative campaigns use their knowledge and experience to guide their future lobbying activities, leading to an increased reliance on outside lobbying, controlling for factors such as membership.

Because of the large number of groups that may be between particular initiatives, though, a better test of the effect of the initiative on inside lobbying is to examine groups that are at least considering use of the initiative process. Since they are involved in a particular issue and have considered a ballot measure, they may have increased leverage with the legislature in their inside lobbying techniques. Controlling for whether a group supported or opposed a particular initiative shows that this is the case. Groups involved in possible campaigns score higher on both the inside and outside lobbying strategies. This indicates that the initiative does provide an increase in bargaining position with the legislature.

Interestingly, the presence or use of the initiative does not affect a group's score on the issue entrepreneur scale. This is surprising since issue entrepreneurs can use direct democracy to their advantage when their efforts are rebuffed by the legislature. A recent example from California is Ron Unz, who has attempted to parlay his victories on educational initiatives into a campaign for state office.

Table 8.1: Average Change in Probability of Responding “Five” on Importance Scale

	Initiative-Related Independent Variables			
	For Init	Against Init	Init State	Age*Init State
Contacting Legislators	-0.13	0.30	0.13	-0.02
Policy Research	-0.14*	0.02	0.09	-0.03
Press Releases	-0.13*	-0.05	0.03	0.01
Litigation	0.03	-0.06	0.07	-0.04*
Contacting Committees	-0.10	0.22	0.12	-0.05
Mobilizing Members	-0.14	-0.23	0.19*	0.02
Campaign Contributions	-0.01	0.06	0.01	-0.01
Advertisements	-0.05*	-0.30*	-0.00	-0.01
Responding To Info Requests	-0.17*	0.06	0.02	-0.03
Influential Citizens Contact	-0.04	-0.08	0.16*	-0.08
Drafting Legislation	-0.11	0.26*	0.15	-0.06
Contacting Agencies	-0.13	0.19	0.25*	-0.10*
Public Opinion	-0.22	-0.17*	0.06	-0.02
Monitoring Policy	-0.08*	-0.09	-0.08	0.05
Mail/Phone Campaigns	-0.14*	-0.32*	-0.01	0.04
Discussing Policy Implications	-0.06	-0.11	0.04	0.00
Elections Campaigning	0.01*	-0.15	0.06*	-0.03*
Seeking Endorsements	-0.12	-0.15	0.14	0.01*
Building Legislative Support	-0.04	0.13	0.12	0.04
Max Observations	139	66	29	8

Source: average of groups' differences between estimated probabilities of choosing category five without the initiative and with the initiative: signs indicate the change resulting from removing the effect of the underlying initiative variable.

Dependent variable is group's response to the five point importance-of-activity question (see Appendix D), so I run an ordered probit regression.

* Significant at 90% level.

Table 8.2: Ordered Probit Analysis of Importance of Strategies

	Dependent variable	
	<i>Contacting Agencies</i>	<i>Mail or Phone Campaigns</i>
Trade/Professional	0.570** (0.261)	0.994** (0.281)
Labor Union	0.378 (0.464)	1.029** (0.467)
Govt Association	0.386** (0.377)	1.180** (0.348)
Other Groups	0.416* (0.246)	0.820** (0.271)
Lobbying Freq	-0.044 (0.061)	-0.166** (0.062)
Revenue	0.010 (0.059)	-0.083 (0.061)
Members	-0.019 (0.030)	0.094** (0.031)
Groups Involved	-0.053 (0.053)	0.036 (0.051)
Issue Years	0.010* (0.006)	0.002 (0.005)
For Initiative	0.392 (0.259)	0.489* (0.263)
Against Initiative	-0.700 (0.469)	0.964* (0.496)
Initiative State	-0.699** (0.275)	0.033 (0.289)
Age*Init State	0.011** (0.005)	-0.004 (0.005)
Group Age	-0.009** (0.004)	0.001 (0.004)
N	194	194
LR χ^2_{14}	39.20	65.22

Source: Groups' response to 5-point importance scale and questions about characteristics.

* Significant at 90% level.

** Significant at 95% level.

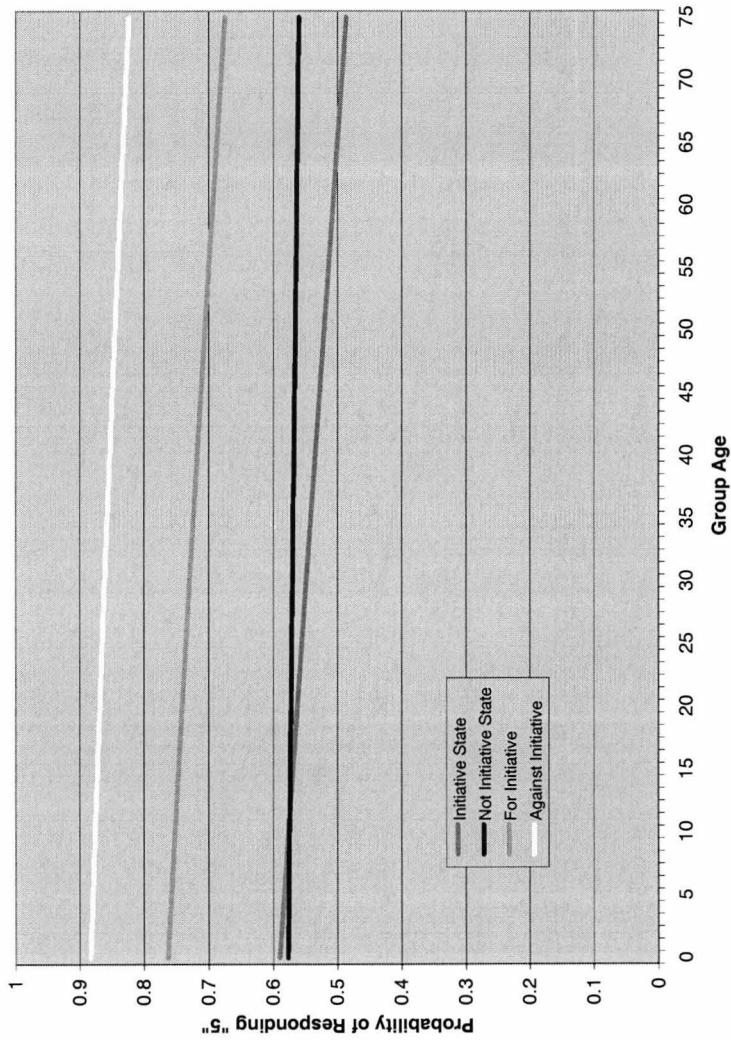


Figure 8.1: The Effect of the Initiative Process on Interest Groups' Beliefs about the Importance of Organizing Mail or Phone Campaigns, Depending on Group Age

Source: Table 4 coefficients.

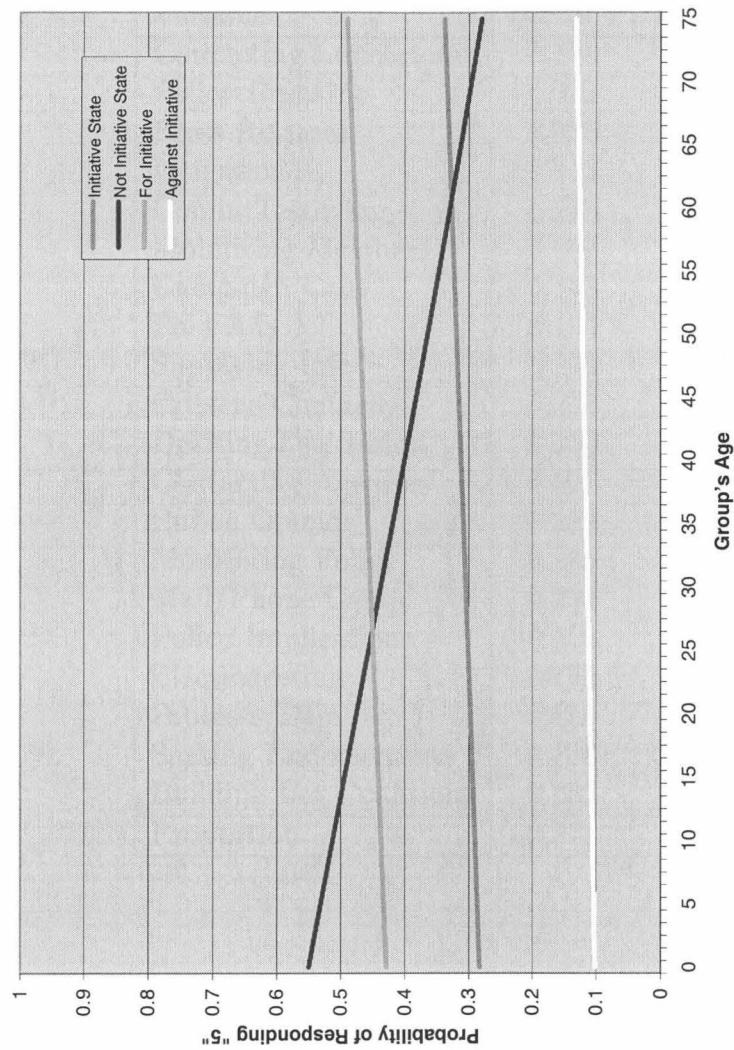


Figure 8.2: The Effect of the Initiative Process on Interest Groups' Beliefs about the Importance of Contacting Agencies, Depending on Group Age

Source: Table 4 coefficients.

Table 8.3: Factor Analysis: Principle Components' Eigenvectors

Variable	Factor 1	Factor 2	Factor 3
Contacting Legislators	0.189	-0.412	0.203
Policy Research	0.264	-0.123	-0.169
Press Releases	0.235	0.081	0.398
Litigation	0.113	0.153	0.348
Comm Testifying	0.245	-0.316	-0.004
Mobilizing Members	0.285	0.087	-0.172
Campaign Cont	0.148	0.329	0.008
Paid Ads	0.194	0.368	0.132
Supplying Info	0.219	-0.176	-0.164
Citizens Contact	0.200	-0.006	0.426
Drafting Legislation	0.254	-0.184	-0.157
Contacting Agencies	0.157	-0.202	0.041
Public Opinion	0.259	0.165	0.055
Monitoring Policy	0.266	-0.032	-0.368
Mail/Phone Camp	0.294	0.204	-0.139
Policy Implications	0.285	0.023	-0.307
Electioneering	0.171	0.334	-0.046
Protests/Dem	0.155	0.242	-0.002
Seeking Endorsements	0.186	-0.006	0.222
Building Leg Coalitions	0.235	-0.295	0.256
Proportion	0.271	0.114	0.076

Table 8.4: Average Factor Scores by Initiative Possibility and Involvement

	Professionalized Inside	Excluded Outside	Issue Entrepreneurs
Non-Initiative State	0.076	-0.161	0.001
Initiative State	-0.087	0.184	-0.001
<i>T</i> statistic	1.28	-2.74**	0.02
Not Involved	-0.304	-0.027	-0.087
Involved	0.318	0.581	0.159
<i>T</i> statistic	-3.05**	-2.83**	-1.19
Against Initiative	0.332	2.419	-0.046
For Initiative	0.306	0.194	0.246
<i>T</i> statistic	-0.06	-5.68**	0.64

Source: survey of interest groups.

** Indicates *t*-test rejects equal means at the 95% level (null hypothesis of difference in means equal to zero, assuming equal variances). Factor scores each converted zero mean and unit variance before comparisons made.

Table 8.5: Determinants of Lobbying Types: Group Factors and State Type

	Professionalized Inside	Excluded Outside	Issue Entrepreneurs
Trade/Professional	-0.149 (0.438)	-0.032 (0.257)	-0.317 (0.283)
Labor	-0.138 (0.532)	1.367** (0.349)	0.111 (0.288)
Gov't Association	0.478 (0.597)	-0.325 (0.326)	0.469 (0.32)
Other Groups	-0.400 (0.424)	-0.250 (0.222)	0.358 (0.258)
Lobbying Frequency	-0.551** (0.104)	0.108* (0.060)	0.026 (0.057)
Revenue	-0.107 (0.113)	-0.006 (0.057)	0.102 (0.064)
Number of Groups Active	1.458** (0.693)	0.717* (0.393)	-0.486 (0.403)
Initiative State	-0.489* (0.277)	0.539** (0.177)	0.051 (0.205)
Members	0.096* (0.058)	0.092** (0.035)	-0.047 (0.029)
Group Age	0.157 (0.804)	0.538 (0.512)	0.097 (0.613)
Issue Involvement	0.891 (0.992)	-0.211 (0.406)	-0.378 (0.390)
Constant	0.724 (0.755)	-1.356** (0.400)	-0.143 (0.463)
Observations		307	

* Significant at 90% level.

** Significant at 95% level.

Table 8.6: Determinants of Lobbying Types: Initiative Involvement

	Professionalized Inside	Excluded Outside	Issue Entrepreneurs
Trade/Professional	0.064 (0.461)	-0.110 (0.24)	-0.240 (0.286)
Labor	-0.654 (0.556)	0.577* (0.348)	0.250 (0.323)
Gov't Association	0.635 (0.588)	-0.248 (0.305)	0.502 (0.319)
Other Groups	-0.357 (0.428)	-0.276 (0.209)	0.397 (0.255)
Lobbying Frequency	-0.517** (0.101)	0.115** (0.056)	0.028 (0.057)
Revenue	-0.070 (0.109)	-0.008 (0.052)	0.113* (0.065)
Number of Groups Active	1.492** (0.672)	0.749* (0.385)	-0.496 (0.404)
For Initiative	1.536** (0.506)	0.266 (0.239)	0.237 (0.243)
Against Initiative	1.666** (0.695)	2.581** (0.426)	-0.463 (0.414)
Initiative State	-1.099 (0.929)	-0.343 (0.507)	-0.453 (0.614)
Members	0.079 (0.059)	0.099** (0.033)	-0.055* (0.030)
Initiative State*Age	0.133 (1.339)	0.985 (0.798)	0.746 (0.807)
Group Age	0.023 (0.944)	-0.083 (0.666)	-0.209 (0.691)
Issue Involvement	1.030 (0.952)	0.119 (0.428)	-0.494 (0.394)
Constant	0.486 (0.853)	-1.050** (0.416)	0.026 (0.583)
Observations		307	

* Significant at 90% level.

** Significant at 95% level.

Table 8.7: Determinants of Lobbying Type: Membership in Initiative States

	Professionalized Inside	Excluded Outside	Issue Entrepreneurs
Trade/Professional	0.007 (0.458)	-0.037 (0.235)	-0.236 (0.288)
Labor	-0.643 (0.554)	0.564 (0.346)	0.248 (0.324)
Gov't Association	0.541 (0.582)	-0.127 (0.303)	0.510 (0.322)
Other Groups	-0.405 (0.430)	-0.214 (0.208)	0.401 (0.258)
Lobbying Frequency	-0.514** (0.102)	0.112** (0.055)	0.028 (0.057)
Revenue	-0.065 (0.110)	-0.014 (0.05)	0.112* (0.065)
Number of Groups Active	1.46** (0.681)	0.783** (0.371)	-0.490 (0.404)
For Initiative	1.622** (0.504)	0.157 (0.239)	0.230 (0.243)
Against Initiative	1.701** (0.694)	2.534** (0.427)	-0.465 (0.413)
Initiative State	-1.102 (0.931)	-0.339 (0.511)	-0.456 (0.618)
Members	0.135* (0.079)	0.028 (0.041)	-0.060 (0.041)
Initiative State*Members	-0.124 (0.100)	0.158** (0.057)	0.010 (0.056)
Initiative State*Age	0.546 (1.353)	0.460 (0.808)	0.717 (0.859)
Group Age	-0.066 (0.944)	0.033 (0.665)	-0.204 (0.704)
Issue Involvement	1.001 (0.957)	0.157 (0.430)	-0.492 (0.395)
Constant	0.469 (0.852)	-1.031** (0.419)	0.028 (0.583)
Observations		307	

* Significant at 90% level.

** Significant at 95% level.

Chapter 9 Conclusion

Every political system is organized around a distinct constellation of interests that is the product of its rules, processes, and institutions, none of which are products of natural forces beyond our leaders' control.

— Jack L. Walker

Mobilizing Interest Groups in America

Understanding how interest groups respond to the institutional constraints they face is critical to advancing our understanding of the consequences of direct democracy for state politics. Even critics of the process should consider that its consequences for interest group populations and interest group behavior may be greater than the policy changes which occur relatively infrequently at the ballot box.¹ This dissertation is an important step in furthering our understanding of the relationship between direct democracy and interest group behavior. Most importantly I construct and test three predictions about how the initiative process should influence group behavior and come to three main findings: 1) states with the initiative process are likely to adopt policies earlier than non-initiative states; #2) initiative states have more interest groups than non-initiative states; #3) interest groups in initiative states differ in important ways, including having more members and less revenue.

These results are based on tests of three hypotheses developed from a formal model of the initiative process. The model, constructed in Chapter 2, explicitly links the initiative process to policy adoptions, policy diffusion, interest group mobilizations and the effect of the initiative on inside lobbying. Chapter 3 uses the model's predictions to develop three empirically testable hypotheses about these phenomena. It also discusses the different data required to test each. By confirming the hypotheses in three different contexts, I demonstrate

¹In terms of direct initiatives that passed in all states, there has been half a successful new policy per year since 1898, and even notorious users like California only average one successful initiative per year. Data taken from Initiative and Referendum Institute's Web site: <http://www.iandrinstitute.com>.

both the empirical robustness of the model and provide a first look at the extent of the initiative process' influence.

The hypotheses I test are both related to how interest groups use the initiative process to assist them in attempting to change policy. I find that for both casino-style gaming and capital-punishment adoptions, initiative states are significantly more likely to adopt as voters are more likely to support change. The targeting of initiative states by interest groups also implies that initiative states will play a unique role in information diffusion. In policy areas with more uncertainty about voters preferences such as casino style gaming, I find both strong theoretical and empirical evidence of initiative-based information diffusion, which greatly increases the rate of initiative state adoption. In policies with low levels of uncertainty I neither predict nor find information diffusion.

Following the policy analysis, Chapter 5 demonstrates that there are more interest groups in initiative states due to the increased ability to influence policy that the initiative provides. By expanding the set of political tools available to groups, the initiative process leads them to mobilize in greater numbers. I find that there are eighteen percent more interest groups on average in initiative states in 1990 than there would be if they did not have that institution. I also find that different types of groups respond disproportionately to the altered incentives: groups that fall into membership high categories tend to be more responsive. The end result of this is that initiative state interest group populations are more diverse.

A further investigation of the impact of the initiative process on interest group characteristics is undertaken through survey analysis of 307 groups in four states. The comparisons made in Chapter 6 demonstrate that initiative states groups differ in important and expected ways. By providing an advantage for groups that are traditionally denied success in the legislature, the effect of the initiative process is realized by generating groups with more members, less revenue, less paid employees, and less years of activity. These differences will lead to a different set of voices being heard on many issues and the difference in resources may tend to shift the locus of political discourse. Evidence for the latter is provided by the tendency of initiative state groups to rely less on inside lobbying tactics such as contacting legislators, testifying before committees, contacting agencies, and building legislative coalitions.

Controlling for the population level differences in group resources and characteristics, I still find in Chapter 8 that there are significant differences in the use of different lobbying tactics and strategies. Most importantly, groups in initiative states score significantly higher on the outside lobbying dimension and significantly lower on the inside lobbying dimension. A third, new dimension of lobbying strategies is also found that is related to single issue entrepreneurs that rely on their wealth and connections to achieve policy influence. The initiative does not influence the use of this strategy yet, though.

There are also many important patterns within initiative states based on involvement with the process. Groups that indicate being currently involved in a potential initiative have more members, less revenue, more volunteers, and more years involved with the issue they are currently involved in. This is important because these differences lead these groups to significantly different lobbying patterns: groups not involved in initiatives give lower responses for almost all of the lobbying activities they were asked about. Involvement in the initiative process increases group activity among a specific subset of groups. Involvement also allows me to demonstrate that groups that at least consider using the process can use it to increase their ability to inside lobby. Groups that support potential initiatives do not rely more on outside lobbying, whereas groups that are opposed to initiative score higher on both the inside and outside lobbying dimensions.

If access to and possible use of the initiative process leads to such distinct and predictable effects on interest group behavior, then it would seem wise to continue to explore its effect as well the effect of other state-level differences in institutions. This is an area that has received scant attention in the interest group literature, revealed merely by the fact that almost all work on interest group up until 1996 focuses only on the Washington D.C. population. As scholars begin to develop a firmer understanding of these groups, it only makes sense to expand to state interest group populations to take advantage of the variation in institutions and other characteristics such as divided government.

Partly this lack of focus on state interest group population may be a reflection of the lack of theoretical motivations for using the variation inherent in state populations. There have been relatively few attempts to model the effect of institutions on group behavior and even fewer empirical investigations. Clearly, the results here indicate that further work in both

areas is warranted and possibly required to further our understanding of groups behavior. If groups react in such a pronounced way to other state level differences, then we can learn much about them by studying state interest group populations with an eye towards these differences.

From the other point of view, recent advances in the study of state politics should also incorporate the influence of institutions such as direct democracy. If the consequences are so notable among interest group populations and lobbying then there are other areas that are likely to be influenced as well. This dissertation demonstrates the effect of the initiative process on policy adoptions and shows, as other scholars have demonstrated (Gerber 1999, Matsusaka and McCarty 1999), that it is not contingent upon initiatives reaching the ballot. Other aspects of government activity may be influenced as well. While the effect of initiative access and usage has been explored in some detail here, further work might use different measures of access to determine under what conditions legislators are more responsive to potential initiative users. At what stage of the legislative process is this threat most important: agenda setting or bill writing? The model also makes predictions about the effect of campaign contributions on initiative usage and vice-versa.

One important issue that cannot be explored as of yet is how the influence of the initiative process changes over time. In particular, has the recent surge in initiative usage each decade over the last forty years increased the role of the initiative in interest groups' calculations? While there is evidence in Chapter 5 that the number of initiative-mobilized groups increased from 1975 to 1990, a more detailed investigation over time would be useful. Returning to the same four interest group populations in the future would make this possible.

A different strategy would focus more exclusively on the initiative theory of mobilization, which indicates that initiative-mobilized groups may develop differently than traditional legislative oriented groups. Use of the initiative may teach groups to rely on outside lobbying strategies even more than other initiative state groups and these differences would be present even among two similar groups when they approach the legislature. While there is some evidence in Chapter 8 that initiative state groups' use of lobbying tactics evolve over time, with purely cross-sectional data it is impossible to distill this process from potential differences resulting from period effects. Follow-up interviews with the groups already surveyed would

provide some leverage on this question.

Finally, while this dissertation has attempted to investigate the effect of the initiative process on state politics, I have attempted to avoid any normative conclusions about the topic. Short of pointing out that there is much further work to be done to establish the magnitude and diversity of the consequences of direct democracy for state politics, this dissertation has investigated the initiative process' effect solely on interest groups and policy adoptions. While it has made significant contributions in our understanding of both of these, determining the net social impact of direct democracy will not depend solely on whether any particular ballot measure is deemed good or bad, but on how its broader consequences are incorporated into everyday political activity through groups, citizens, and legislators.

Bibliography

Achen, Christopher H. 1986. *The Statistical Analysis of Quasi-Experiments*. Berkeley: The University of California Press.

Alt, James E. and Robert C. Lowry. 1994. "Divided Government, Fiscal Institutions and Budget Deficits: Evidence From the States." *American Political Science Review* 88: 811-828.

Allison, Paul D. 1984. *Event History Analysis: Regression for Longitudinal Event Data*. Sage University Paper Series on Quantitative Applications in the Social Sciences, series no. 07-046. Beverly Hills and London: Sage Publications.

Armentano, Paul. 1997. "State Legislatures to Decide on Wide Range of Medical Marijuana Bills." NORML Publications Director. 2/6/97.

Austen-Smith, David. 1987. "Interest Groups, Campaign Contributions and Probabilistic Voting." *Public Choice* 54: 123-139.

Bauer, Raymond A., Ithiel de Sola Pool and Lewis A. Dexter. 1963. *American Business and Public Policy: The Politics of Foreign Trade*. New York: Atherton Press.

Baumgartner, Frank and Beth Leech, 1998. *Basic Interest: The Importance of Groups In Politics and Political Science*. Princeton: Princeton University Press.

Beck, Nathaniel, Jonathan N. Katz, and Richard Tucker. 1998. "Taking Time Seriously: Time-Series-Cross-Section Analysis With a Binary Dependent Variable." *American Journal of Political Science* 42: 1260-1288.

Berry, Frances Stokes and William D. Berry. 1990. "State Lottery Adoptions as Policy Innovations: An Event History Analysis." *American Political Science Review* 84: 395-415.

Berry, Frances Stokes and Wiliam D. Berry. 1991. Reply to "Specifying a Model of State Policy Adoption." *American Political Science Review* 85: 573-579.

Bloom, David E. and Mark R. Killingsworth. 1985. "Correcting for Truncation Bias Caused by a Latent Truncation Variable." *Journal of Econometrics* 27:131-135.

Bowler, Shaun, Todd Donovan, and Caroline J. Tolbert (editors). 1998. *Citizens As*

Legislators: Direct Democracy in the United States. Columbus: Ohio State University.

Box-Steffensmeier, Janet M. and Bradford D. Jones. 1997. "Time Is of the Essence: Event History Models in Political Science." *American Journal of Political Science* 41: 1414-1461.

Brehm, John. 1999. "Alternative Corrections For Sample Truncation." *Political Analysis* 8.

Brehm, John. 1993. *The Phantom Respondents: Opinion Surveys and Political Representation.* Ann Arbor: University of Michigan Press.

Broder, David S. 2000. *Democracy Derailed.* United States: Harcourt Brace.

Browne, William P. 1990. "Organized Interests and Their Issues Niches: A Search for Pluralism in a Policy Domain." *Journal of Politics* 52: 477-509.

Browne, William P. 1995. *Cultivating Congress: Constituents, Issues, and Interests in Agricultural Policymaking.* Lawrence: University of Kansas Press.

Chong, Dennis. 1991. *Collective Action and the Civil Rights Movement.* Chicago: University of Chicago Press.

Coughlin, Peter J, Dennis C Meuller, and Peter Murrell. 1990. "Electoral Politics, Interest Groups and the Size of Government." *Economic Inquiry* 28: 682-705.

Cox, D. R. 1972. "Regression Models and Life Tables." *Journal of the Royal Statistical Society* 34: 187-220.

Cronin, Thomas E. 1989. *Direct Democracy: the Politics of Initiative, Referendum and Recall.* Cambridge: Harvard University Press.

Dahl, Robert A. 1961. *Who Governs? Democracy and Power in an American City.* New Haven: Yale University Press.

Denzau, Arthur T. and Michael C. Munger. 1986. "Legislators and Interest Groups: How Unorganized Interests Get Represented." *American Political Science Review* 80: 89-106.

Dombrink, John and William N. Thompson. 1990 *The Last Resort: Success and Failure in Campaigns for Casinos.* Reno: University of Nevada Press.

Dubin, Jeffrey A. and Douglas Rivers. 1990. "Selection Bias in Linear Regression, Logit and Probit Models." *Sociological Methods and Research* 18:354-365.

Eadington, William R. 1999. "The Economics of Casino Gaming." *Journal of Economic*

Perspectives 13: 173-192.

Erikson, Robert S., Gerald C. Wright, and John P. McIver. 1993. *Statehouse Democracy: Public Opinion and Policy in the American States*. Cambridge: Cambridge University Press.

Gais, Thomas. 1996. *Improper Influence: Campaign Finance Law, Interest Groups, and the Problem of Equality*. Ann Arbor: University of Michigan Press.

Gerber, Elizabeth R. and Arthur Lupia. 1995. "Campaign Competition and Policy Responsiveness in Direct Legislation Elections." *Political Behavior* 17: 287-306.

Gerber, Elizabeth R. 1996. "Legislative Response to the Threat of Popular Initiatives." *American Journal of Political Science* 40: 99-128.

Gerber, Elizabeth R. 1999. *The Populist Paradox: Interest Group Influence and the Promise of Direct Legislation*. Princeton: Princeton University Press.

Gray, Virginia and David Lowery. 1996. *The Population Ecology of Interest Representation*. Ann Arbor: The University of Michigan Press.

Greene, William H. 1993. *Econometric Analysis*. Englewood Cliffs: Prentice Hall.

Heckman, James J. 1976. "The Common Structure of Statistical Models of Truncation, Sample Selection and Limited Dependent Variables and a Simple Estimator for Such Models." *Annals of Economic and Social Measurement* 5/4:475-492.

Heckman, James J. 1979. "Sample Selection Bias as a Specification Error." *Econometrica* 47:153-161.

Heinz, John P., Robert O. Laumann, Robert L. Nelson, and Robert L. Salisbury. 1993. *The Hollow Core*. Cambridge, MA: Harvard University Press.

Honaker, James, Anne Joseph, Gary King, and Kenneth Scheve. 1999. Amelia: A Program for Missing Data (Gauss Version). Cambridge, MA: Harvard University, <http://GKing.harvard.edu>.

Hsiao, Cheng. 1990. *Analysis of Panel Data*. Cambridge, MA: Cambridge University Press.

Kallick-Kaufmann, Maureen. 1979. "The Micro and Macro Dimensions of Gambling in the United States." *Journal of Social Issues* 35: 7-26.

Key, Jr., V.O. and Winston W. Crouch. 1939. *The Initiative and Referendum in California*. Berkeley, California: University of California Press.

Kiewiet, D. Roderick and Kristin Szakaly. 1996. "Constitutional Restrictions on Bor-

rowing: An Analysis of State Bonded Indebtedness.” *Journal of Law, Economics and Organization* 12: 62-97.

Kim, Jae-On and Charles W. Mueller. 1978. *Factor Analysis: Statistical Methods and Practical Issues*. Beverley Hills: Sage Publications.

King, Gary. 1989. *Unifying Political Methodology: The Likelihood Theory of Statistical Inference*. Ann Arbor: The University of Michigan Press.

King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. 2000. “Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation.” Working paper (<http://GKing.harvard.edu>).

Kollman, Ken. 1998. *Outside Lobbying: Public Opinion and Interest Group Strategies*. Princeton, NJ: Princeton University Press.

Lupia, Arthur. 1992. “Busy Voters, Agenda Control, and the Power of Information.” *American Political Science Review* 86: 390-403.

Maddala, G.G. 1983. *Limited Dependent and Qualitative Variables in Econometrics*. Cambridge: Cambridge University Press.

Magleby, David B. 1984. *Direct Legislation: Voting On Ballot Propositions in the United States*. Baltimore: Johns Hopkins University Press.

Matsusaka, John G. 1992. “Economics of Direct Legislation.” *Quarterly Journal of Economics* 107: 541-571.

Matsusaka, John G. 1995. “Fiscal Effects of the Voter Initiative.” *Journal of Political Economy* 103: 587-623.

Matsusaka, John G. and Nolan M. McCarty. 1998. “Political Resource Allocation: Benefits and Costs of Voter Initiatives.” Working Paper, University of Southern California.

Meltsner, Michael. 1973. *Cruel and Unusual: The Supreme Court and Capital Punishment*. New York: Random House.

Mintrom, Michael. 1997. “Policy Entrepreneurs and the Diffusion of Information.” *American Journal of Political Science* 41: 738-770.

Mintrom, Michael and Sandra Vergari. 1998. “Policy Networks and Innovation Diffusion: The Case of State Education Reforms.” *The Journal of Politics* 60: 126-148.

Mitchell, William C. and Michael Munger. 1991. “Economic Models of Interest Groups:

An Introductory Survey." *American Journal of Political Science* 35: 512-546.

Mooney, Christopher Z. and Mei-Hsein Lee. 1999. "Morality Policy Re-Invention: Death Penalty Policy in the American States." Working paper.

Mooney, Christopher Z. and Mei-Hsein Lee. 1999. "The Influence of Values on Consensus and Contentious Reform Policy: U.S. Death Penalty Reform, 1956-82." Working paper.

Mooney, Christopher Z. and Mei-Hsein Lee. 1999. "The Temporal Diffusion of Morality Policy: The Case of Death Penalty Legislation in the American States." Working paper.

Morrow, James D. 1994. *Game Theory for Political Scientists*. Princeton, NJ: Princeton University Press.

Morton, Rebecca. 1999. *Methods and Models*. Cambridge: Cambridge University Press.

Mowry, George E. 1951. *The California Progressives*. Chicago: Quadrangle Books.

Mueller, Dennis G. and Peter Murrell. 1986. "Interest Groups and the Size of Government." *Public Choice* 48(1): 125-145.

Nichols, Mark W. 1998. "Deregulation and Cross-Border Substitution in Iowa's Riverboat Gambling Industry." *Journal of Gambling Studies* 14(2): 151-172.

Nownes, Anthony J. and Patricia Freeman. 1998 "Interest Groups Activity in the States." *The Journal of Politics* 60: 86-112.

Olson, Mancur, Jr. 1965. *The Logic of Collective Action*. Cambridge: Harvard University Press.

Olson, Mancur, Jr. 1982. *The Rise and Decline of Nations*. New Haven, CT: Yale University Press.

Pierce, Patrick A. and Donald E. Miller. 1999. "Variations in the Diffusion of State Lottery Adoptions: How Revenue Dedication Changes Morality Politics." Working paper.

Pierce, Patrick A. and Donald E. Miller. 1999. "Roll the Dice: Internal Diffusion of Gambling Policy in the American States." Working paper.

Riker, William H. and Peter C. Ordeshook. 1962. "A Theory of the Calculus of Voting." *American Political Science Review* 62: 25-42.

Romer, Thomas, Howard Rosenthal and Vincent G. Munley. 1992. "Economic Incentives and Political Institutions: Spending and Voting in School Budget Referenda." *Journal of Political Economy* 49:1-33.

Rothenberg, Lawrence S. 1992. *Linking Citizens to Government: Interest Group Politics at Common Cause*. USA: Cambridge University Press.

Schattschneider, E. E. 1960. *The Semi-Sovereign People*. New York: Holtz, Rinehart and Winston.

Schrag, Peter. 1998. *Paradise Lost: California's Experience, America's Future*. New York: The New Press.

Schlozman, Kay Lehman. 1984. "What Accent the Heavenly Chorus? Political Equality and the American Pressure System." *The Journal of Politics* 46: 1006-1032.

Schlozman, Kay Lehman, and John T. Tierney. 1986. *Organized Interests and American Democracy*. New York: Harper and Row.

Sherman, Robert. 2000. "Tests of Certain Types of Nonresponse in Surveys Subject to Item Nonresponse or Attrition." *American Journal of Political Science* 44: 362-374.

Ron Shinkman, 11/09/98. "Voters Back Pot Rights: Medicinal Use of Marijuana Approved in Four States, *Modern Healthcare* magazine.

Stern, Bob. 04/16/98. "Making of a Ballot Initiative." Los Angeles Times article.

Tolbert, Caroline, Daniel H. Lowenstein and Todd Donovan. 1998. "Election Laws and Rules for Initiatives." In *Citizens as Legislators: Direct Democracy in the United States*. Edited by Shaun Bowler, Todd Donovan and Caroline Tolbert. Columbus: Ohio State University Press.

Truman, David B. 1951. *The Governmental Process: Political Interests and Public Opinion*. New York: Knopf.

von Herrmann, Denise K. 1999. "The Politics of Adopting Lotteries and Casinos: An Update Using Event History Analysis." Paper presented at the 1999 Annual Meeting of the Midwest Political Science Association.

Walker, Jack L., Jr. 1984. "The Origin and Maintenance of Interest Groups in America." *American Journal of Political Science* 77: 390-406.

Walker, Jack L., Jr. 1991. *Mobilizing Interest Groups in America: Patrons, Professionals and Social Movements*. Ann Arbor: University of Michigan Press.

White, Welsh S. 1987. *The Death Penalty in the Nineties*. Ann Arbor: University of Michigan Press.

Appendix A Derivation of Formal Results

Proof of Proposition 1: *The legislature always chooses to set policy at its ideal point initially. If $\lambda_i < \lambda_i^*$ the group does not propose an initiative and bargaining happens when $\beta < 1$. When $\lambda_i^L \leq \lambda_i < \lambda_i^P$ the legislature and the interest group successfully bargain to move policy, otherwise the group proposes an initiative (when $\lambda^* \leq \lambda < \lambda_i^L$ or $\lambda^P \leq \lambda \leq 1$).*

Proof: A strategy for the legislature is mapping

$$\sigma_L : (\beta, \pi(x), c) \rightarrow \{0, 1\}^2,$$

where the outcome is a decision where to place policy and whether to bargain, based on the intensity of its preferences, $\beta > 0$, the probability, $\pi(x)$ of an initiative at x passing, and the fixed cost, c , for an interest group to get an initiative on the ballot. A strategy for the proposing interest group is a mapping

$$\sigma_p : (\beta, \lambda_i, \alpha) \times \{0, 1\} \rightarrow \{0, 1\}^2 \times \mathbb{R}^+,$$

where $\lambda_i = \Pr(V_i = 1)$, α is the weight the median voter places on the advertising quantities s_R and s_P and β is the legislature's utility. Depending on these parameters and the location of the status quo at either 0 or 1, the groups decides whether to lobby the legislature or propose an initiative, and how much to spend. A strategy for the reactive interest group is

$$\sigma_R : (\alpha) \times \{0, 1\} \rightarrow \mathbb{R}^+,$$

it just has to decide how much to spend during the initiative campaign.

Using backward induction, at the campaign stage, both groups have to simultaneously choose advertising quantities. For the proposing interest group, facing a status quo x_0 , this

involves solving the following with an intiaitive at x :

$$\max_{s_P \in \mathbb{R}^+} \left[\left(\alpha \frac{s_P}{s_P + s_R} + (1-\alpha) \Pr(V = x) \right) u_p(x) + \left[1 - \left(\alpha \frac{s_P}{s_P + s_R} - (1-\alpha) \Pr(V = x) \right) u_P(x_0) - s_P - c \right] \right].$$

This gives a solution of

$$s_P^* = ([u_P(x) - u_P(x_0)] \alpha s_R)^{\frac{1}{2}} - s_R.$$

By symmetry, the reactive group faces the same solution. Since $s_P \geq 0$, and $c \geq 0$, placing the initiative at the status quo is a dominated strategy since there is no utility gain possible. The group will only propose an initiative when $x_0 = 0$. This gives the reaction functions as

$$\begin{aligned} s_P^* &= (\alpha s_R)^{\frac{1}{2}} - s_R \\ s_R^* &= (\alpha s_P)^{\frac{1}{2}} - s_P, \end{aligned}$$

which give solutions of

$$s_R^* = s_P^* = \frac{\alpha}{4}.$$

When the status quo is at zero, the proposing interest group will use the initiative when it has an expected utility greater than or equal to -1 . This happens when

$$\begin{aligned} \left(\alpha \frac{s_P^*}{s_P^* + s_R^*} + (1-\alpha) \lambda_i \right) u_P(1) + \left(1 - \alpha \frac{s_P^*}{s_P^* + s_R^*} - (1-\alpha) \lambda_i \right) u_P(0) - s_P^* - c &\geq -1. \\ -\left(1 - \frac{\alpha}{2} - (1-\alpha) \lambda_i \right) - \frac{\alpha}{4} - c &\geq -1 \\ \frac{c - \frac{\alpha}{4}}{1-\alpha} &\leq \lambda_i. \end{aligned}$$

Call the value of λ_i that meets this condition with equality λ_i^* . For values greater than this, the initiative will have expected utility greater than or equal to the status quo.¹ Now I derive the equilibrium in the Nash Bargaining subgame.

Since the interest group will never bargain if the status quo is at its ideal point, I focus on the case where it is at the legislature's ideal point. Denote the transfer t and let u_i^b be

¹The group may prefer to propose an initiative at indifference since it may give the legislature an incentive to bargain and make the group strictly better off.

the utility to i of bargaining and u_i^r be the reservation utility of not bargaining. First I look at the case where $\lambda_i < \lambda_i^*$.

$$\begin{aligned} u_L^b &= -\beta + t \\ u_L^r &= 0 \\ u_P^b &= -t \\ u_P^r &= -1 \end{aligned}$$

Computing how much the groups have to get if they are going to agree to bargain,

$$\begin{aligned} u_L^b &> u_L^r \\ -\beta + t &> 0 \\ u_P^b &> u_P^r \\ -t &> -1. \end{aligned}$$

Which bounds the possible set of transfers:

$$\beta < t < 1.$$

Nash Bargaining says they will split the difference so $t^* = \frac{1+\beta}{2}$. In the other case, when $\lambda_i \geq \lambda_i^*$, only the reservation utilities change.

$$\begin{aligned} u_L^r &= -\frac{\beta\alpha}{2} - \beta(1-\alpha)\lambda_i \\ u_P^r &= -1 + \frac{\alpha}{4} + (1-\alpha)\lambda_i - c, \end{aligned}$$

which says

$$1 - \frac{\alpha}{4} - (1-\alpha)\lambda_i + c > t > \beta - \frac{\beta\alpha}{2} - \beta(1-\alpha)\lambda_i.$$

Splitting the difference again,

$$t^* = \frac{1}{2} + \frac{\beta}{2} - \frac{\alpha}{4}(\beta + \frac{1}{2}) - \frac{1}{2}(1 - \alpha)\lambda_i(\beta + 1) + \frac{c}{2}.$$

The proposing interest group prefers to bargain when

$$-t^* > -1 + \frac{\alpha}{4} + (1 - \alpha)\lambda_i - c.$$

Rearranging, this happens when

$$\lambda_i < \frac{1 + 3c + \beta(\frac{\alpha}{2} - 1) - \frac{\alpha}{4}}{(1 - \alpha)(1 - \beta)}$$

Call the value of λ_i that meets this equality λ_i^P . Taking the same steps for the legislature, its critical value of λ_i is

$$\lambda^L = \frac{1 + c + \beta(\frac{\alpha}{2} - 1) - \frac{\alpha}{4}}{(1 - \alpha)(1 - \beta)}$$

As it is readily apparent that $\lambda_i^L \leq \lambda_i^P$, and that $\lambda_i^* \leq \lambda_i^L$ (the construction of λ_i^L assumes this to be true, otherwise the equilibrium is the same as when $\lambda_i \leq \lambda_i^*$ and does not depend on the particular value of λ_i), this gives the equilibrium outcome as outlined in the proposition. ■

Proof of Proposition 2: *The presence of the initiative process makes the proposing interest group weakly better off in expectation.*

Proof: If the interest group proposes an initiative, it must provide higher expected utility than the status quo, which is at the legislature's ideal point by Proposition 1.

All that is needed is to show that it also does better in the bargaining game. The interest group's utility of bargaining is $u_P^b = -t^*$. If there is no expected utility gain from the initiative the transfer is the same, so when $\lambda \leq \lambda^*$, the interest group is indifferent.

Looking at the derivation of t^* ,

$$t^* = \frac{u_L^r + 1 - u_P^r}{\lambda},$$

and given that when there is a utility increasing initiative the reservation value for the proposing group goes up and for the legislature it goes down, the transfer made is smaller, so the group's utility is greater. ■

Proof of Proposition 3 *If voters' preferences are positively correlated, neighbors' adoptions increase policy adoptions in initiative states, but not in non-initiative states, and only if the neighboring state is also an initiative state.*

Proof: Given that λ_i is drawn according to some distribution at the start of the game, the actors' best guess is just the mean of this distribution, $E[\lambda_i]$. When there is correlation between the two states draws, $\rho = \text{Corr}(\lambda_i, \lambda_j)$, then this information is useful in estimating λ_i , which can be written as $E[\lambda_i | \lambda_j, \rho]$. When ρ is positive, $E[\lambda_i | \lambda_j, \rho > 0] \geq E[\lambda_i | \lambda_j, \rho = 0]$ and when ρ is negative, the opposite relationship holds.

Actors do not directly observe their neighbor's realization of λ_j , however — just whether the policy was adopted or not. This information can be used to update about the realization of λ_j , though, since the players in state i know that initiative states will only adopt for certain values of this variable.² ■

²To utilize this information, they need to know λ_j^* and the legislature's utility loss of adoption, or at least have prior distributions over them.

Appendix B Policy Adoptions

B.1 Capital Punishment

B.1.1 Adoption Dates

1972 Florida

1973 Oklahoma, Arkansas, Nevada, Indiana, Idaho, Arizona, Nebraska, Connecticut, Georgia, Utah, Louisiana

1974 Mississippi, Tennessee, Texas, South Carolina, Delaware, Illinois, Ohio, Pennsylvania, Montana

1975 Washington, Maryland, Virginia, Colorado, Missouri

1976 Alabama

1977 Wyoming, California, North Carolina

1978 Oregon

1979 South Dakota, New Mexico

1982 New Jersey

B.1.2 Independent Variables

Table B.1: Independent Variables by Initiative

	Non-Initiative States	Initiative State
Population	4.03 (4.24)	4.96 (5.61)
Dem Leg, Rep Gov	0.19 (0.40)	0.23 (0.42)
Rep Leg, Rep Gov	0.08 (0.28)	0.20 (0.4)
Dem Leg, Dem Gov	0.12 (0.33)	0.04 (0.21)
Split Leg, Dem Gov	0.04 (0.20)	0.16 (0.37)
Split Leg, Rep Gov	0.04 (0.19)	0.07 (0.25)
Lagged Murder Rate	5.81 (3.95)	6.09 (3.85)
Ideology	-11.05 (5.75)	-15.21 (8.37)
Religion	10.78 (10.17)	11.76 (11.75)
Real Per Capita Income	770,453.30 (648,881.30)	508,225.20 (508,673.10)
Divided Government	0.39 (0.49)	0.51 (0.50)
Initiative State Neighbors	0.75 (1.33)	0.99 (1.06)
Non-Initiative State Neighbors	0.92 (1.25)	0.41 (0.78)

Standard Errors in Parentheses.

B.2 Casino-Style Gaming

B.2.1 Dependent Variable

The dependent variable is taken from von Herrmann (1999). The years of adoption are as follows:

1931 Nevada

1976 New Jersey

1988 California*

1989 Iowa, South Dakota

1990 Arizona, Colorado, Connecticut, Montana, New Mexico, Wisconsin

1991 Illinois, Louisiana, Michigan, Minnesota, Mississippi, Missouri, North Dakota, Washington

1992 Idaho, Indiana, Maryland**, Oregon

* card rooms only ** card rooms and gaming devices only

The neighbors coding was taken from Berry and Berry's (1990) definition. All states that share a border are coded as neighbors and, in addition, they treat the pairs New Jersey and Maryland and Massachusetts and Maine as neighbors. Alaska and Hawaii are excluded from their analysis. The neighbors coding is available upon request or can be found in the appendix to Berry and Berry (1990).

B.2.2 Independent Variables

Table B.2: Independent Variables by Initiative

	Non-Initiative States	Initiative State
Population	4.65 (4.32)	5.18 (5.57)
Dem Leg, Rep Gov	0.24 (0.43)	0.21 (0.41)
Rep Leg, Rep Gov	0.07 (0.26)	0.11 (0.31)
Dem Leg, Dem Gov	0.10 (0.31)	0.09 (0.29)
Split Leg, Dem Gov	0.04 (0.19)	0.06 (0.24)
Split Leg, Rep Gov	0.10 (0.3)	0.10 (0.30)
Lagged Percent Debt	0.65 (0.42)	0.47 (0.32)
Lagged Percent Deficit	-0.03 (0.06)	-0.02 (0.05)
Real Per Capita Income	11,419.46 (2222.65)	11,065.53 (1532.17)
Lagged Economic Growth	0.02 (0.06)	0.02 (0.04)
Ideology	-13.62 (6.39)	-16.46 (7.66)
Initiative State Neighbors	0.10 (0.49)	0.49 (0.82)
Non-Initiative State Neighbors	0.26 (0.51)	0.12 (0.37)
Federally Recognized Tribes	3.29 (5.71)	11.83 (20.06)

Standard Errors in Parentheses.

B.3 Initiative Adoption Dates

Table B.3: States With the Initiative Process and Year of Adoption

State	Year	Type	Average Number per Year
Arizona	1910	S,C	1.67
Arkansas	1909	S,C	0.87
California	1911	S,C	3.02
Colorado	1910	S,C	2.27
Florida	1978	C	0.54
Idaho	1912	S	0.29
Illinois	1970	C	0.04
Michigan	1908	S,C	0.64
Missouri	1908	S,C	0.72
Montana	1906	S,C ¹	0.68
Nebraska	1912	S,C	0.45
Nevada	1904	S,C	0.44
North Dakota	1914	S,C	1.99
Ohio	1912	S,C	0.72
Oklahoma	1907	S,C	0.90
Oregon	1902	S,C	3.13
South Dakota	1898	S,C	0.45
Utah	1900	S	0.15
Washington	1912	S	1.44

Source: States taken from Gerber (1999), adoption dates from Magleby (1984) and average use taken from Initiative and Referendum's web site: <http://www.iandrinstitute.org/usage/bypassage.html>.

Appendix C Interest Group Subpopulations

C.1 Data: Indepedent Variables

Table C.1: Independent Variables by Initiative

	Non-Initiative States	Initiative State
State General Expenditures	6067.69 (7209.72)	6704.69 (11,278.04)
State General Expenditures Squared	88,100,000.00 (294,000,000.00)	169,000,000.00 (718,000,000.00)
Gross State Product	48.48 (40.87)	55.56 (69.92)
Gross State Product Squared	3999.35 (7020.73)	7873.75 (22069.47)
Logarithm State Population	1.18 (0.96)	1.09 (1.07)
Logarithm Population, 1975	—	0.34 (0.78)
Logarithm Population, 1980	—	0.36 (0.8)
Logarithm Population, 1990	—	0.39 (0.83)

Standard Errors in Parentheses.

C.2 Regression Results in the Ten Subpopulations

Table C.2: OLS Results for Agriculture Subpopulation

	Estimated Coefficient	Standard Error
Expenditures	0.74	0.26 **
Expenditures squared	-0.01	0.00 *
GSP	-0.06	0.10
GSP squared	0.00	0.00
1980	1.08	0.98
1990	1.50	1.87
Initiative 1975	-1.14	1.37
Initiative 1980	-0.32	0.91
Initiative 1990	-0.62	1.42
Init*(Log 1975 Pop)	11.78	14.43
Init*(Log 1980 Pop)	-0.58	41.98
Init*(Log 1990 Pop)	27.40	13.60 *
Log Population	6.22	8.89
Michigan*1990	7.57	3.04 *
Minnesota*1975	-6.16	2.84 *
Texas*1980	4.48	2.83
Texas*1975	-8.79	3.06 **
Pennsylvania*1975	2.11	2.92
Constant	-0.75	0.94
Number of Obs.	126	
R-square	0.68	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 90% level.

** Significant at the 95% level.

Table C.3: OLS Results for Mining Subpopulation

	Estimated Coefficient	Standard Error
Expenditures	0.79	0.40
Expenditures squared	-0.01	0.01
GSP	0.27	0.16
GSP squared	-0.00	0.00
1980	6.29	1.52 **
1990	-2.65	2.89
Initiative 1975	-6.22	2.12 **
Initiative 1980	-0.38	1.41
Initiative 1990	4.87	2.20 *
Init*(Log 1975 Pop)	-66.19	22.33 **
Init*(Log 1980 Pop)	66.52	64.96
Init*(Log 1990 Pop)	-48.16	21.05 *
Log Population	42.61	13.76 **
Michigan*1990	5.27	4.70
Minnesota*1975	-1.09	4.39
Texas*1980	6.73	4.38
Texas*1975	-17.08	4.74 **
Pennsylvania*1975	3.50	4.51
Constant	-1.02	1.45
Number of Obs.	126	
R-square	0.74	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 90% level.

** Significant at the 95% level.

Table C.4: OLS Results for Construction Subpopulation

	Estimated Coefficient	Standard Error
Expenditures	1.17	0.39 **
Expenditures squared	-0.01	0.01
GSP	0.33	0.15 *
GSP squared	-0.00	0.00 *
1980	2.07	1.48
1990	-3.97	2.82
Initiative 1975	-1.76	2.07
Initiative 1980	-0.39	1.38
Initiative 1990	2.22	2.15
Init*(Log 1975 Pop)	-18.66	21.78
Init*(Log 1980 Pop)	-135.84	63.34 *
Init*(Log 1990 Pop)	-40.24	20.52
Log Population	7.69	13.42
Michigan*1990	7.12	4.58
Minnesota*1975	-4.97	4.28
Texas*1980	5.89	4.27
Texas*1975	-9.71	4.62 *
Pennsylvania*1975	-8.56	4.40
Constant	0.86	1.42
Number of Obs.	126	
R-square	0.62	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 90% level.

** Significant at the 95% level.

Table C.5: OLS Results for Manufacturing Subpopulation

	Estimated Coefficient	Standard Error
Expenditures	6.48	0.82 **
Expenditures squared	-0.06	0.01 **
GSP	0.68	0.32 *
GSP squared	0.00	0.00
1980	-5.21	3.13
1990	-0.71	5.97
Initiative 1975	-9.85	4.38 *
Initiative 1980	-5.19	2.91
Initiative 1990	10.11	4.54 *
Init*(Log 1975 Pop)	-103.52	46.06 *
Init*(Log 1980 Pop)	100.96	133.97
Init*(Log 1990 Pop)	-73.34	43.41
Log Population	4.85	28.39
Michigan*1990	23.28	9.69 *
Minnesota*1975	-5.08	9.06
Texas*1980	-5.7	9.04
Texas*1975	-16.48	9.77
Pennsylvania*1975	-24.98	9.31 **
Constant	2.64	2.99
Number of Obs.	126	
R-square	0.92	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 90% level.

** Significant at the 95% level.

Table C.6: OLS Results for Transportation Subpopulation

	Estimated Coefficient	Standard Error
Expenditures	3.35	0.57 **
Expenditures squared	-0.01	0.01
GSP	0.34	0.22
GSP squared	-0.00	0.00 **
1980	6.06	2.16 **
1990	10.28	4.13 *
Initiative 1975	-5.83	3.03
Initiative 1980	-1.43	2.01
Initiative 1990	4.24	3.14
Init*(Log 1975 Pop)	-40.87	31.89
Init*(Log 1980 Pop)	75.43	92.74
Init*(Log 1990 Pop)	-27.58	30.05
Log Population	-5.83	19.65
Michigan*1990	4.74	6.70
Minnesota*1975	-23.19	6.27 **
Texas*1980	10.23	6.26
Texas*1975	-31.93	6.77 **
Pennsylvania*1975	-12.42	6.44
Constant	-4.71	2.07 *
Number of Obs.	126	
R-square	0.90	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 90% level.

** Significant at the 95% level.

Table C.7: OLS Results for Trade Subpopulation

	Estimated Coefficient	Standard Error
Expenditures	4.74	0.72 **
Expenditures squared	-0.06	0.01 **
GSP	0.08	0.28
GSP squared	0.00	0.00
1980	-0.68	2.73
1990	11.94	5.21 *
Initiative 1975	-5.66	3.83
Initiative 1980	-2.62	2.54
Initiative 1990	-1.9	3.96
Init*(Log 1975 Pop)	-67.61	40.24
Init*(Log 1980 Pop)	318.33	117.02 **
Init*(Log 1990 Pop)	34.28	37.92
Log Population	-27.15	24.79
Michigan*1990	49.12	8.46 **
Minnesota*1975	-9.58	7.92
Texas*1980	10.7	7.90
Texas*1975	-16.85	8.54
Pennsylvania*1975	-5.06	8.13
Constant	-3.49	2.61
Number of Obs.	126	
R-square	0.88	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 90% level.

** Significant at the 95% level.

Table C.8: OLS Results for Finance Subpopulation

	Estimated Coefficient	Standard Error
Expenditures	2.84	1.07 **
Expenditures squared	-0.02	0.02
GSP	0.15	0.42
GSP squared	-0.00	0.00
1980	11.27	4.06 **
1990	12.65	7.74
Initiative 1975	-8.77	5.68
Initiative 1980	-5.10	3.77
Initiative 1990	5.94	5.88
Init*(Log 1975 Pop)	-66.13	59.73
Init*(Log 1980 Pop)	-159.89	173.71
Init*(Log 1990 Pop)	-70.26	56.29
Log Population	5.45	36.81
Michigan*1990	38.71	12.56 **
Minnesota*1975	-14.36	11.75
Texas*1980	20.83	11.72
Texas*1975	-40.77	12.67 **
Pennsylvania*1975	-106.39	12.07 **
Constant	-6.17	3.88
Number of Obs.	126	
R-square	0.81	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 90% level.

** Significant at the 95% level.

Table C.9: OLS Results for Service Subpopulation

	Estimated Coefficient	Standard Error
Expenditures	11.41	1.04 **
Expenditures squared	-0.12	0.02 **
GSP	0.37	0.41
GSP squared	0.00	0.00
1980	3.22	3.94
1990	-0.16	7.52
Initiative 1975	-14.81	5.52 **
Initiative 1980	-7.40	3.67 *
Initiative 1990	12.39	5.72 *
Init*(Log 1975 Pop)	-176.25	58.03 **
Init*(Log 1980 Pop)	114.05	168.77
Init*(Log 1990 Pop)	-108.33	54.69
Log Population	0.02	35.76
Michigan*1990	70.06	12.20 **
Minnesota*1975	-23.93	11.42 *
Texas*1980	13.89	11.39
Texas*1975	-12.00	12.31
Pennsylvania*1975	-14.04	11.72
Constant	-0.56	3.77
Number of Obs.	126	
R-square	0.93	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 90% level.

** Significant at the 95% level.

Table C.10: OLS Results for Government Subpopulation

	Estimated Coefficient	Standard Error
Expenditures	3.02	1.22 *
Expenditures squared	0.01	0.02
GSP	1.43	0.48 **
GSP squared	-0.00	0.00 *
1980	-0.17	4.65
1990	-0.96	8.87
Initiative 1975	-28.36	6.51 **
Initiative 1980	-11.33	4.32 *
Initiative 1990	32.05	6.74 **
Init*(Log 1975 Pop)	-300.02	68.44 **
Init*(Log 1980 Pop)	138.74	199.03
Init*(Log 1990 Pop)	-223.05	64.50 **
Log Population	56.64	42.17
Michigan*1990	35.06	14.39 *
Minnesota*1975	-36.98	13.46 **
Texas*1980	27.40	13.43 *
Texas*1975	-21.06	14.52
Pennsylvania*1975	-4.55	13.83
Constant	0.83	4.45
Number of Obs.	126	
R-square	0.88	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 90% level.

** Significant at the 95% level.

Table C.11: OLS Results for Social Subpopulation

	Estimated Coefficient	Standard Error
Expenditures	2.48	1.04 *
Expenditures squared	-0.04	0.02 *
GSP	1.27	0.41 **
GSP squared	-0.00	0.00
1980	20.20	3.96 **
1990	28.04	7.55 **
Initiative 1975	-4.12	5.54
Initiative 1980	-1.39	3.68
Initiative 1990	2.34	5.74
Init*(Log 1975 Pop)	-41.24	58.27
Init*(Log 1980 Pop)	225.04	169.46
Init*(Log 1990 Pop)	-1.89	54.91
Log Population	-65.73	35.90
Michigan*1990	1.30	12.25
Minnesota*1975	-26.63	11.46 *
Texas*1980	46.65	11.44 **
Texas*1975	-21.77	12.36
Pennsylvania*1975	-28.67	11.77 *
Constant	-15.69	3.79 **
Number of Obs.	126	
R-square	0.84	

Dependent variable is the total number of groups in state i at time t less its average in state i over times $t = 1975, 1980, 1990$. The continuous dependent variables are transformed in the same way.

* Significant at the 90% level.

** Significant at the 95% level.

Appendix D Survey Instrument

D.1 Selection of Sample

I set out to survey groups in six states, three with the initiative and three without. In choosing the states I tried to generate variation in the characteristics of their interest group populations, location and use of the initiative process. Drawing on Gray and Lowery's (1996) state level interest group population characteristics from 1990, I compiled the following set of states:

Table D.1: Rankings of Selected States' Interest Group Populations

	Initiative	Total Groups	Density	Diversity
California	1	2	1	8
Arizona	1	17	30	49
Ohio	1	8	12	5
New York	0	6	2	20
Minnesota	0	7	32	32
New Mexico	0	26	44	28
Oregon	1	16	36	25
South Dakota	1	37	47	27

Source: Gray and Lowery (1996).

The first six of these states were to be selected for the main survey. Due to financial constraints that would have limited the number of surveys sent to each state, I decided to select only four states. Because of its size and status in the initiative world, I decided to remove California from the sample so that any findings would not be based on it alone. To replace it, I chose Oregon, also a high user, but in a state that was more reflective of other initiative states. This left Oregon and Arizona as the initiative states, since I could not obtain the list of registered lobbyists in Ohio. For non-initiative states I chose New Mexico because of its proximity and similarity to Arizona on the interest group rankings

in Table D.1. I wanted to avoid another western state, so the other non-initiative state chosen was Minnesota. These states form a reasonable cross-section of group population characteristics and avoid biasing the results in my favor.

South Dakota was selected for the pretest because it is also not a western state, but when the final number of states had to be reduced, I decided it was too infrequent a user of the initiative process and too small on other dimensions. The other pretest state was New Mexico. Twenty five surveys were sent to groups in each of these two states, randomly drawn from the 1998 lists of registered groups obtained from their Secretary of States' offices.

The mailing was done on August 24, 1998, and responses were received over the period August 31 to October 6. Of the 50 surveys distributed, three were returned as "addressee not found" and 14 were completed and returned, for a response rate of 30%. Of those returned, one was only partially completed. After the initial mailing of the survey on August 24, a reminder postcard was sent on September 10 to groups that had not yet responded. Seven surveys were received in the period August 31 to September 9 and an additional seven were received between September 15 and October 6 with all but one of them arriving before September 21. The response rate here is typical for mail surveys in the literature: Gerber reports a response rate of twenty-six percent (Gerber 1999, p. 77).

After adjusting the survey instrument, I obtained lists of groups registered to lobby in the four main survey states from the Secretary of State for each state. I then randomly selected 500 groups in each state, as many as finances would allow, to receive a copy of the mail survey and assigned each group a unique identification code to ensure anonymity. After the surveys were sent I waited ten days and sent a postcard reminding them to return the survey and including information about how to get another if they had misplaced the first. A final reminder card was sent in another ten days. Of the two thousand surveys mailed, about two hundred were returned to me by the post office as "addressee not found" and of the remaining eighteen hundred, two hundred ninety-two were returned at least partially completed by the groups for a response rate of sixteen and two-tenths percent. These comprise the data set for the analysis in this paper.

The telephone portion of the survey was drawn randomly from the set of groups not selected to receive the mail survey. Fifty groups in each state were drawn. Phone calls were

then placed to groups in Oregon and New Mexico who were asked four identical questions. Groups in Oregon were also asked if they were involved in an initiative during the last year.¹ Of the one hundred numbers drawn, about seven groups were not able to be found at their listed or any other number, though efforts were made to track down groups through the phone book or on the Web. Responses were given by seventy-three groups for a response rate of seventy-eight percent.² Their responses on these questions were used, along with the frequencies of responses in the mail survey, to compute the weights used in the analysis.

Table D.2: Response Frequencies and Survey Weights

	Mail Survey	Phone Survey	Weight
Trade associations	15.58	13.33	0.85
Professional associations	18.18	8.00	0.44
Labor unions	3.90	6.67	1.72
Business firm or corporation	9.74	33.33	3.42
Government association	9.74	8.00	0.82
Social organization	3.90	0.00	0.25
Charity	3.25	0.00	0.25
Non-profit research group	1.30	0.00	0.25
Foundation	0.00	4.00	0.00
Other (Please indicate)	34.42	26.67	0.77

The categories with zero cells in the phone survey were assigned weights of 0.25 since they have non-zero frequencies in the mail survey. Since there were no foundations in the mail survey responses, they received a weight of zero, though it does not matter.

¹ Many of the groups in Minnesota did not have phone numbers included with their information, so I only use these two states for now. I tried to look up the groups through information, but there is concern over which groups I am likely to find and how representative they are of the original sample.

² For two groups that refused to respond I filled in answers using information from their Web site.

D.2 Survey Instrument

State-level Survey of Group Activities

The purpose of this survey is to learn more about how groups such as yours are represented at the state level. Your response is very important to us in accomplishing this goal.

To help us understand the different ways in which organizations make themselves heard it is important that we get information from all types of groups, including those that may not view government and policy-related activities as an important part of their overall functions. This will help us get a more accurate view of what the typical group does.

In the following survey you will be asked questions about the general characteristics of your group as well as questions relating to different types of activities that organizations engage in at the state level. Your response will be kept **completely confidential** and the results of this survey will only be reported in statistical formats that will prevent individual organizations from being identified.

Please return this survey in the enclosed postage-paid envelope by **March 10, 1999**. If you need a new envelope, please contact us and we will be happy to send a replacement.

If you have any questions or concerns about this survey, please contact us at (626) 395-7830 or send an email message to us at boehmke@hss.caltech.edu. A summary of survey results will be available to all participants upon request.

Thank you very much for your cooperation.

Professor R Michael Alvarez and Frederick J Boehmke
Survey Directors

Please return to:
Survey of Group Activities
California Institute of Technology
Dept of Humanities and Social Sciences 228-77
Pasadena, CA 91125

Please answer all questions as well as you can. If you do not know the answer, or do not have access to the relevant information for a particular question, please move on and answer as many of the others as you can. When asked to choose from a set of responses, please mark the one that best describes your answer. If there are no boxes available for your response, please check the one that best applies and indicate your answer in the margin.

Your organization has been contacted due to its activities in the state of Oregon. Please answer all questions with respect to your resources or activities in that state only.

Background Information

The following series of questions is to provide background information on your organization and its activities.

1. Which best describes your organization? Please check one.

Trade association	<input type="checkbox"/>
Professional association	<input type="checkbox"/>
Labor union	<input type="checkbox"/>
Business firm or corporation	<input type="checkbox"/>
Government association	<input type="checkbox"/>
Social organization	<input type="checkbox"/>
Charity	<input type="checkbox"/>
Non-profit research group	<input type="checkbox"/>
Foundation	<input type="checkbox"/>
Other (Please indicate) _____	

2. How many years has your organization been active in Oregon? _____

3. What was the approximate total (national) revenue for this organization from all financial sources, including grants and contracts, during the last fiscal year?

Less than \$50,000	<input type="checkbox"/>	\$500,001 to \$1,000,000	<input type="checkbox"/>
\$50,001 to \$100,000	<input type="checkbox"/>	\$1,000,001 to \$10,000,000	<input type="checkbox"/>
\$100,001 to \$500,000	<input type="checkbox"/>	\$10,000,001 or more	<input type="checkbox"/>

4. Does your organization have an affiliated political action committee?

Yes No

If yes, what is the name of that PAC and how much money did it contribute to candidates last election cycle?

Name _____ \$ _____

5. Does your organization accept individuals as members?

Yes No

If you answered yes, please indicate how many individual members your organization has, otherwise please skip to the next question.

0 - 50	<input type="checkbox"/>	501 - 1000	<input type="checkbox"/>
51 - 100	<input type="checkbox"/>	1001 - 5000	<input type="checkbox"/>
101 - 250	<input type="checkbox"/>	5001 - 10,000	<input type="checkbox"/>
251 - 500	<input type="checkbox"/>	More than 10,000	<input type="checkbox"/>

6. How many full time equivalent employees does your organization have? How many full-time equivalent volunteers does it have in Oregon?

Paid staff **Volunteers**

None	<input type="checkbox"/>	None	<input type="checkbox"/>
One	<input type="checkbox"/>	One	<input type="checkbox"/>
Two to five	<input type="checkbox"/>	Two to five	<input type="checkbox"/>
6-20	<input type="checkbox"/>	6-20	<input type="checkbox"/>
21-50	<input type="checkbox"/>	21-50	<input type="checkbox"/>
51-100	<input type="checkbox"/>	51-100	<input type="checkbox"/>
More than 100	<input type="checkbox"/>	More than 100	<input type="checkbox"/>

7. How often is your group active in government relations, including monitoring government activities, preparing reports or comments about proposed policies, mobilizing citizens regarding proposed policies or contacting government officials?

Daily	<input type="checkbox"/>	Several times a year	<input type="checkbox"/>
Weekly	<input type="checkbox"/>	Once a year or less	<input type="checkbox"/>
Monthly	<input type="checkbox"/>	Never	<input type="checkbox"/>

8. The diversity of interests varies across groups. For each of the following policy areas, please indicate how active your group is. A one indicates that you are not active in that policy area (no resources expended on it in the last two years), while a five indicates that you are very active in that area.

	Not active in this area	Very active in this area
Agriculture	1 2 3 4 5	
Civil rights and civil liberties	1 2 3 4 5	
Crime and law enforcement	1 2 3 4 5	
State economy (money supply, taxation, and regulations affecting business, insurance, labor, or banking)	1 2 3 4 5	
Education	1 2 3 4 5	
Energy and natural resources	1 2 3 4 5	
Environmental policy	1 2 3 4 5	
Health policy	1 2 3 4 5	
Government operations, including state personnel policy, administrative organization, and elections	1 2 3 4 5	
Social welfare	1 2 3 4 5	
Sports, Entertainment & Recreation	1 2 3 4 5	
Technology (e.g., space, science, or communications policy)	1 2 3 4 5	
Transportation	1 2 3 4 5	
Other (please specify) _____	1 2 3 4 5	

9. Please answer the following questions with respect to legislative bills in Oregon from the last year.

To how many did you consider devoting any resources? _____

Of those, to how many did you actually devote some
resources (staff time, money, etc)? _____

Of those, to how many did you devote a large amount of
resources? _____

10. From the previous question, when choosing from the bills that you considered devoting some resources to, how important were the following in determining which you devoted a large amount of resources to?

	Not very		Very	
Total resources available	1	2	3	4
Importance of policy	1	2	3	4
Member support	1	2	3	4
Public support	1	2	3	4
Legislative activities on that issue	1	2	3	4
Lack of other group's activity	1	2	3	4
Lack of opposition	1	2	3	4

Particular Issue

One method that organizations have at their disposal to change public policy in Oregon is the direct initiative process, whereby groups can place legislation directly on the ballot for voters to decide on. If your organization was involved with an initiative or a potential initiative within the last two years, please use the issue that it concerned in answering the following questions. It is not necessary that your involvement ended with an initiative on the ballot, or that if it did, your group was still involved in the effort. If you were involved in a campaign against an initiative, please use that issue.

If you were not involved with any initiatives within the last two years, please choose the most recent public policy issue (including state rulemaking procedures) in which this organization has been involved and with which you are familiar. It is not necessary for the issue to be directly tied to a particular bill or regulation. If your organization stays in contact with government officials to advise them about the general problems facing members of your organization or your industry, you may use that as your issue.

11. What was that issue? Please note general policy area and specific details if possible.

12. Was this organization for or against changes on this issue?

13. For how many years has this organization been involved in this issue in Oregon?

_____ years

14. Does this organization plan to register to lobby next year (1999-2000)?

Yes No

15. Besides this organization, about how many organizations were active on this issue?

None	<input type="checkbox"/>	16 to 25	<input type="checkbox"/>
One to five	<input type="checkbox"/>	26 to 50	<input type="checkbox"/>
Six to 10	<input type="checkbox"/>	51 or more	<input type="checkbox"/>
11 to 15	<input type="checkbox"/>		

16. If you answered none in the previous question please skip to the next question, otherwise please indicate approximately how many of those groups fall into the following categories.

About how many of those were in agreement with you? _____

Of the groups that were in agreement with you, how many did you interact directly with? _____

Of those groups that you interacted directly with, how many did you share information with? _____

Of those groups that you shared information with, how many did you coordinate activities with? _____

17. In general, organizations often engage in the following activities in their attempts to make their voices heard. Different groups, however, use different methods. For each of the following activities please indicate how important it was for your group in this instance.

	Not very			Very	
Contacting legislators or staff	1	2	3	4	5
Policy research	1	2	3	4	5
Press releases	1	2	3	4	5
Litigation	1	2	3	4	5
Testifying before committees	1	2	3	4	5
Mobilizing members	1	2	3	4	5
Making campaign contributions	1	2	3	4	5
Paid advertisements	1	2	3	4	5
Responding to requests for information	1	2	3	4	5
Asking influential citizens to contact legislators	1	2	3	4	5
Drafting legislation	1	2	3	4	5
Contacting agency officials	1	2	3	4	5
Public opinion information	1	2	3	4	5
Monitoring policy	1	2	3	4	5
Organizing mail/phone campaigns	1	2	3	4	5
Pointing out other policy implications	1	2	3	4	5
Election campaigning	1	2	3	4	5
Public demonstrations or protests	1	2	3	4	5
Seeking elected officials' endorsements	1	2	3	4	5
Building support among groups of legislators	1	2	3	4	5

18. Organizations often express their views directly to legislators when trying to influence public policy. If you contacted any regarding this particular issue, please indicate the importance of the following in determining whom you contacted. Otherwise, please skip this question.

	Not very		Very		
Committee membership	1	2	3	4	5
Historical issue involvement	1	2	3	4	5
Previous interaction	1	2	3	4	5
Constituent characteristics/concerns	1	2	3	4	5
Similar policy opinions	1	2	3	4	5
Dissimilar policy opinions	1	2	3	4	5
Other groups already contacted	1	2	3	4	5
Request for information	1	2	3	4	5

19. How important were the following factors in motivating your involvement on this issue?

	Not very		Very		
Legislative connections	1	2	3	4	5
Increasing number of supporters	1	2	3	4	5
Increasing total resources available	1	2	3	4	5
Importance of issue to group	1	2	3	4	5
Historical involvement	1	2	3	4	5
Public duty	1	2	3	4	5
Detailed technical knowledge	1	2	3	4	5
Opposition groups' actions	1	2	3	4	5
Need for current information on policy	1	2	3	4	5

20. Were any other types of governmental actors, such as courts, the state governor, state or local governments, etc., active in this issue?

Yes No

About how many? _____

Please list them.

21. Relative to your most desired outcome, when your group got involved on this issue where did you expect government policy to be when it was resolved, compared to where it was then?

Much closer	<input type="checkbox"/>	A little farther	<input type="checkbox"/>
A little closer	<input type="checkbox"/>	Much farther	<input type="checkbox"/>
No change	<input type="checkbox"/>	Don't know	<input type="checkbox"/>

22. At the present moment, how has government policy moved on this issue, relative to your most desired outcome, compared to where it was when your group became involved?

Much closer	<input type="checkbox"/>	A little farther	<input type="checkbox"/>
A little closer	<input type="checkbox"/>	Much farther	<input type="checkbox"/>
No change	<input type="checkbox"/>	Don't know	<input type="checkbox"/>

If you were not involved in an initiative on this issue, please skip to the concluding section on page eleven. If you were involved in an initiative, please continue with question twenty-three.

23. With respect to this initiative or initiative attempt, please check all of the following activities in which your group was directly involved.

Drafting the initiative	<input type="checkbox"/>
Doing technical research about implications	<input type="checkbox"/>
Paid advertisements	<input type="checkbox"/>
Preparing press releases	<input type="checkbox"/>
Gathering signatures	<input type="checkbox"/>
Legal research/advice	<input type="checkbox"/>
Mobilizing members	<input type="checkbox"/>
Gauging public opinion	<input type="checkbox"/>
Providing funds to supporting groups	<input type="checkbox"/>
Providing funds to opposing groups	<input type="checkbox"/>
Public endorsement	<input type="checkbox"/>
Testifying before committees	<input type="checkbox"/>
Testifying before agencies	<input type="checkbox"/>
Seeking elected officials' or candidates' endorsements	<input type="checkbox"/>
Other (Please indicate): _____	<input type="checkbox"/>

24. If your group was involved in the drive for a potential initiative, what forces led you to consider its use?

Check here if not involved
 Public support
 Legislative unresponsiveness
 Organized opposition
 Focus election on this issue
 Increase voter turnout
 Opposition's lobbying power
 Another initiative
 Other (Please indicate): _____

25. Before the initiative was drafted, did you engage in any of the following activities on this issue? Please check all that apply.

Contacting legislators
 Research/Providing information
 Litigation
 Media campaign
 Gauging public opinion
 PAC contributions
 Testifying before committees
 Working with other groups
 Other (Please indicate): _____

26. Besides those that you sought out, did any other politicians take a public stand:

Opposing your position on this issue? Yes No
 Supporting your position on this issue? Yes No

27. If you responded that politicians took a stand supporting your position on this issue in the previous question, please indicate whether you publicized their support, otherwise please skip to the next question.

Publicized Did not publicize

28. If you began to gather signatures for qualification, what percentage of volunteer signature gatherers did you use?

If no signature gathering started, check here

Zero percent 26-50 percent

One to ten percent 51- 75 percent

11 – 25 percent 76-100 percent

29. Did the initiative reach the ballot?

Yes No

If not, please check all reasons that apply. Otherwise, please skip to the next question.

Monetary

Lack of public support

Legislative action

Organized opposition

Not enough signatures

Not reflective of your policy desires

Legal concerns

Other (Please indicate): _____

30. What were your group's total expenditures on the initiative campaign?

\$ _____

31. Were any bills drafted and introduced in the legislature on this issue? If so, please indicate when the first action occurred.

Check here if no bills introduced or drafted

Before signature collection began

During signature collection

After ballot qualification

After placed on ballot

After election

Concluding Section

To help us in our analysis, the final few questions concern you, the person who completed this survey.

32. Who completed this survey?

Director of this organization *S*
Director of government relations
Public relations director
Public relations staff member
Government relations staff member
Other (Please indicate) _____

33. How long have you been with this organization? _____

34. Are there any topics not treated in this questionnaire that you feel are important for understanding how organizations like this one are represented? Are there any comments that you would like to make about this study? Please give us any reactions you may have. Use the back of this questionnaire or attach additional sheets if necessary.

We would welcome other information that you think might help us understand your organization or the policy issue that you discussed above. Examples of things you might enclose when returning the survey include this organization's annual statement, organizational newsletters, or recent press releases.

May we have permission to contact you by phone, if necessary, to learn more about your organization or clarify an answer? If you are willing to be contacted by phone, please list your name and telephone number below.

Name _____ Phone _____.

Thank you for your help and cooperation in completing this survey.

If your organization would like to request a copy of the survey results in statistical form only, please include a phone number and a mailing address for this to be sent to.

D.3 Phone Survey

Phone Survey

State-level Survey of Group Activities

Hi, my name is Fred Boehmke and I'm conducting an academic survey to learn more about the characteristics of groups such as yours. I only need to ask you 5 questions about your group and its involvement in government relations during the last year. This should only take 2-5 minutes. The information you provide is for academic research and, to ensure complete confidentiality, will be reported in statistical formats only.

This survey will help me understand the different types of organizations that are involved in government relations, including direct contact of legislators about policy, monitoring government activities, preparing reports about proposed policies and mobilizing citizens regarding policies, so it is important that I get information from all types of groups, including those that may not view government and policy-related activities as an important part of their overall functions. This will help me get a more accurate view of what the typical group does.

In the following you will be asked questions about the general characteristics of your group as well as questions relating to the frequency with which you are involved with government relations. While these are general questions, it is important to have accurate responses. If there is someone in the organization who would feel more comfortable answering these questions, please let me know.

Group: _____

Group ID: _____

Phone Number: _____

Attempt #1: _____

Attempt #2: _____

Attempt #3: _____

Attempt #4: _____

1. Does your organization accept individuals as members?

Yes No

If yes: About how many individual members your organization have? I'm going to read off eight categories, when you hear the correct one please let me know

0 - 50	<input type="checkbox"/>	501 - 1000	<input type="checkbox"/>
51 - 100	<input type="checkbox"/>	1001 - 5000	<input type="checkbox"/>
101 - 250	<input type="checkbox"/>	5001 - 10,000	<input type="checkbox"/>
251 - 500	<input type="checkbox"/>	more than 10,000	<input type="checkbox"/>

2. Which of the following ten categories best describes your organization? Please stop me if you hear the right one.

Trade association

Professional association

Labor union

Business firm or corporation

Government association

Social organization

Charity

Non-profit research group

Foundation

Other (Please indicate) _____

3. Roughly, which of the following six ranges best describes the approximate national revenue for this organization from all financial sources (including grants and contracts) during the last fiscal year? Please stop me when you hear the correct one.

Less than \$50,000 \$500,001 to \$1,000,000

\$50,001 to \$100,000 \$1,000,001 to \$10,000,000

\$100,001 to \$500,000 \$10,000,001 or more

4. About how often is your group active in government relations (including monitoring government activities, preparing reports or comments about proposed policies, mobilizing citizens regarding proposed policies or contacting government officials)? I'm going to read off six categories, please let me know when you hear the one that best fits your group.

Daily	<input type="checkbox"/>	Several times a year	<input type="checkbox"/>
Weekly	<input type="checkbox"/>	Once a year or less	<input type="checkbox"/>
Monthly	<input type="checkbox"/>	Never	<input type="checkbox"/>

5. Was your group involved with an initiative in the last two years?

Yes No

If yes: That concludes the main part of the survey, but if you have a few more moments, I would like to ask you 8 more questions about your involvement with this initiative. The same rules of confidentiality apply.