Hunting the Whale:
More Evidence on State Government Leviathans

Noel D. Campbell
University of Central Arkansas
NCampbell@uca.edu

R. Zachary Finney
University of Southa Alabama
zfinney@usouthal.edu

David T. Mitchell
St. Mary's College of California
dtmitche@stmarys-ca.edu

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ABSTRACT:

Caplan holds that governments are Leviathans, seeking to extend their power by increasing government expenditures beyond the level preferred by voters. We extend Caplan's model by examining the real (percentage) growth rates of government. We also examine whether government size increases at an increasing rate as the minority party weakens. We find evidence that supports and fails to support the original Leviathan hypothesis. We also fail to support our extensions of Caplan's hypothesis. Furthermore, our significant and contrary results have intuitively appealing interpretations. From these results, we conclude that the impact of political party power on government spending is ambiguous.

JEL Codes: H11, H30, H70

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Introduction

In his "Has Leviathan been bound?" (Caplan 2001), Caplan presents a model of a government that expands further or faster than its citizens desire, or a Leviathan government (Brennan and Buchanan 1980). Caplan allows that a conservative party's ideology may serve to partially constrain government growth. A Leviathan government is one that seeks to expand its own power because acquisition of more power is inherently appealing to governments. Caplan uses expenditures or revenues as proxies for power. Using cross-sectional time series data from the U.S. states, he presents evidence that state governments are "Leviathans" partially, but incompletely, constrained by ideology. That is, ideological positions which political parties find difficult to abandon serve to limit the government's urge to expand its power. Using the same data, he compares his model to ideological models of government, and to unconstrained Leviathan models of government. In ideological models, political parties exist to further a particular set of beliefs or policy positions. In a model with an unconstrained Leviathan, political parties would adopt or abandon any set of policies or core values in order to expand their power. Caplan's evidence indicates that his partially constrained Leviathan model fits the data best.

In support of his Leviathan hypothesis, Caplan's key prediction is that spending and revenue collection will decline as state legislatures become more competitive. Stated otherwise, as one party increases its control over state government, thereby facing less and less effective political competition, government expenditures and revenue collection will rise, ceteris paribus. Caplan's data support this conclusion. He also finds that, as they consolidate political power,

Republicans increase spending and tax collection *by less than* do Democrats. Caplan interprets this as evidence of an ideological constraint on Republican controlled state governments' Leviathan tendencies.

Caplan's (2001) evidence is presented in levels of real spending and spending as a percent of state income. However, as he points out, even though government spending and taxation could grow, provided they grew more slowly than state income, the government's share of the state economy would fall. A state government that occupies a declining share of a state's economy is not entirely consistent with Leviathan governmental behavior. Therefore, we choose to focus exclusively on state spending as a percent of state income.

As one party consolidates its control over a state legislature, a logical extension of Caplan's model is that expenditure and revenue collection ought to increase at an increasing rate. That is, as a given party's opposition becomes less likely to win legislative control, the winning party becomes more able to indulge its Leviathan preferences; hence government size should not only increase (Caplan's original hypothesis), but increase at an increasing rate.

Our paper has two aims: 1) to replicate Caplan's results using a different time period with additional controls, and, 2) to test our extensions of Caplan's hypothesis. More specifically, our second aim is to determine whether government size increases at an increasing rate as a party consolidates legislative control. To answer these questions, we assemble a data set similar to Caplan's original data set.

We fail to replicate Caplan's (2001) result that state governments are Brennan and Buchanan (1980) power maximizers. Our evidence also fails to support our hypothesized extension of Caplan's hypothesis: that the relationship between government size and political power is convex rather than linear. Further complicating matters, our significant and contrary

results have a set of intuitively appealing interpretations. Taking our results together with Caplan's results, a murky picture emerges. From these results, we conclude that the issue of whether political parties are power maximizers, vote maximizers, or ideologues remains inconclusively answered. Ultimately, we view our results as suggestive, not conclusive. Specifically, the results suggest that the Leviathan theory requires more empirical testing; only after additional investigation may we understand the role political party power plays in determining state governments' income shares.

Caplan's Leviathan

Caplan's model is in the vein of imperfect political competition, wherein voters treat political parties as differentiated products, e.g. Lindbeck and Weibull (1987), Dixit and Londregan (1995, 1996, 1998), and Grossman and Helpman (1996). The utility of Caplan's voters depends on the consumption of public and private goods, and upon their "taste" for a particular party. Two competing political parties offer differentiated platforms. Although both parties are power-maximizing Leviathans, the parties seek to maximize "party utility[1]," subject to remaining in office. A voter then selects the party whose platform maximizes her utility.

Whether there is certainty or uncertainty about which party is likely to secure legislative control, the model solves for a government of larger size than that most preferred by voters, independent of the victorious party's identity. Furthermore, the winning party wishes to expand government size even further, but is constrained by the existence of a competing party that siphons away voters, should the victor expand government "too far." Thus, Caplan's model predicts that as a party's probability of electoral victory increases, i.e., the opposing party offers

less effective competition, the winning party will expand government size even further away from the voters' preferred level.

For empirical purposes, Caplan measures the size of government with real, per-capita total government expenditure and with real, per-capita total expenditure as a fraction of state income. He proxies the probability of a party's electoral victory with the variable Distance, which has enjoyed wide use in the literature, e.g., Anderson and Tollison (1991), Grier, McDonald, and Tollison (1995), and Wallis (1996). Distance is the proportion of seats held by the ruling party greater than 0.5, i.e. half. For example, if the Democrats are the ruling party, first calculate Dempercent as

$$(1) \qquad DemPercent = \#Democrats \Big/ (\#Democrats + \#\text{Re}\,publicans)$$

Then define Distance as

$$(2) \qquad Distance = |\,\text{Dempercent} - 0.5\,|$$

obviously defined over the interval (0, 0.5).

Caplan regresses his size variables on Distance and a list of ceteris paribus variables. Caplan summarizes:

> "…the preliminary evidence for the Leviathan hypothesis is surprisingly positive and robust. It does not matter how one measures the size of government or Distance. Both total spending and total taxation always appear to be increasing [and statistically significant] functions of Distance as the model predicts." (Caplan, 2001, p. 835)

However, he also finds that Democrats increase government size more than Republicans even after accounting for electoral margin size. Thus, Caplan adopts an intermediate approach between an ideology model and a pure Leviathan model, wherein ideology and the preference for power augment each other for Democrats, but pull in opposite directions for Republicans. Caplan presents evidence supporting the hypothesis that state governments are partially

ideologically constrained power maximizers. Furthermore, his evidence supports a Leviathan model against competing hypotheses that state governments are (1) unconstrained Leviathans, (2) ideologues, (3) perfectly constrained Leviathans adjusting to shifting voter preferences, (4) perfectly constrained Leviathans, and (5) simple vote maximizers.

In a model of perfectly constrained Leviathan, political parties have the urge to expand their power, however, there is no slack in the political agency relationship between parties and voters. Therefore, the changes in government size are caused by changes in voter preferences over government. It is the issue of whether voter preferences change that differentiates (3) from (4). Simple vote maximizing parties adopt policy positions designed to maximize their vote shares, but not necessarily government expenditures or revenues.

Implications of Caplan's Leviathan

Leviathans want to increase government size, to tax more and to spend more; that is the nature of Leviathan. However, the parties' Leviathan preferences are held in check by the existence of an effective opposition and a "small government" ideological bias, in the case of Republicans.[2] Caplan estimates a linear equation but, we argue, the relationship should be convex. Consider that Leviathans want to raise and spend more and more money. Therefore, as the "brakes of political competition" come off, i.e., as the probability of opponent victories declines, the winning party should increase government size at an increasing rate.[3]

This provides us with an avenue to refine Caplan's theories. We should be able to fit a convex curve to our data, rather than a linear equation as Caplan did. Considering the question graphically, and somewhat loosely[4], Caplan estimated the relationship in Figure 1.

Figure 1 about here

However, because of a party's preference for maximizing government's size, we postulate that the victorious party will increasingly indulge this preference as the losing party falls increasingly into disfavor with the voters. Thus, we should find evidence to support the relationship in Figure 2.

Figure 2 about here

The econometric solution to such problems typically is to fit squared terms as additional regressors, e.g., to fit both "Distance" and "Distance squared."

Empirical Framework

We collect a data set on the U.S. states, excluding Nebraska[5], covering 1977 through 2001. This dataset is somewhat similar to Caplan's data set covering the contiguous 48 states from 1950-1989. We believe the differences in the data set provide robustness to the results by emphasizing the generalizability of Caplan's theory. All revenue, expenditure, income, and intergovernmental transfer variables are in real, per capita terms. Variables are defined in Table 1 and selected correlation coefficients are presented in Table 2. Visual inspection of all variables revealed no obvious outliers.

Given that our data set is a panel—the data have cross-sectional and time-series variation—and the fact that a state government's tax and expenditure authority stop at its borders, we estimate all models using the fixed effects estimator. Each model estimates a fixed effect per state. In all instances, we present evidence for the lower house, the upper house, and joint significance of both houses of government. Similar to Caplan's models, we include real

personal income per capita and real total Federal intergovernmental transfers as ceteris paribus variables, as well as the Democratic percentage of legislators.

However, we include several considerations suggested by the literature and otherwise. These include:

- Dichotomous variables to capture when a state's governor is of the same party as the majority of the upper and/or lower houses of the state's government
- Dichotomous variables that indicate whether the GOP is in the majority in the upper and/or lower houses
- Interaction effects between GOP majorities and Distance measures
- The "industry mix" of a state's economy, the percentage of gross state product accounted for by agriculture and manufacturing
- The relative sizes of the upper and lower houses of a state's government
- And the number of upper house and lower house legislators per capita.

We wished to include the effects of item veto power wielded various by state governors. Unfortunately, there was too little variation through time for us to use line-item veto. Forty-three states have the line item veto but that number did not change throughout our time period. Accordingly, the variable could not be included in fixed effects estimates.

We estimate our equations in level and double-log specifications, after logging the dependent variables and the intergovernmental transfer and income per capita variables. We typically estimate Distance for the upper chamber and the lower chamber, and also estimate for joint significance. Additionally, we include squares of the Distance variables to look for non-linearities.

4) Results and Discussion

Table 3 presents selected estimates when all variables are in levels. Table 4 presents selected estimates when the dependent variables and selected control variables in logs.

The estimated coefficient on intergovernmental revenue is uniformly positive and significant. This is intuitively appealing. We do not estimate the combined Federal and state taxation and expenditure behavior. In our models, Federal intergovernmental revenue is treated as an exogenous increase in a state's budget. Not surprisingly, this leads to increased state spending.

The estimated coefficient on income per capita is negative and significant in level and log specifications. This is contrary to expectation. One would expect that as a state's income per capita increases, the state would gain added capacity to finance state government expenditure; furthermore Wagner's Law would come into play. If a state's citizens view government services as normal goods, their demand for state services will increase as their income rises. However, this does not appear to be the case. If anything, our results show an "anti-Wagner's law" in the states, implying that citizens view state services as inferior goods. This is somewhat intuitive. The primary expenditures of states are on education, health, and the social safety net. As incomes rise, people come to rely more on private education, private insurance, and so on.

Our "industry mix" variable, measuring the combined agricultural and manufacturing percentage of GSP, is insignificant in levels, but takes a negative and significant coefficient in logs. The correlation between the industry mix variable and income per capita is negative, arguing that as income rises states orient their economies away from agriculture and manufacturing, or vice versa. As these processes occur, citizens rely less heavily on inferior government services. The correlation coefficient between the industry mix variable and income per capita is (-)0.43, possibly suggesting multicollinearity. However, the income coefficients do not appreciably change when we leave out the industry mix variable.

As suggested by Gilligan and Matsusaka (1995), we include measures to control for the size of the legislative houses relative to the voting population, the "Law if 1/*n*" (Weingast, Shepsle, and Johnsen, 1981). Briefly, consider $b_i(x)$ to be the benefit of government spending of x dollars in district i, while $c_i(x)$ is the cost of such spending. The usual marginal conditions argue that the efficient level of government spending is that for which marginal benefit equals marginal cost. However, suppose that there are n districts, which share equally in the funding burden of governmental expenditure. Therefore, the constituents in district i bear only $(1/n)$ of the spending burden in their district. Accordingly, the legislator's new marginal condition becomes $b'_i(x) = (1/n)\, c'_i(x)$. If legislators logroll and defer to each other, then government spending is an increasing function of n. Gilligan and Matsusaka (1995) argue "the logrolling theory… relies on the idea that representatives can target spending to specific subsets of the population. Holding constant the number of districts, this should be more difficult with a small population than with a large population." (Gilligan and Matsusaka, 1995: 386)

We incorporate these considerations into our models by estimating two coefficients, one for the ratio of lower chamber seats to the population, and one for the ratio of upper chamber seats to the population. The estimated coefficients are always insignificant and mixed, with slightly more positive coefficients than negative coefficients. Though insignificant, the results for the upper chamber are more consistently positive. Thus, as the number of upper chamber seats rises relative to the population, government per capita spending as a percentage of per capita income *increases*. This result, though limited by the general insignificance of the coefficients, supports Gilligan and Matsusaka (1995), who found that larger chambers, relative to the population, spent more. Meanwhile, the lower chamber per capita variable is negative in

levels, but positive in logs, offering a very limited amount of support for Gilligan and Matsusaka (1995).

The government spending process involves joint production of three inputs, the lower chamber, the upper chamber, and the state's governor. To include the governor in our model, we estimate coefficients for HGOV, a dichotomous variable taking a value of one when the lower chamber majority and governor are of the same party. We also estimate SGOV, a dichotomous variable taking a value of one when the upper chamber majority and governor are of the same party, and HSGOV, a dichotomous variable taking a value of one when the lower, upper chamber majority and governor are all of the same party. The estimated coefficients on HGOV, was uniformly positive and significant. The similar measure for the upper chamber, SGOV, was uniformly negative and significant in levels and logs. The two variables were jointly significant only rarely, however, taking a negative coefficient. Observation reveals that the lower house effect and the upper house effect very nearly cancel each other, leaving a negative but usually insignificant net effect.

These results make intuitive sense. Governors typically submit expansive "wish list" budgets to lower chambers, which are typically quite partisan. Furthermore, conventional wisdom suggests the typically larger lower chamber's operating institutions place less emphasis on logrolling, personal relationships, and accommodating the other party, and instead emphasize party discipline. If the lower chamber majority and the governor are of the same party, the lower chamber will support the governor's spending initiatives and will rely on party power and party discipline to adopt the governor's budget. If the lower chamber majority and the governor are of different parties, the lower chamber opposes the governor's spending initiatives. The upper chamber is typically less partisan and their rules require more logrolling, and deference to the

opposition party. These institutional influences in the upper chamber may serve to moderate the spending proclivities of the lower chamber and the governor.

Alternatively, an oppositional majority in the lower house may accommodate some of a governor's spending objectives, but include much of the opposition's spending plans as well. The governor's majority in the upper chamber reduces the budget in support of its party and the governor and to deny the opposition the increased political support expected to flow from funding the opposition's initiatives. In the reverse situation, the governor's majority in the lower chamber funds many of the Governor's initiatives. The opposition majority in the upper chamber reduces funding for the Governor's projects to limit popular support for the Governor and the lower chamber majority.

Continuing in the vein of joint production of government spending, we include a measure of the relative sizes of upper and lower chambers: the number of seats in the lower chamber divided by the number of seats in the upper chamber, as was used to model interest group expenditures in McCormick and Tollison (1981). Across our panel there was very little variation through time. Apparently, though, there was sufficient variation for the variable to "load" into fixed effects estimates. The ratio's coefficient is negative, and is significant in level specifications but insignificant in log specifications. Across states and through time, as the state "House" grows larger relative to the state "Senate," the *level* of state spending as a fraction of income significantly declines, but the *growth rate* of state spending as a fraction of income declines only insignificantly. Note that relatively few states made changes in the ratio of seats; among those few states making changes, the changes were relatively small. This result is generally consistent with McCormick and Tollison (1981) who found that interest group lobbying for governmental income transfers decreased as the state houses became less equal.

A voluminous literature, including Caplan (2001) and Gilligan and Matsusaka (1995) among many others, seeks to estimate the effect of political party power on government spending. To account specifically for political party influences on spending, we estimate coefficients on a list of dichotomous variables indicating whether the GOP controls the lower chamber, the upper chamber, both, or neither. We note that state governments appear to have been rather non-competitive in terms of party control. In a majority of cases, partisan control of state governments either (a) never changed during our sample, or (b) changed once, briefly, i.e. one election cycle, or (c) changed only once to a new stable majority. We consider only 12 states to be "battleground" states, where the majority party in a state's legislature changed several times in our sample. Table 5 summarizes our findings.

The estimated coefficients on HGOP, a dummy variable coding as one when the lower chamber has a GOP majority, and a similar measure, SGOP, are inconsistent, usually negative, and insignificant in levels. However, HGOP is generally positive, though insignificant in log specifications. SGOP is consistently positive and significant in logs. This indicates that GOP majorities in the upper chamber tend to increase the growth rate of government spending as a percent of state income. This result is at odds with Reed's (2006) finding that Democrat control of the state house leads to larger governments, as measured by tax burden. The variable for GOP majorities in both chambers is uniformly negative, as predicted by Reed (2006) and Caplan (2001), but it is insignificant.

In addition to a set of dichotomous "GOP majority" indicators, we also include Dempercent, the percentage of seats in the chambers held by Democrats, as in Caplan (2001). In the level estimates, the percentage of Democrats in the state house has a negative, but insignificant, effect on state spending, as does the total percent of Democrats in the state

legislature. However, some models have negative and significant coefficients for state senate Democrats. Turning to log specifications, the state house Democrat percentage is positively and significantly linked to growth of state spending. However, the effect of the total legislative Democratic percentage on spending growth is negative. Furthermore, the coefficients are markedly greater and significance levels higher than for state house Democratic percentage alone. Thus, our evidence is internally inconsistent, but indicates that Democrats generally suppress state spending and state spending growth, when measured in real terms as a percent of income. These results are at odds with Reed (2006), who found that Democrats taxed (and presumably spent) more than Republicans, and is at odds with Caplan (2001), who found that Republicans were partially ideologically constrained to less, or slower growing, expenditure. This is especially true when considering the GOP majority indicators jointly with the Democratic percentage indicators. However, our results are generally consistent with the overall literature on political parties' effects on spending. In a broader sample of the literature, researchers have shown the parties' effects on state spending to be inconsistent and unevenly significant.

One reviewer suggested that these results may stem from omitted variable bias; specifically, we captured the effect of an unobserved variable that exogenously increased state government spending and was correlated with GOP power. As education expenditures account for such a large portion of state government spending, the reviewer suggested we include school-age children in our models. Accordingly, we variously included the population percentage of ages 5-19, the change in school age population, and the change in school population per growth in the national population. Our results proved generally robust to these changes in specification. The signs and coefficients on the party variables of interest were largely unchanged. Of course, the standard errors and, therefore, statistical significance were different.

Simply put, *GOP majorities lead to bigger state government*, as per our measures. These results contrast with Caplan's (2001) finding that Republicans were partially ideologically constrained in their spending preferences. However, our results are not completely unexpected, given the literature's weak and often inconclusive findings regarding political party effects on spending, e.g., Gilligan and Matsusaka, 1995; Blais, Blake, and Dion, 1993; Garand, 1988; Dye, 1984.

The "Distance" Results

We fail to replicate Caplan's results. The Distance measures are frequently insignificant. However, even when insignificant, they nearly always have negative coefficients. Likewise, the Distance interactions are insignificant, indicating upper and lower chamber Distances are not jointly significant. This is an "anti-Leviathan" result, both due to the general *insignificance* of the Distance coefficients and due to the *negative* coefficients. These results indicate that as political competition declines, *ceteris paribus*, state spending as a percentage of income *declines* and has a *negative* elasticity. This is not a Leviathan result; instead it is an anti-Leviathan result, in marked contrast to Caplan (2001).

We also fail to find evidence for our hypothesized extension to Caplan's model, namely, that state government expenditure as a percent of income should increase at an increasing rate as Distance increases. The typical approach to test for such non-linear relationships is to include a variable and its square, as we do with our Distance terms. However, our squared Distance terms almost never have significant coefficients. Even when they do have significant coefficients, the relative Distance variable to the first power is always insignificant. We conclude that non-linear

relationships between Distance and government spending as a percent of income are not prominent. Accordingly, we fail to support our hypothesized extension to Caplan's (2001) model, that the relationship between government spending and Distance would be convex rather than linear.

The sole consistent and generally significant Distance coefficient is the *negative* coefficient on lower house Distance, an anti-Leviathan result arguing that government size shrinks as a particular party consolidates political control. There is at least one alternative, non-Leviathan explanation that fits our results within the arena of imperfect political competition models. One can construct plausible scenarios for a negative relationship between lower house Distance and government expenditure share.

Consider a state in which two political parties are evenly matched in the lower house (a low Distance observation). The lower chamber is attempting to pass a budget. To succeed, the majority party needs significant support from the large minority. Therefore, political parity encourages more inter-party logrolling. In the ensuing logrolling, significant portions of the majority's spending preferences are approved, as are significant portions of the minority's spending preferences. Therefore, increased logrolling will lead to more expenditure. That is, as the state government becomes more competitive, government size will increase. Our results also indicated an absence of Wagner's Law; indeed, an anti-Wagner's Law. However, in states with closely matched parties, big spending incumbents can claim (a) they delivered significant portions of the party's spending priorities, and (b) the rest of the spending is the result of a strong opposition bloc, thereby mitigating the electorate's disfavor with big government. This is not the case in politically uncompetitive states, when the majority can ramrod its budget through the

chamber with little need of logrolling with the minority, but also bears the fallout from presiding over a government that is "too big."

Even so, what about the Leviathan urges of legislators in politically uncompetitive states? Again our results suggest that state government output is inferior. Alternatively, ideological concerns or parochial political interests constrain the parties' favorite particular spending priorities. Given effective, even if imperfect, agency constraints an anti-Leviathan electorate can rein in the Leviathan preferences of a strongly dominant political party.

Conclusion

Thus, we fail to replicate Caplan's (2001) result that state governments are Brennan and Buchanan (1980) power maximizers. Our evidence also fails to support our hypothesized extension of Caplan's hypothesis: that the relationship between government size and political power is convex rather than linear. Squared terms of the degree of political competition are generally insignificant predictors of state governments' income shares. Further complicating matters, our significant and contrary results have a set of intuitively appealing interpretations. As political parity increases, the capacity of the minority to block the majority increases, thereby encouraging more inter-party logrolling. As both parties' preferred issues require expenditure, increased logrolling will lead to more expenditure.

Taking our results together with Caplan's results, a murky picture emerges. From these results, we conclude that the issue of political party preferences—whether political parties are power maximizers, vote maximizers, or ideologues—remains inconclusively answered. The question is relevant because of its bearing on the nature of democratic governmental outcomes. Are those outcomes efficient, as in Wittman (1989, 1995), or not efficient, as in Dixit and

Londregan (1995, 1996, 1998), Grossman and Helpman (1996), and Caplan (2001)? Furthermore, the question has bearing on the differences between the "Virginia School" public choice tradition (e.g., the career works of James Buchanan, Gordon Tullock, Richard Wagner, Robert Tollison and others) and other recent political economy research, e.g. Wittman (1989, 1995), Alesina and Rosenthal (1995), Grossman and Helpman (1996), and Dixit and Londregan (1995, 1996, 1998). Ultimately, we view our results as suggestive, not conclusive. Specifically, the results suggest that the Leviathan theory requires more empirical testing; only after additional investigation may we understand the role political party power plays in determining state governments' income shares.

References

Alesina, Alberto and Howard Rosenthal (1995) *Partisan politics, divided government, and the economy*. New York: Cambridge University Press.

Anderson, Gary and Robert Tollison (1991) "Congressional influence and patterns of new deal spending, 1933-1939". *Journal of Law and Economics* 34:161-75.

Becker, Gary (1983) "A theory of competition among pressure groups for influence." *The Quarterly Journal of Economics* 98:4, 371-401.

Blais, Andre, Donald Blake, and Stephane Dion (1993) "Do parties make a difference? Parties and the size of government in liberal democracies." *American Journal of Political Science* 37: 40-62

Brennan, Geoffrey, and James Buchanan (1980). *The power to tax: Analytical foundations of a fiscal constitution.* Cambridge, MA: Cambridge University Press.

Caplan, Bryan (April 2001) "Has Leviathan Been Bound? A Theory of Imperfectly Constrained Government with Evidence from the States." *Southern Economic Journal* 67(4), 825-847.

Dixit, Avinash, and John Londregan (1995) "Redistributive politics and economic efficiency." *American Political Science Review* 89:856-66.

Dixit, Avinash, and John Londregan (1996) "The determinants of success of special interests in redistributive politics". *Journal of Politics* 58:1132-55.

Dixit, Avinash, and John Londregan (1998) "Ideology, tactics, and efficiency in redistributive politics". *Quarterly Journal of Economics* 113:497-529.

Dye, Thomas (1984) "Party and policy in the states." *The Journal of Politics* 46: 1097-1116.

Garand, James (1988) "Explaining government growth in the U.S. states." *American Political Science Review* 81: 837-849.

Gilligan, Thomas W., and John G. Matsusaka. "Structural Constraints on Partisan Bias under the Efficient Gerrymander." *Public Choice* 100 No. 1/2 (July, 1999): 65-84.

Grier, Kevin, Michael McDonald, and Robert Tollison (1995) "Electoral politics and the executive veto: A predictive model". *Economic Inquiry* 33:427-40.

Grossman, Gene, and Elhanan Helpman (1996) "Electoral competition and special interest politics." *Review of Economic Studies* 63:265-86.

Lindbeck, Assar, and Jorgen Weibull (1987) "Balanced-budget redistribution as the outcome of political competition." *Public Choice* 52:273-97.

McCormick, Robert and Robert Tollison (1981) *Politicians, Legislation and the Economy*, Chapter 3. Boston, MA: Martinus-Nijhoff.

Reed, W. Robert (2006) "Democrats, Republicans, and Taxes: Evidence That Political Parties Matter." *Journal of Public Economics*, 90:725-50.

Wallis, John (1995) "What determines the allocation of national government grants to the states?" *NBER Historical Paper No. 90*.

Weingast, Barry, Kenneth Shepsle, and Christopher Johnsen (1981) "The political economy of benefits and costs: A neoclassical approach to distributive politics." Journal of Political Economy 89: 642-664.

Wittman, Donald (1989) "Why democracies produce efficient results." *Journal of Political Economy* 97: 1395-1424.

Wittman, Donald (1995) *The myth of democratic failure: Why political institutions are efficient.* Chicago: University of Chicago Press.

Figure 1. Government size as a linear function of the variable, Distance, as in Caplan (2001)

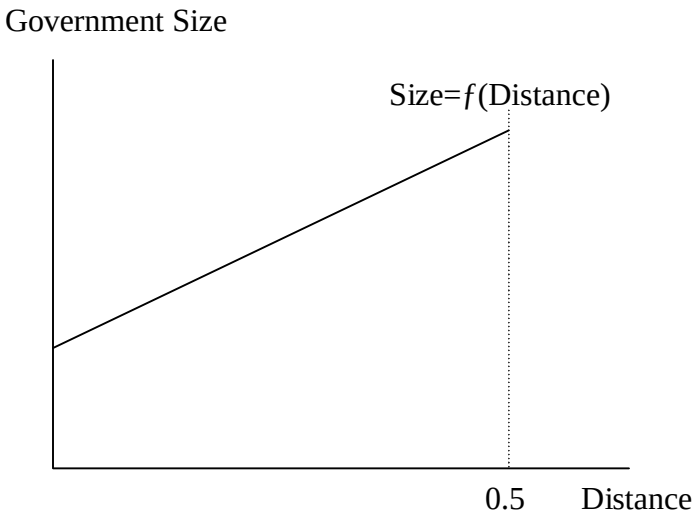

Figure 2. Government size as a convex function of the variable, Distance

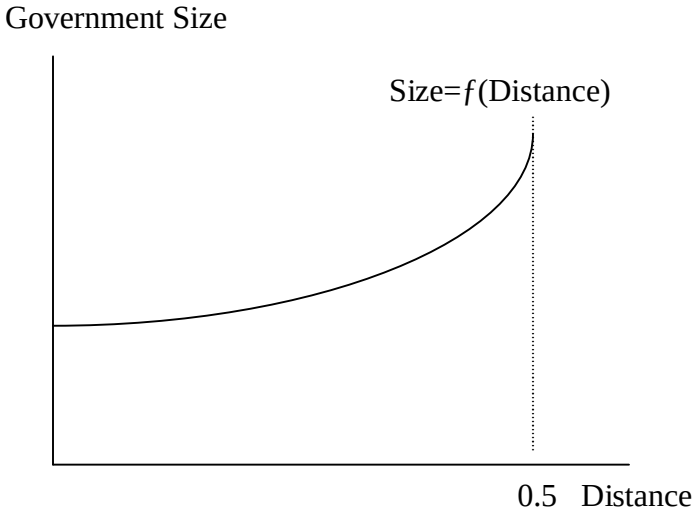

Table 1: Variable definitions

ExpYPC	Real total government expenditure per capita as a percent of real personal income per capita (LnExpYPC is the log)
RTFIGRPC	Real total federal intergovernmental transfers per capita (LnIGR is the log)
RPYPC	Real personal income per capita (LnYPC is the log)
AgMfgPct	Percentage of GSP accounted for by agriculture and manufacturing
HGov	Takes (1) when governor and lower house majority are the same party; (0) otherwise.
SGov	Takes (1) when governor and upper house majority are the same party; (0) otherwise.
HSGov	The interaction of HGov and SGov.
HGOP	Takes (1) when GOP holds a lower house majority; (0) otherwise.
SGOP	Takes (1) when GOP holds an upper house majority; (0) otherwise.
HSGOP	The interaction of HGOP and SGOP
HDistance	The variable, Distance, for the lower chamber
SDistance	The variable, Distance, for the upper chamber
HSDistance	The interaction of Hdistance and SDistance
HD2	Hdistance squared
SD2	Sdistance squared
HDPct	The Democrat percent in the lower chamber
SDPct	The Democrat percent in the upper chamber
HSDPct	The Democrat percent of all legislators
HtoSRatio	Ratio of lower house members to upper house members
HPop	Number of lower house seats per capita
SPop	Number of upper house seats per capita

Table 2: Correlation Coefficients

	expypc	rtfigrpc	rpypc	agmfgpct	hgov	hgop	hdistance	hd2	sgov	sgop
expypc	1									
rtfigrpc	0.964	1								
rpypc	0.266	0.326	1							
agmfgpct	-0.076	-0.114	-0.43	1						
hgov	-0.018	-0.041	-0.07	0.045	1					
hgop	-0.109	-0.098	0.08	-0.090	-0.028	1				
hdistance	-0.167	-0.179	-0.31	-0.029	0.210	-0.270	1			
hd2	-0.172	-0.186	-0.31	0.013	0.221	-0.262	0.960	1		
sgov	0.015	0.014	-0.10	0.012	0.578	-0.019	0.230	0.253	1	
sgop	0.126	0.139	0.16	-0.167	-0.006	0.542	-0.327	-0.318	-0.057	1
sdistance	-0.179	-0.197	-0.34	0.025	0.199	-0.293	0.817	0.820	0.257	-0.425
sd2	-0.168	-0.188	-0.35	0.025	0.219	-0.308	0.818	0.861	0.266	-0.391
hsgov	-0.045	-0.049	-0.09	-0.033	0.291	-0.045	0.224	0.244	0.403	-0.117
hsgop	-0.071	-0.064	0.05	-0.110	-0.030	0.825	-0.145	-0.166	0.009	0.730
hsdist	-0.168	-0.186	-0.34	0.026	0.229	-0.300	0.916	0.961	0.266	-0.369
hsdist2	-0.138	-0.153	-0.33	0.059	0.214	-0.262	0.796	0.903	0.244	-0.305
htosratio	-0.047	-0.050	0.08	0.135	0.035	0.097	-0.024	-0.039	0.075	0.119
hpop	-0.274	-0.265	-0.07	-0.025	-0.021	0.328	-0.046	-0.053	0.021	0.231
spop	-0.374	-0.361	-0.18	-0.239	-0.081	0.356	0.002	-0.006	-0.060	0.203
hdpct	-0.009	-0.024	-0.20	0.079	0.146	-0.776	0.590	0.632	0.152	-0.630
sdpct	-0.123	-0.146	-0.26	0.121	0.135	-0.610	0.590	0.620	0.166	-0.795
hsdpct	-0.100	-0.119	-0.28	0.072	0.192	-0.516	0.735	0.808	0.214	-0.549

Table 2, Continued: Correlation Coefficients

	sdistance	sd2	hsgov	hsgop	hsdist	hsdist2	htosratio	hpop	spop	hdpct	sdpct	hsdpct
sdistance	1											
sd2	0.958	1										
hsgov	0.237	0.249	1									
hsgop	-0.199	-0.226	-0.064	1								
hsdist	0.917	0.960	0.251	-0.21	1							
hsdist2	0.796	0.907	0.233	-0.20	0.94	1						
htosratio	-0.045	-0.042	-0.039	0.16	-0.04	0.0	1					
hpop	-0.102	-0.096	-0.071	0.31	-0.08	-0.1	0.705	1				
spop	-0.073	-0.075	-0.056	0.29	-0.05	-0.1	-0.045	0.626	1			
hdpct	0.611	0.648	0.181	-0.69	0.67	0.6	-0.102	-0.282	-0.299	1		
sdpct	0.700	0.726	0.227	-0.66	0.70	0.6	-0.091	-0.229	-0.225	0.859	1	
hsdpct	0.768	0.838	0.261	-0.49	0.86	0.8	-0.072	-0.179	-0.175	0.890	0.892	1

Table 3: Results Levels

Government spending as a fraction of personal income

	1		2		3		4		5		6	
rtfigrpc	1.738	***	1.734	***	1.734	***	1.734	***	1.737	***	1.736	***
rpypc	-0.093	***	-0.099	***	-0.099	***	-0.098	***	-0.098	***	-0.099	***
agmfgpct	-0.022		-0.033		-0.034		-0.031		-0.033		-0.033	
htosratio	-10.681	***	-10.983	***	-11.239	***	-11.096	***	-10.596	***	-10.613	***
hpop	-23.234		-29.096		-29.023		-29.672		-23.615		-24.296	
spop	30.184		31.329		26.568		33.731		19.499		17.486	
hgov	2.866	***	2.999	***	3.041	***	2.995	***	2.940	***	2.974	***
sgov	-2.650	***	-2.586	***	-2.597	***	-2.617	***	-2.573	***	-2.557	***
hsgov	-0.609		-0.685		-0.718	*	-0.680		-0.654		-0.683	
hgop	-0.745		-1.605		-2.085	*	-1.583		-1.236		-1.321	
sgop	0.268		-0.483		-0.735		-0.438		0.053		-0.211	
hsgop	-1.199		-0.140		0.072		-0.193		-0.667		-0.575	
hdpct	-1.90		-3.172		-5.727		-2.677		-4.186		-4.250	
sdpct	-6.054		-8.772	*	-9.864	*	-8.453	*	-6.061		-8.589	*
hsdpct	-9.696		9.699		22.249		5.295		4.621			
hdistance			-9.427	*	-20.859	**	-12.621	*				
hd2					21.164		8.277					
sdistance			-1.379		-3.164				-0.498			
sd2					-7.255				-12.681			
hsdist			0.729		44.723						-21.254	
hsdist2					-197.789						-6.109	
constant	59.575	***	55.913	***	53.185	***	57.920	***	54.887	***	51.064	***
R-sq:	0.903		0.904		0.904		0.904		0.903		0.904	
F	720.75		603.75		517.65		639.83		636.68		637.69	
F(f.e.)	29.38		29.52		29.13		29.6		29.34		29.38	

*-Significant at the 90% level
**-Significant at the 95% level
***-Significant at the 99% level

Table 4: Results Logs

Log of government spending as a fraction of personal income

	1		2		3		4		5		6	
lnigr	0.961	***	0.959	***	0.959	***	0.959	***	0.961	***	0.960	***
lnypc	-1.073	***	-1.072	***	-1.074	***	-1.078	***	-1.069	***	-1.073	***
agmfgpct	-0.010	***	-0.010	***	-0.010	***	-0.010	***	-0.009	***	-0.010	***
htosratio	-0.068		-0.079		-0.080		-0.078		-0.068		-0.070	
hpop	0.310		0.191		0.192		0.210		0.291		0.254	
spop	-0.204		0.200		0.222		-0.098		-0.080		-0.002	
hgov	0.023	***	0.023	***	0.023	***	0.024	***	0.022	***	0.022	***
sgov	-0.025	***	-0.026	***	-0.027	***	-0.026	***	-0.026	***	-0.026	***
hsgov	-0.010		-0.010		-0.010		-0.011		-0.010		-0.010	
hgop	0.016		0.010		0.011		0.005		0.018		0.018	
sgop	0.044	**	0.039	**	0.046	**	0.038	**	0.043	**	0.047	***
hsgop	-0.029		-0.019		-0.021		-0.016		-0.028		-0.025	
hdpct	0.184	**	0.215	**	0.219	**	0.190	**	0.207	**	0.232	***
sdpct	0.092		0.100		0.144		0.103		0.094		0.147	*
hsdpct	-0.827	***	-1.075	***	-1.198	***	-0.921	***	-0.986	***	-1.247	***
hdistance			-0.232	**	-0.213		-0.279	**				
hd2					-0.153		0.572					
sdistance			-0.066		0.067				-0.085			
sd2					-0.532				0.287			
hsdist			0.711	*	0.766						-0.325	
hsdist2					1.995						2.973	*
constant	6.812	***	6.974	***	7.014	***	6.940	***	6.863	***	6.976	***
R-sq:	0.9756		0.9758		0.9758		0.9757		0.9757		0.9757	
F	3097.59		2588.86		2215.18		2739.14		2730.47		2735.89	
F(f.e.)	51.26		51.5		50.46		51.46		50.91		51.32	

*-Significant at the 90% level
**-Significant at the 95% level
***-Significant at the 99% level

Table 5: Partisan control of state legislatures

Opp Party 2yrs or less	Never Switch or primarily one party		Single Switch	Battleground
	Never GOP	Never Dem		
Colorado (GOP)	Alabama	Idaho	Florida	Alaska
Illinois (Dem)	Arkansas	N. Hampshire	New Jersey	Arizona
Nevada (Dem)	California	Wyoming	Ohio	Indiana
S. Carolina (Dem)	Connecticut		Oregon	Iowa
S. Dakota (GOP)	Delaware			Kansas
Virginia (Dem)	Georgia			Michigan
Wisconsin (Dem)	Hawaii			Montana
Maine (Dem)	Kentucky			North Dakota
	Louisiana			Pennsylvania
	Maryland			Utah
	Massachusetts			Vermont
	Minnesota			Washington
	Mississippi			
	Missouri			
	New Mexico			
	New York			
	North Carolina			
	Oklahoma			
	Rhode Island			
	Tennessee			
	Texas			
	West Virginia			

[1] Caplan posits the concept of "party preferences" (Caplan, 2001:828) without explicitly defining it. We follow his convention here.

[2] For those readers uncomfortable with the term ideological bias we offer an alternative construct that will yield the same result. Parties will develop organizational norms, operating procedures, rules of thumb, and the like, e.g., the party's internal institutions. In the case of the Republicans, these institutions render their party less efficient when it comes to increasing government revenues or expenditures, relative to the Democrats.

[3] By assumption, both parties are Leviathans. This means that both parties want to expand government power faster than or further than voters want. Caplan demonstrates that Democrats have an easier time of it than Republicans.

[4] Presumably, there is an upper limit to the size of state government, which neither Caplan nor we discuss. A familiar example comes from Becker (1983), wherein increasing governmental spending and redistribution increases dead weight costs at an increasing rate, until it is in neither party's interest to expand government any further. In this paper, all changes to government size are assumed to be infra-marginal.

[5] We test for independent results in lower and upper chambers of the state legislatures as well as the overall result from both houses combined. Nebraska's unicameral legislature excludes the state from our data set.