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Has Leviathan Been Bound? A Theory of Imperfectly Constrained Government with Evidence from the States

Bryan Caplan*

This paper develops a formal theory that combines power-maximizing “Leviathan” political parties with well-defined imperfections in the political process. The model implies that both parties tend to make government larger as their likelihood of electoral victory increases. Empirical tests on state-level data confirm this prediction. Racing the Leviathan hypothesis against alternative theories of party motivation indicates that both the Leviathan and the “contrasting ideologies” views have some degree of validity.

1. Introduction

The “Leviathan” motive of politicians to maximize their power is a central assumption of the public choice approach to political economy.¹ This approach has been strongly attacked for underestimating the importance of competitive checks on politicians; Wittman (1989, 1995) in particular broadly argues that electoral competition is an effective solution to whatever principal-agent problem might exist between politicians and voters. Yet recent research in political economy (Dixit and Londregan 1995, 1996, 1998; Grossman and Helpman 1996) casts renewed doubt on the efficiency of political markets. Formal models incorporating imperfections in the electoral process show that politicians have the latitude to deviate somewhat from citizen interests. Although politicians face constraints, they retain some measure of monopoly power, a conclusion consistent with the public choice literature.

The main difference between recent political economy and the public choice tradition arises from their assumptions about politicians’ objective functions. The public choice approach tends to view all political parties as power maximizers, whereas others see parties as either vote maximizers (Dixit and Londregan 1995, 1996; Grossman and Helpman 1996) or promoters of conflicting ideologies (Alesina and Rosenthal 1995; Dixit and Londregan 1998). The present paper briefly develops a theoretical model that pits Leviathan—in the form of two power-maximizing parties—against the electoral constraints of modern political economy. The main implication of the model—an implication empirically tested against several alternatives later in

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¹ See, for example, Brennan and Buchanan (1980) and McGuire and Olson (1996).

the paper—is that *both* imperfectly constrained power-maximizing parties will make government larger as their likelihood of electoral victory increases. Intuitively, the results are consistent with Peltzman's (1992) informal analysis of government growth in the face of voters' fiscal conservatism:

The larger question is how political agents can persistently dissipate voter wealth; that is, why has government grown so much (and why is it fiscally progressive)? . . . One [possibility] is that the political costs of growing budgets are too weak to compel much restraint. . . . These exercises suggest that incumbents can indulge in nontrivial spending growth before they risk a close call next election day. (pp. 358–9)

The next section discusses the theoretical and empirical literature on politicians' objective functions and imperfections in the political sector. The third section presents the model of power-maximizing parties facing electoral constraints. Initially, politicians operate in a certain environment; this assumption is then relaxed to yield implications that are both more plausible and more readily tested. The fourth section tests the Leviathan model and its competitors on state-level political and economic data during the 1950–1989 period and analyzes the empirical results. Because section four finds that political parties differ less about the *level* of spending than one might expect, the fifth section examines whether parties matter for the *composition* of taxation and spending. The sixth section concludes the paper.

2. Related Literature

The model developed here builds on the formal theory of recent political economy, the less formal analysis of government found in the public choice literature, and the broader debate about the extent to which politicians find themselves constrained to efficiently satisfy consumer preferences.

The conclusions of my model, like most recent work in theoretical political economy, depend critically on the existence of an imperfection in the electoral process: Voters treat political parties as differentiated products. A literature beginning with Lindbeck and Weibull (1987) differentiates parties by assuming that they may easily alter their positions on some issues (such as the budget) but must hold their stance on other issues (such as abortion) fixed. Recent advances made on this foundation include those of Dixit and Londregan (1995, 1996, 1998) and Grossman and Helpman (1996). This assumption is not *ad hoc*: As Dixit and Londregan (1998) note, voters genuinely care about ideology, and even in the face of repeated electoral defeats, parties find it difficult to make genuine ideological shifts. Fixed ideological positions plus voter ideology adds up to imperfect political competition.²

Although a growing literature builds on Lindbeck and Weibull's approach, there is much less consensus about parties' objective functions. Wittman (1983) provides a general discussion of the implications of politicians' preferences over policies as well as electoral outcomes. Some, such as Grossman and Helpman (1996) and Dixit and Londregan (1995, 1996), simply model parties as vote maximizers. Others, such as Baron (1994), assume parties maximize their probability of victory. In Alesina and Rosenthal (1995), one party has a progovernment ideology while the other has an antigovernment ideology; Dixit and Londregan (1998) have parties max-

² Bender and Lott (1996) survey economic literature on the principal-agent in politics. They conclude that empirically, the problem of political shirking is not severe. For discussions of party ideology and party advantage in the political science literature, see Geer (1991), King and Gelman (1991), Romero (1993), and Gaddie (1995).

Table 1. Summary of the Model

	Interpretation
Exogenous variables	
Z	Maximum possible utility level of citizens
G_c^*	Citizen c 's most preferred quantity of public good
β	Sensitivity parameter for public goods
Ψ_c	Intensity of citizen c 's preference for party i
Ψ	Average (and median) value of Ψ_c
G_t^*	Most preferred quantity of public good of citizen type t
T	Number of types of citizens, each with own most preferred level of government services
χ_t	Fraction of the population belonging to type t
\tilde{G}	Mean most desired level of government services
Endogenous variables	
u_c	Utility function of citizen c
P_c	Quantity of private good consumed by citizen c
G	Quantity of public good (= "size of government")
z_c	Indirect utility function of citizen c in state k
I_i	Indicator variable = 1 if party i wins, = 0 otherwise
G_i, G_j	Size of government offered in platforms of parties i, j
u_i, u_j	Utility function of parties i, j
$U(G_i)$	Utility of federal party i conditional on ruling
#Dem, #Rep	Raw numbers of Democratic and Republican legislators in a given legislative body
Distance	$\equiv Dempercent - .5 $
Demmajority	Dummy variable = 1 if $#Dem/(#Dem + #Rep) \geq .5$, and otherwise = 0
Dempercent	$\equiv #Dem/(#Dem + #Rep)$

imize a weighted average of their vote share and an ideological social welfare function. Electoral competition forces both parties to compromise their ideologies to some extent.

Vote-maximizing and conflicting ideologies theories of political motivation differ from the power-maximizing or "Leviathan" parties often posited within the public choice literature. Brennan and Buchanan (1980), for example, assume that both Democrats and Republicans want to make government revenue and spending as large as possible. They only refrain from increasing it even more because of political and economic constraints, not because they do not want to. An analogous perspective is perhaps most dominant in the literature on the political economy of protectionism (Grossman and Helpman 1995). A common conclusion in this literature is that both political parties incline toward excessive protectionism.

3. The Theory of Electorally Constrained Power-Maximizing Parties³

The players are two federal parties $\{i, j\}$ and a continuum of citizens whose measure is normalized to 1. Play is simultaneous, and in any Nash equilibrium (i) all citizens must vote for their most preferred federal party and (ii) both political parties must offer platforms that maximize their expected utility.

³ Note that the interpretation of all variables is given in Table 1.

Citizen Preferences and Constraints

Citizen utility depends on not only consumption of private goods P_c and public goods G , but also on the political environment:

$$u_c = u(P_c, G) + \Psi_c I_i. \quad (1)$$

$\Psi_c \sim U[-0.5 + \Psi, 0.5 + \Psi]$ is c 's relative taste for party i versus party j . Ψ_c is the amount of utility (positive or negative) the individual would be willing to give up in order to be ruled by i rather than j ; Ψ may be interpreted as both the average and the median value of Ψ_c . I_i is an indicator variable, which is 1 if party i is in power and 0 otherwise; $I_j = 1 - I_i$.

Citizens' corresponding indirect utility function z_c is assumed to have functional form:

$$z_c = Z - \beta(G - G_c^*)^2 + \Psi_c I_i. \quad (2)$$

There are T distinct types of citizens, each with its own most desired level of government services, G_t^* , which is uncorrelated with Ψ_c . Each of these types constitutes a fraction χ_t of the population, so

$$\sum_{t=1}^T \chi_t = 1. \quad (3)$$

Parties' Preferences and Constraints

The parties compete in an election held each period. G_i is the political platform offered by party i , and G_j is the platform of j . The competing parties are both "power maximizers" who want government to be as big as possible assuming they are in office.⁴ Formally,

$$u_i = I_i * U(G_i) \quad (4)$$

$$u_j = I_j * U(G_j). \quad (5)$$

All properties of standard utility functions hold. It is further assumed that $U(0) = 0$: Controlling a government with no resources gives the same utility as being out of power.

Political Equilibrium with Certainty about Political Advantage

Because citizens vote to maximize their own utility, a citizen votes for federal party i if

$$-\beta(G_i - G_i^*)^2 + \Psi_c \geq -\beta(G_j - G_j^*)^2 \quad (6)$$

and for party j otherwise.

Suppose that Ψ can be observed without error by the political parties, and (for simplicity)

⁴ "Power-maximization" has two different interpretations in the literature. McGuire and Olson's (1996) self-interested autocrats maximize their tax revenues minus their expenditures; in consequence, government unconstrained by elections is too small. Brennan and Buchanan (1980), in contrast, equate power maximization with maximization of government spending, making the equilibrium size of government too large. These two approaches are not as different as they might appear: Since direct appropriation of surplus tax revenues is normally impermissible in democracies, politicians face the public-sector equivalent of rate-of-return regulation. The rational response to this cap is to let costs rise to eliminate monopoly profits.

that a tie goes to i if $\Psi \geq 0$, and to j if $\Psi < 0$. Given majority rule, it will then *not* be an equilibrium for both political parties to offer the median preference. If $\Psi \geq 0$, party i wins with certainty if it plays the median value of G ; due to its advantaged position, it can definitely win even if its platform offers a somewhat larger public sector. Party i will want to keep increasing the offered level of government until it drives the percentage of votes it receives down to 0.5. Similarly, if $\Psi < 0$, j wins with certainty if it exactly satisfies the median preference; due to its advantaged position, it can afford to offer a larger government.⁵

Consider first the case where $\Psi > 0$. Assuming no corner solutions,⁶ party i can drag its share of the vote down to .5 if it pushes its offered platform up until it satisfies

$$\sum_{t=1}^T \chi_t [(\Psi + 0.5) - \beta[(G_i - G_t^*)^2 - (G_j - G_t^*)^2]] = 0.5. \quad (7)$$

Due to disadvantaged status, in equilibrium, party j will never win. However, in equilibrium, j must still seek to maximize its votes:

$$\max_{G_j} \sum_{t=1}^T \chi_t [(\Psi + 0.5) - \beta[(G_j - G_t^*)^2 - (G_i - G_t^*)^2]]. \quad (8)$$

Define $\tilde{G} \equiv \sum_{t=1}^T \chi_t G_t^*$, the *mean* most desired level government. Then solving Equation 8 reveals that j 's vote-maximizing strategy is given by

$$G_j = \tilde{G}. \quad (9)$$

One can find i 's best response by plugging Equation 9 into Equation 7, yielding

$$G_i = \tilde{G} + \sqrt{\frac{\Psi}{\beta}}. \quad (10)$$

In the case where $\Psi < 0$, it is merely necessary to switch the i and j subscripts and replace Ψ with $|\Psi|$. In general, then $G = \tilde{G} + \sqrt{|\Psi|/\beta}$ where G is the value of the platform that wins in equilibrium. The advantaged party is always the winning party, which deviates as far from mean preferences as it can get away with without losing office.⁷ The disadvantaged party offers to set the size of government equal to the mean preference but invariably loses. Adding the assumption of “product differentiation” to democratic elections with perfect information has an outcome similar to that of the Bertrand duopoly game with cost advantages; the more intrinsically popular party always wins but is constrained by the presence of the alternative, less popular party. Note further that even when both parties are power maximizers, there will appear to be a “big government” and a “small government” party. The advantaged party consistently promotes a larger government than the disadvantaged party even though no ideological differences divide them.

⁵ If $\Psi = 0$, then this model reduces to the standard median voter model.

⁶ That is, some voters of each type vote for each party. This condition would be violated, for example, if $\Psi = 0$, in which case, 100% of each type would vote for the party closest to G^* .

⁷ Caplin and Nalebuff (1991) and Ma and Weiss (1995) also discuss “mean voter theorems,” although in my model, policy merely gets closer to mean preference as imperfections decrease.

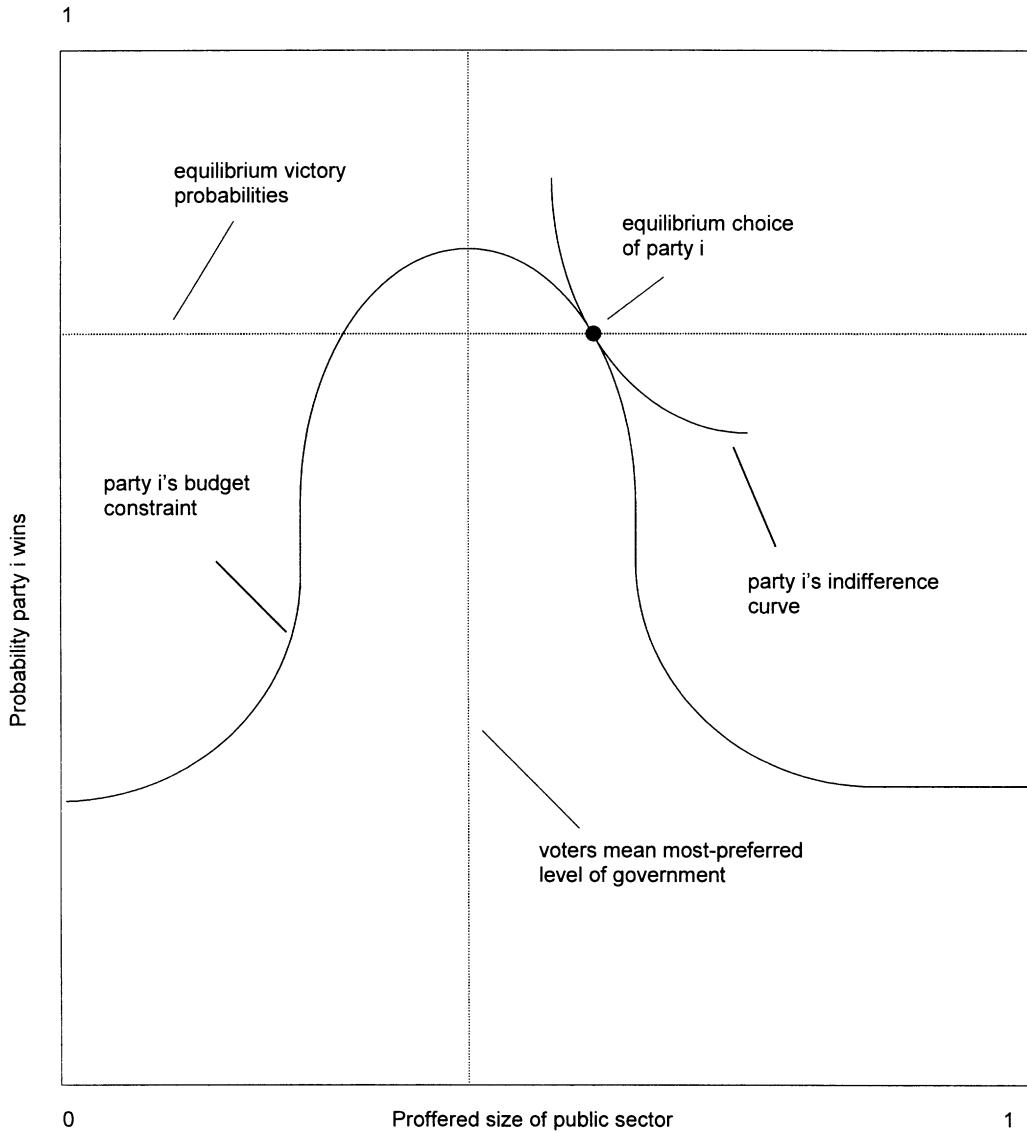


Figure 1. Optimal Platform and Victory Probability for Party i

Political Equilibrium with Uncertainty about Political Advantage

Adding uncertainty makes the predictions considerably more interesting, especially for empirical testing. Figures 1–3 show the basic intuitions. Figure 1 illustrates the choice problem of party i holding constant the behavior of party j . i 's platform choices lie along the x-axis; its probability of victory choices lie along the y-axis. The curve centered at \bar{G} is i 's “budget constraint”; points on the frontier are feasible while points outside of the frontier are infeasible. It is possible to draw a class of indifference curves on this diagram, indicating the “bundles” of platforms and victory probabilities that give equal utility levels; northeast is the direction of increasing utility. The party's optimum is shown by the tangency of its indifference curve to the budget constraint. Note that because the budget constraint

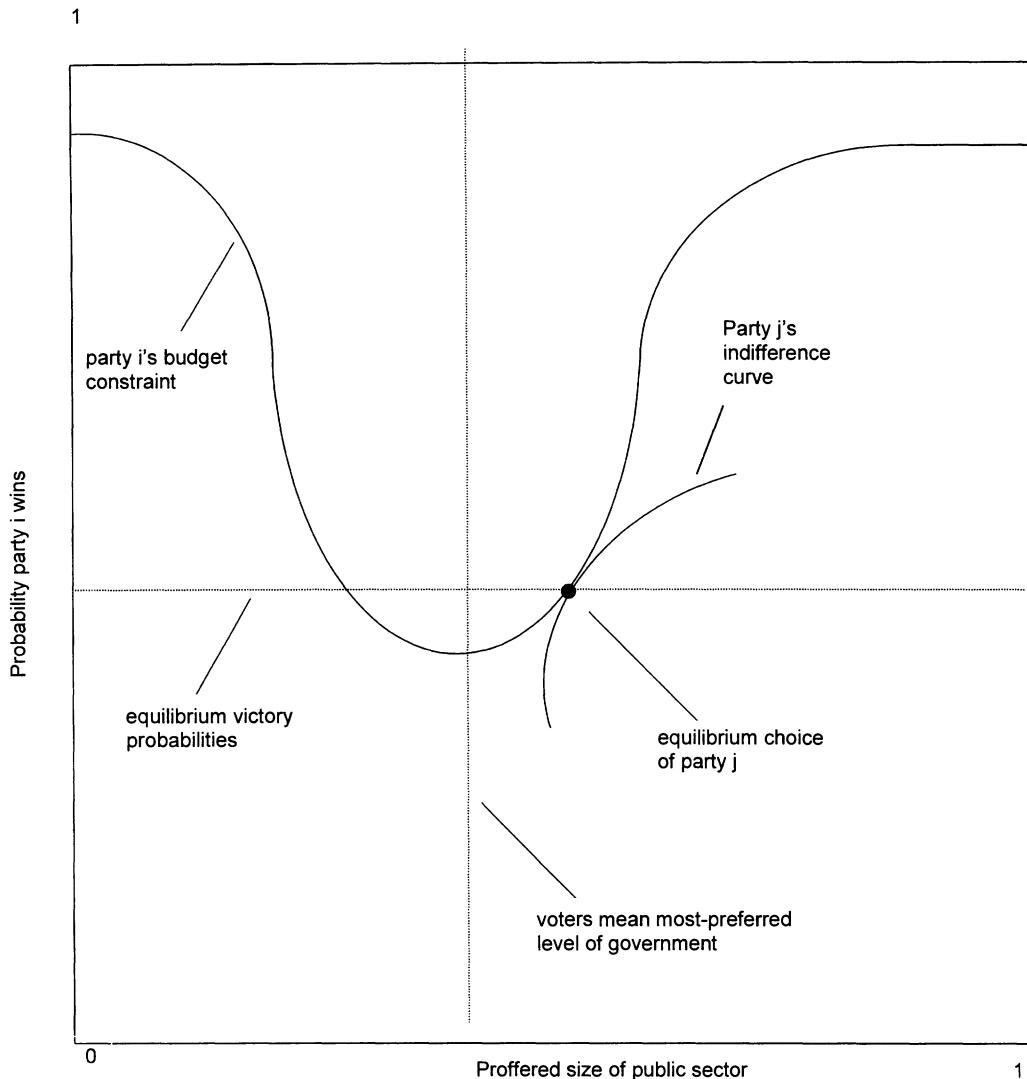


Figure 2. Optimal Platform and Victory Probability for Party j

is only negatively sloped to the right of \tilde{G} , the optimal point will definitely be tangent to the right of that point.

Holding \tilde{G} constant, what factors shift i 's budget constraint? There are two: the strategy of party j and the value of Ψ . When j increases the deviation of its platform from voter preferences, i 's victory prospects improve for every platform. Similarly, if Ψ increases, the entire budget frontier moves up. Thus, "political advantage" is analogous to wealth. It shifts the budget constraint out, making it possible to "buy" both a larger probability of victory and a larger offered size of government.

Figure 2 shows the same choice problem from the perspective of party j . j 's budget constraint is rotated because the labels on the axes are unchanged: the y-axis still gives the probability of i winning while the x-axis shows j 's platform. Movement away from the origin

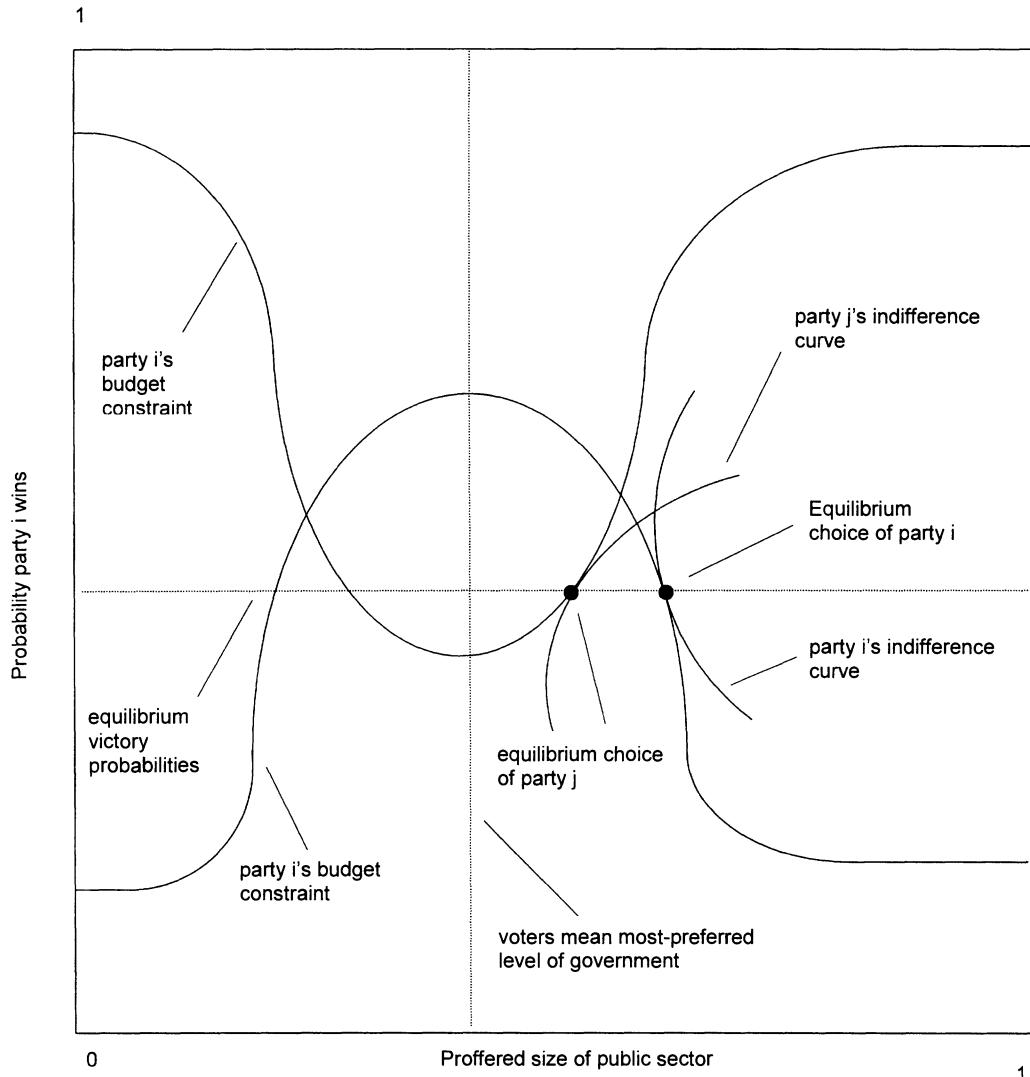


Figure 3. Optimal Platform and Victory Probability for Parties i and j

indicates a platform with a larger public sector; southeast is j 's direction of increasing utility. When j 's political advantage increases (Ψ becomes more negative), or i offers a platform voters like less, j 's budget constraint shifts out.

Figure 3 combines the two diagrams in a manner somewhat analogous to an Edgeworth box. The two parties' combined probability of winning must equal 1, and both parties maximize utility subject to the behavior of their competitor. In equilibrium, each party has its indifference curve tangent to its respective "budget constraint." The equilibrium points lie along a horizontal line, because the joint probability of victory is unity, but (in contrast to an Edgeworth box) there is no need for the equilibrium points to also be on the same vertical line. In fact, one would expect the disadvantaged party's platform to offer a smaller size of government because they are less able to afford deviations from voters' wishes.

Table 2. Summary Statistics

Variable	Mean	SD	Min	Max	MWSD
1920 Observations: 48 Continental United States, 1950–1989					
Sales tax	286.815	133.097	68.948	816.559	124.524
Income tax	107.742	119.991	0	623.357	88.571
Corporate tax	34.341	31.248	0	192.21	22.397
Total tax	428.898	213.515	68.948	1157.233	227.164
Spending	894.453	416.805	196.324	2562.59	447.443
Edu	330.802	180.938	29.64	860.21	198.031
Hhsp	64.41641	34.825	10.84	210.23	34.64
Hwy	161.422	73.519	25.68	658.89	56.638
Pw	136.985	91.589	13.49	579.38	78.851
Personal income	8887.044	2669.925	2873.966	19,002	2747.875
1719 Observations: 48 Continental United States, 1950–1989, except 1951, 1962, and 1964 (all states); NB (all years); and MN, 1950–1972					
Sales tax	297.304	133.620	68.948	816.559	125.458
Income tax	113.806	123.365	0	623.357	88.797
Corporate tax	36.118	31.966	0	192.21	22.62
Total tax	447.227	213.814	68.948	1157.233	227.691
Spending	930.912	417.256	209.565	2562.59	451.473
Edu	346.906	180.976	29.64	860.21	200.223
Hhsp	66.931	35.257	10.84	210.23	35.346
Hwy	162.270	73.807	25.68	658.89	56.554
Pw	143.831	93.382	13.49	579.38	80.205
Personal income	9083.006	2672.865	2916.512	19,002	2778.613
Grant	309.393	181.132	24.423	992.674	195.893
Lower Demmajority	0.641	0.480	0	1	0.288
Lower Dempercent	0.607	0.229	0.01	1	0.123
Lower Distance	0.205	0.149	0	0.5	0.095
Upper Demmajority	0.608	0.488	0	1	0.279
Upper Dempercent	0.606	0.244	0	1	0.129
Upper Distance	0.219	0.151	0	0.5	0.100

4. Empirical Tests of the Leviathan Hypothesis and Alternatives

*Data and Variables*⁸

This section tests the Leviathan and some alternative hypotheses using fiscal and political data for the 48 contiguous U.S. states from 1950–1989. For empirical purposes, it is necessary to quantify the size of government and the probability of electoral victory of the advantaged party. The size of government is measured in two ways: with states' real per-capita government spending (1982 dollars) and with spending as a fraction of personal income. The probability of electoral victory of the advantaged party is proxied by Distance, the fraction of legislative seats held by the ruling party; a party with a slim majority is assumed to have had a lower *ex ante* probability of victory than a party with a large supermajority. Formally, define Dempercent for a given legislative body as #Dem/(#Dem + #Rep). Then Distance ≡ |Dempercent – 0.5|, the absolute value of the difference between 50% and the percentage of seats held by the ruling

⁸ Table 1 includes variable definitions; Table 2 shows the summary statistics of the data used and details on missing observations.

Table 3. Regression of Taxation and Spending on Distance (Standard Control Variables)^a

Dependent Variable	Taxes (Real Per Capita)	Spending (Real Per Capita)	Taxes (% Personal Income)	Spending (% Personal Income)
Constant	197.166 (42.407)	773.843 (60.950)	5.669 (0.139)	9.475 (0.218)
Lower Distance	115.853 (18.77)	71.484 (26.125)	1.213 (0.169)	1.084 (0.265)
R ²	0.924	0.959	0.852	0.919
Constant	208.976 (42.485)	780.942 (60.876)	5.700 (0.139)	9.502 (0.218)
Upper Distance	97.115 (17.703)	67.437 (25.366)	0.984 (0.165)	0.989 (0.257)
R ²	0.924	0.959	0.851	0.919

^a Standard errors below coefficients; N = 1719; missing observations = 201; years: 1950–1989.

party in a legislative body.⁹ Several earlier studies, including Wright (1974), Anderson and Tollison (1991), Grier, McDonald, and Tollison (1995), and Wallis (1996) use a similar variable.

All specifications include state and year dummies and control for grants from the federal government. Specifications that use real per-capita fiscal measures always control for personal income; those that use spending as a percentage of personal income never control for personal income.

The Leviathan Hypothesis: Preliminary Results

The Leviathan hypothesis predicts a positive correlation between Distance and the size of government. Before testing this null hypothesis against its main competitors, it is necessary to determine whether there is even a *prima facie* case that the Leviathan hypothesis is correct. To answer this question, total government spending and total taxation¹⁰—both measured in real per-capita terms—were regressed on Distance and the standard control variables (state and year dummies, personal income, and federal grants). To check the sensitivity of the results to specification, I use both the lower and the upper houses of the state legislature to measure Distance.

The “real per-capita” columns of Table 3 show the point estimates and standard errors of the interesting coefficients. The preliminary evidence matches the Leviathan model’s predictions exactly: For both lower and upper measures, the impact of Distance on total spending and total taxation is positive and statistically significant. If Distance in the lower house of the state legislature increases from 0 to 0.1, total real per-capita spending is predicted to rise by \$7.14, and total taxation by \$11.59. If Distance increases by .1 in the upper house, spending goes up by \$6.74 and taxation by \$9.71.

It could be argued that it would be more informative to express fiscal variables as a *percentage of personal income*, rather than in absolute levels (and then drop personal income from the list of control variables). Using levels perhaps implausibly implies that the effect of

⁹ Note that 0 ≤ Distance ≤ 0.5: The difference between the political balance and an even split ranges between 0% and 50%. The results are insensitive to choice of metric: replacing Distance with Distance² makes little difference.

¹⁰ “Total” taxation is defined as the sum of sales, income, and corporate taxation. Note that in general, total spending considerably exceeds this measure of total taxation due to federal grants, deficit spending, and additional revenue sources.

Table 4. Predictions of Null and Alternative Hypotheses

Hypothesis	Coefficient on Distance	Coefficient on Dempercent
Null: “Leviathan”	+	0
Alternative I: “Ideologues”	0	+
Alternative II: “Voter Preference Shift”	0	+
Alternative III: “Fully Constrained”	0	0
Alternative IV: “No Platform Preferences”	0	0

Distance is constant over time, even though the absolute size of the economy is constantly increasing. To alleviate this concern, the preliminary regressions were re-run using this alternative specification.

The two rightmost columns of Table 3 (labeled “% of personal income”) display the interesting output. Once again, the Leviathan hypothesis works. The impact of Distance is invariably positive and statistically significant, whether one looks at taxation or spending, or uses the lower or upper house measure of Distance. The coefficients here are particularly easy to interpret. The value of 1.084 on lower Distance in the spending equation means that if Distance rises by 0.1, spending as a percentage of personal income increases by 0.108. Similarly, under the same conditions, one would expect taxation (with a 1.213 coefficient) to go up by 0.121 percentage points as a fraction of income.

Overall, then, 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 functions of Distance as the model predicts.

Four Alternatives to the Leviathan Hypotheses

The Leviathan model builds on two crucial assumptions: First, both political parties want the size of government to be as large as possible conditional on electoral victory; second, the electoral constraint works imperfectly. The main implication—which the preliminary results confirm—is that greater political advantage increases the size of the public sector by equal amounts for both political parties. But there are several other classes of models with contrary implications. These either make different assumptions about parties’ objective functions, or the degree of electoral slack. This section contrasts the empirical implications of the Leviathan null hypothesis to those of four plausible alternative hypotheses. Table 4 summarizes their key features.

A. Alternative I: Ideologues

Probably the most popular alternative model of the political process accepts the idea that parties are imperfectly constrained but gives parties opposite preferences: While one likes to make government big, the other likes to make it small (Alesina and Rosenthal 1995; Dixit and Londregan 1998). In Dixit and Londregan’s model, for example, parties embrace different weighted averages of pure libertarian and pure egalitarian ideologies. One natural way to model this difference would be to assume that one party maximizes the size of the public sector while the other maximizes the size of the *private* sector. The equilibrium result in the game with uncertainty is predictable: Both parties use political advantage to advance their agenda, but this

yields a positive correlation between the probability of victory and the size of government for one party, and a negative correlation for the other. If Alternative I is correct, then a multiple regression of fiscal variables on both Distance and Dempercent will find zero impact for the former, but a positive effect for the latter. The higher the percentage of Democrats, the larger government becomes; the higher the percentage of Republicans, the smaller it becomes.

B. Alternative II: Voter Preference Shift

Alternative I posits imperfectly constrained, ideological opposed parties that respond to changes in their political advantage. Alternative II posits perfectly constrained, ideologically opposed parties responding to shifting voter preferences. When voters want a larger size of government, they give more votes to the large government party; when they want a smaller size of government, they give more votes to the small government party. This generates the same comovements between victory probabilities and size of government as Alternative I, but without appealing to imperfect constraints on politicians.

C. Alternative III: Fully Constrained

A third alternative is that political parties are fully constrained, and voter preferences are stable. In consequence, there is no connection between the probability of victory and parties' platforms. The objective function of parties makes no difference, because power-maximizing parties would find themselves forced to do the same thing as ideological parties. Empirically, this predicts that neither Distance nor Dempercent will have coefficients significantly different from zero.

D. Alternative IV: No Platform Preferences

A final alternative hypothesis is that parties have no platform preferences; they simply maximize their votes (Dixit and Londregan 1995, 1996; Grossman and Helpman 1996). The implied equilibrium is straightforward: with certainty, both parties would offer the platform most preferred by the mean voter; with uncertainty, both parties would offer the platform that they expect the mean voter to most prefer. Like Alternative III, this predicts no connection between fiscal variables and Distance or Dempercent.

As Table 4 indicates, some of the alternative hypotheses yield the same predictions. Alternatives I and II both imply the size of government will be an increasing function of Dempercent. Additional empirical tests would be necessary to distinguish between them. Similarly, zero observed correlation of the size of government with either Distance or Dempercent would be consistent with both Alternative III and Alternative IV. The predictions of the Leviathan null hypothesis, however, do not readily follow from any other prominent alternative theories of the political process.

Leviathan Versus the Alternatives: Baseline Results

The first block of regressions looks at the effect of the political variables on total state spending and total taxation. As before, unless otherwise stated all specifications include state and year dummies and control for federal grants. Equations using real per-capita measures control for personal income; those using percentage of personal income measures do not. To check the sensitivity of the results, I continue to use both the lower and the upper houses to

Table 5. Regression of Taxation and Spending on Legislatures' Partisan Composition (Standard Control Variables)^a

Dependent Variable	Taxes (Real Per Capita)	Spending (Real Per Capita)	Taxes (% Personal Income)	Spending (% Personal Income)
Constant	167.370 (42.087)	745.733 (60.995)	5.250 (0.150)	9.126 (0.237)
Lower Demmajority	5.057 (5.788)	-18.566 (8.389)	0.049 (0.054)	-0.067 (0.085)
Lower Dempercent	92.947 (18.233)	116.081 (26.424)	0.914 (0.168)	0.893 (0.267)
Lower Distance	108.062 (17.973)	63.887 (26.048)	1.122 (0.167)	1.007 (0.265)
R ²	0.926	0.959	0.857	0.920
Constant	186.486 (42.142)	750.924 (60.986)	5.255 (0.150)	9.099 (0.238)
Upper Demmajority	15.285 (6.303)	-6.703 (9.121)	0.060 (0.059)	-0.106 (0.093)
Upper Dempercent	64.355 (17.814)	98.416 (25.780)	0.832 (0.165)	0.983 (0.261)
Upper Distance	83.148 (17.542)	55.440 (25.386)	0.834 (0.163)	0.870 (0.258)
R ²	0.926	0.959	0.856	0.920

^a Standard errors below coefficients; N = 1719; missing observations: 201; years: 1950–1989.

measure Dempercent and Distance. Finally, to allow for the possibility of a discontinuous effect of a change in the controlling party, these specifications include the variable

$$\text{Demmajority} = \begin{cases} 1 & \text{if Dempercent} \geq 0.5 \\ 0 & \text{otherwise.}^{11} \end{cases}$$

Table 5 (“real per-capita” columns) shows the coefficients and standard errors of the interesting variables. The most notable results are as follows:

- The coefficients on *both* Dempercent and Distance are positive and significant for both spending and taxation, whether one measures the political variables using the data for lower houses or upper houses. When Distance increases by 0.1, real per-capita spending rises by about \$6.39 (using the lower house data), or \$5.54 (using upper house data). When Dempercent increases by .1, spending goes up by \$11.61 using lower house data, \$9.84 using upper house data.
- By definition, if the Democrats’ percentage of seats rises by 0.1, then both Dempercent and Distance increase by 0.1; conversely, if a Republican majority’s percentage of seats goes from 0.51 to 0.61, Dempercent falls by 0.1, but Distance rises by 0.1. Netting these implies that if the Democrat’s majority in the lower house rises from 0.51 to 0.61, government grows by \$18.00; if the Republican lower house majority rises in the same way, government shrinks by \$5.22. For the upper house, the corresponding changes are +\$15.38 and -\$4.30. However, a simple *t*-test shows that for both spending equations, it is not possible to reject the hypothesis

¹¹ Note that it is not possible to interact Demmajority and (1 – Demmajority) with Distance and Dempercent because the resulting vectors would be collinear.

that the coefficients on Distance and Dempercent are equal. This is equivalent to saying that a larger Democratic majority increases the size of government in a statistically significant way, but a larger Republican majority does not.

- There is a little evidence that changing the majority party has a discrete effect. The coefficients on Demmajority are only statistically significant in two equations out of four, but their signs are somewhat puzzling: positive for total taxes, negative for total spending. Subsequent sensitivity tests examine this finding's robustness.

Switching to percentage of personal income measures of fiscal variables (Table 5, two right columns) strengthens the central results:

- The signs on both Distance and Dempercent continue to be positive and significant for all four equations.

- Quantitatively, the model predicts that increasing the Democratic majority in the lower house from just over 50% to 100% will increase spending by about 1 percentage point of personal income. Increasing a Republican majority by 50 percentage points increases it by a smaller magnitude—a statistically insignificant 0.06 percentage points.

- As before, it is not possible to reject the hypothesis that the coefficients on Distance and Dempercent are equal: bigger Democratic majorities make government bigger, but bigger Republican majorities make little difference either way.

- Demmajority is statistically insignificant in all four equations, though the coefficient remains positive for the tax equations and negative for the spending equations.

Sensitivity Tests

Serial Correlation

The error terms in the preceding equations are highly serially correlated; after taking due account of the pooled nature of the data, the first-order serial correlation is usually around 0.75. To correct for this problem, all of the basic results from Table 5 were reestimated using the generalized method of moments (GMM), which is robust to serial correlation of unknown form. The first lags of total taxation and total spending were used as instruments, with all of the independent variables treated as exogenous.

Qualitatively, this correction leaves the fundamental results intact (coefficients not shown). The most noticeable difference is that the standard errors are larger. Because serial correlation leads only to inefficient rather than biased ordinary least squares (OLS) estimates, this is what one should expect. The estimated effect of Distance increases in absolute magnitude for all of Table 5's equations while remaining positive and statistically significant. The effect of Dempercent also remains positive in all cases, but the magnitude and statistical significance of its coefficient is less robust. Dempercent is no longer statistically significant in any of the tax equations; when spending is measured as a percentage of personal income, the absolute magnitude of the coefficients stays roughly the same, but the coefficients cease to be statistically significant; in real per-capita terms, the effect of Dempercent on spending grows in magnitude but stays about the same in terms of statistical significance. The coefficient on Demmajority is less robust: Switching from OLS to GMM frequently changes its sign and increases its absolute magnitude. Overall, then, correcting for serial correlation using GMM makes Distance look more important, and Dempercent less important.

Multicollinearity and VIFs

The high R^2 's in Table 5 suggest that there may be a high degree of multicollinearity at work, especially for the central variables of Demmajority, Dempercent, and Distance. In order to weigh the seriousness of this problem, variance inflating factors (VIFs) were computed for each of these variables using both the lower and upper house data. The findings were fairly reassuring. The VIFs for both measures of Distance were less than 3.5; the VIFs for both measures of Demmajority were less than 5; and the VIFs for lower and upper house Dempercent were 8.4 and 9.1, respectively. In no case did a VIF exceed Gujarati's recommended threshold of 10 for "high collinearity" (Gujarati 1995, p. 339).

The South

While all of the basic results use state dummies, the long-enduring one-party systems in the South do raise the possibility that uniquely Southern factors drive the results. To address this concern, Table 5's results were reestimated after dropping the eleven southern states. The main finding here (coefficients not shown) is that the predictive power of Distance is actually much more robust than that of Dempercent. Using nonsouthern data only, the magnitude and statistical significance of Distance stays about the same for all tax equations, and for spending as a fraction of personal income.¹² Dempercent, in contrast, is only statistically significant in two of the tax equations. Thus, there is some reason to think that the apparent effect of Democratic control actually stems from peculiarities of the South. In contrast, the effect of lopsided partisan control is much more robust.

Controlling for Governor's Party

The empirical results in Table 5 only look at the effects of the party composition of lower and upper legislative houses. Does ignoring the fiscal impact of the party of the executive branch of state government somehow bias the coefficients? The results for Table 5 were rerun controlling for the party affiliation of the governor. (Governor = 1 if the governor of a state in a given year is a Democrat and 0 otherwise.)

Qualitatively, the main finding (coefficients not shown) is that the party of a state's governor makes little difference. Governor has no apparent impact on taxation, and at most a marginal one on spending. The point estimate controlling for lower Distance and Dempercent is a statistically insignificant \$8.56; for the upper house, a barely significant \$10.21. In economic terms, putting a Democratic governor in office has roughly the same estimated effect as increasing a Democratic legislative majority in one house by 5 percentage points.

Other Sensitivity Tests

The results in Table 5 all look separately at the impact of the lower and upper houses. The regressions were redone using two alternate specifications (coefficients not shown). In one specification, parties' seats in both houses of the legislature were added together to calculate the values of Demmajority, Dempercent, and Distance. This specification leaves the results virtually

¹² Distance does however cease to be statistically significant when spending is measured in real per-capita terms. Although this suggests the need to interpret the results cautiously, spending measured as a fraction of personal income is probably the more economically interesting metric.

Table 6. Regression of Taxation and Spending on Legislatures' Partisan Composition (Omitting Demmajority; Standard Control Variables)^a

Dependent Variable	Taxes (Real Per Capita)	Spending (Real Per Capita)	Taxes (% Personal Income)	Spending (% Personal Income)
Constant	166.490 (42.072)	748.966 (61.051)	5.239 (0.149)	9.142 (0.236)
Lower Dempercent	102.027 (14.979)	82.742 (21.736)	1.002 (0.138)	0.773 (0.219)
Lower Distance	107.776 (17.969)	64.934 (26.074)	1.119 (0.167)	1.011 (0.264)
R ²	0.926	0.959	0.857	0.920
Constant	179.831 (42.116)	753.843 (60.848)	5.243 (0.150)	9.120 (0.237)
Upper Dempercent	92.547 (13.518)	86.053 (19.530)	0.943 (0.125)	0.788 (0.197)
Upper Distance	83.872 (17.566)	55.123 (25.379)	0.837 (0.163)	0.866 (0.258)
R ²	0.926	0.959	0.856	0.920

^a Standard errors below coefficients; N = 1719; missing observations = 201; years: 1950–1989.

unchanged. A second variant jointly estimates the effects of lower and upper house values of Demmajority, Dempercent, and Distance (for a total of six political explanatory variables). This specification yields larger standard errors and smaller absolute values of coefficients for the political variables but rarely changes their signs.¹³

One puzzle from Table 5 is that the coefficient on Demmajority in the spending equations is always negative, not positive or zero as one would expect. Because the negative coefficient on Demmajority is only statistically significant one time out of four in Table 5, it might be more informative to simply drop it from the specification. Table 6 shows that if one drops Demmajority from Table 5 and reestimates, all of the main findings persist.

Analysis of Results

Magnitudes

As a fraction of income, the predicted magnitude of the impact of partisan composition initially seems small. In the main specifications, moving from an evenly divided chamber to one in which a single party holds all of the seats never increases spending as a fraction of income by more than 1 percentage point. But the effect is much more striking if one looks at the predicted magnitude as a fraction of the state budget. For a theory of the impact of partisan composition on spending, this is probably a better metric of the economic importance of the results.

Over the sample period, the state budget consumes \$931 real per-capita on average—or

¹³ Another potential doubt about the baseline specification is that it implicitly assumes that political or economic variables function contemporaneously—if the governing forces or economic factors change, government policy changes in the same year. Replacing the explanatory variables in the baseline specification with their first lag uncovers only small changes from the baseline results.

about 10% of personal income. Netting the impact of both Distance and Dempercent implies approximately zero budgetary impact of greater Republican majorities, no matter how lopsided.¹⁴ But the net impact of greater Democratic majorities relative to the state budget is substantial. The Table 6 results predict that increasing the Democrats' majority in the lower house by .1 raises real per-capita spending by \$14.8. For the average state budget of \$931, this means a rise of 1.6%. Alternately, the lower house results for Table 6 predict that this same 0.1 increase makes spending as a fraction of income go up by 0.18 percentage points. This translates to a 1.8% rise in the typical budget (which consumes roughly 10% of personal income).

The results for total taxes can be looked at in the same way. Greater Republican majorities have no significant connection to total tax collections. But greater Democratic majorities noticeably increase taxation. If lower house Distance and Dempercent go up by 0.1, Table 6 indicates that real per-capita taxes rise by \$20, or 0.20 percentage-points of personal income. Adjusting for the size of typical state budgets, both specifications predict that taxes go up by about 2% as a result of a 10-percentage-point increase in a Democratic majority. In sum, the estimated magnitudes are appreciable but not overwhelming. Consistent with those of Peltzman (1992), my findings suggest that politicians operate in a fairly competitive environment but nevertheless retain a measurable degree of slack.

Interpretation

The Fully Constrained (Alternative III) and No Party Preferences (Alternative IV) hypotheses predict no connection between the size of government and Distance or Dempercent. The evidence is strongly against either of these alternatives. The contest between the Leviathan null and the Ideologues (Alternative I) and Voter Preference Shift (Alternative II) hypotheses is more difficult. Consistent with the null, Distance has the predicted positive impact on the size of the public sector. As electoral margins become larger, so does government. But the sign on Dempercent is also positive, as contrasting ideology theories of political parties would predict. Holding their electoral margin constant, Democrats make government bigger than Republicans would. Each hypothesis thus incorrectly predicts that the sign on the variable emphasized by its competitor will be zero.¹⁵

To explain the findings, it is probably necessary to take an intermediate position by combining a model of contrasting ideological tastes with a Leviathan model.¹⁶ The Leviathan hypothesis and Alternatives I and II can be viewed as complements rather than substitutes. The positive and significant impact of both Distance and Dempercent on taxes and spending should then be interpreted as follows:

For Democrats, ideology and political advantage augment each other. They want to make government larger on ideological grounds, but they also like having more power. For Republicans, in contrast, ideology and advantage pull in opposite directions. Ideologically, they want to make government smaller, but like their Democratic competitors, they also want more power.

¹⁴ As noted previously, for the total spending equations one cannot reject the hypothesis that the coefficients on Distance and Dempercent are equal, implying that the impact of greater Republican majorities is not significantly different from zero.

¹⁵ Still, the last section's robustness checks suggest that the null should not be entirely ruled out. The role of Dempercent does diminish after correcting for serial correlation or excluding southern states from the sample.

¹⁶ Alternative I lends itself to this compromise more readily than Alternative II, which posits perfectly constrained parties. The positive coefficient on Distance suggests that parties have some degree of slack. It is still possible, however, that voter preference shifts partly explain the policy changes the accompany changes in partisan composition.

For Democrats, ideology amplifies their nonideological urge to make government bigger. For Republicans, ideology dampens this same urge. In other words, greater advantage makes it *feasible* for both parties to expand the size of the public sector. However, because the parties' ideological views differ, Democrats expand the size of the public sector as much as politically possible, whereas Republicans are less eager to seize this opportunity when it presents itself.

5. Do Parties Differ along Other Margins?

When Democratic majorities become more lopsided, total taxation and total spending grow; when Republican majorities become more lopsided, total taxation and total spending barely change. Conflicting ideology theories seem to overstate how much the parties differ on the total *level* of taxation and spending. Do the parties differ along other margins? In particular, do the parties prefer to use their political slack to change the *composition* of taxes and spending rather than its level? This section searches for less obvious differences between the parties by examining the sensitivity of different types of taxation and spending to Distance and Dempercent.

Main Results

The data set partitions total taxation into sales, income, and corporate taxation, and total spending into spending on education, health and hospitals, highways, public welfare, and "other." Each of these fiscal components was regressed on Distance, Dempercent, Demmajority, and the standard set of control variables. Table 7 shows the interesting coefficients using real per-capita measures. Table 8 repeats the same exercises for fiscal variables as a percentage of personal income. The findings are as follows:

- Real per-capita sales taxes have no significant connection to either Distance or Dempercent. Sales taxes as a percentage of income, in contrast, are an increasing function of both Distance and Dempercent. The coefficient on upper Dempercent is not significant, but all of the others are.
- In the income tax equations, the coefficients on both Distance and Dempercent are invariably positive and significant.
- Corporate taxes and Distance have no clear connection, but consistent with ideological stereotypes, corporate taxes always significantly increase as Dempercent increases.
- Education spending appears if anything to be negatively related to Distance: The coefficients are usually negative, even though only one is statistically significant. The Dempercent coefficient is insignificant in Table 7 (real per capita), but positive and significant in Table 8 (percentage of personal income).
- Republicans actually seem more inclined than Democrats to increase spending on health and hospitals: Dempercent's coefficient is always negative and usually significant. Health spending's link to Distance is less clear: the sign is always positive, but significant only for upper Distance.
- Dempercent has large negative effects on highway spending, however measured, but Distance only has a negative effect in Table 7. Either way, Democrats drastically cut highway spending when their political dominance becomes greater, while Republicans on net increase highway spending as their electoral position improves. The negative coefficient on Dempercent is consistent with standard perceptions of the parties' ideological positions on mass transit versus

Table 7. Baseline Regression of Taxation and Spending on Legislatures' Partisan Composition (Standard Control Variables; Real Per-capita Fiscal Variables)^a

Dependent Variable	Sales	Income	Corporate	Education	Health and Hospitals	Highways	Public Welfare	Other
Constant	399.446 (32.441)	-136.101 (34.372)	-95.975 (10.642)	674.717 (30.762)	52.644 (8.790)	-1.809 (22.570)	-30.281 (23.800)	50.463 (35.199)
Lower Demmajority	-8.445 (4.462)	9.956 (4.727)	3.546 (1.464)	6.246 (4.231)	2.741 (1.209)	-7.906 (3.104)	14.886 (3.273)	-22.042 (4.841)
Lower Dempercent	9.828 (14.054)	65.337 (14.891)	17.782 (4.610)	10.249 (13.326)	-10.914 (3.808)	-66.539 (9.778)	102.997 (10.310)	80.288 (15.249)
Lower Distance	8.205 (13.854)	86.765 (14.679)	13.092 (4.545)	-22.222 (13.137)	6.300 (3.754)	-29.337 (9.638)	66.708 (10.163)	42.437 (15.032)
R ²	0.888 0.852	0.789 0.945	0.789 0.882	0.945 0.882	0.882 0.882	0.822 0.876	0.880 0.880	
Constant	402.653 (32.424)	-121.883 (34.623)	-94.284 (10.690)	673.559 (30.727)	52.880 (8.753)	-9.952 (22.758)	-18.512 (24.175)	52.950 (35.211)
Upper Demmajority	8.146 (4.849)	6.646 (5.178)	0.493 (1.599)	3.136 (4.596)	-2.333 (1.309)	-3.075 (3.404)	6.119 (3.616)	-10.550 (5.266)
Upper Dempercent	-12.880 (13.706)	56.149 (14.635)	21.085 (4.519)	-1.027 (12.989)	-5.565 (3.700)	-55.903 (9.620)	100.003 (10.219)	60.909 (14.884)
Upper Distance	21.069 (13.497)	62.827 (14.412)	-0.748 (4.450)	-35.818 (12.790)	12.485 (3.643)	-32.579 (9.473)	48.487 (10.063)	62.865 (14.657)
R ²	0.888 0.850	0.787 0.945	0.787 0.883	0.945 0.883	0.819 0.819	0.873 0.873	0.880 0.880	

^a Standard errors below coefficients; N = 1719; missing observations: 201; years: 1950–1989.

Table 8. Baseline Regression of Taxation and Spending on Legislatures' Partisan Composition (Standard Control Variables; % Personal Income Fiscal Variables)^a

Dependent Variable	Sales	Income	Corporate	Education	Health and Hospital	Highways	Public Welfare	Other
Constant	5.222 (0.121)	0.042 (0.101)	-0.017 (0.038)	4.666 (0.119)	0.839 (0.033)	0.562 (0.103)	0.782 (0.090)	2.277 (0.120)
Lower Demmajority	-0.066 (0.044)	0.090 (0.036)	0.025 (0.014)	-0.093 (0.043)	0.026 (0.012)	-0.008 (0.037)	0.116 (0.033)	-0.109 (0.043)
Lower Dempercent	0.303 (0.136)	0.451 (0.114)	0.160 (0.043)	0.425 (0.134)	-0.189 (0.037)	-0.752 (0.115)	0.999 (0.102)	0.411 (0.135)
Lower Distance	0.341 (0.135)	0.719 (0.113)	0.062 (0.042)	0.051 (0.133)	0.057 (0.037)	0.062 (0.114)	0.527 (0.101)	0.310 (0.134)
R ²	0.853	0.872	0.734	0.923	0.770	0.854	0.793	0.829
Constant	5.189 (0.121)	0.099 (0.103)	-0.034 (0.038)	4.675 (0.120)	0.850 (0.033)	0.505 (0.103)	0.757 (0.091)	2.312 (0.120)
Upper Demmajority	0.040 (0.047)	0.039 (0.040)	-0.019 (0.015)	-0.082 (0.047)	-0.016 (0.013)	0.074 (0.040)	0.028 (0.035)	-0.110 (0.047)
Upper Dempercent	0.225 (0.133)	0.372 (0.113)	0.235 (0.042)	0.380 (0.132)	-0.136 (0.036)	-0.668 (0.114)	1.057 (0.100)	0.350 (0.132)
Upper Distance	0.463 (0.131)	0.458 (0.112)	-0.086 (0.041)	-0.174 (0.130)	0.073 (0.036)	0.013 (0.112)	0.355 (0.099)	0.603 (0.130)
R ²	0.854	0.869	0.734	0.923	0.771	0.852	0.791	0.831

^a Standard errors below coefficients; N = 1719; missing observations: 201; years: 1950–1989.

automobiles.¹⁷ Glazer (1989) provides a possible strategic rationale for a negative coefficient on Distance: When parties are confident that they have a secure majority, they are less inclined to try to “bind the hands” of future administrations by spending more on durable goods during the current period.

- Distance and Dempercent always have significant and positive coefficients in the equations for public welfare spending, confirming earlier findings of Gilligan and Matsusaka (1995). The same pattern also appears for “other” spending.

Analysis

The Leviathan hypothesis wrongly assumes that parties share identical goals, but the alternatives that attribute different objective functions to the parties overemphasize spending levels rather than spending composition. While most models of platform divergence in political economy emphasize the level of spending and taxation, their composition matters at least as much. Tables 7 and 8 show that parties exhibit important differences on *what* they tax and *how* they spend.¹⁸

Democrats are more prone to raise income and corporate taxes than sales taxes. Yet the positive coefficient on Distance dampens or even reverses any tendency of income and corporate taxes to fall as Republican majorities increase. In three of the five spending categories—education, public welfare, and “other”—Democrats are predictably likely to make spending greater than Republicans would given the same degree of political slack. But for the remaining components of spending—health and hospital, and highways—the coefficients on Dempercent are negative. Republicans are actually more inclined to increase spending on these parts of the budget than Democrats are.

Aggregation thus conceals important compositional shifts. Even when total spending is stable, altering the legislature’s partisan composition permits large changes in some kinds of spending. Democrats have a particularly strong tendency to reduce highway spending (and, to a lesser extent, health and hospital spending) as their political position becomes more secure. This enables them to increase public welfare and “other” spending by much more than would appear possible if one simply looked at the change in total spending. Republicans increase spending on highways as their political position becomes more secure; they manage to restrain the growth in total spending by slashing public welfare spending.

One possible explanation for these compositional differences is ideological. This is consistent with the positive connection between Dempercent and income and corporate taxes, as well as education and public welfare spending. The strong negative relationship between highway spending and Dempercent also fits conventional ideological stereotypes. In other cases, “pork barrel” explanations may fit the facts better: Health and hospital spending has at most a tenuous connection to Republican ideology.

Some have seen ideology as little more than a way to credibly commit to certain pork barrel policies (Bender and Lott 1996). On the other hand, recent theorizing suggests that pork barrel explanations may be unable to explain why the parties’ spending patterns differ at all. Dixit and Londregan (1995) find that both parties will tend to target money on “swing voters”—politically central, relatively nonideological, yet nonaffluent constituencies. To get the contrary

¹⁷ I owe this observation to an anonymous referee.

¹⁸ See Paddock (1992) and Blais, Blake, and Dion (1993) for two other empirical studies that find small, but real, differences between the parties.

“machine politics” result, one needs the special assumption that parties can better deliver pork to their core support groups than to swing voters (Dixit and Londregan 1996). Deciding between these explanations must be left to future research; the parties’ divergent spending patterns merit more intensive study, especially when the data show that ideological stereotypes oversimplify the facts.

6. Conclusion

As recent literature in political economy emphasizes, imperfections in political and economic competition leave slack for politicians to pursue their own agendas. But what agendas do politicians want to pursue? Do they, as in Alesina and Rosenthal (1995) or Dixit and Londregan (1998), divide up between pro- and antigovernment ideology? Or, as the public choice tradition argues and as the theoretical model presented here assumes, do politicians on both sides of the fence want to maximize their power?

Both classes of models seem to explain part of the data. The main empirical problem with the Leviathan model is that it dismisses ideological differences between parties too swiftly. Democrats definitely appear more likely to increase spending when they have a large majority, even controlling for state effects, year effects, personal income, and federal grants. Corporate income tax collections tend to rise with larger Democratic majorities and fall with larger Republican majorities. Differences in ideology might also explain why Democrats and Republicans shift the composition of government spending as their hold on the legislature becomes more lopsided, although a “pork barrel” explanation for these comovements should not be ruled out.

However, there is an asymmetry in the data that models emphasizing divergent party ideology fail to capture: A peculiar kind of big government bias exists. Spending grows as Democratic majorities grow, but it does not fall even when Republicans enjoy a supermajority position. If antigovernment ideology influences Republicans’ policies, it mainly does so by restraining the expansion of the public sector, rather than prompting cuts. Ideological models of party behavior under imperfect political competition need to be supplemented by a power-maximizing model to deal with these findings. Future research on the economics of imperfect political competition should explore the complementary roles of ideology and power maximization in greater depth.

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