Interest Group and Lobbying Research in a Higher Level Context: Two Tests of Integrating Multiple Levels of Analysis

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Abstract

Scholarship on interest groups and lobbying has become bifurcated between the dominant micro-level research on the choices of individual groups and macro-level research on group-level populations, especially the work of Gray and Lowery, with almost no integration of the two. Failure to integrate levels of analysis, unfortunately, will impede future progress in the subfield. I discuss some of the challenges to integrating research at multiple levels and then propose a solution which I test by re-analyzing two of my micro-level research projects now combined with Gray and Lowery' macro-level density variable using hierarchical modeling. It turns out that grouping micro-level observations by group interest niches matters in the statistical analysis, though the effects of varying group population density are more subtle.

Today's interest group literature is bifurcated between two levels of analysis, and this is a serious concern for theory development, research design, statistical modeling, and general progress in the sub-field. Certainly scholars ought to conduct research at the individual and higher, aggregate levels because these different perspectives enrich the literature. The next, crucial step, however, is to integrate these findings to create a richer body of knowledge. Research on war in the international relations literature, for instance, was considered stagnant until Waltz (1959) kick-started it by defining explanations for why some nations are more prone to war at three levels of analysis and then suggesting ways to integrate them (see Singer, 1961). Yet the interest group and lobbying literature seems stuck with a yawning chasm dividing the majority of research where individual groups and lobbyists are the unit of analysis from a smaller body of work spearheaded by Gray and Lowery on group populations. The links between this macro-level work and micro-level research are so fuzzy that one scholar recently questioned whether the former contributed much at all to the interest group literature (Loomis, 2015).

In this paper I discuss the theoretical, empirical, and statistical challenges of integrating micro- and macro-level research on interest groups, and suggest ways it might be done. I then try it by re-testing micro-level research on lobbyist cooperation in the United States, as well as research on how advocates strategically select lawmaking venues for their lobbying in a multi-level context. I find that when the micro-level data is re-analyzed using statistical models that account for variation between group populations, many results change significantly. This shows that levels of analysis need to be taken seriously. However, subsequently incorporating one of Gray and Lowery's key variables, group population density, as a higher level effect varying from population to population only shows a subtle effect when there is any effect at all. Finally, I end by speculating on how to further integrate levels of analysis in interest group research.

Levels of Analysis and Interest Group Research

Conducting research at different levels of analysis is essential when a sub-field is new and basic aspects of a phenomenon need investigation. Olson's (1965) collection action theory, however, firmly grounded interest group research at the micro-level because extending or refuting his findings required other scholars to similarly focus on individual group mobilization (e.g., Salisbury, 1969; Moe, 1980; Walker, 1983) with little regard for how one interest's mobilization shaped whole group populations. When research on how interest groups contributed to campaigns emerged, it too used individual groups or political action committees as units of analysis (e.g., Gopoian, Smith, & Smith, 1984), and so did work on how lobbyists gained access to lawmakers, chose advocacy strategies, and cooperated with each other (e.g., Hansen, 1991; Hojnacki, 1997; McKay, 2012). Others used micro-level lobbyist-legislator dyads to study access (e.g., Hojnacki & Kimball, 1998), lobbyist-lobbyist dyads to study competition (e.g., Holyoke, 2011), and PAC-legislator dyads to study the buying of influence (e.g., Wright, 1989).

Then, in the 1990s, Gray and Lowery (e.g., 1993; 1996) developed an approach to studying interest mobilization focusing on the dynamics of whole group populations. Drawing on biological theories of population ecology, they argued that interest groups strive to monopolize well-defined "niches" of people with similar wants and needs. If successful, they become that "interest niche's" dominant spokes-group, commanding the loyalty and resources of everyone there wanting to pursue their common interest through political advocacy. Gray and Lowery's theoretical and empirical work focused on how group populations in interest niches are shaped by this competition for resources. With their approach to studying group politics being adopted by scholars outside the United States (e.g., Beyers et al., 2014; Halpin, 2014), macro-level work will likely continue and ought to be taken seriously by micro-level researchers.

Yet micro-level researchers seem to be largely ignoring population-level findings regarding group mobilization and competition in their study designs. They essentially assume that group system density, a key population ecology variable, has no influence on how lobbyists do things like gain access to lawmakers. As Holyoke (2015), and to an extent Witko (2015) and Maloney (2015), argue, attempts should at least be made to think about how higher level population factors might influence individual lobbyists' choices and conduct tests when possible. This will allow us to see if population level research has any value-added for micro-level work.

Specifically, scholars need to think about how the decisions of individual lobbyists might directly or indirectly affect the contours of group populations, or how overly dense interest niche populations shape the strategic choices of those groups' lobbyists. Another barrier is difficulties in gathering group population data, or (arguably harder) micro-level data on all groups in a niche (Nownes, 2015). Then there are statistical problems. Generalizing micro-level findings to whole populations is dangerous unless researchers have true random samples, which is rarely the case, and conducting macro-level analyses and generalizing to the individual group level runs into the ecological inference problem (Ainsworth, 2000). And if scholars just throw micro *and* macro-level variables into regression models, they risk biasing estimates and standard errors (Guo & Zhao, 2000). These are significant barriers to integrating levels of analysis, but to a considerable extent they can be overcome. The rest of this paper provides examples of how it might be done.

Test One: Competition and Cooperation in an Interest Niche Context

The first example of integrating levels of analysis involves re-analyzing research on how lobbyists choose to compete or form coalitions. If integration matters, then the micro-level results should change when population level groupings and variables are considered.

Integrating Levels of Analysis in Interest-Niche and Issue-Niche Competition

Gray and Lowery's population ecology theory argues that there are meaningful differences between kinds of group populations. They focus primarily on interest niches, or segments of the population with similar interests such as blue-collar workers, business owners, and environmentalists. Interestingly, micro-level researchers also frequently draw samples from specific group populations to make data gathering easier, such as Hojnacki (1997) who studied alliance formation by lobbyists working on energy, labor, campaign finance, job training, and family medical leave issues. Similarly, Holyoke (2009) argues that group competition also occurs in the context of issues, competition being the degree to which one group's ideal policy goal is perceived as coming at the expense of the interests of other groups' goals in the same piece of legislation addressing a specific issue-problem. So issues, as well as interests, also define group populations, with "issue niches" containing all groups concerned with an issue.

Since population ecology theory emphasizes the importance of interest niches, a useful research strategy here is to take micro-level data already sampled from different issue areas and see what happens when they are further clustered by interest niches. I therefore re-analyze Holyoke's data on interest group competition, where the lobbyists are already grouped by the issues they are lobbying, to see if the results of a simple analysis where interest niches are ignored change when potentially cross-cutting interest niche groupings are included. Then the analysis pushes further by studying the effects of variables that vary across, but not within, interest niches, such as group population density. While drawing niche boundaries around groups feels a little artificial, if population ecology matters these higher level effects should affect the analysis and, consequently, change the way we understand lobbyist competition. If no significant change is found, population ecology's utility for micro-level research could be reconsidered.

Predicting how an analysis of lobbying competition might change when micro-level data already clustered by issue niches is re-grouped by interest niches requires care. Many issue proposals, like bills in Congress, are multi-dimensional in the number of interests they impact (Baumgartner et al., 2009), which means it is possible for an issue niche to overlap more than one interest niche. If niche clusters matter at all, then the more an issue niche overlaps two (or more) interest niches, the more likely it is that a pair of lobbyists in that *issue* niche will vary in their reactions to each other depending on whether they are in the same or different *interest* niches. I try to clarify this in Figure 1 which presents predictions of lobbyist behavior by whether an issue niche overlaps one or two interest niches, and by the population density of each interest niche.

---- Insert Figure 1 about here ----

The top row in Figure 1 has one issue niche encompassing one interest niche; both niches contain the same interest groups. Here the encompassing issue, perhaps a narrowly drawn bill, only affects people represented by groups in a single interest niche, implying that all groups lobbying the bill represent people with fairly similar interests. This, in turn, means the policy positions for which groups are lobbying are also similar to each other. Without major policy differences, most lobbyists should be comfortable working together. However, if the issue niche (the bill) also encompasses a second interest niche, the bottom of Figure 1, the policy preferences of all groups in one interest niche are likely to be collectively further away from those in the other. Preference differences within each interest niche will be smaller in comparison. Competition will be more intense between a pair of lobbyists lobbying the same issue if they represent groups in different interest niches; they are more likely to fight than cooperate.

The other variable presented in Figure 1 across the horizontal axis is interest niche population density, a key Gray and Lowery variable. When the issue niche only overlaps one interest niche, and that interest niche's density is low (Figure 1's upper-left corner), there is unlikely to be much policy-driven *or* resource-driven competition, and thus few barriers to cooperation overall. As density increases, seen in the upper-right, so too does the pressure on lobbyists to distinguish their groups from each other. Conflict is greater, even over minor policy differences, but driven by the need to dominate an interest niche, not issue concerns per se.

When the issue niche overlaps two interest niches, but group density in those interest niches is low (Figure 1's lower-left corner), there is little reason not to form *within*-interest niche alliances. Cross-niche cooperation, however, will only occur when some force exogenous to the interest niche is present, like pressure from senior lawmakers to form the broad coalitions needed to move legislation. As density increases in one or both interest niches, the lower-right corner, lobbyists come under greater pressure to remain true to member-driven goals instead of compromising those goals by joining coalitions supporting compromises lest their disillusioned members get poached by similar groups. In other words, lobbyists in dense interest niches are under pressure to fight groups holding very different positions in other interest niches, *and* are under pressure to distinguish their group from others in the same interest niche through conflict. We would see almost no cross-interest niche *or* within-niche support for coalitions.

Research Design Summary for Test One

The micro-level unit of analysis here is each lobbyist's choice to work with, or fight against, each competitor lobbying the same issue. The data is organized into dyads where both lobbyists in a pair are in the same issue niche but may be from different interest niches with different group population densities. The issues, and thus issue niches, studied are: labeling

genetically modified foods, reforming dairy pricing laws, drilling for oil in the Arctic National Wildlife Refuge, adding money to state environmental programs, money-laundering law reform, and bankruptcy law reform. Eighty-three interest group and corporate lobbyists working these issues were interviewed in 2003. On each issue four policy proposals were identified addressing the issue question active on the government's agenda between 1999 and 2002, either bills in Congress or executive branch regulations. Each issue's four alternatives were arrayed on a simple, ordinal policy outcome continuum based on whether one imposed greater regulation, or cost the government more money, than another. Every lobbyist was asked which of these four positions best represented the ideal policy preferences of their members or clients, and then were asked whether they actively lobbied in support of, or opposition to, each policy alternative.

The dependent variable is built from these lobbyist pairs. The data matrix is arranged so that there is one observation for every lobbyist paired once with every other working the same issue (in the same issue niche) for a total of 3,709 dyadic observations. If both lobbyists in a pair lobbied for a policy proposal at the same position on the ordinal outcome scale, and if that proposal did not represent the ideal position of the first lobbyist's members, then I assume the lobbyist chose to cooperate with the competitor and a binary dependent variable is coded 1. Otherwise it is coded 0 for conflict. Readers are referred to the original work for construction of the independent variables, but key variables are pressure from legislators to compromise and counter pressure from members to not compromise. One variable is different from the original work – the degree of competition between pairs of lobbyists. The competitive effect may be curvilinear, with lobbyists more likely to work with competitors when the policy outcome differences are small, but less when they are greater. Thus a dummy variable is coded 1 if the competitive difference on the ordinal scale is 1 space, and a second dummy coded 1 if it is 2.[1]

Finally, the niche density measure is created by sorting each of the eighty-three groups into fourteen interest-niches using *Washington Representatives's* (2004) classifications, counting the number of groups listed in each. Dairy has the fewest at 24, and local government most at 1,367.

Analysis and Discussion

It turns out that in only 20% of the dyads did the first lobbyist change positions to support the same issue position as a competitor in a coalition. Yet 28% of these choices to cooperate were between lobbyists in the same interest niche; only 17% were across niches. There is a low, but statistically significant, pair-wise correlation between the choice to cooperate and niche density of $r = 0.20$ overall, but a significant $r = 0.16$ across interest niches and $r = 0.30$ within. Cooperation, it seems, is more likely within interest niches than across them. This finding suggests that at least population groupings matter and are worth further exploration.

An intuitive way to explore the impact of incorporating higher levels of analysis in a multivariate setting is to start with a simple statistical model that initially ignores them, but then gets more complex. The dependent variable is binary, so I use a basic logit model where y_i is the dependent variable and x_i a vector of all the micro-level independent variables described in the prior section, β the combined parameter coefficient of these variables, and α the dependent variable's value when the independent variables are all 0. The model in latent response form is

$$y_i^* = \alpha + \beta x_i + \varepsilon_i \qquad (1)$$

where ε_I is the random error where $E(\varepsilon_I \mid x_i)=0$ means the term is assumed to be independently distributed across all dyads i. The results are in the first column of Table 1. Interestingly, competition with other lobbyists where the differences on the ordinal outcome scale are small is positive, but negative where the differences are larger, showing the curvilinear competitive

effect. Pressure from allied lawmakers to support a compromise is positive, and member constraint is negative. Again, no interest niche or niche density effect is included here.

---- Insert Table 1 about here ----

Following Bryk and Raudenbush (1992), the best way to estimate the effects of independent variables on data grouped by interest niches, statistically linking the micro- and macro-levels, is with the class of models called multilevel or hierarchical. These are used in many areas of political science, but are largely absent from interest group research. The random-intercept model is the simpler form. Here unobserved influences specific to interest niche *j* are controlled for by estimating separate logit curves for each niche *j* under the assumption that the intercept for each curve, the probability a lobbyist joins a coalition when independent variables are 0, is randomly distributed (often called random effects). Analysis of the independent variables emphasizes inter-niche effects rather than intra-niche. The latent response model is

$$y_{ij}^{*} = \alpha + \beta x_{ij} + \zeta_{j} + \varepsilon_{ij} \qquad (2)$$

where ε_{ij} remains the random error term independent of all variables and follows the standard logistic distribution, but ζ_j is the random-intercept, a *unique intercept for each interest niche j* with the normality assumption $\zeta_j \sim N(0, \psi)$. In other words, the unique intercept of every interest niche is assumed to be independent of every other, as well as independent of all covariates in equation 2 which apply to all *I* observations nested in *j* interest niche populations.[2]

Results are presented in the random-intercept column of Table 1. The likelihood-ratio test rejects the null hypothesis that estimating a random-intercept for interest niches produces results no different from basic logit (the significant χ^2 = 100.33), meaning that incorporating groupings at a higher level of analysis matters. But does it matter much? The standard deviation of the intercepts for all fourteen interest niches around the average intercept α is ζ_j = 1.11.

Converting this to an odds ratio, exp(1.11)=3.03, shows that the odds are more than twice as great that lobbyists in an interest-niche with an intercept more than one standard deviation greater than the average intercept will cooperate rather than fight. In other words, the characteristics of a lobbyist's interest niche matters significantly. Furthermore, while the main variables do not change direction or significance, three control variables that were significant are no longer. PAC contributions, the number of members, and distributive policy do not matter for lobbyist cooperation, but incorporating niche populations does matter in lobbying research.

The final step is to estimate a random-*coefficient* model. While the random-intercept model estimates separate intercepts for each interest niche, it assumes that the shape of the logit curve for each is the same. Adding a random coefficient relaxes this assumption so that each interest niche's curve may deviate from the average curve of all interest niches with the reported niche-level coefficient showing the estimated degree of deviation. The latent response form is

$$y_{ij}^{*} = \alpha + \beta x_{ij} + \varsigma_j^I + \varsigma_j^S x_j^d + \varepsilon_{ij} \qquad (3)$$

where the random-intercept term is now identified with the superscript *I.* The new random-effects term ς_j^S has superscript *S* indicating it is the parameter of the slope of the coefficient for each interest niche given each niche's group density, listed as variable x_j^d. Remember that this term is niche-specific in that it affects the slope for all lobbyists in the same interest niche in exactly the same way, only varying from one niche to another and thus determining the deviation of each niche-slope from the overall slope β in the model. In this case the interest niche level variable is Gray and Lowery's group population density variable.

The results are in the third column of Table 1 with no clear evidence that greater interest group population density influences either within or across interest niche cooperation as predicted in Figure1. While the estimate of the standard deviation of the random-intercepts for

each interest niche increased from 1.11 to 1.49, suggesting an even greater niche-effect over the random-intercept model, the estimated standard deviation of the logit curve *deviations* from the average curve of all interest niches, capturing the influence of the density measure at the niche-level, is only 0.001. This is tiny and suggests that while the influence of group density is significantly different from 0, the null hypothesis, the practical effect is nearly 0.

Test Two: Multi-Level Venue Advocacy by Charter Schools

Another opportunity to assess population-level influence on micro-level research is in multi-venue lobbying strategy. In the United States where lawmaking and veto powers are separated between institutions with different responsibilities, lobbyists can target their most intense efforts at venues where lawmakers are most receptive to their arguments (Baumgartner & Jones, 1993; McKay, 2012). Federal systems like the United States and the European Union also have layers of government levels with differing responsibilities, higher levels constraining the decisions of institutions lower levels (Beyers & Kerremans, 2012). Thus lobbyists may vertically venue shop by targeting institutions in either levels, or both. My second test re-analyzes Holyoke, Brown, and Henig's (2012) research on lobbying in by charter school leaders trying to influence education policy in the states of Arizona, Michigan, and Pennsylvania. Jurisdiction over education policy is fragmented; not only can charter advocates lobby state legislatures, governors, and state education agencies, but also mayors, school districts, and superintendents.

Studying venue-shopping advocacy also requires taking levels of analysis into account, but here data is grouped by states and levels of government. This means state specific variables can also be used to estimate state-level effects. The data in the original analysis were already

double-grouped in a random-intercept model, target venues nested in the states, but now I add Gray and Lowery's state group density as a higher level variable in a random-coefficient model to see if competition for member support played a role in multi-venue lobbying. The model is

$$y^{*}_{ijk} = \alpha + \beta x_{ijk} + \varsigma^{S}_{k} + \varsigma^{L}_{j} + \varsigma^{D}_{j} x^{d}_{j} + \varepsilon_{ijk} \qquad (4)$$

where charter school *I* lobbies in a venue at level *j* in state *k.* There is a random intercept term for each state, ς^{S}_{k}, and a second term for each level, ς^{L}_{j}, as well as random coefficient term ς^{D}_{j} multiplied by the number of education groups at the state level, variable x^{d}_{j}.

In 2002, 234 charter schools were surveyed, yielding data on whether they lobbied in each of six venues. This information was turned into six binary variables per-school indicating whether it did or did not lobby the governor, state legislature, state education agency, local mayor, local school board, or local district superintendent. Observations are grouped by the government level lobbied and by state. The point is to see if varying group population density leads to strategic change in venue targeting, so I use the overall number of education policy-oriented interest groups in the state as the density measure, the data from the National Institute for Money in State Politics.[3] Again, readers are referred to the original work for information on the independent variables, but key variables include a measure of partisan dominance of each venue, whether lawmakers in a venue actively initiated work on charter school policy, whether lawmakers in a venue were elected, each school's annual budget, and whether the school lobbied a local venue potentially constrained by the authority of a state venue in the federal system.

The multilevel model is first estimated with just the two random intercepts, similar to the published work, omitting the random coefficient population density variable $\varsigma^{D}_{j} x^{d}_{j}$. I then estimated a random-coefficient model by adding the higher level state group density variable. The results are not displayed because it appears again that adding a random coefficient to

estimate the higher level effect of group density made little difference from just grouping by states and levels. Yet a closer look reveals an interesting point. The estimated deviation of the state-specific intercepts, ζ_k^S, rose from 0.15 to 0.60 when group density was added as a state specific variable, meaning that venue selection differs significantly from one state to another dependent on the number of education groups lobbying in each state. In this sense the higher level effect of density matters. Surprisingly, though, the deviation of level intercepts (for state and local levels), ζ_j^L, fell from 0.29 to 0.17 when the group density variable was added, and the effects parameter for state education group density is only $\zeta_j^D = 0.03$, which is quite small.

---- Insert Table 2 about here ----

Rather than try to draw conclusions based on these hard to interpret deviations and effects parameters, a better approach is to predict the mean probabilities a school will lobby the state and local levels using the results from the basic logit model and compare them to predictions from the random-intercept model. The changes shown in Table 2 are striking. By just taking into account the data's nested nature, the probabilities of lobbying state venues rises in all three states, while lobbying of local venues falls in Michigan and Arizona but rises in Pennsylvania. The predicted mean probabilities for the random-coefficient model with the density variable, however, show only a little evidence of change. Still, two interesting results are worth noting. First, in the random-intercept and random-coefficient models, the probabilities of lobbying state venues in all three states become uniformly higher than lobbying local venues. Second, while adding the density variable did not yield significant changes in the probabilities, it appears that in both random-effects models, the probability of lobbying local venues falls as density rises.

Thinking about Integrating Research

Levels of analysis do matter in interest group research. In both cases I found that merely taking into account the natural grouping of data by higher levels in the analysis, whether by interest niches, states, or levels of governance in a federated system, changed results significantly. This is an important lesson for scholars studying interest groups and lobbying at the micro level: higher level influences should be considered. Yet the observed effect of one of Gray and Lowery's key higher level variables was small. This does not mean their higher level theory, population ecology, should be dismissed; they themselves may never have envisioned their density measure influencing lobbyist competition or multi-venue lobbying. Nonetheless, further links should be explored, such as testing the effect of their population *diversity* measure in studies of important questions like how lobbyists gain access and influence with members of legislatures. Hopefully it will also be possible for macro-level scholars to incorporate micro-level data in their research designs, though one would need to be very careful about how they are used to not run afoul of the ecological inference problem. Also, since multilevel statistical models require the dependent variable to be at the lowest level possible, a different modeling approach will have to be used when dependent variables are at the population level.

Overall conceptual and methodological integration is crucial to the scientific endeavor, and that requires thinking hard about the research and analysis methods used to understand any phenomenon. Interest group research, however, seems to be stuck in a rut, with work done at the micro-level or at the population level without the two ever meeting. Scholars in either field can hardly be unaware of what others are doing, yet there is little serious engagement between the two, perhaps because it is not clear how to do it. Hopefully this paper provides some clues on how to integrate levels of analysis and use more sophisticated statistical methodology, making

multilevel analysis easier. It would also be useful if more scholars would re-do their own work with variables from other levels. The result might be a more holistic theory of group politics.

Figure 1

Predicted effects of niche overlap and group density on lobbyist competition and cooperation

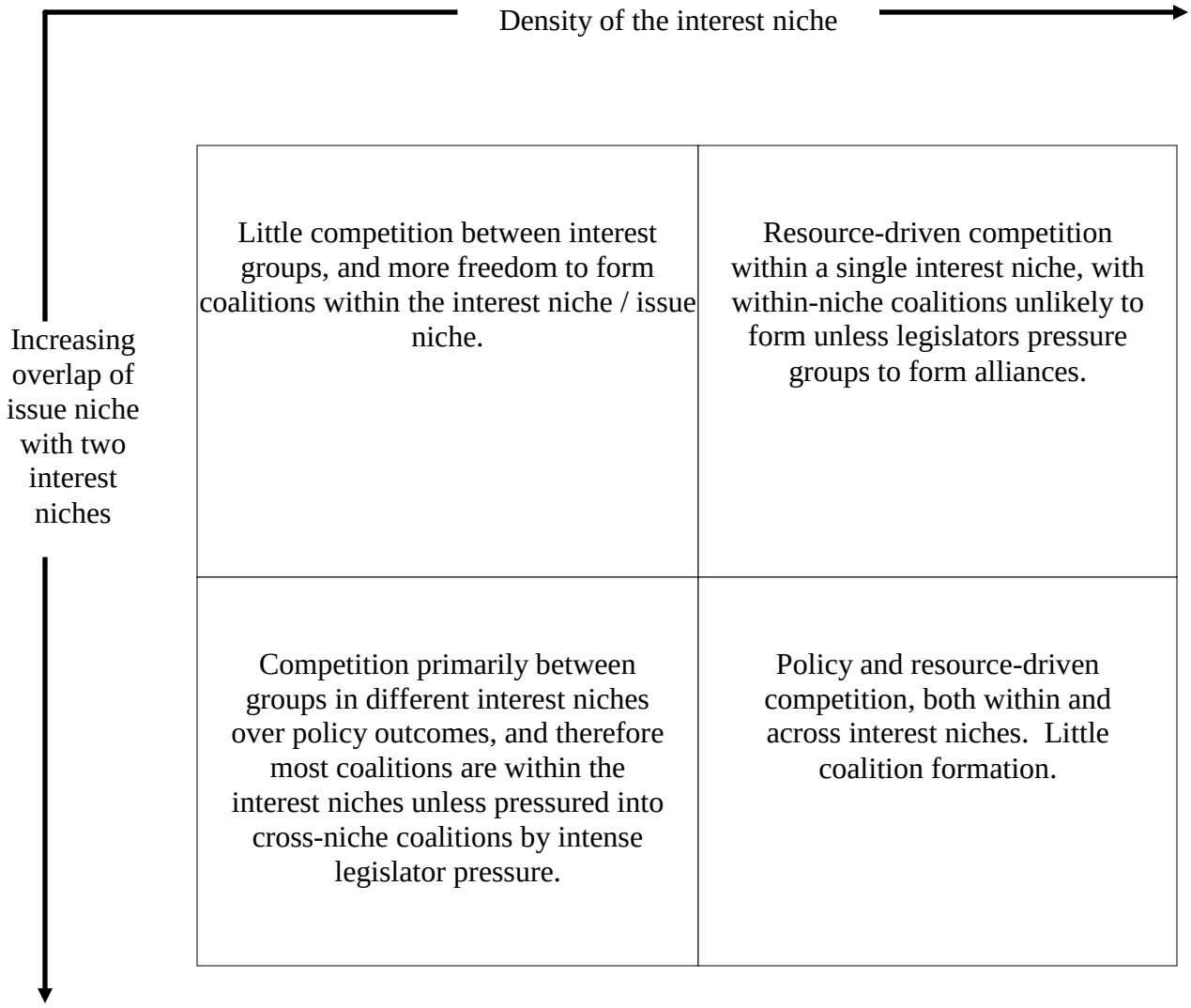

Table 1: Estimation of models of lobbying competition and cooperation

Explanatory variable	*Basic logit model* Coefficient (standard error)	*Random-intercept model*	*Random-coefficient model*
Near competition	0.01** (0.01)	0.01* (0.01)	0.01* (0.01)
Far competition	–0.01*** (0.01)	–0.01*** (0.01)	–0.01*** (0.01)
Pressure from legislators	1.03*** (0.14)	1.33*** (0.17)	1.33*** (0.18)
Constraint from members	–1.65*** (0.13)	–1.30*** (0.17)	–1.32*** (0.17)
PAC contributions	–0.01** (0.01)	–0.01 (0.01)	–0.01 (0.01)
Group resources	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Number of individuals as members	–0.01** (0.01)	–0.01 (0.01)	–0.01 (0.01)
Age of the interest group	0.01*** (0.01)	0.01** (0.01)	0.01** (0.01)
Distributive policy domain	–0.30** (0.11)	–0.18 (0.17)	–0.21 (0.17)
Constant	1.63*** (0.33)	0.59 (0.51)	1.14 (0.58)
Wald Chi-Square	394.25***	200.55***	191.09***
Likelihood-ratio test	–	100.33***	102.76***
Standard deviation of the niche intercept	–	1.11	1.49
Standard deviation of group density	–	–	0.001

** p < 0.05 ** p < 0.01 *** p 0.005*

Table 2:

Predictions for lobbying state venues and local venues by group density and model type

Model type and state group density	*State level venues*	*Local level venues*
Predicted mean probabilities from a basic logit model		
Michigan (22)	0.65	0.69
Pennsylvania (39)	0.61	0.55
Arizona (60)	0.65	0.62
Combined fixed effects and random effects predictions from the random-intercept model		
Michigan (22)	0.77	0.66
Pennsylvania (39)	0.79	0.62
Arizona (60)	0.77	0.54
Combined fixed effects and random effects predictions from the random-coefficient model		
Michigan (22)	0.75	0.68
Pennsylvania (39)	0.78	0.61
Arizona (60)	0.76	0.53

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[1] The budget control variable is also different. Most groups' annual budget data is from *Washington Representatives* (2004). For corporate lobbying offices, though, and groups with unavailable data, lobbyists were asked in interviews what their departments' annual budget was.

[2] This approach uses STATA's "xtmelogit" command.

[3] It is for 2006 as the Institute does not have complete data before then.