The Influence of Interest Group and Party Competition on Growth in State Spending and Debt

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Abstract

Does more lobbying by more interest groups, especially groups representing a state's largest business sector, lead to greater spending and debt? Or does the blame really rest with state lawmakers and their political parties, which compete to attract and retain the allegiance of these powerful organized interests so they can win control of state government? We test this question with data on annual state budgets from 2006 to 2015, the number of interest groups in each state for those years, the size of the constituencies in different economic and social sectors these groups potentially represent, and the degree of competition between the political parties. Our results reveal that while there is a positive interest group effect on spending, the effect becomes negative as parties compete more for control of the state. As the gatekeepers, lawmakers and their parties, more than interest groups, are ultimately responsible for a state's fiscal condition.

The conventional wisdom is that government budgets increase in response to political demands, but demands from whom and under what circumstances is not always clear. The need for constituent support has often led elected officials to promise new policies and financial benefits in return for enough votes to comfortably secure re-election, but not all constituents are equal when it comes to their political appeal. Those mobilized as interest groups may have greater value to legislators because they are more politically active and, at the behest of group leaders, direct their votes for or against candidates. Elected lawmakers, organized into parties competing to control state governments, therefore have a powerful incentive to reach out to these organized constituencies, increasing the financial benefits they already enjoy, or promising whole new regimes of benefits and spending in exchange for votes. The unintended result is increased overall spending by the state and, consequently, greater debt due to interest group influence.

Interest group influence over a government's ability to deliver services has been studied, often in response to Olson's (1982) dire prediction that too many demands from too many interests will retard the state's ability to support economic growth, ultimately resulting in paralysis. Whether this happens because interest groups drove governments into debt by pressuring lawmakers to over-spend, though, has at best received only modest attention. Since elected officials make the actual spending decisions, we develop a model of group influence that is partially conditioned on political party competition, testing whether interest group advocacy directly, or indirectly through the parties, drives spending and debt with data on groups, parties, and budgets in the American states from 2006 to 2015. We find that more organized interests can drive-up spending, but, surprisingly, their influence decreases the more parties compete to control state legislatures. This, we argue, is a significant change in the way we understand interest group

influence. Interest groups may be players in spending politics, but lawmakers and their parties are the ones ultimately responsible for runaway budgets and crushing debts.

The Politics of State Spending

What drives government spending has drawn no shortage of scholarly attention. Studying state and national government spending trends, scholars have identified a number of factors influencing growth in public budgets. Often their work came as contributions to debates about potential structural changes in national and state constitutions and governing institutions. For instance, in the 1980s there was a flurry of research on the effects of line-item vetoes and debt limits on state spending because Congress was considering them as well (Abney and Lauth 1985; Holtz-Eakin 1988; Bails and Tieslau 2000). When the term-limits debate heated up in the 1990s, researchers started exploring whether adopting them would reduce spending at both national and state levels (Payne 1991; Reed et al. 1998; Johnson and Crain 2004; Erler 2007).

Scholars also started investigating the effects of interstate competition when "race to the bottom" concerns emerged over changes in public safety-net spending, finding that some states were reducing benefits to deter potential recipients from relocating there from neighboring states (e.g., Bailey and Rom 2004). While such concerns primarily arose in welfare policy, Bailey, Rom, and Taylor (2004) also found evidence of it in higher education spending. Surprisingly, though, Volden (2002) found that states were willing to increase their benefit levels if other states did so first. Further work also found that internal budgetary tradeoffs matter at least as much as interstate competition, with increased spending in one policy area forcing reductions in others (Berry and Lowery 1990; Garand and Hendrick 1991; Nicholson-Crotty, Theobald, and Wood 2006).

Other research in both welfare and education policy attributes much of the rises and falls in spending to ideological clashes and political competition, especially between the two major parties for control of state governments (Dye 1984; Hwang and Gray 1991; Poterba 1996; Barrilleaux, Holbrook, and Langer 2002; Berkman and Plutzer 2004). Recent research has found that both parties benefit at the polls from higher overall spending (Cummins and Holyoke 2018), so recurring competition between them may drive it even higher, perhaps accounting for some of the cyclical pattern of occasional bursts of state spending uncovered by Jones et al. (2009).

It is to these partisan and electoral explanations for increases in spending and debt (a consequence of over-spending) that we hope to contribute. Targeting budget rewards towards key constituencies is a long-practiced means of gaining and retaining electoral support (Fiorina 1989; Arnold 1990). Yet while bringing home money for all kinds of things from big dams (McCool 1994) to higher education dollars (Balla et al. 2002) can produce good results at the polls, the obligation on available budget dollars and levels of long-term debt can be significant. Even the demands of conservative, anti-tax interests, like Tea Party organizations, can lead to greater debt. Unfortunately for state treasuries, short-term needs to attract key voting constituencies often trump any long-term concerns lawmakers may have. California Democrats aggressively expand public assistance programs to satisfy progressive constituencies, while Kansas Republicans cut taxes across the board to appeal to conservatives, both jeopardizing their states' financial well-being.

That parties use spending to appeal to motivated constituencies suggests they are trying to attract the support of organized interest groups. What might be the consequences? Perhaps the closest scholars have come to looking for an interest group-driven effect on overall government performance has come from testing Mancur Olson's 1982 argument that excessive interest group influence will lock-up public sector investment in new industries and technologies to such a degree

that a nation's productive economic growth is paralyzed. Empirical support for Olson's rather apocalyptic hypothesis in studies of democratic nations (e.g., Coates and Heckelman 2003; Horgos and Zimmermann 2009) and the American states (Dye 1980; Gray and Lowery 1988; Ambrosius 1989; Crain and Lee 1999) has been decidedly mixed (Heckelman 2007), though most of this work focused on how states stimulate economic activity rather than spending and debt.[1] However, with Bacot and Dawes (1996) and Newmark and Witko (2007) finding that interest group advocacy led to more spending on state environmental programs, we argue it is worth testing for a general group effect on spending and debt in the American states. Not only do state budgets and debts vary considerably, so do the size and diversity of state interest group populations (Nownes and DeAlejandro 2009; Strickland 2019; Holyoke 2019).

Interest Groups, Parties, Spending, and Debt

We start by assuming that interest group lobbyists want to obtain public resources for their members, or otherwise enact policies providing them with benefits, regardless of whether these members are individuals, businesses, or other kinds of organizations. The benefits may be targeted appropriations, guaranteed spending formulas, tax breaks for conservative interests, or all of the above. Since lobbyists cannot directly manipulate public budgets themselves, they must convince state legislators to do it for them. What is the connection? The literature cited above emphasizes the influence of party competition on state policy as the elected officials embodying these parties use the tools available to them to advance their collective goal of dominating state government (Dye 1980; Morehouse 1981). Scholars have shown how important it is to a party's electoral fortunes to gain and retain the loyalty of coalitions (e.g., Brown 1995; Herrnson 2009; Bawn et al. 2012), and others like Heaney (2010) argue that interest group members' benefits rise and fall

depending on whether their patron party is in power. Thus, group influence on government spending may run through party competition to win elections and control government.[2]

Specifically, legislators want to be re-elected to office and serve in the majority party controlling the state legislature and governor's office (Hershey 2012; Lee 2016). Organized interests represent specific constituencies that are politically motivated and likely to vote or provide the financial resources that party legislators believe is essential for achieving re-election and majority control (Hansen 1991). Legislators therefore offer tax and spending benefits in exchange for the votes and campaign support of group members as they form electoral coalitions, or at least promise it if they are in the minority party hoping to become the majority. Interest group influence on state spending and debt is therefore conditional on receiving party support.

To identify testable hypotheses, we consider four scenarios in Figure 1. Interest groups tend to focus only on policy areas relevant to their members, so each scenario (which we admit cannot fully represent every policy area) regards the dispositions of several interest groups relative to the two major parties in a policy area.[3] There is no meaningful party competition in scenario one; party P_1 has a firm majority and, consequently, controls all spending. Groups IG_1 and IG_2 are close to the majority party and likely enjoy some spending and tax benefits in return for their electoral support. However, because P_1 is in control, and because these two groups' members are unlikely to give their leaders the significant flexibility needed to align with right-leaning, but powerless, P_2, the ruling party does not need to spend heavily to keep the loyalty of IG_1 and IG_2. If they are the only groups lobbying, there is no reason to expect increased spending.

---- Figure 1 ----

Yet there are two other groups, IG_3 and IG_4, which are center-right, suggesting some diversity among the positions of all groups lobbying this policy. If P_2 had a chance of becoming

the majority, then a bidding war might occur, perhaps resulting in IG_3 and IG_4 giving their loyalties to the aggressive minority party. Yet that might not increase spending because regardless of which party won, only two groups would be rewarded with spending benefits. Although P_2 is unlikely to win in this scenario, P_1 still wishes to strengthen its legislative majority and may promise more spending benefits to attract IG_3 and IG_4, whose loyalties are up for grabs because P_2 cannot make credible promises. This is consistent with Morehouse's (1981) argument that when interest groups are weak vis-à-vis parties, they will try to accommodate themselves to the ruling party. It also suggests that greater diversity among more interest groups may lead to greater spending and debt. We cannot test all of these spatial implications, but we can state our first hypothesis:

H1: Absent significant party competition, greater policy diversity among interest groups leads to greater state spending and, consequently, debt.

The effect of party competition on interest group influence and spending emerges in scenarios two and three in Figure 1. Unlike scenario one where P_1 is the only game in town, here both parties compete for control of state government. The collective positions of the four interest groups are the same as in scenario one, but now minority party P_2 can make credible spending promises in exchange for group support. Majority P_1 may promise benefits to attract IG_3 and IG_4, and the minority may promise more to attract groups 1 and 2, but if both parties have realistic chances to become, or remain, the majority, IG_1 and IG_2 are likely to remain loyal to their proximate ally, P_1, and the other two groups will be loyal to P_2. Since only one party can win, only two groups receive benefits, so spending is *less* likely to rise in scenario two than in one.

The parties are still competing in scenario three, but now we add two more interest groups, IG_5 and IG_6, which increases the overall policy diversity of all of the organizations seeking benefits. Collectively this weakens their hands vis-à-vis the parties. P_1 likely holds the loyalty of

IG_1 and IG_2 with only a little extra spending over scenario two since it is highly unlikely the groups' members would let their leaders support P_2. Indeed, given their proximity, they might support P_1 regardless of any spending promises. The same is true for the minority party and IG_5 and IG_6. The only real targets the parties might compete for with spending promises are IG_3 and IG_4. The result is that more interest groups supporting a greater diversity of positions on policy depresses their collective influence on spending when the parties compete, and might even lead to less spending and debt. So, a conditional hypothesis:

H2: More interest group policy diversity lessens their influence on spending and debt (in *H1*) when there is greater party competition.

Interest group competition, however, is complicated. Not only is it often not zero-sum, Gray and Lowery (1996) found that groups also compete to attract members, or at least contributors. If the groups in either scenarios two or three are competing for a small, fixed set of potential members, group leaders must promise to deliver more spending benefits to convince them to overcome collective action barriers and join. This, in turn, may mean trying to attract the support of the dominant party (as in scenario one), or of the other party if it has a chance to become the majority. Yet the more an interest group strives to recruit members, but the fewer there are to compete for, the less attractive any single group is to the parties because it will have fewer members whose support they can offer. So, in the aggregate the more interest groups there are competing for members, the less spending the parties will promise for their support. Furthermore, when the parties compete, as in scenarios two and three, they have less incentive to promise more spending to groups fighting for members. So:

H3: Greater competition between more interest groups for members depresses their influence over spending and debt, especially when the parties are competing for government control.

This also suggests another hypothesis, that if one interest group dominates the largest population of members in a policy area, or is a state's biggest employer, it will be the most tempting target for the spending promises of each party, especially if both parties are competing to be the majority. In Figure 1's scenario four, IG_3 has a much larger membership than the other groups. Not only does this make it significantly more attractive to the two competing parties, who will make enormous spending commitments to attract its voter-members, and perhaps even shift their preferred policy positions closer to IG_3, the other interest groups may also shift their positions towards IG_3 to be attractive to the parties (though we do not test for this). So our final hypothesis:

H4: The fewer interest groups there are representing a state's largest industry, the greater the increase in spending and debt, which will be even greater if the parties are competing for control.

Research Design

We test these hypotheses with data on public spending, interest group populations, party competition, and long-term debt in the American states. Our first dependent variable is the percentage change in annual state spending from 2003 to 2015, meaning the amount of money state legislatures appropriate each year as part of their annual budget process or otherwise spend through automatic funding formulas.[4] This data comes from the *Fiscal Survey of the States* published annually by the National Association of State Budget Officers.[5] Our second dependent variable is each state's long-term debt for the same years, which comes from the U.S. Census Bureau. After standardizing both fiscal variables to year 2000 dollar values, we find that California spent the most at over $84 billion in 2007, and Wyoming the least at $417 million in 2004.

To get a sense of trends in spending and debt over this time-period, which encompassed the Great Recession, we convert both variables into *z*-scores to make them comparable, average

them for all fifty states, and graph the results in Figure 2. The trend shows spending increasing as vibrant economies put more money into state coffers, then a significant dip when the recession hit the public sector in 2009 (lagging behind the private sector slump in 2008), and finally a recovery. We see a similar trend in debt, which, unsurprisingly, continued to increase after spending fell as states tried to cope with demands, only leveling off in 2011. California and New York achieved the dubious honor of having the most debt, while Wyoming carried the least. Rather than use *z*-scores in the analysis below, we divide spending and debt by state population for per capita spending and debt measures, and then calculate the percentage change from one year to the next.[6]

---- Figure 2 ----

We obtained interest group data from the National Institute for Money in State Politics for 2006 through 2015, a source used in other research (e.g., Witko and Newmark 2005; Gray et al. 2015).[7] This data includes traditional member-based groups, as well as businesses and nonprofits lobbying state government, representing different sections of business and society.[8] To get a sense as to whether there is a link between interest group numbers and state spending, we add the annual average number of lobbying organizations (as *z*-scores) in Figure 2. For several years, the number of groups appears to track spending, though, interestingly, growth in group numbers lagged state spending as the recession passed. The correlation of spending and organizations is 0.79 ($p < 0.005$).[9] The relationship with state debt is less clear since debt increased at the very time the number of groups diminished, though the correlation of 0.76 ($p < 0.005$) suggests a link.

Measuring interest group policy diversity requires us to assume there are differences in the policy outcomes preferred by the interest groups lobbying each policy area. Since we cannot measure the difference of one group's preference from another, we simply assume there is a single, ordinal difference between every group lobbying in a well-defined area of policy. More groups

therefore mean more differences in position diversity, seen in Figure 1's scenario three. We start constructing our measure by identifying policy areas using the system developed by the U.S. Department of Commerce, called the North American Industrial Classification System (NAICS) (used in interest group research by Hansen, Mitchell, and Drope 2005). As detailed in our appendix, we sort groups into NAICS policy areas such as "agriculture," "communication," "entertainment," "energy and natural resources," "finance, insurance, and real estate," "leisure," "general business including manufacturing," "education," "social service," "health care," and "transportation."[10] Health policy tends to have the most groups, and entertainment policy the least.

To create an index of state group policy diversity each year, we use this equation where *g* refers to groups indexed by *j* in policy area *i* where the set of all issue areas is represented as *P*:

$$\sqrt{\frac{\sum_{i=1}^{P}\left[(g_j^2/2)-(g_j/2)\right]_i}{P}}$$

The equation calculates the number of differences between an interest group and every other group *j* in policy sector *i*.[11] It then sums the results and divides by all policy areas for a single, annual state score. The distortion from squaring *g* is reduced by taking the square-root. Since we predicted that the interest group effect is conditioned on the level of party competition for government control, we capture this using the four-year folded Ranney Index of state party competition.[12]

Hypothesis *H3* regards group competition for members. Since our interest group data is already organized by the NAICS codes, we also obtained Occupational Employment Statistics data from the U.S. Department of Labor, which lists the number of people employed in dozens of tightly defined categories for every state and every year. We aggregated these employment categories into larger, more general groupings matching the NAICS (see the appendix for details).[13] Then we divided the total number of groups in each NAICS category for that state and that year by the

number of people employed in the corresponding labor category. Larger ratio values mean more groups are competing for fewer potential members, which *H3* predicts to have a negative effect on spending and debt, especially when party competition is more intense.

We predict in *H4* that interest groups dominating a state's major industry are especially influential on spending and debt. We therefore found the total number of people employed in each industry for each year using the occupation codes and identified the one employing the most. Unsurprisingly, in 70% of our 500 cases it turned out to be "general business including manufacturing," with "Agriculture" in 30% of cases that primarily included rural states like Montana, West Virginia, and the Dakotas. We then divided the total number of interest groups for that industry in that state and that year into the total number of people employed in that industry to create our measure. Lower values of the ratio indicate dominance, which should drive-up spending and debt, even more so when there is party competition.[14]

We also use several control variables in the statistical models, some of which are fiscal in nature.[15] The first is per capita gross state product (GSP), which comes from the U.S. Bureau of Economic Analysis.[16] Individual per capita income for each state and year was also obtained from the Census Bureau and used as a control. Next, many states have laws limiting spending and taxes, so we include a score on how restrictive state laws are on spending (ranging from 0 to 30) developed by the American Enterprise Institute.[17] The prevailing political ideology of a state's populace may influence the proclivity of lawmakers to spend, so we use Berry et al.'s (1998) state ideology scores.[18] So too might party control of the legislature and governor's office, especially since Democrats tend to be tied to higher welfare payments (Barrilleaux, Holbrook, and Langer 2002; Dye 1984). We therefore code a dummy variable 1 if Democrats control both houses of the state legislature in an observed year, and another dummy 1 if the governor is a Democrat that year,

the data coming from the *Book of the States.* Some governors have greater powers over state spending than others, so we include an annual index of gubernatorial budget powers by Krupnikov and Shipan (2012). A more professional legislature might also be more or less likely to spend heavily, so we include various years of Squire's index of professionalism.[19] Anzia and Moe (2015) argue that unions drive state spending, so we also include a count of public and private labor unions from the National Institute for Money in State Politics. Finally, the Great Recession encompassed 2008 and most of 2009, so we coded a dummy variable 1 for those years and 0 otherwise.

Multivariate Analysis and Discussion

Testing our hypotheses requires a statistical model able to estimate cross-sectional time-series data grouped by forty-nine states (minus unicameral Nebraska), as well as data that varies more across states than over time. Rather than handle unseen state-specific effects by just including state dummies in fixed-effects models, we follow the recommendations of Wilson and Butler (2007), and Clark and Lizner (2014), and use a hierarchical model where state-specific effects are controlled for by estimating a unique slope for each state, the slopes distributed Normally.[20] Since the state political ideology and recession variables measure state-level effects that are broader than just the interplay of parties and interest groups, we use them to estimate the steepness of the state slopes, as well as use them to estimate state spending and debt. As it turns out, though, the test statistics indicating that state-to-state effects needed to be controlled for by estimating separate slopes were insignificant in both our spending and debt models.[21]

Hypotheses *H2* to *H4* are operationalized by interacting the interest group measures with the party competition variable to capture the conditional nature of group influence, and all three are included in the changes in spending and debt results presented in Table 1.[22] Using percentage

change in per capita spending as a dependent variable should eliminate any need to include a lagged term of the dependent variable to control for serial correlation. We do include a lagged debt variable in the debt model in real dollars because the sheer size of the debt might pressure some lawmakers to vote against policies that might further increase the debt.

---- Table 1 ----

The results appear to only partially support our hypotheses. As predicted in *H1,* greater policy diversity among more interest groups has a significant, positive effect on increases in state spending, though not debt. At 0.004, the group policy diversity coefficient appears small, but the variable's scale ranges from 0 to 208, so a linear increase from 50 to 100 has a corresponding increase in state spending of 20% (some states, like Colorado, New York, and even Georgia had even larger diversity score increases over several years). Greater demands made by more organizations appears to drive-up spending. This direct effect, it is worth noting, is the one most consistent with Olson's argument – that more interest groups lead to a lock-up of state resources. Rather than retard levels of state economic stimulus, which is what Olson studied, here we see groups pushing elected lawmakers to increase state spending and programmatic benefits, which we assume are increasingly going to support programs in policy areas important to group members. Since more lobbying by groups likely occurs in coalitions, this result is consistent with other recent work on the efficacy of coalition lobbying (see Heaney and Leifeld 2018; Junk 2019).

This result does not take party competition into account, and although the Ranney index is, by itself, not statistically significant in either model, the interaction is significant with group policy diversity in the spending increase model and with group member competition in the debt change model. To get a clearer sense of what this means for state spending, we follow the recommendation of Brambor, Clark, and Golder (2006) and graph the marginal effect of group policy diversity on

spending change for every value of the Ranney index in Figure 3. When there is no party competition at all, meaning the index is 0, the group policy diversity effect is still 0.004. As party competition increases (moving across the horizontal axis), the interest group influence on percentage per capita change in state spending decreases, vanishes entirely, and then exhibits a significant negative effect when party competition is intense. The result supports *H2* in the sense that more, and more diverse, interest groups depresses their collective influence as party competition grows, though we had not expected it to lead to spending *decreases* when party competition is especially intense. Remember from the scenarios in Figure 1, though, that more groups with more preference differences mean many, perhaps most groups, are far from the positions of either party and thus harder to attract with spending. More promises may be made, but less is enacted. While the other interest group variables do not effect spending, note that, contrary to Anzia and Moe, more labor unions show a surprising negative effect. It is also interesting that the party control and legal spending limit variables fail to exhibit an influence. Actually, the only other drivers of state spending are gross state product and per capita income.[23]

---- Figures 3 and 4 ----

While group competition for members shows no independent or conditional effect in the spending model (as we had predicted in *H3*), it does in the debt change model. Figure 4 shows the marginal effect of competition for members on change in debt across the Ranney index's range of values. Since the member competition variable does not have a significant unconditional effect, the estimate on the left-side of Figure 4 (where the confidence bands are on either side of the 0 line) means competition for potential group members has no effect on debt change when party competition is low, or even moderate. Only when the Ranney index exceeds 0.56 does an interest group effect emerge, and its effect on debt is increasingly negative. Even though the effect did not

materialize with spending, the logical interpretation is that when interest groups compete for members, rather than dominate their member-niches, the parties find increasingly less reason to incur debt through spending to attract their support, though this is only true when the parties themselves are competing. Perhaps this is why the variable capturing a group's domination of an industry (*H4*) fails to perform in either model - it dominates its own niche, but not the entire state group population, so its effect is not strong enough to stand out in the analysis.[24] It may also be that when party competition is extreme, debt is more of a salient issue and its reduction becomes an overriding concern, which is a possible interpretation of the lagged debt variable being significant and negative. Otherwise, even laws limiting taxes and spending fail to influence debt.

So far we have only investigated the aggregate effect of interest groups and party competition on overall spending, but the effects might be more noticeable within particular areas of policy spending. From the *State Expenditures Reports* published by the National Association of State Budget Officers we obtained annual state spending on education (K-12 and higher education), social services, transportation, and Medicaid, and calculated their annual percentage per capita increase (or decrease). We also identified interest groups only in those policy areas and calculated scores for their policy diversity and for member competition.[25] Since we are only studying four specific policy areas, we cannot use our measure of groups representing the dominant industry. We also cannot estimate debt models since debt is not policy specific. Unfortunately, all four of these models fail to achieve overall statistical significance, producing insignificant Wald chi-square statistics, telling us that the estimates do not improve over random chance. Arguably, further research along these lines requires more variables unique to each policy area, for these may be driving state spending in each policy area. In any case, we can only draw conclusions from the results of our aggregate state spending and debt models.

Conclusion

Why state governments grow, especially in terms of how much taxpayer money they spend on an annual basis, is a complex problem, and we certainly do not claim to have fully explained it here. We hope we have provided some insight into the role organized interest groups and political parties play in spending growth. At the very least, we start to show how complex the interplay of the two is. Drawing on a variety of literatures, we argued that group influence, often branded as the boogeyman of American politics, is largely conditional when it comes to state spending and debt. How much a state spends to meet its citizens' needs is perhaps its most fundamental responsibility, and severe inequalities can develop in terms of who benefits and who loses. Indirectly anyway, interest group leaders trying to advance the self-interests of their members seek financial support from legislators, who can collectively worsen any state's fiscal condition. Yet the responsibility for these decisions does not directly rest with interest groups, but with elected officials. Group influence, we found, is partially conditioned on the degree to which legislators need group support. When one party dominates the state, they will enhance their coalitions with more interest groups by offering more spending, otherwise party competition depresses the interest group effect. In other words, budget-hawks need to worry about one party dominance of state government. It may be hard to pin fault for bloated budgets and debts on any single legislator, but they are collectively to blame - a fiscal tragedy of the commons.

Another ramification of our research regards the well-known argument of Olson, that growing interest group influence may decrease a government's ability to act in the best interests of its citizens, which remains a major research agenda (Unger and van Waarden 1999). While we found that more groups led to greater spending, and through this to greater debt, which certainly hampers a state's long term ability to provide services, again the blame rests not so much with

these interest groups as it does with elected officials, even if one party dominates. Interest groups are not nefarious outsiders come to suck a state dry of its money, but organizations created to serve the collective interests of people who often reside in that state, and who feel their leaders ought to prioritize their interests over those of others. Ultimately, it is these elected officials who control the degree to which interest groups, and coalitions of groups and the people behind them hoping to receive government benefits, lock-up pieces of the state budget and ultimately drive the state into unmanageable levels of debt. It is therefore worth further exploration to better understand the detrimental (or beneficial) influence interest groups have on state politics and budgets. It would also be worthwhile to more thoroughly explore whether the differentiation of interest groups into more, and smaller, issue niches has any effect, positive or negative, on spending and debt.

Finally, it is worth noting that research on government budgeting has also changed over the years, moving away from the incremental growth models detailed by Wildvasky (1988), to studies revealing patterns of very little change punctuated by instances of very large change in spending and who is receiving state financing (e.g., Jones et al. 2009). In this vein of research Breunig and Koski (2012) find that the size of dramatic spending punctuations effect long term spending trends, but does interest group influence pressure lawmakers towards or away from such policy punctuations? Or, since our results suggest that party lawmakers have the upper-hand relative to interest groups (see Holyoke 2009), are the long periods of little spending change the result of them pressuring groups into holding off on their demands? Furthermore, do dramatic increases in spending shift state resources from one group coalition to another, and can groups on the losing end use their influence to regain a share of state largess, especially if lawmakers find they need those groups' support to maintain their hold on the legislature? These questions are worth further explanation in future research on state budgeting and interest group influence.

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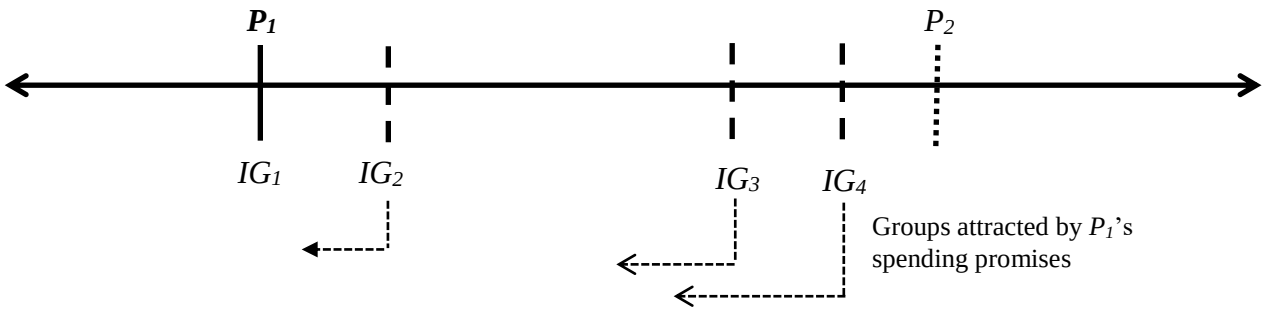
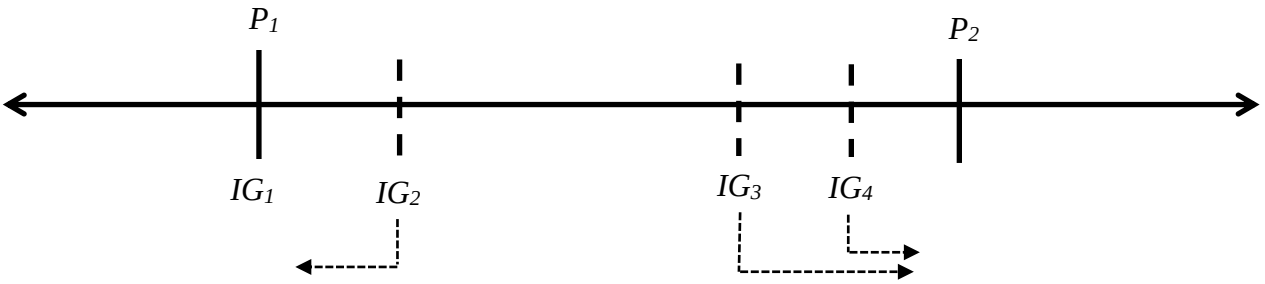
Figure 1: Four Scenarios of Interest Group and Party Interaction

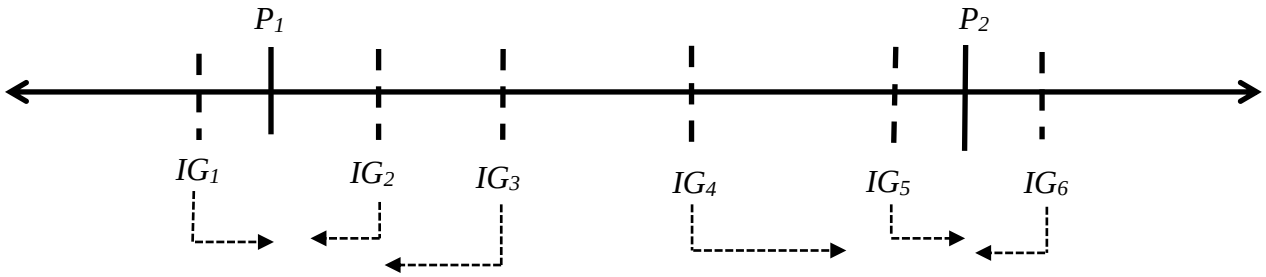
Scenario 1: Ruling party holds the loyalty of IG_1 and IG_2, spends to attract IG_3 and IG_4, so spending increases



Scenario 2: Parties compete for government control, so, despite promises, fewer groups receive spending benefits



Scenario 3: Parties compete and more group diversity, so spending demands rise, but party competition limits it



Scenario 4: Competing parties spend to attract an interest group dominating the state's major employing industry

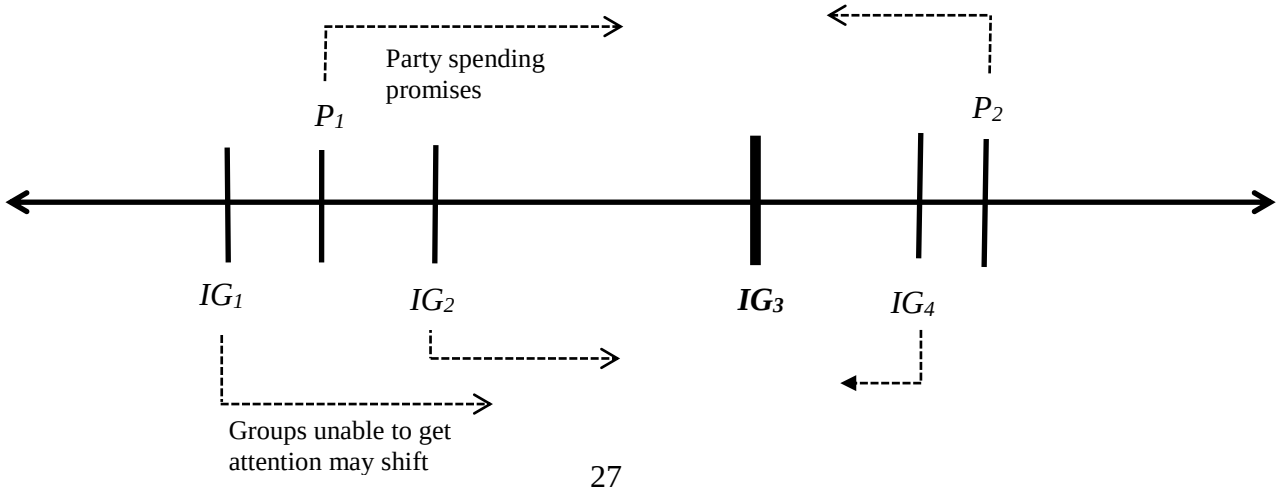


Figure 2: Trends in average state spending, state debt, and the number of lobbying organizations (converted into *z*-scores)

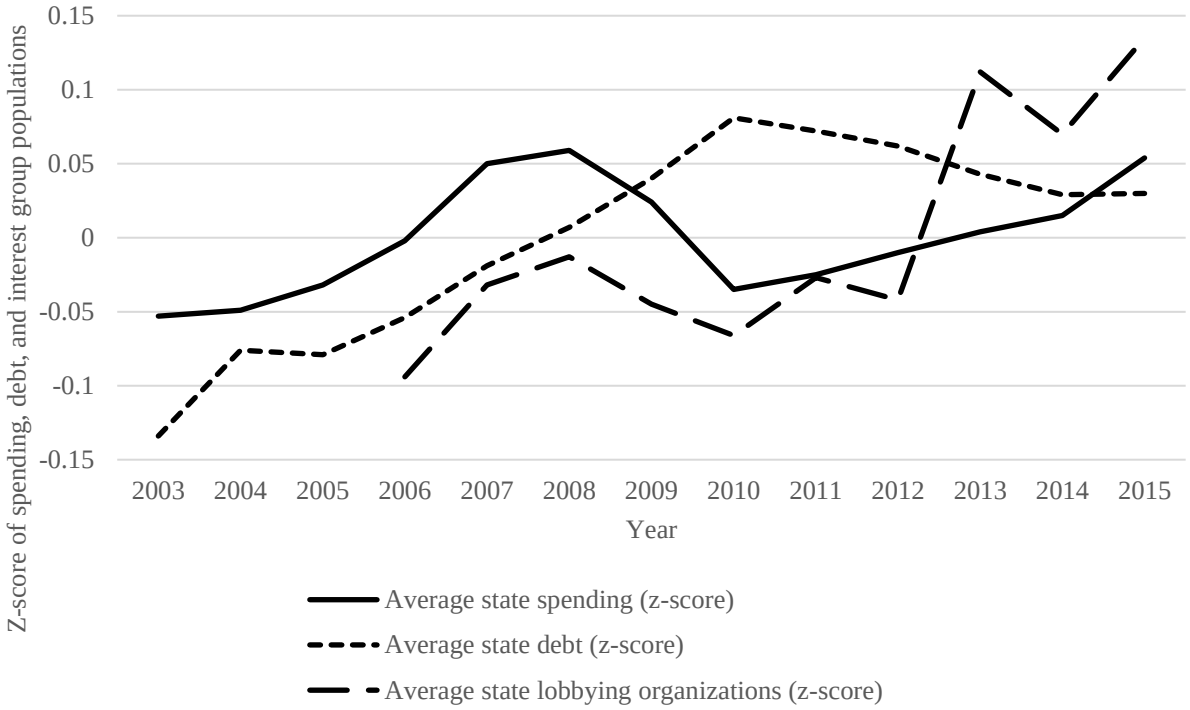


Figure 3: Marginal effect of interest group policy diversity for levels of party competition on change in per capita state spending

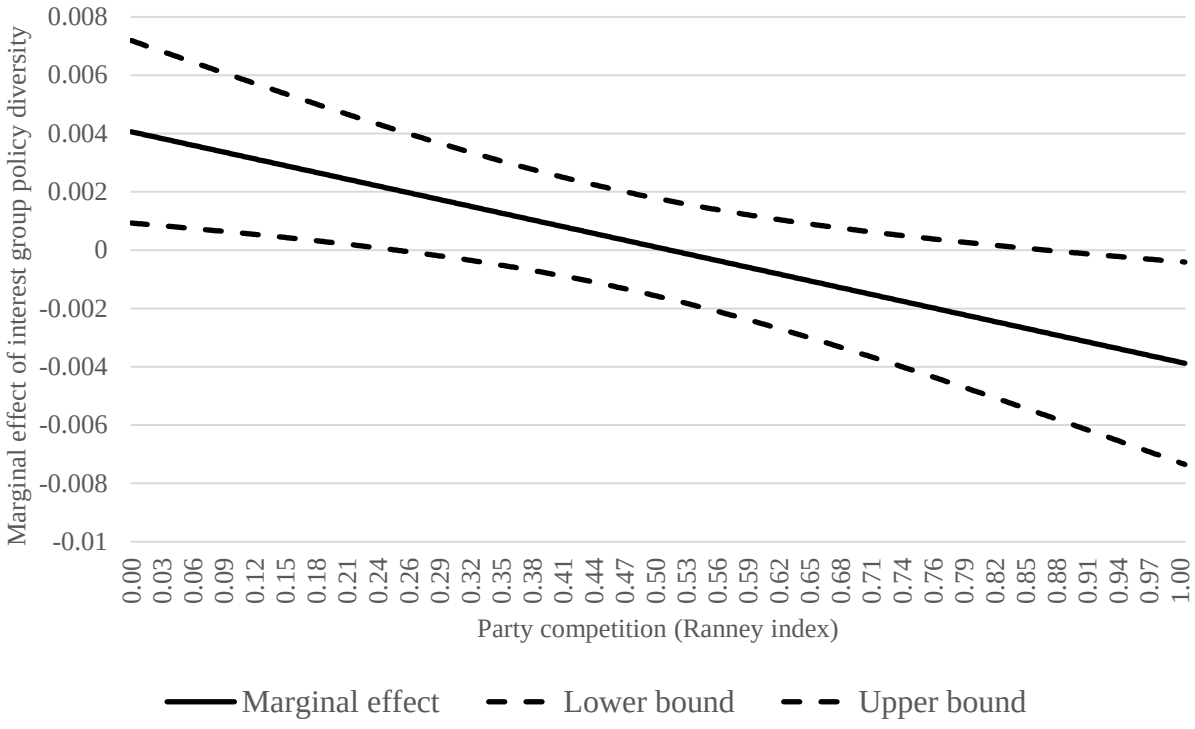


Figure 4: Marginal effect of interest group competition for members as party competition increases on change in per capita state debt

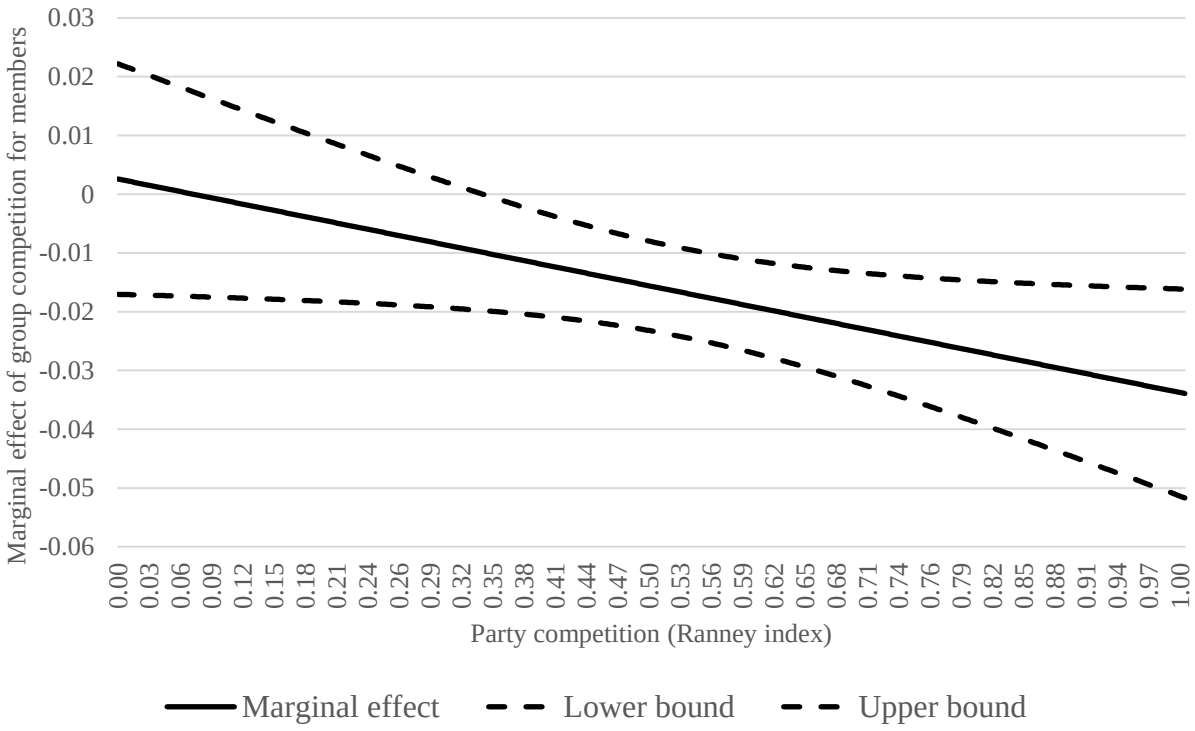


Table 1: Models of Percentage Change in Per Capita State Spending and Debt, 2006 – 2015

Maximum likelihood estimates (robust standard errors)

Explanatory variable	Percentage change in per capita spending	Percentage change in per capita debt
Party competition (Ranney index)	–0.027 (0.229)	0.056 (0.036)
Interest group policy diversity (*H1*, positive)	0.004* (0.002)	0.000 (0.000)
Interest group policy diversity *x* party competition (*H2*, negative)	–0.008** (0.003)	–0.000 (0.000)
Interest group member competition (*H3*, negative)	–0.003 (0.063)	0.003 (0.010)
Interest group member competition *x* party competition (*H3*, negative)	–0.006 (0.109)	–0.036* (0.017)
Major industry dominance of potential members (*H4*, positive)	–0.082 (0.099)	–0.012 (0.016)
Major industry dominance of potential members *x* party competition (*H4*, positive)	0.283 (0.157)	0.010 (0.025)
Per capita gross state product	0.028*** (0.009)	–0.000 (0.001)
Per capita income	0.001* (0.001)	0.001*** (0.000)
Lag of prior year's state debt (whole 2000 dollars)	–	–0.001** (0.000)
Governor's budget powers	0.006 (0.023)	0.001 (0.004)
Squire index of legislative professionalism	–0.051 (0.274)	–0.010 (0.051)
Recession years (2008 and 2009)	–0.057 (0.057)	–0.001 (0.009)

State has laws limiting taxes and spending	–0.005 (0.003)	–0.000 (0.000)
Democratic control of the legislature	–0.089 (0.046)	0.006 (0.007)
Governor is a Democrat	0.075 (0.042)	0.002 (0.007)
State labor unions	–0.003* (0.002)	0.000 (0.000)
Constant	–0.271 (0.189)	–0.099*** (0.030)
Wald χ^2 of model fit	38.90**	73.67***
N	490	490

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

[1] In the economics and public choice literature testing Olson's hypothesis, only Mueller and Murrell (1986) find an interest group effect on spending, but do not articulate a causal mechanism.

[2] This is explicit in political economy research (e.g., Avinash and Londregan 1996; Coate and Morris 1995; Grossman and Helpman 1996). Grossmann and Hopkins (2016), however, argue that only the Democratic Party is an amalgamation of interest groups, at least at this point in time.

[3] We realize that some issue areas concern only a tiny number of interest groups, so there is a limit to the explanatory power of these scenarios.

[4] We include states with two-year budgets because groups can still influence them in year two.

[5] NASBO publishes this twice a year; we use the spring version containing information on actual spending in the prior fiscal year, listed as "Expenditures" and is in millions of dollars.

[6] Per capita spending change ranges from -0.23 to 0.66 with a mean of 0.01 and a standard deviation of 0.008, and for debt the range is -0.24 to 0.66 with a mean of 0.01 and standard deviation of 0.07. State population data comes from the U.S. Census Bureau.

[7] At http://www.followthemoney.org/. We received it after making a special request and will share.

[8] While no business truly represents its employees, they often portray their wants as beneficial for everyone working in that industry, so we are comfortable counting them as lobbying organizations.

[9] Some conservative interests may advocate for tax cuts instead of spending, which would not drive up state spending (but it drives up debt). However, searching our data set for groups with the word "tax" in their names revealed that only 0.5% *might* advocate for tax breaks, so we do not think that the presence of these groups in our data set changes our results to any significant degree.

[10] See the online appendix regarding the sector coding of organizations.

[11] If the issue area had four groups, there would be six differences. For five groups it would be ten.

[12] Ranney Index data for 2006 to 2012 came from Carl Klarner, which is here: https://dataverse.harvard.edu/dataset.xhtml?persistentId=hdl:1902.1/22519. Data for 2013 to 2015 came from (Holbrook et al. 2018). The variable was re-scaled to range from 0 to 1 and now has a mean of 0.60 and standard deviation of 0.24.

[13] Details on this are in the online appendix.

[14] The three interest group measures are also re-scaled so that the minimum value is 0. Policy diversity ranges from 0 to 208.69 with a mean of 48.84 and standard deviation of 39.08. Competition for members ranges from 0 to 9.21 with a mean of 1.32 and standard deviation of 0.88. Sector domination ranges from 0 to 3.89, a mean of 0.96, and a standard deviation of 0.59.

[15] Descriptive statistics on the control variables are in the online appendix.

[16] Using state population data to create per-capita measures means we should not enter a separate population measure in the models.

[17] The report is at https://www.aei.org/wp-content/uploads/2017/09/Kallen-WP-Sept-2017.pdf. We also investigated the effect of state debt limits. According to *Budget Processes in the States* (see page 55 in the 2015 version) from the National Association of State Budget Officers, all but eight states have some kind of limit on debt. This does not prevent them from taking on debt, but limits the overall amount (in some cases) from certain sources and for certain purposes. We tried coding a dummy variable 1 if a state had a debt limit and used it in both models. It did not achieve statistical significance (not even close) in either model, so we did not include it in the final models.

[18] The data itself is available at http://garnet.acns.fsu.edu/~wberry/a.html.

[19] For 2006 to 2008 we use the 2007 scores, the 2009 scores for 2009 to 2012, and the 2015 scores for 2013 to 2015 (see Squire 2017).

[20] Wilson and Butler also argue that using just fixed-effects where the independent variables do not change much over time means that they might correlate highly with unobserved state-level effects and thus produce large standard errors, the "sluggish variable problem." Furthermore, Clark and Lizner argue that simple fixed-effects models should not be used when the number of groups, in this case the forty-nine states, exceeds the number of observations over time, which is only ten.

[21] When we use dependent variables measured as real dollars, there is a distinct state-level effect. These differences disappear when we convert changes in spending and debt to percentages.

[22] Even though Ranney was used to create all three interactions, including all of them in the models does not produce excessive multicollinearity. The correlation between policy competition and member competition with the Ranney interaction is –0.20; between group policy competition and big employer groups is 0.37; and between big employer and member competition is 0.02.

[23] It may be that a new party majority might try to follow-up on campaign promises with new bursts of spending. To test this we coded a dummy variable 1 if Democrats gained the majority in the prior year, and another if Republicans gained the majority, and tried these in the spending and debt models. Neither were even close to statistical significance and are not included in the models.

[24] For what its worth, the interaction of party competition and the dominating interest group variable is significant at $p < 0.10$ in the spending model, but so also is the variable measuring laws limiting spending and debt, and Democratic control of the legislature and governor's office.

[25] For education, we used all groups in the "Education" sector. For welfare, it was groups in the "Social Service" sector. For transportation, groups in the "Transportation" sector. For Medicaid it was groups in the "Social Service" and "Health" sectors.