

# Party Competition, Party Polarization, and the Changing Demand for Lobbying in the American States

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## Abstract

Interest system density influences internal dynamics within interest organizations, how they lobby, and policy conditions. But how do political conditions influence interest system density? How does politics create demand for interest representation? We examine these questions by assessing how legislative party competition and ideological distance between parties in state legislatures affect the number of lobby groups. After stating our theoretical expectations, we examine 1997 and 2007 data on legislative competition and party polarization to assess their influence on system density. We find mixed results: Whereas politics slightly influenced the structuring of nonprofit interest communities, they seem to have not affected the structuring of for-profit interest communities or interest communities as a whole.

## Keywords

interest organizations, interest system density, population ecology, polarization, state legislatures

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The study of communities of organized interests has developed very rapidly over the last decade and a half.<sup>1</sup> We now know that populations matter a great deal. They matter most immediately in terms of defining the severity of the collective action problems organizations face (Lowery & Gray, 1995). Interest system density influences their mortality risks (Nownes & Lipinski, 2005), the kinds and number of issues on which they lobby (Lowery, 2007; Lowery, Gray, Kirkland, & Harden, 2012), and how they do so (Bosso, 2005; Lowery et al., 2009). Perhaps of greatest interest, we now know that the diversity of interest systems is a complex result of variations in the density functions of different subsets or guilds of interest organizations rather than a simple product of wealth as power, and that for-profit and nonprofit interest communities are not necessarily motivated by the same factors (Lowery, Gray, & Fellowes, 2005). At the end of the influence production process, we know that the density and diversity of interest communities can sometimes, but not always, influence the shape of public policy (Gray, Lowery, & Benz, 2013).

In short, we know that interest system density influences internal dynamics within interest organizations, how they lobby, and policy conditions. But how do political conditions influence interest system density? How do these conditions create a demand for interest representation? A few others have studied versions of this question. Boehmke (2005), for example, asked how the ability of citizens and organized interest groups to circumvent the legislative process through use of the initiative alters traditional state and interest group politics. His answer was that initiative states have almost 30% more interest groups and more than 40% more citizen groups, making them more representative of the public than states without the initiative (Boehmke, 2005). We examine these larger questions by assessing how ideological distance between the two major parties in U.S. state legislatures influences how many organized interests register to lobby those legislatures. We address a question that a student asked one of us at the end of a course: “[i]f party polarization is increasing, is there still room left for interest groups to be influential?” After laying out our theoretical expectations about these relationships, we examine 1997 and 2007 data on party polarization as well as legislative party competition to assess their influence on the density of state interest systems. We find indications that both measures of the character of politics within the states matter slightly in structuring interest nonprofit interest communities, but not for-profit interest communities. This raises concerns about the changing nature of organized economic interests compared with noneconomic interests, where several anomalous patterns have been observed.

## The Political Demand for Lobbying

In many earlier studies of the politics of interest representation, government policies and politics were not viewed as influencing interest activity so much as interest activity was viewed as influencing policies and politics. Mancur Olson's (1982) *Rise and Decline of Nations*, for example, offers an image of interest representation as a supermarket in which organized interests enter at their will, freely shopping for policies sitting passively on the store's shelves, and then purchasing them with little interaction among themselves or with the passive (if greedy) politicians at the checkout counter.

More recently, attention has shifted to the role of government activity and policies in generating a demand for representation via lobbying (Baumgartner, Larsen-Price, Leech, & Rutledge, 2011; Dusso, 2010; Gray, Lowery, Fellowes, & Anderson, 2005; Leech, Baumgartner, La Pira, & Semanko, 2005). That is, organized interests are more commonly drawn to legislatures by the attention they pay to policies under consideration, not the reverse. Policy agendas are not so much generated by interest organizations; instead, interest organizations respond to policy agendas.

This perspective on policy agendas acting as a magnet for organized interests was foreshadowed by Gray and Lowery's (1996) Energy–Stability–Area (ESA) model in which the *Energy* term refers to the policy issues of concern to interest organizations and the level of uncertainty about their solution. These two kinds of energy mobilize groups to form; typically, issues are measured by the size of the governmental agenda in a given policy area. The level of uncertainty is measured most often by the level of party competition. States with more competitive party systems or more active policy agendas, or both, can support more organized interests than otherwise might survive. States with less active policy agendas or less competitive political parties, or both, will typically see fewer organized interests mobilize. In this article, we focus on interparty competition rather than agenda size because it is an article about political parties.

But the key term in the ESA model is *Area*, which is interpreted as the potential number of constituents in the interest sector that might be represented by an interest organization. This variable is positive and linear for much of its range. Where do we find more constituents to be mobilized? States with larger economies and populations provide the resources for citizens and business organizations to mobilize (roughly four fifths of registered interests at state capitals represent business). In these large states (either by population size or economic size), more specialized organizations can be added, representing niches of the interest space. At some point, the positive linear relationship becomes less positive and more curved, taking the shape

of a polynomial, reflecting density dependence or crowding within the interest community. Some niche organizations are so fine-grained that there are not enough constituents to support all of them, so that birthrates of new organizations decline and death rates of older organizations increase. These changes indicate that the resource environment has reached its carrying capacity. The *Stability* term is a constant in the short to medium term in stable democracies such as the United States, but it might well come into play in other countries, example, emerging democracies.

We turn now to a discussion of the Energy term as measured by party competition.

### *Party Competition*

But what of politics per se, rather than the public policies produced by government? Does the level and nature of political party competition itself influence how many organized interests decide to lobby governments? Such an influence is clearly expected in the earliest versions of Gray and Lowery's (1996) ESA model of state interest community density. One of the key measures of the energy term of the model is interest uncertainty, which they often measure with a folded Ranney index of state political party competition. A considerable amount of research examines the role of political competition on parties' behavior and its subsequent influence on state policy outcomes (e.g., Lowi, 1963; Schlesinger, 1966; Walker, 1969). This work often centers on whether the implementation of the parties' sincere policy views is strengthened or weakened by competition between the major parties (see Plotnick & Winters, 1990). In one perspective, parties are especially likely to "stake out" distinct positions when facing more severe competition in an effort to obtain support from distinct constituencies (Alt & Chrystal, 1983; Page, 1977; Plotnick & Winters, 1990). In such cases, close competition provides the parties with an opportunity to win based on their sincere preferences, and thereby move policy in their preferred directions.

Alternatively, several other works adopt the view that parties are essentially a means of achieving the goal of winning elections (e.g., Aldrich, 1995). In this view, parties adjust their policy positions in a competitive environment—a move that requires moderation toward the median—to gain support from enough voters to win elections (see also Downs, 1957). By this logic, the opposite occurs in a less competitive state. In the absence of a need to pick up extra votes, parties do not need to moderate. Thus, parties may shift between strategic and sincere behavior in response to the level of competition (Barrilleaux, Holbrook, & Langer, 2002; Chappell & Keech, 1986; Key,

1949). This perspective suggests that the effects of party competition are conditioned by the ideological separation of parties in legislatures.

The critical point from this work for our purposes is that more competition creates more tension over policy, leading to more interest uncertainty. In a competitive environment, both major parties have a realistic chance of winning a majority, and they must decide whether to hold true to their policy preferences and take the risk of staking out a distinct position or whether to moderate their platform to increase the odds of winning. Both choices create uncertainty in the policy environment that we expect corresponds to an increase in organized interests' incentives to lobby. If a party stakes out a distinct position and loses by a narrow margin, it becomes a viable minority voice for organized interests that hold different preferences from the majority. If the party moderates and wins narrowly, it is susceptible to interests representing the party's ideological base *and* interests on the side that the party moved closer toward to win the majority. Thus, for those either favoring policy change or opposed to it, states with high levels of party competition offer venues for lobbying by organized interests that might pay high dividends in terms of securing their interests.

Accordingly, Gray and Lowery (1996) in measuring the Energy term of their model argued that policy change is more likely to occur in competitive party systems as the out-party stands as a ready alternative to the in-party. Or as Lowi (1963) put it, "in a party system, innovation is a function of the minority party" (p. 571). In contrast, the payoff from lobbying in states with more limited party competition is likely to be lower; the status quo is simply more secure. As a result, there is more uncertainty, and thus more demand for interest representation, when competition is high.

### *Party Polarization*

However, although political party competition in the states has been shown to influence the density of some specific guilds (Lowery & Gray, 1995), it does not seem to influence equally strongly all of those guilds that have been studied to date, and its impact on the overall size of the interest system seems weak, albeit in the expected direction.<sup>2</sup> Thus, the empirical results to date, although generally supportive of our hypothesized effect of competition, remain somewhat mixed.

One plausible reason why this is so is the failure to consider how different the two parties are in terms of their preferences.<sup>3</sup> That is, if the two major parties do not differ greatly in terms of their ideological preferences that bear on public policies, it may simply not matter if one party poses a risk to take over the levers of government from the other, even if the parties are highly

competitive. This overlap or short distance between the two parties in ideology may translate into a more stable policy environment for some organized interests. These interest groups have little uncertainty riding on the election's outcome. In contrast, competition between the parties should matter more in terms of stimulating lobbying activity on the part of organized interests in states in which the two parties are more sharply divergent in their preferences. Thus, we might expect that party competition interacts with the ideological distance between the major parties to stimulate or depress the demand for interest representation.

Prior work on other issue domains has found some support for this interaction hypothesis. Studies have found robust effects on policy outcomes for models with both competition and ideological measures (Krause, 2000), as well as stronger effects for party control when considering ideological measures (Brown, 1995; Dye, 1984). Such results suggest it may be useful to more fully explore the importance of parties by focusing on how party competition interacts with ideological divisiveness, rather than examining electoral competition on its own.<sup>4</sup>

But the ideological distance between the parties might also matter on its own terms. Ideological distance between parties or degree of party polarization (on polarization, see Layman, Carsey, Green, Herrera, & Cooperman, 2010) can generate a lot of noise that might in turn generate *perceived* threats or opportunities even when the out-party stands relatively little chance to become the in-party. And in their efforts to get or to keep their hands on the levers of power in government, the major political parties have plenty of incentives in terms of energy, enthusiasm, and contributions to exaggerate for their respective bases the potential policy consequences that would follow from a hypothetical change in party control. Thus, although we most strongly expect that the influence of party competition and the ideological distance between the parties interact in their influence on incentives to lobby and, thereby, the density of state interest communities, it is also possible that they exercise quite independent influences on both.

However, research on how party polarization might affect interest representation is lacking as overall research into the fundamental relationships between parties and organized interests has been moribund for decades (for an essay on this problem, see Heaney, 2010). Hence, the student's question that we referenced earlier is very pertinent: Has this growing party polarization crowded out chances for interest groups to be influential?

Perhaps one way to think about this, and one we find compelling, is to consider the more general strategic choices facing organized interests in dealing with political parties. One major strategy is to tightly align with the policy goals and objectives of a single party. We see such a strategy in the now

decades long association of the union movement with Democrats and Christian Right organizations with Republicans. The alternative interest group strategy is to win friends in both parties. Evidence of this approach, of course, can be found in the long-standing pattern of major corporations contributing political action committee (PAC) money to both parties. The latter strategy seems to have been the dominant pattern for groups in recent years. Both strategies have costs and benefits for organized interests. But as the parties become more polarized, doing the latter may become more difficult for several reasons. First, as the parties diverge, the consequences in terms of changed policy become starker for many interest organizations. Although either party's position might have been broadly acceptable to an organizational interest in the past, the now more sharply divergent positions may shift the preferred position of the organization into one camp or the other. Organized interests might thus find that the potential costs of stretching across the partisan divide to be costly.

And second, the parties themselves may become more active in demanding fealty to one side, as illustrated by the K-Street project of Tom Delay when he was majority leader in the U.S. House. For our purposes, this logic bears similarly on the incentive of organizations to mobilize for political purposes. When political parties are deeply polarized, the costs of an organization sitting on the sidelines increase relative to a situation in which an organization can remain relatively indifferent to the policy positions of the parties. And a more polarized duel-to-death world is one in which politicians will have powerful incentives to mobilize any allies they can find and to punish those who do not show up suited for battle. For these reasons, we should expect that a more polarized party system should be one in which there is a higher level of mobilization on the part of organized interests. And although we do not test this implication in this article, a more polarized world is one in which we should expect the first strategy outlined above—aligning with parties—to become more dominant in comparison with seeking friends in both parties.

Some supportive hints for our expectations can be gleaned from both the recent parties and the interest representation literatures. In the political parties literature, for example, Layman et al. (2010) both theorize and empirically suggest that one of the causes of party polarization comes from increasingly extreme party activists. They also acknowledge that activist influence may be even stronger if parties are broad coalitions of organized interests, social movements, and others demanding policy who work to gain control of government to further their own goals. The chief exposition of the perspective that parties are made up of interest groups and activists comes from Bawn et al. (2012). Reviving an older group-centered view of political parties, they articulate and

provide support for the view that parties are best understood as coalitions of interest groups and activists seeking to capture and use government for their particular goals. In contrast to the typical view that election-minded politicians control parties, Bawn et al. demonstrate that “intense policy demanders” (e.g., policy-demanding groups and activists) increasingly control the presidential nomination process. Bargaining among these policy demanders constructs the party system, but importantly it also constructs the ideological space between the two parties. Bawn et al. view the polarized votes of legislators as the pursuit of policies demanded by interest groups and activists, allowed because voters are not really paying attention to how extreme the policies are. This perspective suggests that political parties in more polarized states are especially dominated by party activists, organized interests, social movements, and other policy demanders that pull their party away from the median.

Complementary to Bawn et al. (2012) is Herrnson (2009) who describes political parties as enduring multilayered coalitions. These coalitions can include party-connected committees, such as party members’ personal campaign committees and leadership PACs, and party allies, consisting of interest groups that primarily support one party’s candidates, individual donors, PACs, 501(c) groups, 527 committees, political consultants, think tanks, opinion leaders, and issue activists. Herrnson sees several implications from the spending patterns he studies in Congressional elections, at least one of which is very relevant to our study. He cites Godwin (1988) for the finding that politicians who are more extreme and who use inflammatory rhetoric have significant advantages in fundraising. Heberlig, Hetherington, and Larson (2006) demonstrate this advantage specifically in the case of Congressional leadership: Members of Congress will select ideologically extreme leaders over moderates when extremists redistribute more money than centrists, leading to a more polarized leadership in Congress. Also Herrnson (2009) argues that another source of polarization is that members of Congress have become more responsive to the policy perspectives of party allies, especially those allies who are campaign donors. In sum, these scholars would point us toward explanations rooted in changes in campaign finance and extremism of leaders in any accounting for party polarization at the state level. Whereas party polarization at the national level has been extensively documented and analyzed, examination of polarization in state legislatures is lacking, aside from the yeoman work of Shor and McCarty (2011) who have collected roll call data from all state legislatures since the mid-1990s. Importantly, they have also developed a technique by which ideal point estimates can be compared across state legislatures and across time.

The literature on interest representation is equally deficient at least until recently in its consideration of how polarized political parties might

influence organized interests.<sup>5</sup> Andres (2009) observed that the growing polarization in Congressional parties in the 1990s and 2000s brought about a number of changes in advocacy organizations. Some of these changes are relevant to our analysis as they may already have happened in the more polarized states. Andres, for example, suggested that increased Congressional party polarization enhanced the importance of legislative party leadership; this development means that organized interests now lobby leadership as well as committee chairs. Other consequences of polarization noted by Andres include the blurring of the line between the politics of campaigns and the politics of public policy, the growth in the number of leadership PACs seeking money from organized interests and PACs, and the rise of new partisan and bipartisan lobbying firms as opposed to general advocacy firms.

There are also growing demands on lobbyists to help promote partisan agendas. A theoretical account for this “reverse lobbying” had already been developed by Hall and Deardorff (2006), especially the notion that lobbying is mainly a form of *legislative subsidy* in which lawmakers ask organized interests for help in passing legislation rather than the reverse. Interest organizations are asked to subsidize lawmakers with policy information, political intelligence, and labor. A related development that affects the reliance on reverse lobbying is the empowerment of lobbyists resulting from the fact that Democratic and Republican members of Congress talk less frequently to each other. Instead, lobbyists on both sides of the ideological divide are now more likely to exchange information and, thereby, serve as a conduit for indirect communication between the parties in Congress (Andres, 2009). In short, a polarized environment is one in which demand for interest groups’ services is high.

## Hypotheses

From this discussion, we derive three hypotheses stemming from the role of party competition and polarization: one hypothesis on the marginal effect on interest density of each and one interactive hypothesis.

**Hypothesis 1 (H1):** The level of party competition in a state’s legislature is positively associated with the size of the state’s interest group community.

This hypothesis is derived in part from the Energy term of the ESA model (Gray & Lowery, 1996) where groups mobilize in reaction to interest uncertainty such as that brought about by the possibility of a switch in legislative control. Also the hypothesis rests on party scholars from Lowi (1963) to

Plotnick and Winters (1990) who argue that close competition provides parties with an opportunity to win based on their sincere preferences.

**Hypothesis 2 (H2):** The level of party polarization in a state's legislature is positively associated with the size of the state's interest group community.

This hypothesis is based in part on the research of Hall and Deardorff as well as Andres that concludes that a polarized environment is one in which demand for interest groups' services is high. Also the hypothesis logically follows from those scholars (e.g., Bawn et al., 2012; Herrnson, 2009; Layman et al., 2010) who take the position that parties are now driven by interest groups, noisy policy activists, and other policy demanders.

**Hypothesis 3 (H3):** As the level of polarization increases, the marginal effect of competition on interest group density (H1) increases.

This hypothesis rests in part on the theoretical position that parties adjust their policy positions in a competitive environment—a move that requires moderation toward the median—to gain support from enough voters to win elections (Aldrich, 1995; Downs, 1957). Thus, parties may shift between strategic and sincere behavior in response to the level of competition, which suggests in turn that the effects of party competition are conditioned by the ideological separation of parties in legislatures. In addition, scholars have found robust effects on state policy outcomes for models with both competition and ideological measures (Krause, 2000), as well as stronger effects for party control on welfare policy when considering ideological measures (Brown, 1995; Dye, 1984). The logical implication of these results is an expectation for an interaction between polarization and party competition in increasing group density in the states.

While this theoretical framework comes in part from past literature on both state and national government, our empirical analysis uses the states to test these hypotheses, as the states provide variation on our key variables of interest—competition and polarization—that is not available at the national level.

## Research Design

### *Data and Estimation*

We measure interest system density, our dependent variable, with the number of lobby registrations by interest organizations in 1997 and 2007.<sup>6</sup> The state

lobby registration data we employ have been described more fully elsewhere (Gray & Lowery, 2001). Briefly, however, lobby registration lists were gathered by mail or web page from state agencies responsible for their maintenance. Group lobby registration data remain the best measure of interest group activity in the American states in terms of both their operational value and their accessibility to researchers.<sup>7</sup> In 1997, the density of state interest communities ranged from a low of 191 in the state of Hawaii to a high of 2,106 in California. In addition, we compiled a new data set that includes the density of interest groups in each state for 2007.<sup>8</sup> In 2007, the density of state interest communities ranged from a low of 297 in Hawaii to a high of 2,961 in Texas. Between the 2 years, few states actually declined in the number of groups; the bulk of the states showed small increases up to 100 new groups; four states added between 500 and 1,000 groups over the decade; four others gained between 1,000 and 1,500 groups, while New York's interest group population increased by more than 1,500 in a decade's time.

While our substantive interest in this analysis concerns party competition and the ideological distance between the parties, we assess their impact in the context of a broader ESA model of interest system density (Gray & Lowery, 1996). The independent variables are the area and energy terms of the ESA model (Lowery & Gray, 1995). The area term of the model addresses the "supply" of interest organizations provided by society. As the potential or latent membership of an interest guild increases, it is expected to support a larger number of interest organizations and, thereby, lobby registrations. But this relationship is expected to be curvilinear, or density dependent. That is, the rate of growth of organization mobilizations and then lobby registrations in response to increases in the size of the potential membership of a guild is expected to slow as the size of the potential membership becomes larger.<sup>9</sup> 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 interest guilds across states. These include narrow indicators that are highly specific to each guild<sup>10</sup> (Lowery & Gray, 1995), intermediate measures such as the number of firms associated with each guild (Lowery et al., 2005), and highly aggregated measures such as total gross state product (GSP) in a state (Lowery & Gray, 1998). All produce similar findings. The choice among them largely depends on the degree to which one wishes to compare across the guilds and the availability of data at different levels of aggregation.

In this analysis, we focus on the total size of the interest system. We opt, therefore, for an aggregated measure of the potential membership of organizations found in the interest system: 1997 and 2007 GSP.<sup>11</sup> GSP is entered into the models in a polynomial form to capture the curvilinear density-dependent

relationship between forces of supply or area and the density of state interest communities.<sup>12</sup>

While the area or supply term of the model is a necessary variable in the model, in this article, we are especially interested in the “demand” for lobbying represented by the energy or demand term of the ESA model. Lowery and Gray (1995) highlight two measures of the energy underlying the mobilization of state interest organizations, to which we will add a third. As is mentioned above, the first is interest uncertainty. As party competition increases, the prospect of a change in party control is enhanced, and 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. Those in office are motivated to action by the prospects of the loss of “threatened goods,” while those out of office are motivated by the opportunities to secure either “lost goods” or “new goods” (see Morrison, 1979).

Lowery and Gray (1995, 1998) normally tap interest uncertainty with a folded Ranney index of party competition. To date, this variable has generated somewhat mixed results. In part, this may be due to calculation of the Ranney index over several years when it seems that interest organizations are especially responsive to within-legislative year sources of demand (Lowery, Gray, Fellowes, & Anderson, 2004). It may also be due to a failure of the Ranney index to account for how different the two major parties are in terms of ideological distance, an issue we address below. The Ranney (1976) index also is heavily weighted by the party of the governor, which could also be a drawback.

Therefore, we substitute a folded version of the Klarner index of party control; Klarner’s (2010) index measures the probabilities of Democratic Party control of a legislative chamber 9 months in advance, averaged between the two chambers. Our measure reflects the conditions of the chambers at the beginning of the 1997 or 2007 legislative session and adjusts for states without elections in 1997 or 2007. The party control measure is then folded to form the party competition measure.<sup>13</sup> As this measure is focused solely on the legislature, and on the extent of legislative party competition in the next legislative session, we may find its explanatory power to be superior to that of the standard Ranney index.<sup>14</sup> Because organized interests register with the legislature as whole rather than with individual chambers, we average the scores to create a single measure of legislative party competition.<sup>15</sup> High values indicate close legislative competition.

Our second and new dimension of the energy or demand forces associated with interest system density concerns the stakes at hand. That is, we have argued that the ideological distance or polarization between the two parties

might also matter either directly through interest community size or indirectly through its influence on the effect of party competition. A proper measure of state-level polarization requires aggregating individual-level ideological estimates for all state legislatures in our cross-sections. Such data have been missing in state politics for two reasons. The first is that roll call voting data for all 50 states over time have not been collected. The second impediment is that as ideal points are latent quantities, direct comparisons across states, within states over time, or even across chambers within states are generally exceedingly difficult to make. Without a common legislative agenda, naïve comparisons of scores are misleading at best.

Recently, Shor and McCarty (2011) comprehensively addressed both problems.<sup>16</sup> First, they introduced a new data set of state legislative roll call votes that covers most state legislatures from 1993 until 2009. The roll call data set currently covers as many as 50 states depending on the year and more than 18,000 state legislators over time. Second, they employed a new strategy for establishing comparability of estimates across chambers, states, and time. The basis of this approach is the use of the National Political Awareness Test (NPAT), a survey of state and federal legislative candidates. The NPAT is administered by the nonpartisan Project Vote Smart and asks questions on a wide range of political issues—including fiscal policy, foreign policy, social issues, criminal justice, and environmental policy—in identical form across states over time (see <http://www.votesmart.org/>). This large set of common questions provides significant leverage for making cross-state comparisons. An NPAT-based ideal point is estimated for the responders to the survey (numbering 5,683).<sup>17</sup>

To create the common space, each state legislature's roll calls are scaled separately. Thus, each responder has two scores—a roll call–based score that covers all legislators but is not comparable across states and an NPAT-based score that covers fewer legislators but is in a common space. The authors project the roll call–based state legislative scores to NPAT common space via a least squares regression, under the assumption of ideological consistency (on average). The scores for nonresponders are imputed using the estimated parameters from that mapping. Because all predicted scores are on the same scale, they can now be directly compared.

The final step is the aggregation by chamber of the individual-level scores for those legislators serving in 1997 or 2007. Party medians within the chambers are calculated. The difference between chamber party medians is our chamber-level measure of polarization (see Poole & Rosenthal, 1997). The two chamber distances are averaged to derive a state-level polarization score.<sup>18</sup> Again, because organized interests register with legislatures and not with chambers, the average provides the most appropriate measure for an

analysis with lobby registrations by interest organizations as the dependent variable. We also attempted alternative models using a measure of average ideological distance between each legislator within a chamber, but they are not presented here, as their results were similar to those utilizing ideological distance. The 1997 values of the ideological distance measure ranged from a low of 0.3700 for Nebraska to a high of 2.5635 for California. The 2007 ideological measures ranged from a low of 0.5145 for Louisiana to a high of 2.844 for California.

Given the highly polarized discussions of state politics currently in the media, it might be thought that the ideological distance between the two parties across the states is moving in steady progression toward greater polarization across the board; however, the analysis of Shor and McCarty (2011) indicates that this is not the case. The political parties of most states are becoming slightly more polarized even as others are either not changing or becoming less polarized. Our 1997 to 2007 change data show the same trend: Five states reduced polarization between the parties during the decade. These were Vermont, Kansas, Illinois, North Dakota, and Louisiana. Four more states remained right around zero or had little or no change in ideological distance between the parties: North Carolina, Connecticut, South Dakota, and Pennsylvania. Eleven states recorded below average changes in polarization, while another 12 states scored above average changes in polarization. There were 4 states that experienced much more partisan polarization change over the decade: Tennessee, Missouri, Colorado, and most especially Arizona.

Finally, we include Squire's (2000) measure of state legislative professionalism as a control. As Berkman (2001) demonstrated, professionalized legislatures require less information from lobbyists, and thus groups in those states are less effective, resulting in higher rates of exit from the interest community.<sup>19</sup> See Table 1 for summary statistics of the variables we use.

Our specification of the ESA model, then, includes two area or supply variables—total GSP and its squared value—and two energy or demand variables—the level of legislative competition (H1) and ideological distance between the parties (H2). We expect all of these variables to produce positive coefficients except for GSP<sup>2</sup>, which we expect to be negative. In addition, we examine the interaction of the two energy variables on the expectation that greater ideological distance between the parties enhances the effect of party competition (H3). Thus, we expect a positive coefficient for the interaction term. Finally, we expect a negative coefficient for legislative professionalism because the more professionalized legislatures rely less on interest groups because they have more staff. Citizen legislatures, in contrast, need lobbyists more for information because their own time in session is limited, and they have less staff.

**Table 1.** Descriptive Statistics of Relevant Variables.

| Variable                     | <i>n</i> | Minimum | Maximum  | <i>M</i> | <i>SD</i> | Missing |
|------------------------------|----------|---------|----------|----------|-----------|---------|
| Groups 1997                  | 50       | 191     | 2,106    | 715.30   | 467.69    | 0       |
| Groups 2007                  | 50       | 279     | 3,335    | 1,038.32 | 740.87    | 0       |
| Nonprofit 1997               | 50       | 29      | 768      | 187.72   | 142.26    | 0       |
| For-profit 1997              | 50       | 157     | 1,690    | 517.02   | 331.56    | 0       |
| Nonprofit 2007               | 50       | 52      | 1,133    | 343.48   | 250.59    | 0       |
| For-profit 2007              | 50       | 193     | 2,066    | 664.12   | 466.18    | 0       |
| GSP 1997                     | 50       | 15.17   | 1,019.00 | 166.80   | 189.48    | 0       |
| GSP 2007                     | 50       | 24.63   | 1,801.76 | 272.46   | 329.95    | 0       |
| Legislative competition 1997 | 49       | 0.51    | 1.00     | 0.82     | 0.16      | 1       |
| Legislative competition 2007 | 49       | 0.51    | 1.00     | 0.82     | 0.15      | 1       |
| Ideological distance 1997    | 48       | 0.47    | 2.67     | 1.26     | 0.43      | 2       |
| Ideological distance 2007    | 50       | 0.52    | 3.00     | 1.38     | 0.48      | 0       |
| Legislative professionalism  | 50       | 0.03    | 0.57     | 0.18     | 0.12      | 0       |

Note. GSP = gross state product.

We test our hypotheses with ordinary least squares (OLS) regression, dropping two cases from the full model in 1997 due to missing data on party polarization: Nebraska and Wyoming. For 2007, we have to drop Nebraska due to missing data on party competition.

## Results

We assess our theoretical expectations with the OLS results presented in Tables 2 and 3. The tables are presented with several specifications to illustrate the effects of additional explanatory variables on the fit of the model. Table 2 shows the results of the models for 1997 interest group densities while Table 3 shows the results for 2007 interest group densities. The first column in each table includes only the supply or area terms of the ESA model. As is evident in this column as well as in all of the remaining models in the table, the positive and highly significant GSP estimate, along with the negative and highly significant estimate for its squared value, suggests that state interest communities increase in size with the size of state economies, but at a declining rate as GSP increases. These results support the central organizational ecology hypothesis that populations of organizations of all kinds increase in a density-dependent fashion or are functionally self-limiting. These conclusions remain consistent across both years. As this result has been well-established in prior work, we will have little further to say about it in our discussion of the results for the other models.

**Table 2.** OLS Estimates of Effects on Total State Interest Group Density, 1997.

|                                | Model 1            | Model 2            | Model 3            | Model 4            | Model 5            |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| (Intercept)                    | 0.00<br>(.50)      | 0.00<br>(.50)      | 0.01<br>(.45)      | 0.01<br>(.46)      | 0.00<br>(.48)      |
| GSP 1997                       | 1.42***<br>(<.01)  | 1.38***<br>(<.01)  | 1.42***<br>(<.01)  | 1.39***<br>(<.01)  | 1.57***<br>(<.01)  |
| GSP <sup>2</sup> 1997          | -0.62***<br>(<.01) | -0.59***<br>(<.01) | -0.65***<br>(<.01) | -0.63***<br>(<.01) | -0.69***<br>(<.01) |
| Legislative<br>competition     |                    | -0.04<br>(.32)     |                    | -0.04<br>(.33)     | -0.04<br>(.30)     |
| Ideological<br>distance        |                    |                    | 0.07<br>(.18)      | 0.08<br>(.19)      | 0.11<br>(.12)      |
| Legislative<br>professionalism |                    |                    |                    |                    | -0.20**<br>(.04)   |
| Distance ×<br>Competition      |                    |                    |                    |                    | -0.03<br>(.40)     |
| <i>n</i>                       | 50                 | 49                 | 48                 | 47                 | 47                 |
| Adjusted <i>R</i> <sup>2</sup> | .78                | .77                | .77                | .76                | .77                |

Note. *p* values in parentheses, one-tailed tests. OLS = Ordinary Least Squares; GSP = gross state product.

\**p* < .10. \*\**p* < .05. \*\*\**p* < .01.

It is worth noting Model 1's high adjusted  $R^2$  value of .78 in 1997 and .76 in 2007. However, we must also note that the adjusted  $R^2$  values of the remaining models are not higher and never exceed .77. While one should not make too much of coefficients of determination, it might be thought that this small decrease in variance explained for the final model indicates that the variables we are most interested in—the level of competition among legislative parties and the ideological distance between them—add little to accounting for the density of state interest populations. This becomes especially true as we note that most of the legislative competition explanatory variables across the models yield null results. This pattern of high  $R^2$ s but few significant coefficients may also be a symptom of multicollinearity (MC; see Allison, 1999; Gujarati, 2003). We conducted several tests and found evidence of MC in our models (see the online appendix for more details). Given that our sample size is small (50 or fewer observations), the MC in our data makes it particularly difficult to distinguish the independent effects of each variable.

The second and third models in Table 2 add separately to the baseline supply specification of our indicators of legislative party competition and the ideological distance between the parties. Neither of these variables provides

**Table 3.** OLS Estimates of Effects on Total State Interest Group Density, 2007.

|                                | Model 1            | Model 2            | Model 3            | Model 4            | Model 5            |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| (Intercept)                    | 0.00<br>(.50)      | 0.00<br>(.50)      | 0.00<br>(.50)      | 0.00<br>(.50)      | 0.00<br>(.24)      |
| GSP 2007                       | 1.74***<br>(<.01)  | 1.75***<br>(<.01)  | 1.74***<br>(<.01)  | 1.75***<br>(<.01)  | 1.75***<br>(<.01)  |
| GSP <sup>2</sup> 1997          | -1.02***<br>(<.01) | -1.01***<br>(<.01) | -1.01***<br>(<.01) | -1.01***<br>(<.01) | -1.00***<br>(<.01) |
| Legislative<br>competition     |                    | -0.08<br>(.13)     |                    | -0.08<br>(.19)     | -0.08<br>(.16)     |
| Ideological distance           |                    |                    | -0.01<br>(.43)     | -0.00<br>(.49)     | -0.00<br>(.49)     |
| Legislative<br>professionalism |                    |                    |                    |                    | -0.02<br>(.43)     |
| Distance ×<br>Competition      |                    |                    |                    |                    | -0.03<br>(.36)     |
| <i>n</i>                       | 50                 | 49                 | 50                 | 49                 | 49                 |
| Adjusted <i>R</i> <sup>2</sup> | .76                | .76                | .76                | .76                | .75                |

Note. *p* values in parentheses, one-tailed tests. OLS = Ordinary Least Squares; GSP = gross state product.

\**p* < .10. \*\**p* < .05. \*\*\**p* < .01.

statistically significant results in the 1997 or 2007 data. While the estimates are signed as expected, the mix of results suggests, as noted earlier, the strong explanatory power of GSP dominates the model. These dynamics become more confusing in Model 4, which includes both legislative party competition and ideological distance. Only the estimate for ideological polarization is positive as expected in 1997 but again null results are found in 2007 for Model 4. Legislative competition and ideological distance are not correlated with one another in either 1997 or 2007, so MC is not to blame for the lack of result here.

Model 5 in Tables 2 and 3 adds to the model the interaction of ideological distance and legislative party competition and the control for legislative professionalism. We expect that legislative party competition is especially powerful in drawing interest organizations to state capitals when there are real differences in ideological preference between the two legislative parties. In this case, party polarization in 1997 does not have a significant relationship with interest group density in 1997, as we predicted, and the interaction term does not add anything to our explanation. The control variable, legislative professionalism, performs as we expected

**Table 4.** OLS Estimates of Effects on For-Profit State Interest Group Density, 1997.

|                                | Model 1            | Model 2            | Model 3            | Model 4            | Model 5            |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| (Intercept)                    | 0.00<br>(.50)      | 0.00<br>(.50)      | 0.01<br>(.46)      | 0.01<br>(.46)      | 0.00<br>(.48)      |
| GSP 1997                       | 1.56***<br>(<.01)  | 1.53***<br>(<.01)  | 1.56***<br>(<.01)  | 1.52***<br>(<.01)  | 1.73***<br>(<.01)  |
| GSP <sup>2</sup> 1997          | −0.79***<br>(<.01) | −0.77***<br>(<.01) | −0.79***<br>(<.01) | −0.77***<br>(<.01) | −0.84***<br>(<.01) |
| Legislative competition        |                    | −0.03<br>(.35)     |                    | −0.03<br>(.34)     | −0.04<br>(.30)     |
| Ideological distance           |                    |                    | 0.02<br>(.38)      | 0.02<br>(.40)      | 0.05<br>(.27)      |
| Legislative professionalism    |                    |                    |                    |                    | −0.22**<br>(.03)   |
| Distance × competition         |                    |                    |                    |                    | −0.03<br>(.38)     |
| <i>n</i>                       | 50                 | 49                 | 48                 | 47                 | 47                 |
| Adjusted <i>R</i> <sup>2</sup> | .78                | .78                | .77                | .77                | .78                |

Note. *p* values in parentheses, one-tailed tests. OLS = Ordinary Least Squares; GSP = gross state product.

\**p* < .10. \*\**p* < .05. \*\*\**p* < .01.

in 1997: Highly professionalized states have less need of interest groups, whereas citizen legislatures depend more on interest groups. The coefficient is negative and statistically significant. For 1997 then, we have a reasonably good story to tell about the causes of interest group density: It is mostly shaped by the forces of supply but also more groups are present in citizen legislatures. Thus, at this point in our analysis, the answer to our student's question is that interest groups have no trouble operating in legislative settings where party polarization is intense.

However, when we look at Model 5 in 2007 (Table 3), where we would expect the model's results to be even sharper (as polarization has increased overall), we see that only the forces of supply are operating. None of the political demand variables or the controls has an impact on the number of interest groups lobbying state legislatures.

To add a level of granularity to our dependent variable, we split interest group communities along for-profit and nonprofit lines as categorized by Lowery et al. (2005). Tables 4 to 7 show the results of these splits across both years of analysis.

**Table 5.** OLS Estimates of Effects on For-Profit State Interest Group Density, 2007.

|                                | Model 1            | Model 2            | Model 3            | Model 4            | Model 5            |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| (Intercept)                    | -0.00<br>(.50)     | -0.00<br>(.50)     | -0.00<br>(.50)     | 0.00<br>(.48)      | 0.01<br>(.47)      |
| GSP 2007                       | 1.77***<br>(<.01)  | 1.78***<br>(<.01)  | 1.77***<br>(<.01)  | 1.79***<br>(<.01)  | 1.78***<br>(<.01)  |
| GSP <sup>2</sup> 2007          | -1.06***<br>(<.01) | -1.06***<br>(<.01) | -1.03***<br>(<.01) | -1.05***<br>(<.01) | -1.01***<br>(<.01) |
| Legislative<br>competition     |                    | 0.05<br>(.23)      |                    | 0.05<br>(.26)      | 0.04<br>(.31)      |
| Ideological<br>distance        |                    |                    | -0.07<br>(.19)     | -0.07<br>(.20)     | -0.06<br>(.24)     |
| Legislative<br>professionalism |                    |                    |                    |                    | -0.02<br>(.41)     |
| Distance ×<br>Competition      |                    |                    |                    |                    | -0.04<br>(.34)     |
| <i>n</i>                       | 50                 | 49                 | 50                 | 49                 | 49                 |
| Adjusted <i>R</i> <sup>2</sup> | .76                | .77                | .76                | .76                | .76                |

Note. *p* values in parentheses, one-tailed tests. OLS = Ordinary Least Squares; GSP = gross state product.

\**p* < .10. \*\**p* < .05. \*\*\**p* < .01.

The numbering systems of the models are consistent with the above descriptions of our model formulations. We find powerful results for the explanatory power of our supply variables in for-profit communities in 1997 as well as for legislative professionalism, and in 2007 we get the same results for the supply variables, though not for professionalism in for-profit communities. The nonprofit interest group community seems to operate rather differently, however. In the nonprofit model in Table 6, we see a similar set of results for the supply variables and legislative professionalism. However, in line with H2, ideological distance between the two parties is both highly positive and a statistically significant variable, attracting interest groups to legislatures, while professionalism of the chamber works in the opposite direction, though its coefficient is not significant. In 2007, the nonprofit model performs similarly in Table 7, though ideological distance between the two parties is now only modestly significant. Thus, for-profit groups increase due to the economic supply factors, almost exclusively, in both 1997 and 2007. However, in 1997 and 2007, nonprofit groups increased due to both supply and political demand factors. Overall, it appears that for-profit interest

**Table 6.** OLS Estimates of Effects on Nonprofit State Interest Group Density, 1997.

|                                | Model 1           | Model 2           | Model 3           | Model 4           | Model 5           |
|--------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| (Intercept)                    | -0.00<br>(.50)    | 0.00<br>(.49)     | 0.01<br>(.46)     | 0.00<br>(.48)     | -0.00<br>(.50)    |
| GSP 1997                       | 0.91***<br>(<.01) | 0.84***<br>(<.01) | 0.92***<br>(<.01) | 0.88***<br>(<.01) | 0.99***<br>(<.01) |
| GSP <sup>2</sup> 1997          | -0.10<br>(.33)    | -0.06<br>(.40)    | -0.20<br>(.18)    | -0.18<br>(.22)    | -0.22<br>(.19)    |
| Legislative<br>competition     |                   | -0.06<br>(.28)    |                   | -0.05<br>(.31)    | -0.06<br>(.30)    |
| Ideological<br>distance        |                   |                   | 0.21**<br>(.02)   | 0.22**<br>(.02)   | 0.24**<br>(.02)   |
| Legislative<br>professionalism |                   |                   |                   |                   | -0.12<br>(.19)    |
| Distance ×<br>Competition      |                   |                   |                   |                   | -0.03<br>(.41)    |
| <i>n</i>                       | 50                | 49                | 48                | 47                | 47                |
| Adjusted R <sup>2</sup>        | .66               | .65               | .68               | .67               | .66               |

Note. *p* values in parentheses, one-tailed tests. OLS = Ordinary Least Squares; GSP = gross state product.

\**p* < .10. \*\**p* < .05. \*\*\**p* < .01.

organizations are most able to operate without worrying about their being crowded out by ideological polarization.

### Marginal Effects

Because our hypotheses center on an interactive effect between competition and ideological distance (H3), we graph the marginal effect of competition in Figure 1. The graph in panel (a) comes from Model 5 of Table 2 and the graph in panel (b) comes from Model 5, Table 6 (models in the other tables provide similar results).

Both graphs show essentially no support for H1 or H3. In contrast to our expectations, the marginal effect of competition is small in magnitude and statistically nonsignificant across the range of ideological distance. Moreover, the effect declines somewhat, rather than increases, as ideological distance increases. Recall that we also found only moderate support for H2 (the direct effect of ideological distance). In some instances, that variable produces positive and statistically significant effects, indicating that (when competition is

**Table 7.** OLS Estimates of Effects on Nonprofit State Interest Group Density, 2007.

|                                | Model 1            | Model 2            | Model 3            | Model 4            | Model 5            |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| (Intercept)                    | -0.00<br>(.50)     | 0.00<br>(.50)      | -0.00<br>(.50)     | -0.00<br>(.48)     | -0.01<br>(.46)     |
| GSP 2007                       | 1.63***<br>(<.01)  | 1.65***<br>(<.01)  | 1.64***<br>(<.01)  | 1.67***<br>(<.01)  | 1.71***<br>(<.01)  |
| GSP <sup>2</sup> 2007          | -0.89***<br>(<.01) | -0.91***<br>(<.01) | -0.95***<br>(<.01) | -0.98***<br>(<.01) | -0.95***<br>(<.01) |
| Legislative<br>competition     |                    | 0.04<br>(.33)      |                    | 0.04<br>(.28)      | 0.03<br>(.35)      |
| Ideological<br>distance        |                    |                    | 0.11*<br>(.09)     | 0.12*<br>(.08)     | 0.13*<br>(.07)     |
| Legislative<br>professionalism |                    |                    |                    |                    | -0.08<br>(.26)     |
| Distance ×<br>Competition      |                    |                    |                    |                    | -0.08<br>(.20)     |
| <i>n</i>                       | 50                 | 49                 | 50                 | 49                 | 49                 |
| Adjusted R <sup>2</sup>        | .74                | .73                | .74                | .74                | .73                |

Note. *p* values in parentheses, one-tailed tests. OLS = Ordinary Least Squares; GSP = gross state product.

\**p* < .10. \*\**p* < .05. \*\*\**p* < .01.

very low), more polarization is associated with a more dense interest system. However, that result is mostly concentrated in our 1997 data.

## Conclusion

Previous studies have found strong evidence that the political configuration of states influences the density of interest communities. These results were not consistent in our reanalysis of 1997 data and our new analysis of 2007 data. The level of ideological distance between the two parties appears to work independently, albeit moderately, to enhance or diminish the demand for lobbying on the part of organized interests in 1997 and 2007. But these demand variables add no significant improvement to model fit, especially when compared with the dominant forces of supply. The findings among nonprofit communities suggest that economic interests are less concerned with polarization than nonprofit groups. This follows a distinct pattern with regard to interest certainty; groups that are ideological in nature, a subset of nonprofit groups,

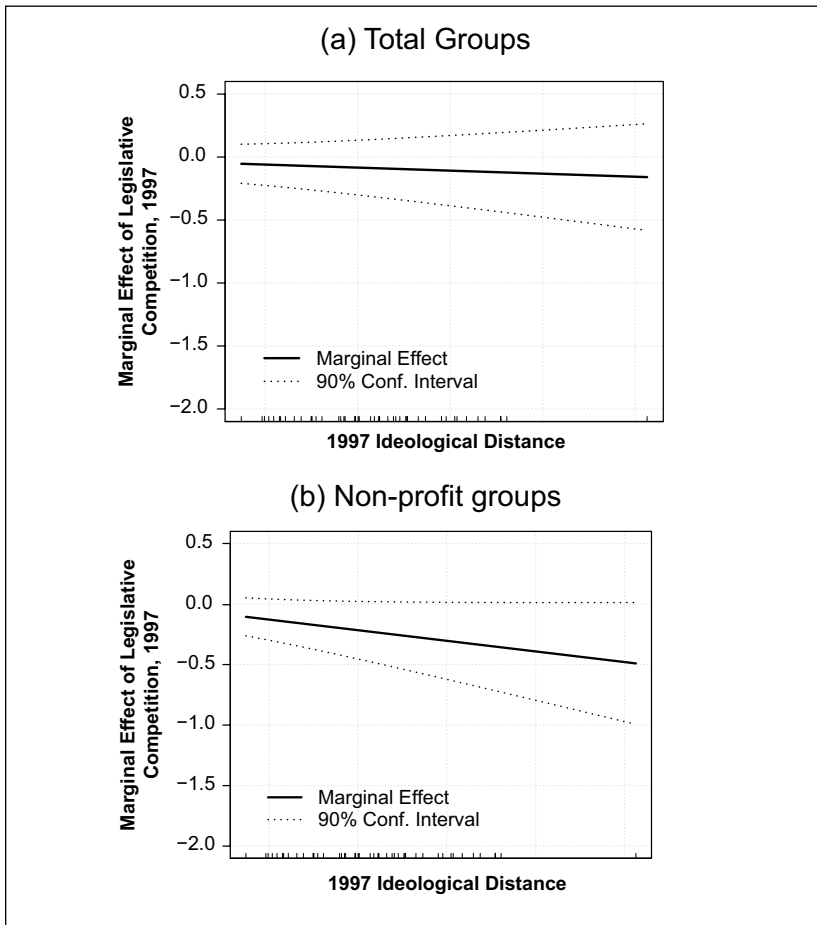


**Figure 1.** Marginal Effect of Legislative Competition on Total Groups and Non-profit Groups in 1997, by Ideological Distance.

are more likely to form in interest communities where legislatures are more ideological.

In this analysis, as well as many others, it is clear that the single best predictor of the density of an interest system is the number of potential constituents available to organized interests for mobilization. In our case, the supply was measured simply by the size of the economy (GSP). Politics as an element of demand does certainly matter. But demand cannot create its own supply. If there are no manufacturing firms in a state, no one will form a

manufacturing association to engage in lobbying even if the legislative parties are competitive and distinct in terms of their ideology. States with larger economies have more heterogeneous and diversified economic interests, and usually larger states also have more heterogeneous political systems as well. It will be important in future analyses to disentangle the causal path between demand and supply. However, at this point we can report that ideological polarization between the two political parties has not had a great influence on the traditional space in the political process for interest organizations to bring their issues to the state capital and have them heard in the legislature. Thus, nothing about the growing polarization of the parties seems to close off the space for interest groups to make their claims on government.

In terms of further research, the clearest avenue is examination of how legislative competition and ideology influence specific types of organized interests, not merely those of nonprofit and for-profit interests. Different kinds of interests—and the organizations that represent them—certainly align more or less neatly along the central ideological dimension that currently separates the two major parties. The policies of some organized interests are embedded more strongly or weakly in the status quo that may make them more sensitive to the prospect of changes in party control of the legislature. Furthermore, focusing on more specific types of interest organizations would allow us to bring back into the specification the demand source of *constituent interest* via measures of the size of the legislative agenda bearing on different kinds of interest organizations. In this regard, we have to this point only examined how two broad groupings of interests—for-profit and nonprofit interests—respond to levels of legislative party competition and ideological distance or polarization. A finer-grained analysis of specific interest guilds would seem to be in order.

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### **Notes**

1. Indeed, prior to 1995, populations of organized interests were not considered to be especially interesting. They were assumed to be simple tallies resulting from mobilization events whereby institutions became active in lobbying or they,

along with individual citizens, joined groups, or associations that lobbied (Olson, 1965; Truman, 1951).

2. Moreover, one study (Berkman, 2001), reported that competition's effect on density was conditioned on legislative professionalism—the competition term was significant and signed in the anticipated direction in less professional states, while, in highly professional state legislatures, party competition did not significantly increase the number of interest groups although the sign was positive.
3. Another plausible reason has to do with the multiyear Ranney index used by Lowery and Gray (1995). Later research indicates, as will be discussed shortly, that organized interests are especially responsive to within-year threats and opportunities bearing on the likelihood of policy change.
4. For an insightful essay on state parties see Wright (2010). He considers the role of party ideology and interparty competition and why it has been difficult to substantiate the impact of competition.
5. Interest group scholars Grossman and Dominguez (2009) challenge the concept of political parties as “coalitions of interests” sketched out above. In their research, they find that interest group–party alliance patterns depend heavily on whether the goals are electoral or legislative. Interest groups line up clearly with one party or the other when a winner-take-all election forces partisan choices. In contrast, they found legislative competition to be multidimensional and driven by a bipartisan core of diverse actors who represent interest group coalitions. In Congressional debate, interest groups act independently of parties. Their study was based on network analysis of 2002 data, and much may have changed in Congress since then.
6. We also replicated the analyses reported here with 1999 data for all of the variables. The results were very similar. Furthermore, we examined whether change in the value of ideological distance and party competition influenced the change in interest organization registrations from 1997 to 1999. Although these change score models did generate the expected positive coefficients, they were very weak, as was the variation accounted for by the modified change score Energy–Stability–Area (ESA) model as whole. Simply put, there is just not enough variation in gross state product (GSP), ideological distance, and party competition over this short 2-year period to make the analysis meaningful. Similar to what Willie Sutton said about banks and money, we report only the cross-sectional results here because that is where the variation is present.
7. Lobby registration data uniquely unite scholarship on both interest group community dynamics and the effects of interest group communities on political and policy outcomes (see Gray & Lowery, 1996). Previous work indicates that the stringency of state lobbying registration requirements has little impact on the density (Lowery & Gray, 1994, 1997) and diversity (Gray & Lowery, 1998) of state interest communities. In contrast, measures of lobbying expenditure are nearly impossible to compare due to different rules across states, and “industry influence” measures of campaign donations make it difficult to separate employees of an organized interest from that interest itself, especially in states that use

direct democracy as a political tool. As an example, the online retail, hotel, and restaurant industries have little material interest in whether a state offers marriage or civil unions to same-sex couples, though industry influence data would show quite the opposite.

8. Interest group data for 2007 were collected from a database of state-registered lobbyist clients collected and categorized by the National Institute on Money in State Politics (hereafter the Institute), using their own codebook. The institute compiles its lobbyist client data from registered lobbyist filings from all 50 states, the same source we used for 1997. When we initiated the coding project, the year 2007 contained the most recent completed and compiled set of registered lobbyist clients. Roughly half of the 52,147 state lobbyist clients in the Institute's 2007 data set had been coded by the Institute. Two graduate student coders were employed to code the remaining groups into the categories created by the Institute. Internet searches were used to determine the category for each unknown group. Two additional graduate students coded a handful of states. Intercooder reliability was established using a test set of data. The coders also constructed a set of coding rules to reduce confusion and retain consistency in the course of the coding effort, which took 18 months. The student-coded data were then merged with the Institute's coded data; the percentage remaining uncoded was 3.39%. Based on a translation table created by the senior author, the 2007 coded data set was then sorted into guild categories equivalent to Lowery and Gray's (1997) data set.
9. Lowery and Gray (2001) report that density dependence results are roughly equally due to the depression of births of new registrations and to the greater death rates of older lobbying organizations in crowded interest communities. Also see Nownes (2004) for a further explication of density dependence in interest populations over time. In contrast, Dusso (2010) argues that density dependence does not operate at the level of the national interest system, and Halpin and Jordan (2009) assert that interest organizations adapt rather than die when faced with environmental challenges.
10. These include, for example, the number of poor in a state for the welfare guild and the number of local governments for the local government guild.
11. In all cases, we use contemporaneous measures of both the supply and demand terms of the ESA model because prior work (Lowery, Gray, Fellowes, & Anderson, 2004) has indicated that it is within-year responsiveness that matters most, not interest organizations lagging or leading the forces of supply and demand.
12. For a detailed examination of the polynomial relationship between GSP and individual guild size in the 2007 data, see Lowery, Gray, and Cluverius (2013).
13. We thank Professor Carl Klarner of Indiana State University for his hard work in calculating this measure for us and in graciously making the data available to us.
14. For more information on Carl Klarner's measures of chamber switch probability, and other applications of these measures, see Klarner (2010). When incorporating gubernatorial elements, this measure predicts 96% of the variance in the

Ranney Index in 2007. Separating the legislative elements allows us to leverage the conditions of the legislature alone, strengthening our variable as a measure of a latent theoretical concept.

15. We have both an empirical reason and a theoretical reason for averaging legislative competition across chambers. The empirical reason is simply that with limited degrees of freedom, we want to make parsimonious modeling choices. More complex specifications would require additional linear terms and additional interaction terms, which present efficiency problems in models with at most 50 observations. This desire for parsimony is particularly relevant in the case of legislative competition because we do not have any theoretical expectations to suggest that the process would be different for the lower and upper chambers. When interest groups lobby state government, they must be able to convince majorities in both chambers because both chambers must ultimately approve identical bills before the legislation goes to the governor. So interest groups' target is the legislature as a whole, not one chamber or the other.
16. We thank Shor and McCarty for providing us with new data from their project not available at the time of their paper's publication.
17. Ideal point estimates are from Bayesian item-response theory models (Clinton, Jackman, & Rivers, 2004; Jackman, 2001, 2004; Martin & Quinn, 2002), but Poole and Rosenthal (1997) NOMINATE scores work just as well.
18. Our results are robust to the use of Shor and McCarty's (2011) alternative, party-free measure of polarization.
19. Berkman (2001) develops a more theoretically and empirically complex interaction model between the ESA model and legislative professionalism. We tested interaction specifications with the energy variables and found similar results to those reported here. Thus, given our limited degrees of freedom, we focus on a simpler model with professionalism only included as a linear term.

## References

- Aldrich, J. H. (1995). *Why parties? The origin and transformation of party politics in America*. Chicago, IL: University of Chicago Press.
- Allison, P. D. (1999). *Multiple regression: A primer*. Thousand Oaks, CA: Pine Forge Press.
- Alt, J. E., & Chrystal, K. A. (1983). *Political economics*. Berkeley: University of California Press.
- Andres, G. J. (2009). *Lobbying reconsidered: Under the influence*. New York, NY: Pearson Education.
- Barrilleaux, C., Holbrook, T., & Langer, L. (2002). Electoral competition, legislative balance, and American state welfare policy. *American Journal of Political Science*, 46, 415-427.
- Baumgartner, F. R., Larsen-Price, H. A., Leech, B. L., & Rutledge, P. (2011). Congressional and presidential effects on the demand for lobbying. *Political Research Quarterly*, 64, 3-16.

- Bawn, K., Cohen, M., Karol, D., Masket, S., Noel, H., & Zaller, J. (2012). A theory of political parties: Groups, policy demands and nominations in American politics. *Perspectives on Politics*, 10, 571-597.
- Berkman, M. B. (2001). Legislative professionalism and the demand for groups: The institutional context of interest population density. *Legislative Studies Quarterly*, 26, 661-679.
- Boehmke, F. J. (2005). *The indirect effect of direct legislation: How institutions shape interest group systems*. Columbus: Ohio State University Press.
- Bosso, C. J. (2005). *Environment, inc.: From grassroots to beltway*. Lawrence: University Press of Kansas.
- Brown, R. D. (1995). Party cleavages and welfare effort in the American states. *American Political Science Review*, 89, 23-33.
- Chappell, H. W., & Keech, W. R. (1986). Policy motivation and party differences in a dynamic spatial model of party competition. *American Political Science Review*, 80, 881-899.
- Clinton, J. D., Jackman, S., & Rivers, D. (2004). The statistical analysis of roll call data. *American Political Science Review*, 98, 355-370.
- Downs, A. (1957). *An economic theory of democracy*. New York, NY: Harper.
- Dusso, A. (2010). Legislation, political context, and interest group behavior. *Political Research Quarterly*, 63, 55-67.
- Dye, T. R. (1984). Party and policy in the states. *Journal of Politics*, 46, 1098-1116.
- Godwin, K. R. (1988). *One billion dollars of influence: The direct marketing of politics*. Chatham, NJ: Chatham House.
- Gray, V., & Lowery, D. (1996). *The population ecology of interest representation: Lobbying communities in the American states*. Ann Arbor: University of Michigan Press.
- Gray, V., & Lowery, D. (1998). State lobbying regulations and their enforcement: Implications for the diversity of state interest communities. *State and Local Government Review*, 30, 78-91.
- Gray, V., & Lowery, D. (2001). The institutionalization of state communities of organized interests. *Political Research Quarterly*, 54, 265-284.
- Gray, V., Lowery, D., & Benz, J. K. (2013). *Interest groups and health care reform across the United States*. Washington, DC: Georgetown University Press.
- Gray, V., Lowery, D., Fellowes, M., & Anderson, J. (2005). Understanding the demand-side of lobbying: Interest system energy in the American states. *American Politics Research*, 33, 404-434.
- Grossman, M., & Dominguez, C. B. K. (2009). Party coalitions and interest group networks. *American Politics Research*, 37, 767-800.
- Gujarati, D. N. (2003). *Basic econometrics*. New York, NY: McGraw-Hill.
- Hall, R., & Deardoff, A. V. (2006). Lobbying as legislative subsidy. *American Political Science Review*, 100, 69-84.
- Halpin, D., & Jordan, G. (2009). Interpreting environments: Interest group response to population ecology pressures. *British Journal of Political Science*, 39, 243-265.

- Heaney, M. (2010). Linking political parties and interest groups. In L. S. Maisel, & J. M. Berry (Eds.), *The Oxford handbook of American political parties and interest groups* (pp. 568-587). New York, NY: Oxford University Press.
- Heberlig, E., Hetherington, M., & Larson, B. (2006). The price of leadership: Campaign money and the polarization of Congressional parties. *Journal of Politics*, 68, 992-1005.
- Herrnson, P. S. (2009). The roles of party organizations, party-connected committees, and party allies in elections. *Journal of Politics*, 71, 1207-1224.
- Jackman, S. (2001). Multidimensional analysis of roll call data via Bayesian simulation: Identification, estimation, inference and model checking. *Political Analysis*, 9, 227-241.
- Jackman, S. (2004). What do we learn from graduate admissions committees? A multiple-rater, latent variable model, with incomplete discrete and continuous indicators. *Political Analysis*, 12, 400-424.
- Key, V. O., Jr. (1949). *Southern politics in state and nation*. New York, NY: Alfred A. Knopf.
- Klarner, C. (2010). Forecasting control of state governments and redistricting authority after the 2010 elections. *The Forum*, 8, Article 14.
- Krause, G. A. (2000). Partisan and ideological sources of fiscal deficits in the United States. *American Journal of Political Science*, 44, 541-559.
- Layman, G. C., Carsey, T. M., Green, J. C., Herrera, R., & Cooperman, R. (2010). Activists and conflict extension in American party politics. *American Political Science Review*, 104, 324-346.
- Leech, B. L., Baumgartner, F. R., La Pira, T., & Semanko, N. A. (2005). Drawing lobbyists to Washington: Government activity and the demand for advocacy. *Political Research Quarterly*, 58, 19-30.
- Lowery, D. (2007). Why do organized interests lobby? A multi-goal, multi-context theory of lobbying. *Polity*, 39, 29-54.
- Lowery, D., & Gray, V. (1994). Do lobbying regulations influence lobbying registrations. *Social Science Quarterly*, 75, 382-384.
- Lowery, D., & Gray, V. (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.
- Lowery, D., & Gray, V. (1997). How some rules just don't matter: The regulation of lobbyists. *Public Choice*, 91, 139-147.
- Lowery, D., & Gray, V. (1998). Representational concentration and interest community size: A population ecology interpretation. *Political Research Quarterly*, 51, 919-944.
- Lowery, D., & Gray, V. (2001). The expression of density dependence in state communities of organized interests. *American Politics Research*, 29, 374-391.
- Lowery, D., Gray, V., Benz, J., Deason, M., Kirkland, J., & Sykes, J. (2009). Understanding the relationship between health PACs and health lobbying in the American states. *Publius*, 29, 70-94.

- Lowery, D., Gray, V., & Cluverius, J. (2013). Economic change and the supply of interest representation. *Business and Politics*, 15, 1-29
- Lowery, D., Gray, V., & Fellowes, M. (2005). Sisyphus meets the Borg: Economic scale and the inequalities in interest representation. *Journal of Theoretical Politics*, 17, 41-74.
- Lowery, D., Gray, V., Fellowes, M., & Anderson, J. (2004). Legislative agendas and interest advocacy: Understanding the demand side of lobbying. *American Politics Research*, 33, 404-434
- Lowery, D., Gray, V., Kirkland, J., & Harden, J. J. (2012). Generalist interest organizations and interest system density: A test of the competitive exclusion hypotheses. *Social Science Quarterly*, 93, 21-41.
- Lowi, T. (1963). Toward functionalism in political science: The case of innovation in party systems. *American Political Science Review*, 57, 570-583.
- Martin, A. D., & Quinn, K. M. (2002). Dynamic ideal point estimation via Markov chain Monte Carlo for the U.S. Supreme Court, 1953-1999. *Political Analysis*, 10, 134-153.
- Morrison, D. E. (1979). Uphill and downhill battles and contributions to collective action. In C. S. Russell (Ed.), *Collective decision-making: Applications from public choice theory* (pp. 130-133). Baltimore, MD: Johns Hopkins University Press.
- Nownes, A. (2004). The population ecology of interest group formation. *British Journal of Political Science*, 34, 49-67.
- Nownes, A., & Lipinski, D. (2005). The population ecology of interest group death: Gay and lesbian rights interest groups in the United States, 1945-98. *British Journal of Political Science*, 35, 303-319.
- Olson, M., Jr. (1965). *The logic of collective action*. Cambridge, MA: Harvard University Press.
- Olson, M., Jr. (1982). *The rise and decline of nations*. New Haven, CT: Yale University Press.
- Page, B. I. (1977). Elections and social choice: The state of the evidence. *American Journal of Political Science*, 21, 639-668.
- Plotnick, R. D., & Winters, R. F. (1990). Party, political liberalism, and redistribution. *American Politics Research*, 18, 430-458.
- Poole, K. T., & Rosenthal, H. (1997). *Congress: A political-economic history of roll call voting*. New York, NY: Oxford University Press.
- Ranney, A. (1976). Parties in state politics. In H. Jacob & K. Vines (Eds.), *Politics in the American states* (pp. 51-94). (3rd ed.). Boston, MA: Little, Brown.
- Schlesinger, J. A. (1966). *Ambition and politics: Political careers in the United States*. Chicago, IL: Rand McNally.
- Shor, B., & McCarty, N. (2011). The ideological mapping of American legislatures. *American Political Science Review*, 105, 530-551.
- Squire, P. (2000). Uncontested seats in state legislative elections. *Legislative Studies Quarterly*, 25, 131-146.
- Truman, D. B. (1951). *The governmental process*. New York, NY: Alfred A. Knopf.

- Walker, J. L. (1969). The diffusion of innovations among the American states. *American Political Science Review*, 53, 880-899.
- Wright, G. C. (2010). State parties research: The quest for strong, competitive state parties. In L. S. Maisel & J. M. Berry (Eds.), *The Oxford handbook of American political parties and interest groups* (pp. 403-422). New York, NY: Oxford University Press.

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