

Political Research Quarterly

<http://prq.sagepub.com>

Federal Policy Activity and the Mobilization of State Lobbying Organizations

Frank R. Baumgartner, Virginia Gray and David Lowery

Political Research Quarterly 2009; 62; 552 originally published online Sep 29, 2008;

DOI: 10.1177/1065912908322407

The online version of this article can be found at:
<http://prq.sagepub.com/cgi/content/abstract/62/3/552>

Published by:



<http://www.sagepublications.com>

On behalf of:



Western Political Science Association



The University of Utah

Additional services and information for *Political Research Quarterly* can be found at:

Email Alerts: <http://prq.sagepub.com/cgi/alerts>

Subscriptions: <http://prq.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations <http://prq.sagepub.com/cgi/content/refs/62/3/552>

Federal Policy Activity and the Mobilization of State Lobbying Organizations

Frank R. Baumgartner

Pennsylvania State University, University Park

Virginia Gray

University of North Carolina at Chapel Hill

David Lowery

University of Leiden, Netherlands

The mobilization of organized interests is affected not only by social and economic “supply” factors but also by government-related “demand” factors. The authors assess the impact of government activity on the mobilization of interests by examining how federal policy activity stimulates lobbying activity in the states. Empirically, they do this by introducing the federal hearings data used by Leech et al. into the model of state lobbying registrations used by Gray et al. The authors find that congressional hearings in a particular issue area have significant—albeit complex—effects on the mobilization of state interest organizations in that same area.

Keywords: *Congress; interest groups; agenda setting; policy diffusion*

As government activity expands into areas previously not the objects of public policy, interests are created and interest organizations are mobilized (Jones and Baumgartner 2005). Thus, many social or economic organizations that may once have had no interest in public policy and did not lobby become politically active as public policy affects them. This governmental activity may be either welcome or viewed with hostility. In either case, organizations that were just associations or institutions such as business firms become “interest organizations” as their private wants have intersected with public policy (Heinz et al. 1993, 24). Indeed, while the “interest-group explosion” of recent decades was surely mostly a social or private economics phenomenon, once established these newly mobilized organizations often sought to monitor or to influence the future growth and development of programs that affected them. Baumgartner and Mahoney (2004) documented such coevolutionary linkages between group and state mobilizations in several issue areas, including the environment, civil rights, the elderly, and human rights, in addition to the women’s movement (also see Baumgartner and Jones 1993, chap. 9; Campbell 2005; Mettler 2005; Skocpol 1992; Soss 2002).

This coevolutionary pattern may develop for several reasons. Most directly, Walker (1991) noted that government can act as a patron or catalyst for the

creation of new groups. He also noted the role of national policy networks and professional communication patterns that take place during the process of policy diffusion, an idea that is central to our analysis (Walker 1969). But an even shorter-term element is evident in the work of Leech et al. (2005), who observed that congressional hearings were strongly related to the number of organizations registering to lobby at the federal level, after controlling for economic and other factors expected to account for mobilization. During periods with more congressional hearings, more organizations lobby.

We follow directly on Leech et al. by linking the policy agendas data they use, which measure annual

Frank R. Baumgartner, Professor of Political Science, Pennsylvania State University; e-mail: Frankb@psu.edu.

Virginia Gray, Professor of Political Science, University of North Carolina; e-mail: vagray@email.unc.edu.

David Lowery, Professor of Public Administration, Leiden University; e-mail: dlowery@fsw.leidenuniv.nl.

Authors’ Note: We appreciate the support of Galen Irwin in facilitating our collaboration. Baumgartner acknowledges the support of National Science Foundation Grants 0111611 and 0111224 for data collection, Bryan Jones and Beth Leech for related research projects from which this article draws, and the Camargo Foundation for a fellowship during which this article was drafted.

fluctuations in congressional policy activity across different issue areas, to state-level interest-group mobilization. By doing so, this project contributes to the literature on vertical policy diffusion, as policy attention is a necessary precursor to policy diffusion. We are not the first to study this phenomenon. But prior work has focused on specific policy areas with somewhat mixed results (Mossberger 1999; Hecht 2001; Tews, Busch, and Jorgens 2003; Daley and Garand 2005; Shipan and Volden 2006), though the most recent study of five health and welfare innovations did find vertical diffusion a stronger explanation than horizontal diffusion (Karch 2007). A broader view across multiple policy areas may help us to reconcile some of these mixed findings. We first discuss several ways in which policy attention at one level of government might be linked to another and consider several different forms it might take. We then introduce the model of state-level lobby registrations using 1999 measures of the density of organized interests and a measure of congressional hearings activity over several years. Several versions of the enhanced pooled state interest guild model are then tested to isolate the nature of the linkage between congressional activity and state lobbying. We conclude the analysis by considering further questions about cross-level linkages of state and national policy systems.

National Influences on State Lobbying

Let us start with the *null hypothesis* that congressional activity and lobbying in the states may well be unrelated. There has been a growing nationalization of state lobby communities in the sense that they are all now responding similarly to a common set of predictors (Lowery and Gray 1994b). And scholars have noted the key role of state affiliates of national federations in linking state and national interest systems (Thomas and Hrebenar 1992; Skocpol et al. 1993). Yet state interest communities remain extremely parochial in being dominated by local rather than national or regional organizations. The vast majority of lobbying organizations are registered in only one state (Wolak et al. 2002). Accordingly, we might well expect that they would be much more attentive to issues in their home states and not to those attracting congressional attention. Furthermore, it is not clear that state and national policy agendas are so tightly linked. States' policy agendas vary considerably (Gray, Lowery, Fellowes, et al. 2005) despite ever more rapid policy diffusion, something that would not be true if all states reflected a single national pattern of policy attention. But even if state agendas

move together, much of what attracts state legislators' attention may well not be what concerns their national counterparts. It would seem unlikely, for example, that congressional attention to nuclear proliferation policy would stimulate a great deal of lobbying on this topic in the states. And last, given Baumgartner and Jones's (1993) punctuated equilibrium model, legislative agendas are quite sticky, changing only periodically and with some difficulty. If so, then it is not clear that state policy agendas would respond contemporaneously to national-level activity. *In sum, there are plenty of good reasons to not expect to find a strong relationship between levels of congressional policy attention and activity and state lobbying.*

On many issues, however, state and national attention is hardly segmented in a classic layer cake fashion (Grodzins 1966). Many state issues—including HMO regulation, the death penalty, abortion, and even the fate of Terry Schiavo—have drawn congressional attention. Federal actions or inactions on all of these issues take place alongside independent state activity. For others, such as the Defense of Marriage Act of 1996, initial federal activity stimulates state legislation. And still other national laws, such as the No Child Left Behind Act of 2001 or the Personal Responsibility and Work Opportunity Act of 1996, seem to reverberate through the halls of state capitols in the years following passage as states struggle with their many intended and often unintended consequences. All of these subsequent state actions were associated with the mobilization of organized interests, a process kick-started by federal activity. Yet if federal activity and state lobbying are connected, it also seems that such linkages might come in several different forms that go beyond the simple federal cause and state effect noted until now.

The first is a simple *contemporaneous effect* with both levels of government and their systems of organized interests struggling simultaneously with a common policy disturbance. In this view, lobbying activity and legislative agendas at all levels reflect less each other than real policy issues facing society. Truman (1951, 511), of course, identified the locus of mobilization in disturbances in society. Organized interests engage in political activity to secure redress on these disturbances. More to the point, it is not obvious that organized interests seek such redress at different levels of government in a sequential fashion. Moreover, legislative entrepreneurs at all levels of government have powerful incentives to monitor their constituents' concerns (Wawro 2000; Weissert 1991; Mintrom 1997). Political parties at all levels too win elections by finding issues on which to campaign (Rabinowitz and

Macdonald 1989). *If legislators, parties, and organized interests at all governmental levels respond swiftly to the same disturbances in society, then we should see the volume of lobbying activity, or the density of organized interests, and the content of legislative agendas at both the national and the state levels changing in a contemporaneous and noncausal manner reflecting the public's concerns.*

A second possible form of linkage is as a *substitution effect*. In this case, policies are pursued in different venues provided by our federal structure of government in a sequential fashion. This idea was noted by Truman (1951, 323) and further developed by Morton Grodzins (1966), who argued that federal systems can be viewed as structures with many cracks through which influence may be exercised. Patterns of influence impeded at one level may find opportunities for influence at another. Indeed, state officials often frame their attention to problems as a response to federal inaction.¹ Thus, in justifying his state's more rigorous than average environmental laws, former California governor Gray Davis (2002, A15) noted, "The federal government and Congress, by failing to ratify the Kyoto treaty on global warming, have missed their opportunity to do the right thing. So it is left to California, the nation's most populous state and the world's fifth largest economy, to take the lead."

But an even better example concerns health care policy. Following the 1994 failure of President Clinton's comprehensive health care proposal, federal attention to health care seemed at an impasse. Congress was unable to address even less comprehensive health care issues, such as criticisms of HMOs or the increasing inability of seniors to pay for prescription drugs.² Scholars such as West, Heith, and Goodwin (1996) and Weissert and Weissert (2002) and journalists such as Johnson and Broder (1996) assigned primary blame for the Clinton fiasco and much of the next decade's stalemate to powerful interests representing the health care industry. As a result of this stalemate, however, the states paid increasing attention to health care policy. Following the demise of the Clinton proposal, many acted by the late 1990s to provide their own prescription drug programs (Gray, Lowery, and Godwin 2007b), to adopt a number of new and rigorous regulations of HMOs (Gray, Lowery, and Godwin 2007a), and to take a number of partial (if usually faltering) steps toward the provision of comprehensive health care to their citizens (Gray, Lowery, Godwin, et al. 2005). Whether as a cause or as an effect of all of this state attention to health care policy, organized interests

rapidly shifted their attention from Congress to state capitols. Indeed, the health interest sector or guild in the states grew more rapidly than any other during the 1990s (Lowery, Gray, and Fellowes 2005b). *The key point, however, is that we might well expect a lack of congressional activity on an issue to stimulate state-level attention to it on the part of either state officials and/or state interest organizations.* The best current example is immigration, where in reaction to Congress's failure to act in 2007, over 1,100 immigration-related bills have been introduced in the fifty state legislatures thus far this year (National Conference of State Legislators 2007), and 170 of them have been enacted into law (Keiderman 2007); both the passage and the introduction numbers are double those of 2006.

A third and we think more typical relationship between congressional legislative activity and the mobilization of state lobbying is a *stimulation effect* reflecting many of the examples we noted earlier. That is, congressional activity at time 1 may lead to state lobbying activity at a later time. Activity in Washington will necessarily stimulate state lawmaking in situations, such as the No Child Left Behind Act, where federal acts have significant consequences for state laws and regulations. In other cases, such a linkage may better reflect a diffusion of legislative entrepreneurship, where state legislators see that there is electoral hay to be made in following a path already trailblazed by a member of Congress. Indeed, state interest organizations may mobilize for similar reasons, learning from watching members of Congress. Congressional legislative activity may also stimulate mobilization of state interest organizations in line with Richard Nathan's cyclical theory of federalism,³ whereby those adversely affected by legislative proposals under consideration at the federal level may mobilize in the states to protect themselves. Similarly, those encouraged by the emergence of an issue at the federal level may decide that the time is ripe to push for similar actions in their state. In sum, *legislative activity at the federal level may have a strong effect on the mobilization of interests at the state level.*

Stimulation may come in two types, direct and indirect. The *direct* stimulation effect is that organizations mobilize in the states to become involved in policy domains where they see that federal activities are increasing; they may want to influence state-level implementation or to counter federal involvement by enacting state policies working in the opposite direction, or they may see federal involvement as a sign that political winds favor a state initiative as well. In any of these cases, whether seeking to amplify, modify, or rectify the

federal policy activity, federal activity leads directly to the mobilization of interest organizations. The *indirect* effect is that federal policy activity may cause increased state-level legislative activity. This lawmaking activity at the state level naturally increases lobbying activity in association with it. While activity in Washington may ultimately be responsible for mobilization, the more proximate cause is a change in the pattern of policy attention in the states.

There are strong reasons to suspect that the third hypothesis, the stimulation effect, is most prevalent. In any case, we can devise simple tests to compare the null, the spurious (contemporaneous), the substitution, and the stimulation hypotheses, and we do so below. To do so, we posit two additional expectations in line with the two mechanisms discussed in the previous paragraph. *First, in line with Nathan's expectations, we expect the federal stimulation effects to be stronger in those policy domains where federal involvement is greater than in those where states traditionally act more autonomously.* As we noted above, where federal activities focus on foreign affairs, nuclear nonproliferation, trade, or other issues treated exclusively at the national level, this should have little impact. Similarly, states may be involved in regulation of occupations or professions, in regulation of critical functions such as insurance, in running large public enterprises such as prisons where state policy is almost completely independent of any federal policy, as the federal government is not a financial partner in these issue areas, nor is it otherwise involved. Within those issue areas with greater state–federal partnership or interference, patterns of communication within professional communities may be more nationalized, and we would therefore expect stronger stimulation effects in these areas. If for no other reason, states are often charged with implementing policy changes adopted at the federal level in such mixed policy domains, and these implementation efforts will attract lobbying activity.

Second, the stimulation effect should be stronger in those states with more professional legislatures given that professional networks of communications are tighter in those legislatures and that politicians in these states would welcome the appearance of issues—whether supportive of or in opposition to federal activity—as a means of promoting their own careers. More professionalized legislatures have larger staffs and more professionally oriented legislators with greater resources to stay abreast of policy developments nationally. Thus, compared to nonprofessional legislatures, communications should be more complete, and linkages from the federal to the state level should be

more firmly in place. Legislative entrepreneurship, we noted already, is important in both Congress (Wawro 2000) and the states (Weissert 1991). And one important shortcut to monitoring the policy environment for issues to promote is to monitor what other politicians in other legislatures are talking about (Mintrom 1997). It is a very small step to suggest that such policy monitoring also occurs across levels of government. Indeed, research on specific policy areas has found evidence of diffusion of policy innovations running in both directions across nearly all levels of government (Mossberger 1999; Hecht 2001; Tews, Busch, and Jorgens 2003; Daley and Garand 2005; Shipan and Volden 2006; Karch 2007). Indeed, Shipan and Volden (2006) found that such vertical diffusion is linked to levels of legislative professionalism. Furthermore, more professional legislatures may have greater staff resources and be better connected to national policy communities. So we would expect the stimulation effects to be stronger in states with professional legislatures.

Exploring State–Federal Linkages: Data and Operationalizations

Our empirical approach builds on previously conducted research at both the state and federal levels. Leech et al. (2005) examined how hearings activity in Congress influences the lobbying activities of Washington interest organizations. Similarly, Gray, Lowery, Fellowes, and Anderson (2005) showed how the size of state legislative agendas, as measured by bill introductions, influences state lobby registrations. While using quite different measures, both studies found that legislative activity promotes lobbying activity. We examine how national legislative activity influences the demand for lobbying at the state level by introducing the congressional hearings data from the Policy Agendas Project (www.policyagendas.org) into the model of state lobbying registrations used by Gray and colleagues. More specifically, our analysis builds on Gray et al.'s test of the energy-stability-area (ESA) model of interest system density using a pooled model with interest guilds and fifty states. Their dependent variable—the main focus of our analysis—was lobbying activity as measured by state lobby registrations across fifteen interest guilds in 1997.⁴ We measure interest activity with the density of lobby registrations by interest guilds in 1999. The lobby registration data have been more fully described elsewhere (Lowery and Gray 2001).⁵ Not all of the registration data discussed in that earlier study could be used in the Gray et al. analysis. Of the

twenty-six categories of interest guilds in the population, Gray et al. excluded several smaller guilds or economic sectors because they could not be readily linked to a guild-specific component of gross state product (GSP), their measure of the area or supply term of the ESA model.⁶ In the end, they analyzed sixteen interest guilds representing banking–finance, construction, communications, hotels and restaurants, agriculture, manufacturing, legal, transportation, insurance, health, utilities, natural resources, education, local government, welfare, and sports and recreation, representing 76.09 percent of registrants.⁷ Four additional guilds are dropped from our analysis here (manufacturing, hotels and restaurants, construction, and sports) because they could not be readily matched with an exclusive set of the congressional hearings data, which we discuss further below. In the end, our pooled analysis examines twelve interest guilds with a total of 22,686 lobby registrations, or 61.38 percent of state lobbying communities in 1999.

The key independent variables beyond the hearings measures are the area and energy terms of the ESA model (Lowery and Gray 1995). As the potential membership of an interest guild increases, it is expected to support a larger number of lobby registrations. But this relationship is also expected to be curvilinear or density dependent, with the rate of growth of lobby registrations in response to increases in the size of the potential membership of a guild expected to slow as the size of the potential membership becomes larger.⁸ Gray and Lowery have used a variety of measures in polynomial specifications to test the density dependent impact of variations in the size of the potential membership of guilds across states.⁹ All produce similar findings, with the choice among them largely dependent on the availability of data at different levels of aggregation. In this analysis, we need to assess the relationship between the size of the potential membership of guilds and lobby registrations across states and guilds. We opt, therefore, for an intermediate measure of the size of the potential membership of the interest guilds: the 1997 GSP generated by each guild in each state.¹⁰ Guild-specific GSP is included in a polynomial specification, with its nominal value expected to have a positive association with registrations and its squared value a negative coefficient.

Lowery and Gray (1995) use two measures of the energy underlying the mobilization of state interest organizations. The first is *interest uncertainty*. As party competition increases, the likelihood of sudden policy change increases. This uncertainty should encourage both those favored by current policy as well as those disadvantaged by the status quo to engage in political activity. Lowery and Gray tap

interest uncertainty with a folded Ranney index of party competition. We measure party competition with a folded Ranney index for the 1995 to 1998 period (with the values of nonpartisan Nebraska as the average of the values of its neighbors). Since this measure is inversely coded, negative coefficients indicate that party competition promotes mobilization. Lowery and Gray's (1995) second energy term concerns *constituent interest*, the specific concerns of a guild that are its focus for lobbying. This measure builds on the strategy originally pioneered by Bowling and Ferguson (2001), measuring constituent interest by the size of the issue agenda of concern to each guild by the number of bills considered in state legislatures in 1999 tapping issues of concern to it.¹¹ The bill count data were collected from the State Full Text of Bills database on Nexis Academic Universe.¹² In most cases, we used their search terms to code the number of times that a state bill was considered with content germane to each guild's interests.¹³ In some cases, however, additional subject search terms were created when the provided search terms did not include a term corresponding with our guild topics. The finance guild, for example, includes both banks and real estate organizations. In such cases, multiple search terms were employed to tap this diversity.¹⁴

So far, all of the measures were employed by Gray, Lowery, Fellowes, et al. (2005) in their analysis of the demand for state interest organizations. The critical innovation of this analysis is the inclusion of data on congressional hearings as used by Leech et al. (2005). At the federal level, lobbyists must disclose their activities in each of seventy-four different policy domains. Leech and colleagues took the numbers of congressional hearings as compiled in the Policy Agendas Project and matched them with as many of these seventy-four issue areas as possible. The Policy Agendas Project categorizes hearings into 226 distinct subtopics, and Leech and colleagues were able to establish fits for about two-thirds of the policy topics, covering 85 percent of the lobbying activity. Here, we do the same thing for the state interest guilds as previously identified by Gray et al. The Web appendix with this article (<http://prq.sagepub.com>) shows the correspondences between the agendas data and the interest guilds. Twelve guilds are used in the analysis, representing 22,686 or 61.38 percent of the total number of lobby registration by organizations in the states in 1999.

We examine two sets of measures of congressional hearings: 1998 and 1999. Generally, we expect the 1999 hearings measure to tap a *contemporaneous*

impact of policy issues on federal and state agendas given that there would have been no time for federal activity within 1999 to diffuse to state-level mobilization of organized interests in the same year. In contrast, we expect the 1998 hearings measure to tap a vertical diffusion process, whether in the form of a substitution or a stimulation effect given that time would have allowed for a lagged response of one level of government to the other. In practice, however, we will see that sorting out these effects is somewhat difficult given that 1998 and 1999 hearings are correlated at the .95 level. We also examined longer lags with hearings data from 1996 and 1997, and we also examined combining the annual measures into biannual counts over four years. These longer lags had little impact on our findings. Thus, we do not report these results.

Our theoretical analysis also suggested several possible interactions. We suggested that the impact of federal hearings on the mobilization of state interest organizations might be especially great in those policy areas where federal involvement is higher and in states with professional legislators. We use quite straightforward measures of each, although we will see that they generate very strong findings. We measure federal involvement with a simple dummy variable scored one identifying five of the twelve policy areas—health, agriculture, education, transportation, and welfare—as more strongly influenced by federal policy than the others listed in the Web appendix (<http://prq.sagepub.com>). Our judgment is based on the extent to which the federal hearings listed in the Policy Agendas Project suggest that federal financial support or regulations would greatly assist, overlap with, or interfere with similar programs operated by the states. In agriculture, the thirty-five hearings covered farm subsidies, agricultural trade and exports, the plight of the family farm, and the status of the migrant worker, all areas that affect farm programs operated by state governments. The forty-two education hearings coded by the Policy Agendas Project took up a wide variety of topics that vitally affect state education policy at all levels, from Head Start to bilingual education, special education, foreign language training, science education, testing and performance standards, programs for the gifted and talented, distance education, desegregation of schools, charter schools, funding of libraries, arts and humanities education, the Elementary and Secondary Education Act, and a variety of programs in higher education including loans and grants to students, the GI bill, construction funds for college buildings, and National Defense

Education Act funding. Federal hearings in the domain of health numbered ninety-eight, and they considered numerous issues that affect states' abilities to reform their health care systems, for example, the impact of the Employee Retirement Income Security Act on the regulation of HMOs, the Medicaid program, and the rising cost of prescription drug coverage (thirty-one states have such programs for seniors). In the transportation area, the fifty-six federal hearings focused on issues of interest to states such as the interstate highway program, federal aid for highway construction, mass transit grants, maintenance funds for bridges, beautification of highways, speed laws, and drunk driving laws. In the welfare area, Congress completed its conversion of the Aid to Families with Dependent Children program to the Temporary Assistance for Needy Families program, a major overhaul of state welfare programs, changing entitlement programs to block grants and time-limited programs during a total of thirty-seven hearings. Also, hearings were held on child nutrition and women's programs of interest to states.

In comparison, the seven remaining policy domains that are a match between the Policy Agendas Project and the State Lobbying Project are policy areas in which the actions of the federal government and state governments are not as tightly linked. These seven domains are banking and finance, communications, government, insurance, law, natural resources, and utilities and energy policy. In most of these domains, the federal government regulates private behavior; it is neither as great a funding source nor as much a joint regulator. The one exception is government operations, which refers to federal government procurement, efficiency, and the like, but again not an activity that affects state governmental operations. One indicator of the difference between the two sets of hearings is that overall the federal grants in aid to state and local governments are much higher for the five policy domains selected as tightly linked than for the seven policy domains marked as less tightly linked. In 1998, the federal government transferred \$105.8 billion for health, \$36.5 billion for education, \$26.1 billion for transportation, \$58.8 billion for welfare, and \$668 million for agriculture (U.S. Census Bureau 2000, 304). The only surprise here might be that agriculture expenditures are so low, but the federal government agricultural presence in states is much more pervasive than just grant-in-aid programs, considering the Agricultural Extension Service with agents available to help farmers in each county, the presence of a land-grant university in each state, federal regulations on pesticides, hog farming, and so on. In

contrast, the amounts of federal grants in aid to the seven more loosely coupled policy domains are much less: utilities and energy received \$424 million, natural resources got \$1.0 billion, law got \$3.7 billion, and the remaining four domains are not large enough to be reported in a summary table in the census (U.S. Census Bureau 2000, 304).

Moreover, we examined the topics of the congressional hearings themselves in the seven policy domains thought to be more separate from state governments. In the twenty-eight hearings held on banking and finance, none appeared to focus on state banks; all were about national problems. The fifty-five hearings on communications covered a broad range of issues from cell phones to long-distance carriers to competition among different carriers, but none of them were specifically on state matters. The government hearings numbered fifty-five, and they extended over the widest range of issues, including federal employee rights to various benefits and reviews and audits of agencies, especially the IRS and OMB, making nominations to various boards. The only state-level issues mentioned were enacting a bill to allow states to enact their own laws to regulate shipping alcohol across state lines. In the insurance area, there were only three hearings, one of which was relevant to the states, requiring them to establish no-fault car insurance. In law and crime, twenty-two hearings were conducted in 1998; mainly, they concerned federal problems such as the operation of the Customs Service, the FBI, and so on, narcotics in Columbia, counterfeiting of currency, vacant federal judgeships, and refugees. But there were some state-related topics such as examining the threat of drugs and gangs in specific locales (e.g., Illinois, New Jersey, Indiana, and Texas), fighting drugs along the Mexican border, and the role of the National Guard in fighting the war on drugs. The domain of natural resources had only nine hearings, in which the topics were almost exclusively federal in nature: adding new national parks, reforming federal regulations in the oil and gas industry, leasing oil and natural gas on public lands, BLM land exchange and acquisition, and a new royalty-in-kind program. The only link to the state level of government was a focus on the impact of federal land use on rural communities. And finally, utilities and energy policy was the subject of only seven policy hearings during the year. They were primarily concerned with deregulation of electric utilities, industry restructuring, consumer issues in electric power, how these issues would play out in rural areas, the TVA, and federal and state roles

in deregulation. At the same time, they were also interested in management of the Forest Service and national recreation areas. Thus, within our data set, the first set of five policies is definitely more tightly linked to federal policy activity and receives more federal money, while the second set of seven policies is not as tightly linked in, as shown by the nature of the hearing data and by the fact they receive less money. But admittedly, this is a rough distinction between two groups sorted on the basis of our best judgment; we have no one measure by which to sort, primarily because we do not have a measure of governmental regulation in each policy area. We can only estimate that. But we present the above two sets as our best judgment, based on multiple criteria, as policies *within our data set* that are loosely coupled and ones that are tightly coupled *relative to each other*.

Our theoretical framework also presumes that state legislative professionalism is one of the mechanisms through which vertical diffusion operates as professional state legislators want to emulate the policy agendas of their congressional peers. After consideration of the extant measures of state legislative professionalism (Berry, Berkman, and Schneiderman 2000; Kurtz 1992; King 2000; Squire 1992), and guided by Mooney (1994), we elected to employ Squire's measure updated as of the late 1990s (Squire and Hamm 2005). It uses the U.S. Congress as a baseline against which to measure the salary, staff, and time in session of all fifty state legislatures. California ranked first on Squire's index, and New Hampshire ranked last in professionalism, which seems to lend face validity to the measure. The federal involvement dummy and the Squire index, as well as their interactions with the 1998 hearings measure, are included following presentation of baseline models.

While the main part of our analysis focuses on the *direct* impact of federal hearings frequency on lobbying registrations in the states, we also conduct an additional set of tests of the *indirect* effects of hearings on state lobby registrations through their impact on the size of state legislative agendas. That is, federal hearings activity may lead state legislators to introduce bills on the subjects of the hearings, which would in turn be expected to influence state lobby registrations given the logic of the ESA model. The dependent variable in this second set of tests is agenda size as measured by bill counts, which we have already discussed as one of the energy terms of the ESA model. The key independent variables in this analysis are the congressional hearings measure and its interaction with federal activity and state legislative professionalism, as just discussed. To

Table 1
Pooled Guild State Interest System Density Models with Federal Hearings Variables

Independent Variable	Dependent Variable: No. of Organizational Lobby Registrations 1999							
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Sector gross state product 1999	0.72 ^{†††}	0.67 ^{†††}	0.65 ^{†††}	0.65 ^{†††}	0.65 ^{†††}	0.72 ^{†††}	0.38 ^{†††}	0.81 ^{†††}
	6.62	6.36	6.20	6.17	9.36	10.25	5.23	11.82
Sector gross state product sq. 1999	-0.38 ^{†††}	-0.35 ^{†††}	-0.33 ^{†††}	-0.33 ^{†††}	-0.31 ^{†††}	-0.35 ^{†††}	-0.11 ^{††}	-0.61 ^{†††}
	-3.02	-2.85	-2.67	-2.65	-5.41	-6.10	-2.06	-10.26
Party competition	-0.08 ^{†††}	-0.09 ^{†††}	-0.09 ^{†††}	-0.09 ^{†††}	-0.10 ^{†††}	-0.09 ^{†††}	-0.01	-0.09 ^{†††}
	-2.74	-2.96	-3.15	-3.19	-3.33	-3.08	-0.11	-3.02
Size of 1999 agenda	0.30 ^{†††}	0.30 ^{†††}	0.29 ^{†††}	0.29 ^{†††}	0.19 ^{†††}	0.21 ^{†††}	0.25 ^{†††}	0.28 ^{†††}
	4.75	5.10	4.88	4.59	5.31	5.62	7.53	8.21
1999 fed. hearings	—	0.15 ^{***}	—	-0.01	—	0.47 ^{***}	0.35 ^{***}	0.49 ^{***}
		4.40		-0.12		4.44	3.95	8.37
1998 fed. hearings	—		0.16 ^{***}	0.17	-0.15 ^{**}	-0.68 ^{***}	-0.53 ^{***}	-0.49 ^{***}
			4.38	1.61	-2.51	-0.51	-4.74	-6.50
Federal involvement					-0.32 ^{***}	-0.45 ^{***}	-0.47 ^{***}	-0.18 ^{***}
					-4.84	-6.33	-7.89	-3.09
Involvement × 1998 hearings					0.58 ^{***}	0.80 ^{***}	0.75 ^{***}	0.33 ^{***}
					7.29	8.63	9.83	5.58
Legislative professionalism	—	—	—	—	-0.02	-0.03	0.00	0.05
					-0.39	-0.59	0.05	1.16
Professionalism × 1998 hearings	—	—	—	—	0.11 [†]	0.08 [†]	0.14 ^{†††}	0.02
					1.58	1.35	2.61	0.28
Constant	41.21	33.84	36.41	36.65	49.94	46.43	11.54	32.34
R ²	.47	.49	.49	.49	.54	.55	.72	.58

Note: $N = 600$. Standardized coefficients are presented with t -values reported below. Model 7 includes dummy variables for 49 states. In model 8, annual values of the dated dependent and independent variables are lagged 2 years. Thus, the dependent variable is for 1997 and the 1999 and 1998 dated independent variables are for 1997 and 1996, respectively.

* $p < .10$, two-tailed. ** $p < .05$, two-tailed. *** $p < .01$, two-tailed. † $p < .10$, one-tailed. †† $p < .05$, one-tailed. ††† $p < .01$, one-tailed.

control for rival explanations of bill introductions, we include a full array of state dummy variables in these models, although these are not reported. We finally look at the combined direct and indirect effects of lagged hearings.

Findings

Table 1 presents the baseline and enhanced ESA lobbying registration models without inclusion of dummy controls for states except for model 7. Looking initially at these simpler models is essential, we think, to assess the robustness of the model given potential problems of collinearity associated with the state dummies. That is, the party competition variable varies over only states, not interest guilds. And the agenda size and hearings measures vary over only guilds, not states. Using dummy controls in these situations, thus, risks rather severe collinearity problems. But we will see later that introduction of the state dummy controls does not alter our findings. The first model in the table presents

a baseline predictor of state lobby registrations without inclusion of the federal policy activities measure. The linear GSP term is, as expected, positive and significant in the baseline ESA model as well as in all of the models including variants of the congressional hearings measure. Also as expected, the squared GSP estimates are uniformly negative and significant, indicating that density dependence sets in as interest systems become large. Similarly, the party competition estimates are negative and significant, indicating—given inverse coding—that registrations increase with competition. And the size of the state policy agenda—as measured by bill counts—generated positive, significant estimates. These results are as expected and provide strong support for the ESA model.¹⁵ But this is not a new finding, and we therefore have little further to say about the ESA coefficients given that they are included in the models to provide the necessary context within which to assess the impact of the federal hearings variables.

Models 2 and 3 in Table 1 show, respectively, the impact of contemporaneous congressional hearings

in 1999 and lagged hearings in 1998 on state lobby registrations in 1999, controlling for the ESA model variables just explained. Federal hearings add only modestly to the overall predictive power of the two models, but both the 1999 (model 2) and the 1998 (model 3) variables are highly significant and positive, indicating that congressional hearings promote state lobby registrations. To distinguish between the contemporaneous effect of the 1999 hearings measure and the stimulation effect of the lagged 1998 measure, both are included in model 4 of the table. The estimate for the contemporaneous 1999 measure switches sign to negative. But the more important consequence of including both the 1998 and 1999 measures is that neither is now discernibly different from zero, precluding our ability to reject the null hypotheses that congressional hearings have no impact on state lobbying registrations. We have already noted, however, that the two measures are very strongly correlated ($r = .95$). Thus, it is likely that collinearity is preventing us from distinguishing their effects. But given the strong positive estimates for both in models 2 and 3 and the fact that the positive estimate for the lagged 1998 variable in model 3 approaches standard significance criteria ($t = 1.61$), we continue to include it in the model. However, we reconsider this decision below in our discussion of model 6. At this point, then, model 3 seems to provide the best specification and indicates that federal hearings do indeed stimulate state lobby registrations in a direct manner when controlling for the standard ESA variables. Our comparison of models 2 and 3 suggests that the *stimulation* effect (model 3) is more powerful than the potentially spurious explanation associated with the *contemporaneous* effect (model 2). The *substitution* effect—a negative relationship between federal activities and state mobilization—receives no support.

In model 5, we include measures and interaction terms designed to distinguish policy areas with greater federal policy involvement and states with greater legislative professionalism. Inclusion of both variables and their interaction terms requires that we interpret our results carefully. Hearings in 1998 now show a slight negative relationship with lobby registrations ($b = -0.15$) as compared to a slightly stronger positive relationship in the basic model 3 ($b = 0.16$). However, the interaction with areas of federal influence has a positive coefficient of 0.58, suggesting that the overall effect is highly positive for those issue areas with strong federal involvement, negative for those with little federal

involvement. Similarly, the interaction between hearings and legislative professionalism is positive (0.11) as well, albeit weakly so at only the .10 level. Still, this suggests that those states with more professional legislatures respond significantly more strongly to federal government activities. These complicated interactions create some issues of collinearity in our models (e.g., as the states with highly professional legislatures also tend to be those with the greatest GSP values, an essential control in the ESA model). But the overall picture laid out in Table 1 is clear. Model 3 suggests that there is a stimulation effect. Model 5 makes clear that the patterns of interaction differ significantly, and indeed are opposite in impact, in professional as opposed to non-professional legislatures and in those issue areas with greater federal involvement versus those where the states are relatively autonomous. These findings suggest, reasonably enough, that state-level lobby registrations by organized interests can be affected by federal policy activity but that the effect is much stronger in certain states and in certain issue areas than in others.¹⁶

The results in model 5 include only the lagged 1998 hearings given the lack of discernible estimates in model 4 when both 1998 and 1999 hearings variables were included in the model. Model 6 is similar to model 5 but now reinserts the 1999 hearing variable to check whether the exclusion in model 5 based on considerations of collinearity was premature. It seems that it was. While all of the other estimates remain essentially the same, both the 1998 hearings estimate and the 1999 hearings estimate are significant in model 6. And their respective signs—positive for the 1999 estimate and, consistent with model 5, negative for the 1998 estimate—suggest that federal policy activity has a very complex influence on lobby registrations. The most plausible interpretation of the positive 1999 estimate is that both federal and state policy systems are responding *contemporaneously* to policy events in the real world. This effect now seems to be independent of the mix of *stimulus* and *substitution* effects associated with lagged 1998 hearings and its associated interactions with state legislative professionalism and the level of federal policy involvement.¹⁷

The last two models in Table 1 probe the robustness of the model in two ways. Model 7 is similar to model 6 but includes forty-nine state dummy variables to probe the robustness of the model in the face of naïve controls for other state-level influences on state lobby registrations. The results are very similar to those presented in model 6, with perhaps only two

Table 2
Pooled Guild Agenda Size Models with Federal Hearings Variables and State Dummies

Independent Variable	Dependent Variable: Size of State or Guild Policy Agenda, 1999			
	Model 1	Model 2	Model 3	Model 4
1999 fed. hearings	0.04	—	-0.93***	-0.55***
	0.76		-10.01	-4.95
1998 fed. hearings	—	0.14***	1.03***	0.37***
		3.01	9.97	2.62
Federal involvement	—	—	—	-0.50***
				-6.65
Involvement × 1998 hearings	—	—	—	0.60***
				6.15
Legislative professionalism	—	—	—	-0.36
				-1.59
Professionalism × 1998 hearings	—	—	—	0.18**
				2.54
Constant	11.16	-15.85	18.16	157.32
R ²	.35	.37	.46	.51

Note: $N = 600$. Standardized coefficients are presented with t -values reported below. Coefficients of state dummies are not shown. * $p < .10$, two-tailed. ** $p < .05$, two-tailed. *** $p < .01$, two-tailed.

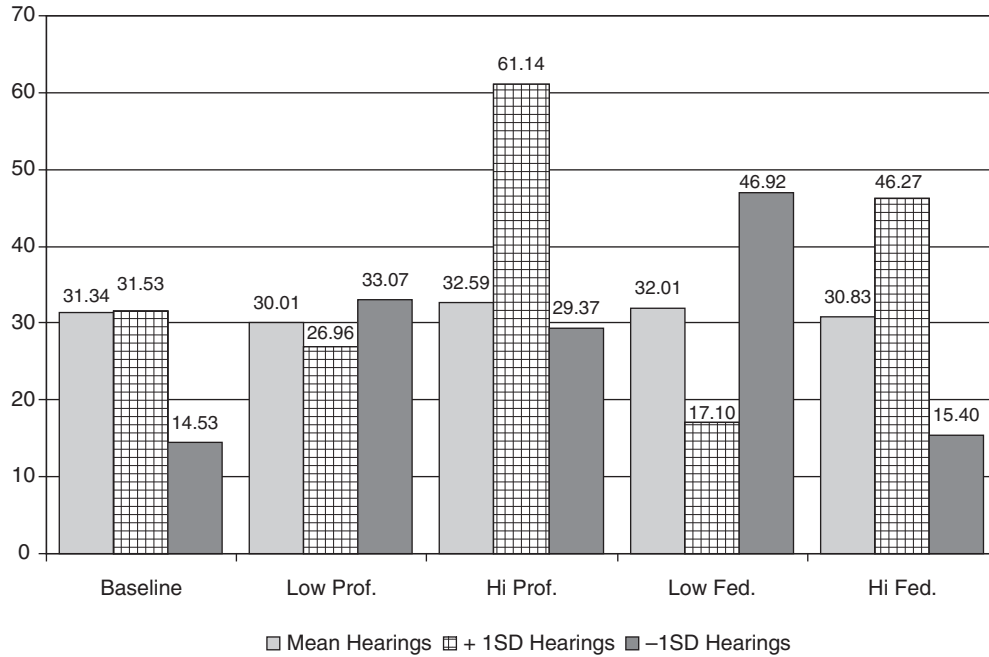
points worth noting. First, the estimate for the party competition variable is no longer significant. This is almost certainly because of the inclusion of the state dummies since the party competition variable—along with several others—varies only by state. And second, the interaction of professionalism and 1998 hearings, which was positive but only weakly significant in models 5 and 6, now generates a positive estimate (0.14) that is significant at the .01 level. The last model in Table 1 differs from the others in terms of the period examined. That is, the dependent variable in this model is a count of lobby registrations by organizations for 1997 rather than 1999. Furthermore, the dated annual measures of the independent variables (GSP and GSP squared, size of agenda, and federal hearings) are for 1996 and 1997, respectively, rather than for 1998 and 1999. Thus, model 8 tests the same specification as used for model 6 but for two years prior to the earlier results.¹⁸ The results for model 8 are strikingly similar to those reported for model 6. In all but one case, the estimates are signed and significant in the same manner. The one exception is the interaction of professionalism and hearings, which, while only marginally significant in model 6 ($t = 1.35$), is not discernibly different from zero in model 8 ($t = 0.28$). Again, however, at least some of this weakness may be because of collinearity. When either the legislative professionalism variable or its interaction with hearings is removed from model 8, the remaining estimate is positive with a notably higher t -value ($t = 1.95$ for professionalism and

$t = 1.59$ for the professionalism and hearings interaction). Thus, the results reported earlier seem to be robust in the face of naïve controls for specification error and time period.

We return to considering the net effect of lagged hearings in a moment. But first, we have also noted that congressional hearings may also have an *indirect impact* on state lobby registrations by stimulating bill introductions in state legislatures, which in turn stimulates registrations in the manner specified by the baseline ESA model. We test this expectation in Table 2, which reports the results from regressing 1998 and 1999 federal hearings and their interactions with state legislative professionalism and federal responsibility on our measure of the size of state policy agendas (bill counts) in 1999. Obviously, this is far from a complete specification. Still, while their estimates are not reported, our specification also included a full set of state dummy variables to control—if in a naïve manner—for other state-level determinants of legislative activity (Gray and Lowery 1995b).

The results of the first model with only the 1999 hearings variable provides little evidence of a *contemporaneous* impact of federal hearings on the size of state agendas. The estimate of the 1999 congressional hearings in model 1 is positive but generates an estimate that is smaller than its standard error. In contrast, inclusion of the lagged 1998 hearings variable in model 2 generates a significant positive estimate, indicating

Figure 1
Sensitivity of Number of State Lobby Registrations to Variations in Congressional Hearings, Professionalism, and Federal Policy Involvement



that congressional hearings in one year have a positive or *stimulative* influence on state bill introductions in the following year, which then promote lobby registrations. Still, as seen in model 3, both a *lagged stimulative* and a *contemporaneous substitution* effect are evident when agenda size is regressed on both 1998 and 1999 hearings. The former is positive, suggesting that more congressional hearings in one year is associated with a larger state policy agenda in the following year. But the latter is positive, suggesting that within any one year, more federal attention to an issue via hearings suppresses the size of the state policy agenda in that policy domain in that same year. This is the opposite of the results in model 1, suggesting that activity of organized interests and bill introductions may not be fully in sync over time (but see Lowery, Gray, and Fellowes 2005a).

Both the positive 1998 and negative 1999 hearings estimates are also evident in model 4, which includes the federal influence and state legislative professionalism measures and their interactions with 1998 hearings. Both coefficients for federal influence and the two legislative professionalism estimates are significant and signed in a manner that is consistent with results reported in model 7 of Table 1. In general, greater federal involvement in a policy area suppresses the size of the state agenda in that domain as

measured by bill counts. However, when Congress holds more hearings, this is reversed so that states in the following year face a more crowded policy agenda. Furthermore, lagged federal hearings in general have an indirect stimulative impact on state lobby registrations through their impact on the size of state policy agendas ($b = -0.37$). In sum, federal hearings activity has an *indirect* impact on the size of the lobby community via a similarly complex set of relationships as observed for the *direct* impacts.

So how do these direct and indirect federal influences combine to influence lobby registrations? Answers are provided in Figure 1, which reports the predicted number of lobby registrations for an interest guild under varying conditions of number of lagged (1998) congressional hearings, levels of state legislative professionalism, and level of federal policy involvement. These estimates were generated using the estimates reported in model 6 in Table 1 and setting most of the ESA variables (GSP, GSP squared, and party competition) at their means. We then varied number of congressional hearings, levels of legislative professionalism, and level of federal policy involvement across their means, plus one standard deviation, and minus one standard deviation, respectively. These changes tap the direct impacts of

federal hearings activity on state lobbying activity. We also, using the results in the last column of Table 2, varied the *values* of state policy agenda variable in the core ESA model for the several conditions of these three independent variables. This taps the indirect impacts of congressional hearing activity on lobby registration as expressed through the size of state policy agendas. Thus, the first set of three bars in the figure shows the expected number of lobby registrations for an interest guild holding *all* variables at their means (including professionalism and federal involvement) but using the mean, plus one standard deviation, and minus one standard deviation estimates of number of federal hearings, respectively, and the associated values for size of state policy agenda. The next set of three bars indicates the same results but under conditions of minus one standard deviation and plus one standard deviation in levels of professionalism and minus one standard deviation and plus one standard deviation in levels of federal involvement, respectively.

Three results of this figure are noteworthy. First, for states with average levels of legislative professionalism and interest guilds with average levels of federal involvement, higher than average numbers of hearings do not greatly increase lobbying registrations (31.53) over baseline (31.34). Yet lower than average levels of hearings lead to very low levels of lobby registration (14.53). This suggests that lagged hearings have a modest stimulative effect. But there are powerful interactions in the analysis.

Thus, second, the highest bar in the figure (61.14) is under the condition of higher than average hearings in states with professional legislatures. This really stands out in comparison to the other values in the second and third sets of comparisons. And it stands in sharp contrast to the weak substitution effect of federal hearings in the low professionalism condition, where higher than average numbers of lagged hearing produced an estimate of only 26.96 registrations while fewer than average hearings generated an estimate of 33.07 registrants. Simply put, more hearings in one year stimulate lobby registrations in states with professional legislatures in the following year. In sum, greater than average numbers of hearings *add* to the usual or baseline numbers of interest organizations registered to lobby in states with professionalized legislatures. The opposite, if a somewhat weaker, effect occurs in states with low levels of professionalism.

The third key result to note concerns the powerful interaction between numbers of congressional hearings and levels of federal policy involvement. In areas

of low federal involvement, fewer federal hearings are associated with higher number of lobby registration: 46.92 in the low hearings condition and only 17.10 in the high hearings condition. The opposite occurs in the high federal involvement condition; higher than average numbers of congressional hearings produce an estimated 46.27 lobby registrations while lower than average hearings produced only 15.40. In the former case, low federal involvement in general and few hearings in specific indicate a policy area that is likely to be fundamentally a state concern and one which the national government has chosen to avoid. As a result, we might well expect more lobbying activity at the state level. Still, the very low number of registrations (17.10) under the condition of low federal involvement and high numbers of congressional hearings is a bit surprising. One possibility is that this reflects something of a substitution effect with the causality operating in a consistent if mirror image of the health care example of a substitution effect discussed earlier. That is, we might see congressional hearings in some troubled policy areas in which the national government is not normally involved but in which there is also little policy activity—and thus relatively few organized interests—at the state level. Congressional hearings on race relations in the 1950s might provide an example where the Congress is acting in substitute for state policy makers. But under the high federal involvement condition, the impact of hearings is obvious and operates in the expected manner. When the Congress holds hearing on issues in which it exercises considerable influence, state lobbying activity increases markedly in the following year.

Conclusion

Scholars have recently turned their attention to how political activity on the part of organized interests is stimulated by legislative agendas (Leech et al. 2005; Gray, Lowery, Fellowes, and Anderson 2005). We extended these analyses by examining several ways in which policy agendas at the national and state levels might be linked so as to influence the state interest group mobilization. By doing so, we have added evidence to support the claim that interest-group mobilization is affected not only by social and economic trends but also by the stimulative or suppressive effects of government activity itself. More to the point, the conclusion applies across the levels of the federal policy system. Our results support several conclusions, all of which point to various

ways in which the growth and development of policy activities at the federal level do indeed affect state-level interest group mobilizations. The precise mechanisms and timing associated with these factors should be the object of further research, but the general effects are clear: strong linkages exist between federal policy activities and the subsequent activities of groups in the states.

First, given the positive sign and significance of the 1999 hearings variable in models 6 and 7 from Table 1, we have evidence of a *contemporaneous direct* response to ongoing events in the political world at both levels of government. We have not highlighted this impact in our discussion of Figure 1, which emphasizes the direct and indirect impacts of lagged hearings, but it is one of the most important aspects of our results. Lobbyists at the state level and members of Congress through hearings are both reacting to the same things; given their powerful incentives to do so, there is no reason to expect them to fail to react to common problems and opportunities.

Second, the results in the same models also provide evidence of a *direct lagged substitution* effect. That is, the negative and significant estimate of the 1998 hearings suggests that congressional hearings in one year dampen state lobby registrations in the following year, at least in certain states (those with the least professionalized legislatures) and in certain policy areas (those with the least federal involvement). But the more powerful impact is through *stimulating* even greater than baseline lobbying activity in states with professionalized legislatures and in policy areas with higher than average levels of federal involvement.

Third, the results in Table 2 suggests that congressional hearings have *indirect lagged stimulation* and *indirect contemporaneous substitution* effects on state lobbying activity though their impacts on the size of state policy agendas. These effects of the lagged (1998) and contemporary (1999) hearings variables are the opposite of those observed for the direct effects on registrations. This suggests that it takes time for changes in levels of federal activity to work their way into patterns of bill introductions in the states to which organized interests respond. But fourth, levels of professionalism in state legislatures and levels of federal involvement with policy areas influence these indirect (through the size of state policy agendas) effects in the same manner as observed with the direct effects. That is, the size of state policy agendas react more positively to lagged congressional hearings in states with professional legislatures and in policy areas in which the federal government plays a strong funding and/or regulator role.

The broader interpretation is that state lobby registrations seem to have a very complex *direct* and *indirect* response to congressional hearings. Our results suggest that the processes of vertical policy diffusion are many and distinct. In all, these findings provide strong and robust support for the view that organized interests are strongly affected not only by the “bottom-up” factors that have long been studied in the literature and that are reflected in the supply and area variables in the ESA model but also by the “energy” factors. The uncertainty of the state legislative environment, the degree of policy activity in the state, long- and short-term levels of policy activity apparent at the federal level, and especially the connections among these factors are important forces in stimulating organizations to mobilize either to protect themselves from initiatives they oppose or to take advantage of opportunities to shape new policies they support, *but only under certain conditions*, an observation that is impossible to derive from studies of diffusion focusing on a single policy. If a diffusion of policy attention is a necessary prerequisite for diffusions of policy innovations, then a broader consideration of the multiple pathways in which federal policy attention influences state policy attention in the manner examined here is needed in further studies of vertical diffusion. Organized interests react to their environments, and other levels of government and their activities are a large part of the environment.

Notes

1. A harsher if rarer form of substitution is *preemption*—when federal action precludes state action, such as with the 1974 Employee Retirement Income Security Act, which preempts state laws that “relate to” employee benefit programs (including health plans) unless such laws are part of the traditional state function of regulating insurance.

2. Done through the Medicare Prescription Drug, Improvement and Modernization Act of 2003.

3. Nathan argued that when society favors new public action, proponents find it more efficient to achieve policy change at the center. But when there is diminished support for public action in the society (i.e., during conservative periods), proponents are likely to be most successful in those states where there happens, for whatever reason, to be support for such action. Thus, states will move into policy areas as the national government moves out or does not take initiative.

4. The stringency of state lobbying registration rules has little impact on the density (Lowery and Gray 1994a, 1997) and diversity (Gray and Lowery 1998) of state interest communities.

5. Registration lists were gathered by mail or Web page from state agencies responsible for their maintenance. After purging state agencies in states requiring their registration, organizations registered to lobby—rather than individual lobbyists—were coded by organizational type (membership group, institution, or association) and interest content (twenty-six guilds of substantive

interests) using directories of organizations and associations and the Web pages of individual organizations. A second coder then examined the coding assignments with discrepancies resolved via discussion between the two coders. Only 1.58 percent of the 35,928 registrations in 1997 and a similar number in 1999 could not be coded by type or substantive interest.

6. These included the organizations in the military/veterans, good government, tax, environment, religion, women's issues, and civil rights guilds. Similarly, the small business and the services-of-business guilds were excluded because of their extreme issue diversity, which made it difficult to identify their discrete interests in the bills being considered by state legislatures. Second, the small police/fire guild was combined with the local government guild.

7. Interest organizations frequently move on and off state lobby registration rolls as specific issues wax and wane (Gray and Lowery 1995a). For example, 17.35 percent of the interest organizations registered to lobby in the states in 1997 were not registered in 1998. Of those registered in 1998, 27.48 percent were not registered in 1997.

8. Lowery and Gray (2001) report that density dependence results roughly equally from the depression of new registrations and the death of older organizations.

9. These include narrow indicators that are specific to each guild (Lowery and Gray 1995), intermediate measures such as the number of firms associated with each (Lowery, Gray, and Fellowes 2005a), and highly aggregated measures such as total gross state product (GSP; Lowery and Gray 1998).

10. Guild-specific GSP is strongly correlated with the number of related firms (Lowery, Gray, and Fellowes 2005a), another intermediate measure of the area term of the energy-stability-area (ESA) model.

11. Several available measures of state agendas were considered. While each of these measures of legislative agendas has virtues, our analysis requires a measure of legislative activity in many different issue areas, a level of specificity that is not reached by extant measures. Furthermore, we required a measure of the entire state legislative agenda, and not only bills of high priority to governors or those with roll calls. Given that a considerable part of this analysis considers contemporaneous and lagged effects of hearings, some might ask about the exclusively contemporaneous inclusion of the bill count data in the ESA model. However, Lowery, Gray, and Fellowes (2005a) fully examined a variety of specifications for the agenda size variable, finding that a simple contemporaneous inclusion clearly proved to be the superior specification.

12. The database is maintained by LexisNexis, a division of Reed Elsevier Inc., and is available at <http://www.nexis.com>. The database contains bill text files for all bills considered by each statehouse in a calendar year and provides a separate listing for each revised version of a bill in the database. For example, Alabama House Bill 175, which appropriated \$4,564,831 to the Department of Public Health in 1997, was listed five times in the database: one entry was the introductory version, three were revisions, and the fifth was the enacted bill.

13. Alternative coding modes were considered, including keyword text and bill summary searches. But these were deemed to be infeasible or unreliable because of database limitations.

14. The search terms for the fifteen guilds were as follows (with the search terms in parentheses): agriculture (agriculture), finance (banking, real estate), communications (media, telecommunications), construction (construction), education (education), health

(health), insurance (insurance), law (legal), local government (municipality, public employees, police, fire), manufacturing (manufacturing), natural resources (gas, oil, minerals), sports (sport), transportation (highways, transit, airports), utilities (utilities), and welfare (social services, charities). Two issues must be noted. First, we do not believe that the search terms provide a comprehensive count of all of the bills the several guilds attend to as they lobby state legislators. Rather, the measure is designed to tap variations in legislative activity across states and across guilds. After reviewing the issue counts, we are quite confident that they tap this variation. States with extensive natural resources, for example, generated much higher bill counts than did those without oil, natural gas, or mining industries. Second, as noted earlier, some bills are counted more than once if they were revised as they moved through the legislative process. Rather than a drawback, we view this aspect of the coding scheme as quite appropriate for our purpose. The attention of organized interests should be heightened as bills proceed further on the road toward becoming law. Our coding scheme taps this greater energy. In 1999, the average guild in the average state generated 117.72 bill counts, with a standard deviation of 179.41.

15. One-tailed tests are used for the ESA model variables given strong prior expectations.

16. This complex interpretation was confirmed when model 2 was run separately under four conditions: (1) nonprofessional legislature (with the Squire indicator dichotomized into high and low levels of professionalism) and low federal activity, (2) nonprofessional legislature and high federal activity, (3) professional legislature and low federal activity, and (4) professional legislature and high federal activity. The standardized estimates of the 1998 hearings variables were, respectively, -0.12 ($t = -2.71$), 0.34 ($t = 4.97$), -0.15 ($t = -1.13$), and 0.63 ($t = 3.49$). Hearings had a negative, significant impact in condition 1, a slightly negative impact in condition 3, a modest but significantly positive impact in condition 2, and a very strong positive impact in condition 4.

17. We also tried to examine the interactions of federal responsibility and professionalism with contemporaneous 1999 hearings. At that point, however, collinearity became overwhelming.

18. Although there are considerable continuities across number of federal hearings over this two-year period, the numbers are less than perfectly correlated. That is, the simple correlation of the 1999 and 1997 hearings numbers across the twelve sectors is .88, and the correlation of the 1996 and 1998 measures is .76. The simple correlation of the 1997 and 1999 dependent variable is .92. The remaining variables were not changed in model 8 because they were measured for the latter half of the 1990s and change relatively little over time within states.

References

- Baumgartner, Frank R., and Bryan D. Jones. 1993. *Agendas and instability in American politics*. Chicago: University of Chicago Press.
- Baumgartner, Frank R., and Christine Mahoney. 2004. Social movements and the rise of new issues. In *Routing the opposition: Social movements, public policy and democracy*, ed. Helen Ingram, Valerie Jenness and David S. Meyer, 65-86. Minneapolis: University of Minnesota Press.
- Berry, William D., Michael B. Berkman, and Stuart Schneiderman. 2000. Legislative professionalism and incumbent reelection: The development of institutional boundaries. *American Political Science Review* 94:859-74.

- Bowling, Cynthia J., and Margaret R. Ferguson. 2001. Divided government, interest representation, and policy differences: Competing explanations of gridlock in the fifty states. *Journal of Politics* 63:182-206.
- Campbell, Andrea L. 2005. *How policies make citizens: Senior political activism and the American welfare state*. Princeton, NJ: Princeton University Press.
- Daley, Dorothy M., and James C. Garand. 2005. Horizontal diffusion, vertical diffusion, and internal pressure in state environmental policymaking, 1989-1998. *American Politics Research* 33:615-44.
- Davis, Gray. 2002. California takes on air pollution and greenhouse gases. *Washington Post*. July 22.
- Gray, Virginia, and David Lowery. 1995a. The demography of interest organization communities: Institutions, associations, and membership groups. *American Politics Quarterly* 23:3-32.
- . 1995b. Interest representation and democratic gridlock. *Legislative Studies Quarterly* 20:531-52.
- . 1998. State lobbying regulations and their enforcement: Implications for the diversity of state interest communities. *State and Local Government Review* 30:78-91.
- Gray, Virginia, David Lowery, Matthew Fellowes, and Jennifer Anderson. 2005. Understanding the demand-side of lobbying: Interest system energy in the American states. *American Politics Research* 33:404-34.
- Gray, Virginia, David Lowery, and Erik K. Godwin. 2007a. The politics of managed care: Explaining variations in state health maintenance organizations regulations. *Journal of Health Politics, Policy and Law* 32:457-95.
- . 2007b. Public preferences and organized interests in health policy: State pharmacy assistance programs as innovations. *Journal of Health Politics, Policy and Law* 32:89-129.
- Gray, Virginia, David Lowery, Erik Godwin, and James Monogan. 2005. Incrementing toward nowhere: Universal health care coverage in the states. Paper presented at the annual meeting of the American Political Science Association, Chicago.
- Grodzins, Morton. 1966. *The American system: A new view of government in the United States*. Chicago: Rand McNally.
- Hecht, Stacey Hunter. 2001. Laboratories or lighthouses: The states, the federal government, and social policy innovation. PhD diss., Univ. of Minnesota.
- Heinz, John P., Edward O. Laumann, Robert L. Nelson, and Robert H. Salisbury. 1993. *The hollow core*. Cambridge, MA: Harvard University Press.
- Johnson, Haynes, and David S. Broder. 1996. *The system: The American way of politics at the breaking point*. Boston: Little, Brown.
- Jones, Bryan D., and Frank Baumgartner. 2005. *The politics of attention: How governments prioritize problems*. Chicago: University of Chicago Press.
- Karch, Andrew. 2007. *Democratic laboratories: Policy diffusion among the American states*. Ann Arbor: University of Michigan Press.
- Keiderman, Eric. 2007. State immigration laws multiply. <http://www.stateline.org/live/details/story?contentId=229930>.
- King, James D. 2000. Changes in professionalism in U.S. state legislatures. *Legislative Studies Quarterly* 25:327-43.
- Kurtz, Karl T. 1992. Understanding the diversity of American state legislatures. *Legislative Studies Section Newsletter* (June): 2-5.
- Leech, Beth L., Frank R. Baumgartner, Timothy La Pira, and Nicholas A. Semanko. 2005. Drawing lobbyists to Washington: Government activity and interest-group mobilization. *Political Research Quarterly* 58:19-30.
- Lowery, David, and Virginia Gray. 1994a. Do lobbying regulations influence lobbying registrations. *Social Science Quarterly* 75:382-84.
- . 1994b. The nationalization of state interest group system density and diversity. *Social Science Quarterly* 75:368-77.
- . 1995. The population ecology of Gucci Gulch, or the natural regulation of interest group numbers in the American states. *American Journal of Political Science* 39:1-29.
- . 1997. How some rules just don't matter: The regulation of lobbyists. *Public Choice* 91:139-47.
- . 1998. Representational concentration and interest community size: A population ecology interpretation. *Political Research Quarterly* 51:919-44.
- . 2001. The expression of density dependence in state communities of organized interests. *American Politics Research* 29:374-91.
- Lowery, David, Virginia Gray, and Matthew Fellowes. 2005a. Organized interests and political extortion: A test of the fetcher bill hypothesis. *Social Science Quarterly* 86:368-85.
- . 2005b. Sisyphus meets the borg: Economic scale and the inequalities in interest representation. *Journal of Theoretical Politics* 17:41-74.
- Mettler, Suzanne. 2005. *Soldiers into citizens: The G.I. Bill and the making of the greatest generation*. New York: Oxford University Press.
- Mintrom, Michael. 1997. Policy entrepreneurship and the diffusion of innovation. *American Journal of Political Science* 41:738-70.
- Mooney, Christopher Z. 1994. Measuring U.S. state legislative professionalism: An evaluation of five indices. *State and Local Government Review* 26:70-78.
- Mossberger, Karen. 1999. State-federal diffusion and policy learning: From enterprise zones to empowerment zones. *Publius* 29:31-50.
- National Conference of State Legislatures. 2007. Immigrant policy project: Overview of state legislation related to immigration and immigrants in 2007. <http://www.ncsl.org/programs/immig/2007StateLegislationImmigration.htm>.
- Rabinowitz, George, and Stuart Elaine Macdonald. 1989. A directional theory of voting. *American Political Science Review* 83 (1): 93-121.
- Shipan, Charles R., and Craig Volden. 2006. Bottom-up federalism: The diffusion of antismoking policies from U.S. cities to states. *American Journal of Political Science* 50:825-43.
- Skocpol, Theda. 1992. *Protecting soldiers and mothers: The political origins of social policy in the United States*. Cambridge, MA: Harvard University Press.
- Skocpol, Theda, Marjorie Abend-Wein, Christopher Howard, and Susan Goodrich Lehmann. 1993. Women's associations and the enactment of mothers' pensions in the United States. *American Political Science Review* 87:686-701.
- Soss, Joe B. 2002. *Unwanted claims: The politics of participation in the U.S. welfare system*. Ann Arbor: University of Michigan Press.
- Squire, Peverill. 1992. Legislative professionalization and membership diversity in state legislatures. *Legislative Studies Quarterly* 17:69-79.

- Squire, Peverill, and Keith E. Hamm. 2005. *101 chambers: Congress, state legislatures, and the future of legislative studies*. Columbus: Ohio State University Press.
- Tews, Kerstin, Per-Olof Busch, and Helge Jorgens. 2003. The diffusion of new environmental policy instruments. *European Journal of Political Research* 42:569-600.
- Thomas, Clive S., and Ronald J. Hrebenar. 1992. The integration of interest group activity at the national, state and local level in the United States: Extent, causes and consequences. Paper presented at the annual meeting of the American Political Science Association, Chicago.
- Truman, David. 1951. *The governmental process*. New York: Knopf.
- U.S. Census Bureau. 2000. *Statistical abstract of the United States: 2000*. Washington, DC: U.S. Census Bureau.
- Walker, Jack L., Jr. 1969. The diffusion of innovations among the American states. *American Political Science Review* 63:880-99.
- . 1991. *Mobilizing interest groups in America*. Ann Arbor: University of Michigan Press.
- Wawro, Gregory. 2000. *Legislative entrepreneurship in the U.S. House of Representatives*. Ann Arbor: University of Michigan Press.
- Weissert, Carol S. 1991. Policy entrepreneurs, policy opportunists, and legislative effectiveness. *American Politics Research* 19:262-74.
- Weissert, Carol S., and William G. Weissert. 2002. *Governing health*. 2nd ed. Baltimore: Johns Hopkins University Press.
- West, Darrell M., Diane Heith, and Chris Goodwin. 1996. Harry and Louise go to Washington: Political advertising and health care reform. *Journal of Health Politics, Policy, and Law* 21:35-68.
- Wolak, Jennifer, Adam Newmark, Todd McNoldy, David Lowery, and Virginia Gray. 2002. Much of politics is still local: Multi-state lobbying in state interest communities. *Legislative Studies Quarterly* 27:527-56.