

Online Appendix for

*Distributive Politics and Legislator Ideology*

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# Online Appendix

## A Adaptation of Dekel, Jackson & Wolinsky’s (2009) Vote-Buying Model

While Dekel, Jackson & Wolinsky (2009) explore a range of political variables and outcomes, our interest is limited to the equilibrium distribution of payments across the ideological spectrum of voters. To elucidate this as quickly as possible, we present just the key features of the model necessary to motivate an understanding of the equilibrium solution and the distribution of payments. We adapt the notation with trivial modifications when convenient, and we adjust the variables to the setting of the distribution of federal projects as manipulated by political parties in Congress. We refer the interested reader to the presentation in DJW (2009) for the full details.

We suppose an odd number of legislators,  $i \in N$ , and two parties,  $R$  and  $L$ . At the start of the game, the party that lacks ex ante support for its preferred outcome has the opportunity to make the first bid (in the example below, this would be party  $R$ ), where a bid consists of a promise of outlays to one or more legislators, and payments to different legislators need not be the same size. The parties then alternate bids, while incurring a non-zero cost to bidding each round.

Offers by a party to a legislator cannot be less than previous offers made by the same party to the same legislator, an assumption that offers are “irreversible.” While offers are binding, if party  $L$  makes a higher offer to a particular legislator than party  $R$ , that legislator will now be voting for party  $L$ , so party  $R$  is free to reallocate the funds it had previously promised to the legislator. This feature becomes important in motivating what DJW refer to as the “shadow price” of buying a legislator’s vote: the legislator’s support itself costs money, but there is an additional cost of having freed up the promises of the opposing party.

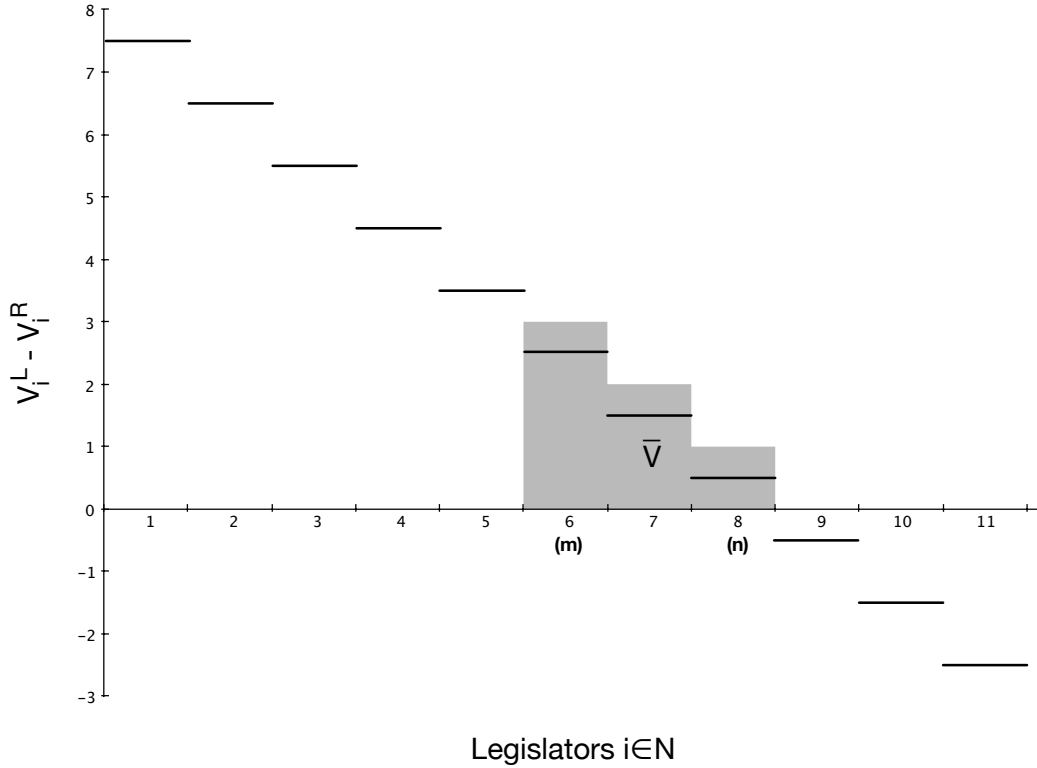
A legislator  $i$  receives utility  $p_i^k + V_i^k$ , where  $p_i^k$  is the payment she receives from party  $k$  and  $V_i^k$  is the utility she receives from voting for the outcome preferred by party  $k$ . These ex ante valuations,  $V_i^k$ , are assumed to be exogenously fixed throughout. We arrange the legislators such that  $v(i) = V_i^L - V_i^R$  is a non-increasing function in  $i$ , as in Figure 1.<sup>1</sup> Legislator  $i$  follows her dominant strategy and votes for the outcome proposed by party  $L$  iff  $p_i^L + V_i^L > p_i^R + V_i^R$ .

Denote the median legislator by  $m = (N + 1)/2$ . We assume without loss of generality that party  $L$  has ex ante majority support, such that  $v(m) > 0$ . Let the rightmost legislator that supports ex

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<sup>1</sup>Based on Figure 1 in DJW (2009).

Figure 1: Visualizing the Equilibrium Distribution of Payments



ante the proposal that party  $L$  prefers be denoted by  $n = \arg \max\{i : v_i > 0\}$ . Then we may define  $\bar{V} = \sum_{i=m}^n v_i$ , admittedly omitting non-trivial nuances regarding the smallest units of payment.<sup>2</sup> It is this quantity  $\bar{V}$  that will be particularly important in characterizing the payments in equilibrium. Note that, as depicted visually in Figure 1 (as well as Figure 1 of DJW (2009)),  $\bar{V}$  represents an area that is a right triangle of sorts, with its hypotenuse sloping (by steps) downwards away from the median (to the right, if we assume  $L$  has ex ante majority support). Lastly, let the valuations of the parties for the passage of their preferred proposal be denoted as  $W^L$  and  $W^R$ .

Suppose that the party with ex ante minority support for its preferred proposal begins the bidding; there is no need for the party with ex ante majority support to preempt in a potentially infinite game as there will always be an opportunity to respond if necessary. Proposition 3 in DJW (2009) then states that, for sufficiently small per-round bidding costs and given our additional assumption that party  $R$  always makes the first move, one of two cases obtains in any equilibrium:

<sup>2</sup>In fact, the existence of a smallest unit of payment (equal to one in the figure) is the reason that the shaded area extends above the valuation lines in Figure 1. Our omission of this detail in the exposition in no way drives the core result regarding equilibrium payments.

1. If  $W^R > W^L$ , party  $R$  wins at cost  $\bar{V}$  paid to the legislators  $m$  (median) through  $n$  (almost-indifferent).
2. If  $W^R \leq W^L$ , party  $L$  wins at no cost, as party  $R$  will not initiate bidding.

In equilibrium, we either observe party  $L$  win and make no payments, or we observe party  $R$  win and make payments that correspond to the region  $\bar{V}$ . These payments are approximately the sum of the valuations of each legislator from the median to the farthest-right legislator that ex ante preferred party  $L$ 's preferred outcome. Party  $R$  must procure the support of the median and all legislators to the right of the median, a winning coalition in a simple majority-rule setting.

The non-zero cost to bidding discourages parties from bidding for legislators' votes when they know they will not have to deliver on their promises. Given the setting of complete and perfect information, each party applies backwards induction, bidding only if they must in order to win. Recall that in this example party  $L$  has ex ante support for its preferred outcome (i.e. has the support of the median voter), so party  $R$  has the choice of making the first bid. Intuitively, then, if party  $L$  values winning its preferred outcome more than party  $R$  values winning its preferred outcome, then party  $R$  will realize that party  $L$  is willing to bid higher and will thus stay out of the bidding entirely. If, however, party  $R$  values the bill more, it will procure the necessary votes to obtain a majority and party  $L$ , realizing party  $R$ 's willingness to outbid, will make no promises to any legislators.

The legislators whose valuations are represented by the area  $\bar{V}$  are the "cheapest" legislators that party  $R$  could have bought to form this winning coalition. When payments occur, therefore, they are directly exclusively to near-median legislators. Moreover, past a certain point, more extreme legislators receive no payments whatsoever.

## B Data: Sources & Variables Created

The data sources are introduced more or less in the order in which they are invoked in the .do file. Data and .do file are available upon request, as is the regression replication .do file.

### B.1 General Data on Federal Government

Using the sources below, a file was created with facts about the broad political landscape. Variables include year and congress (e.g. 98th, 111th) identifiers as well as the size of each party in each chamber, the party with the majority in each chamber, the party of the president, whether it was a period of unified government (Senate and House majorities of the same party as the president), and an inflation multiplier (with 2010 set as the base year).

<http://history.house.gov/Institution/Party-Divisions/Party-Divisions/>

[http://www.senate.gov/pagelayout/history/one\\_item\\_and\\_teasers/partydiv.htm](http://www.senate.gov/pagelayout/history/one_item_and_teasers/partydiv.htm)

[http://www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm)

To this was merged a file with state names, FIPS and ICPSR codes, and years, such that the resulting file had year-state observations from 1983-2009.

### B.2 Ideology Data

#### B.2.1 NOMINATE

Poole & Rosenthal's NOMINATE data (Poole 2005) are used not only for our ideology variables but for the information they provide on a number of other legislator characteristics. As explained in the paper, DW-NOMINATE Common Space scores were used.

[http://voteview.com/dwnomin\\_joint\\_house\\_and\\_senate.htm](http://voteview.com/dwnomin_joint_house_and_senate.htm)

First a variable tracking the tenure of legislators is created, simply counting the number of terms the legislator has served in Congress. Note that a legislator's ICPSR ID number follows her between chambers, but not if she switches party. Observations for seats that were split by two representatives in a single Congress were dropped. This covers retirements and deaths, in which a special election or appointment was made to fill the seat (assuming the replacement cast enough votes to receive a NOMINATE score for that congress) as well as representatives switching parties, receiving a different ID number mid-congress. In the nearly 30 years of our sample, around 100 cases fell into one of those categories. Two primary alternatives to dealing with split seats were both tried, with effectively identical results: 1) The entire congress could have been assigned to the member who cast the greatest number of votes, as in Berry, Burden & Howell (2010); or 2) Each year could be assigned to the member

that served the majority of that year, favoring slightly those members that served the earlier part of the year in which the budget was under construction. To reiterate, though, all methods were tried and results never varied significantly.

### **B.2.2 CVP**

For an additional measure of ideology, Fowler & Hall's (2012) Conservative Vote Probabilities (CVP) were used.

<http://www.andrewbenjaminhall.com/papers/>

### **B.2.3 Party Unity**

Party Unity scores were also used, where "a party unity vote is defined as one where at least 50 percent of Democrats vote against at least 50 percent of Republicans."

[http://pooleandrosenthal.com/party\\_unity.htm](http://pooleandrosenthal.com/party_unity.htm)

### **B.2.4 Derived Ideology Measures**

From the three basic measures of ideology discussed above, a number of derivative variables were created. For NOMINATE and CVP scores, the central variable was absolute distance from the House median in ideology scores. *Absolute rank from the median* was created similarly. Using these distance measures and the party unity scores, a number of interaction variables (e.g. with majority/minority and Democratic/Republican parties) and other functional forms (e.g. log, square, square root) were tested. Lastly, we used the Commonsense DW-NOMINATE scores to calculate a polarization index as in (McCarty, Poole & Rosenthal 2006): the mean Republican minus the mean Democrat NOMINATE scores in a given congress.

## **B.3 Electoral Margins**

From vote shares for the two major parties in congressional elections, a dummy variable was created equal to 1 if the margin of victory was within five percent. For all years, the most recent past electoral outcomes were utilized.

<http://library.cqpress.com/elections/>

From these data and the availability of the geographic correspondences described below, a variable denoting whether there exists a geographic correspondence for a district since its last redistricting was created. In practice, however, Congressional Quarterly appears to designate a district as having been

redistricted if any district in the state was redistricted. Excluding all districts for which there was not an updated geographic correspondence since the last redistricting date seemed overly conservative and created a significant amount of unevenness in our sample, so the most current geographic correspondence data were employed, catching all major redistrictings and most if not all of the minor redistrictings.

Presidential election results at the state level mark the last of the electoral data. The key variable created is, for each year and each state, the absolute value of the state-wide vote margin in the previous presidential election.

## B.4 Committee Membership Data

From Nelson (2013) and Stewart & Woon (2013) come data on committee membership. The key variables were dummies for being a party leader (though in practice many Speakers of the House lack enough votes to be given NOMINATE scores and are thus *de facto* excluded from our dataset), being a committee chair, or being the ranking minority member. Additionally, dummy variables for membership on all of the individual standing committees were generated, although these were left out of the baseline model in the paper. (The member fixed effects strategy leaves little variation for detecting the effect of a representative's tenure on a given committees.)

[http://web.mit.edu/17.251/www/data\\_page.html](http://web.mit.edu/17.251/www/data_page.html)

Poole and Rosenthal continually update their ID numbers, but the committee data reflects what appear to be “un-updated” ID numbers. As a result, corrections in ICPSR ID numbers in the committee file were required, and appear in an auxiliary .do file.

## B.5 County-Level Outlays

Data on county-level outlays come from the Consolidated Federal Funds Report (CFFR), and as discussed in the paper, data from fiscal year  $t$  are matched with data from calendar year  $t - 1$ . CFFR data span from 1983-2010, when the Federal Financial Statistics program remained in operation. The year 1983 is dropped, as there does not exist geographic correspondence data for 1982, the last year of a previous redistricting period. The corresponding calendar years for the explanatory variables is then 1983-2009. Outlays are inflation adjusted, putting all amounts in 2010 dollars.

<http://www.census.gov/govs/cffr/>

The outlays are then split into different types of transfers and are summed by county, state, year, and the type of transfer.

From the FAADS data (discussed below), a correspondence was created between program ID numbers and all of the types of transfers (or types of grants) funds were issued under for a given program ID number. After merging this file into the outlays data, formula grants could be culled out of the grants category, leaving block grants, project grants, and cooperative agreements. The entire grants category as well as only formula grants were also separately analyzed. For all characterizations of outlays, funds were summed, leaving one county-state-year observation for each of the characterizations.

County-year observations with zero value for a given type or cut of outlays were rare (only a couple hundred for non-formula grants, say), but in order to deal with this issue, we added one to all values of outlays. The log-transformed values were then zero and were included in the analysis as such. Substantively, this amounts to assuming that receiving nothing and receiving a single dollar are the same, and the effect that adding one has on higher levels of outlays is even smaller. Previous versions of the paper dropped zero observations from all analyses, and results were nearly identical, if not somewhat stronger.

## **B.6 Geographic Correspondences (County-to-District & District-to-District)**

A county-to-district crosswalk was created, containing all of the relevant population correspondences among counties and congressional districts, using each raw correspondence file repeatedly for all of the years until a new file is available. As mentioned above, this seems to cover all of the major redistrictings and most if not all of the minor redistrictings. Even for the occasional district that might have been redistricted and that lacks an updated file for a couple years, the correspondence is still likely quite accurate. The files may be found at the links below.

<http://mcdc.missouri.edu/websas/geocorr12.html>

<http://mcdc.missouri.edu/websas/geocorr2k.html>

<http://mcdc.missouri.edu/websas/geocorr90.html>

These data identify counties that were represented by only one district. Additionally, with these data one can determine what proportion of a district's population remains in the district across redistricting. Using varying thresholds of population carryover, it is possible to look at within-member variation that spans redistrictings. Further explanation of the use of this method appears in the footnotes for Tables 17, 18, and 19.

## **B.7 County-Level Demographics**

Income and population at the county level come from the Bureau of Economic Analysis (BEA).



[http://bea.gov/iTable/index\\_regional.cfm](http://bea.gov/iTable/index_regional.cfm)

CFFR does not parse apart New York City, which is not a problem for this study as it would be dropped anyway under the restriction that counties be contained in only one district. Additionally, several Alaskan boroughs and Virginia cities (Virginia has a number of cities not within counties) appear in BEA but not in CFFR, or at least not using the same codes. These instances do not ultimately, then, appear in the analysis.

## **B.8 District-Level Outlays**

The FAADS data on district-level outlays are compiled as per Bickers & Stein (1991) and extended in the same manner as outlined in Berry, Burden & Howell (2010), and the reader is referred to both of those papers for more detail. The only real departure in this study is the breakout of grants by type, rather than coefficient of variation. The no-formula category is constructed to mirror the CFFR no-formula category, as it excludes only formula-based spending and includes block grants, project grants, and cooperative agreements. The all-grants measure includes formula-based spending. A dollar was added to all values, to account for any observations of zero outlays.

## C Supplementary Analyses

Table 1: Additional Summary Statistics at the County Level

Variable	Obs	Mean	Std. Dev.	Min	Max
Absolute distance from median	71199	.319	.209	0	1.172
Absolute rank from median (/100)	71199	1.861	1.224	.01	4.32
Absolute distance x majority	71199	.112	.139	0	.848
Distance from median (sq)	71199	.145	.16	0	1.374
Distance from median (sqrt)	71199	.526	.205	0	1.083
Distance from median (ln)	71001	-1.494	1.054	-7.601	.159
Distance x Republican	71199	.214	.242	0	1.172
Distance x Democrat	71199	.105	.173	0	.9
Distance from within party mean	71199	.124	.097	0	.642
Party unity score	71199	84.463	12.952	22.418	100
Unified government	71199	.253	.435	0	1
Polarization index	71199	.755	.077	.646	.844
Distance (CVP) from median	71167	.199	.159	0	.609
Rank (CVP) from median (/100)	71167	1.914	1.233	.01	4.32
Maj on far side of median	71199	.095	.294	0	1
Majority party	71199	.588	.492	0	1
President's party	71199	.496	.5	0	1
Committee chair	71199	.041	.199	0	1
Ranking minority member	71199	.053	.224	0	1
Party leader	71199	.003	.053	0	1
First term	71199	.146	.353	0	1
Tenure (# terms)	71199	4.989	3.785	1	28
Close election	71199	.078	.269	0	1
State presidential margin	71199	14.249	10.103	0	55.94
Log income	71199	12.831	1.311	7.555	17.406
Log population	71199	9.923	1.194	4.111	13.345
Log grants (no formula)	71199	14.371	1.938	0	22.558
Log grants (all)	71199	16.111	1.554	4.094	23.277
Log grants (formula only)	71199	15.705	1.688	0	22.609
Log retirement and disability (all)	71199	17.098	1.347	0	21.558

*Notes: Absolute distance from median* is the absolute value of median-centered ideal point estimates in DW-NOMINATE Common Space scores. All variations of this variable are explained in the footnotes of the results tables in which they are used. Further explanations here are given mostly for control variables. *Majority party* is a dummy variable equal to 1 if a legislator is in the majority party. *President's party* is a dummy variable equal to 1 if a legislator shares the same party as the sitting president. *Committee chair* is a dummy variable equal to 1 if a legislator is the chair of any standing House committee. *Ranking minority member* is a dummy variable equal to 1 if a legislator is the ranking minority member on any standing House committee. *Party leader* is a dummy variable equal to 1 if a legislator has a party leadership role. *First term* is a dummy variable equal to 1 for a legislator's first term in Congress. *Tenure (# terms)* counts the number of Congresses in which a legislator has served. *Close election* is a dummy variable equal to 1 if the margin of victory in the previous congressional election was 5% or less. *State presidential margin* is absolute value of the state-wide vote margin in the previous presidential election. *Log income* is the natural log of county-level income. *Log population* is the natural log of county-level population. *Log grants (no formula)* is the log value of non-formula grants received by a given county in a given year, as measured in the Consolidated Federal Funds Report. The other measures of outlays are explained in the footnotes of the results tables in which they are used. A dollar was added to all values of outlays to account for zeros in the dataset (see Subsection B.5 of this document). The sample is restricted to only those observations included in the baseline model (Table 2 of the paper, model 2).

Table 2: Sequential Addition of Control Variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Absolute distance from median	-0.147*	-0.685*	-0.604	-0.611*	-0.603*	-0.617*	-0.608**
	(0.080)	(0.390)	(0.362)	(0.339)	(0.332)	(0.308)	(0.300)
Majority party		-0.192	-0.161	-0.170	-0.169	-0.165*	-0.162*
		(0.123)	(0.111)	(0.105)	(0.102)	(0.094)	(0.091)
President's party			0.035	0.034	0.035	0.029	0.029
			(0.036)	(0.037)	(0.037)	(0.037)	(0.036)
Committee chair				0.051	0.040	0.045	0.042
				(0.090)	(0.088)	(0.086)	(0.088)
Ranking minority member				-0.005	-0.012	-0.019	-0.018
				(0.074)	(0.074)	(0.069)	(0.068)
Party leader				0.088	0.085	0.080	0.088
				(0.088)	(0.087)	(0.086)	(0.089)
First term					0.037	0.012	0.010
					(0.027)	(0.027)	(0.028)
Tenure (# terms)					-0.194	-0.178	-0.178
					(0.138)	(0.124)	(0.124)
Close election						0.133***	0.135***
						(0.036)	(0.036)
State presidential margin						0.004*	0.004*
						(0.002)	(0.002)
Log income							-0.123
							(0.189)
Log population							-0.046
							(0.279)
Constant	12.850***	13.141***	13.080***	13.091***	12.835***	12.791***	14.724***
	(0.057)	(0.193)	(0.166)	(0.159)	(0.235)	(0.213)	(1.694)
Adj. $R^2$	0.218	0.219	0.219	0.219	0.219	0.220	0.220
N	71199	71199	71199	71199	71199	71199	71199

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores. The first model includes only distance from the median, the second model brings in majority party status, the third model controls for log income and log population, the fourth model adds covariates related to parties and committees, the fifth model adds in first-term and tenure variables, and the sixth model considers electoral margins in the county for the most recent congressional and presidential elections.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 3: Experimenting with Fixed Effects

	(1)	(2)	(3)	(4)
Absolute distance from median	-0.087 (0.218)	-0.199* (0.105)	-0.701** (0.274)	-0.608** (0.300)
Majority party	-0.020 (0.094)	-0.002 (0.051)	-0.197** (0.087)	-0.162* (0.091)
President's party	0.051 (0.039)	0.045 (0.036)	0.014 (0.041)	0.029 (0.036)
Committee chair	0.191 (0.180)	-0.047 (0.048)	-0.014 (0.085)	0.042 (0.088)
Ranking minority member	0.148 (0.146)	0.019 (0.068)	-0.029 (0.063)	-0.018 (0.068)
Party leader	-0.389* (0.204)	0.227*** (0.079)	-0.052 (0.054)	0.088 (0.089)
Party	-0.168* (0.091)	-0.001 (0.041)		
First term	0.025 (0.040)	0.018 (0.027)	0.007 (0.029)	0.010 (0.028)
Tenure (# terms)	-0.002 (0.009)	0.002 (0.005)	-0.197 (0.134)	-0.178 (0.124)
Close election	0.052 (0.057)	0.059 (0.038)	0.127*** (0.038)	0.135*** (0.036)
State presidential margin	0.011** (0.004)	0.002 (0.002)	0.004* (0.002)	0.004* (0.002)
Log income	-0.035 (0.205)	0.142 (0.174)	-0.490*** (0.177)	-0.123 (0.189)
Log population	1.134*** (0.231)	-0.398 (0.266)	1.702*** (0.174)	-0.046 (0.279)
Constant	1.962*** (0.537)	15.029*** (1.623)	1.981*** (0.633)	14.724*** (1.694)
Fixed Effects	None	County	Member	Cnty-Member
Adj. $R^2$	0.555	0.286	0.504	0.220
N	71199	71199	71199	71199

*Notes:* Standard errors clustered by state. Year fixed effects used in all models. In model 1, no additional fixed effects are used. In model 2, county-level fixed effects are used. Model 3 is our baseline model (model 2 from Table 2 of the paper), in which we use member fixed effects. Model 4 uses county-by-member fixed effects. Models 3-4, which condition on each member, do not admit *Party* as an additional control, as party is constant within all legislator ICPSR ID numbers; legislators who switch parties receive a new ID number. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 4: Variations on Absolute Distance

	(1)	(2)	(3)	(4)	(5)	(6)
Absolute distance from median	-0.585** (0.268)	-0.736* (0.430)		-0.659** (0.328)	-1.098** (0.431)	
Distance from median (sq)	-0.032 (0.246)					
Distance from median (sqrt)		0.129 (0.200)				
Distance from median (ln)			-0.016 (0.017)	0.007 (0.014)		
Distance x Republican					1.745 (1.046)	0.647 (0.676)
Distance x Democrat						-1.098** (0.431)
Majority party	-0.162* (0.091)	-0.164* (0.093)	0.023 (0.026)	-0.168* (0.091)	-0.024 (0.091)	-0.024 (0.091)
President's party	0.029 (0.036)	0.029 (0.036)	0.042 (0.041)	0.031 (0.037)	0.037 (0.041)	0.037 (0.041)
Committee chair	0.042 (0.087)	0.042 (0.088)	0.041 (0.089)	0.041 (0.088)	0.043 (0.085)	0.043 (0.085)
Ranking minority member	-0.017 (0.069)	-0.017 (0.068)	-0.002 (0.081)	-0.017 (0.068)	-0.022 (0.064)	-0.022 (0.064)
Party leader	0.088 (0.089)	0.086 (0.089)	0.091 (0.086)	0.086 (0.089)	0.089 (0.087)	0.089 (0.087)
First term	0.010 (0.028)	0.011 (0.028)	0.014 (0.027)	0.011 (0.028)	0.009 (0.028)	0.009 (0.028)
Tenure (# terms)	-0.179 (0.124)	-0.180 (0.125)	-0.166 (0.120)	-0.180 (0.125)	-0.189 (0.129)	-0.189 (0.129)
Close election	0.135*** (0.036)	0.135*** (0.035)	0.135*** (0.036)	0.135*** (0.036)	0.129*** (0.035)	0.129*** (0.035)
State presidential margin	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)
Log income	-0.123 (0.188)	-0.123 (0.188)	-0.133 (0.185)	-0.129 (0.190)	-0.107 (0.195)	-0.107 (0.195)
Log population	-0.046 (0.280)	-0.047 (0.279)	-0.040 (0.277)	-0.038 (0.280)	-0.059 (0.283)	-0.059 (0.283)
Constant	14.728*** (1.704)	14.718*** (1.689)	14.470*** (1.643)	14.757*** (1.701)	14.241*** (1.556)	14.241*** (1.556)
Adj. $R^2$	0.220	0.220	0.220	0.220	0.220	0.220
N	71199	71199	71001	71001	71199	71199

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores. *Distance from median (sq)* is *Absolute distance from median* squared. *Distance from median (sqrt)* is the square root of *Absolute distance from median*. *Distance from median (ln)* is the natural log of *Absolute distance from median*; the counties represented by the median legislator in each year are dropped from these analyses as their value for *Absolute distance* is zero. *Distance x Republican/Democrat* is *Absolute distance from median* interacted with a dummy variable for membership in each party.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 5: Spline Analysis

	0.1	0.3	0.5	0.7	0.9	1.1
	(1)	(2)	(3)	(4)	(5)	(6)
Distance from median - spline 1	-0.604 (0.424)	-0.556** (0.270)	-0.606** (0.279)	-0.613** (0.292)	-0.607** (0.300)	-0.607** (0.300)
Distance from median - spline 2	-0.608* (0.309)	-0.644* (0.353)	-0.618 (0.435)	-0.477 (0.755)	-2.247*** (0.483)	-7.407*** (1.138)
Majority party	-0.162* (0.092)	-0.162* (0.093)	-0.162* (0.090)	-0.162* (0.089)	-0.162* (0.091)	-0.162* (0.091)
President's party	0.029 (0.036)	0.029 (0.036)	0.029 (0.036)	0.029 (0.036)	0.029 (0.036)	0.029 (0.036)
Committee chair	0.042 (0.088)	0.042 (0.087)	0.042 (0.087)	0.042 (0.087)	0.042 (0.088)	0.042 (0.088)
Ranking minority member	-0.018 (0.068)	-0.017 (0.069)	-0.018 (0.069)	-0.018 (0.068)	-0.018 (0.068)	-0.018 (0.068)
Party leader	0.088 (0.089)	0.087 (0.089)	0.088 (0.089)	0.087 (0.089)	0.087 (0.089)	0.087 (0.089)
First term	0.010 (0.028)	0.011 (0.028)	0.010 (0.028)	0.011 (0.028)	0.011 (0.027)	0.011 (0.027)
Tenure (# terms)	-0.178 (0.124)	-0.180 (0.124)	-0.179 (0.124)	-0.179 (0.124)	-0.178 (0.124)	-0.178 (0.124)
Close election	0.135*** (0.036)	0.135*** (0.036)	0.135*** (0.036)	0.135*** (0.036)	0.134*** (0.035)	0.134*** (0.035)
State presidential margin	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)
Log income	-0.123 (0.189)	-0.123 (0.188)	-0.123 (0.189)	-0.122 (0.188)	-0.122 (0.189)	-0.122 (0.189)
Log population	-0.046 (0.279)	-0.047 (0.280)	-0.046 (0.280)	-0.045 (0.279)	-0.047 (0.279)	-0.046 (0.279)
Constant	14.723*** (1.694)	14.740*** (1.701)	14.725*** (1.707)	14.718*** (1.703)	14.724*** (1.693)	14.721*** (1.694)
Adj. $R^2$	0.220	0.220	0.220	0.220	0.220	0.220
N	71199	71199	71199	71199	71199	71199

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores and is allowed to take two slopes, one on either side of a knot point. The number above each model denotes the knot connecting spline 1 to spline 2. Spline 1 estimates the effect of *Distance from median* from zero to the knot point, while spline 2 estimates the effect of *Distance from median* from the knot point and higher. The knot point is allowed to increase across the models, such that spline 1 covers an increasingly large share of the estimation, while spline 2 covers less.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 6: Accounting for the Senate

	(1)	(2)	(3)
Absolute distance from median	-0.437 (0.508)	-0.345** (0.162)	-0.208 (0.363)
Senators from state in own party (0,1,2)	0.015 (0.034)		0.006 (0.032)
Same party as Senate majority (0,1)	0.042 (0.053)		0.035 (0.047)
Senators from state in president's party (0,1,2)	-0.012 (0.026)		-0.009 (0.019)
Log per capita spending in state's other counties		0.733*** (0.055)	0.724*** (0.057)
Majority party	-0.149 (0.151)	-0.079* (0.047)	-0.071 (0.102)
President's party	0.033 (0.034)	0.016 (0.032)	0.017 (0.029)
Committee chair	0.077 (0.091)	0.033 (0.072)	0.074 (0.069)
Ranking minority member	-0.020 (0.064)	0.029 (0.048)	0.029 (0.044)
Party leader	0.066 (0.096)	0.085 (0.097)	0.065 (0.099)
First term	0.017 (0.026)	0.022 (0.022)	0.028 (0.024)
Tenure (# terms)	-0.179 (0.126)	-0.172 (0.115)	-0.171 (0.114)
Close election	0.137*** (0.035)	0.091*** (0.028)	0.092*** (0.026)
State presidential margin	0.004 (0.003)	0.004** (0.002)	0.003* (0.002)
Log income	-0.089 (0.223)	-0.088 (0.175)	-0.060 (0.210)
Log population	-0.073 (0.270)	0.089 (0.279)	0.066 (0.264)
Constant	14.500*** (1.590)	7.052*** (1.643)	6.965*** (1.436)
Adj. $R^2$	0.225	0.243	0.247
N	69553	71199	69553

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores.

The first model includes a variable counting the number of senators sharing the same party as a county's representative in the House (taking on a value of 0, 1, or 2), a dummy variable equal to one if a county's representative is in the same party as the Senate majority party, and a variable counting the number of senators from a county's state that share the same party as the president (again taking on a value of 0, 1, or 2). These variables are all intended to capture the effects of team production between representatives and the senators from their state.

The second model adds to the baseline model the log per capita spending in all other counties in a county's state. This variable is intended capture the effectiveness of a state's senators at procuring distributive spending for their state, without including a county's own spending. When a representative covers more than one county, however, this variable does include funds procured by a county's representative for the other counties she represents.

The third model includes the three variables from model 1 and the spending variable from model 2.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 7: Distance from Party Mean

	(1)	(2)	(3)	(4)	(5)	(6)
Absolute distance from median				-0.180** (0.079)	-0.578** (0.283)	-0.562** (0.257)
Distance from within party mean	0.695 (0.453)	0.952** (0.425)	0.986** (0.400)	0.976** (0.426)	0.878** (0.435)	0.916** (0.414)
Majority party		0.056** (0.025)	0.054** (0.023)		-0.140 (0.087)	-0.137* (0.079)
President's party		0.040 (0.040)	0.042 (0.037)		0.029 (0.036)	0.031 (0.033)
Committee chair		0.058 (0.089)	0.028 (0.088)		0.056 (0.085)	0.026 (0.085)
Ranking minority member		0.017 (0.079)	-0.001 (0.070)		-0.001 (0.063)	-0.017 (0.058)
Party leader		0.122 (0.086)	0.041 (0.082)		0.117 (0.089)	0.037 (0.084)
First term		0.008 (0.028)	-0.006 (0.025)		0.004 (0.028)	-0.010 (0.025)
Tenure (# terms)		-0.185 (0.118)	-0.223 (0.136)		-0.194 (0.123)	-0.231 (0.139)
Close election		0.133*** (0.036)	0.133*** (0.032)		0.134*** (0.035)	0.134*** (0.032)
State presidential margin		0.004* (0.002)	0.004* (0.002)		0.004* (0.002)	0.004* (0.002)
Log income	-0.098 (0.176)	-0.124 (0.183)	-0.129 (0.173)	-0.087 (0.173)	-0.119 (0.189)	-0.123 (0.179)
Log population	-0.027 (0.281)	-0.020 (0.276)	0.001 (0.261)	-0.034 (0.279)	-0.019 (0.282)	-0.001 (0.269)
Constant	14.183*** (1.658)	14.056*** (1.634)	13.914*** (1.493)	14.151*** (1.640)	14.293*** (1.703)	14.153*** (1.563)
Committee dummies	No	No	Yes	No	No	Yes
Adj. $R^2$	0.218	0.220	0.221	0.219	0.220	0.221
N	71199	71199	71199	71199	71199	71199

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores. *Distance from within party mean* is the absolute value of the mean-centered first dimension of the DW-NOMINATE Common Space scores, *by party*, thus measuring each legislator's ideological distance from her party's mean.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$



Table 8: Party Unity

	(1)	(2)	(3)	(4)
Party unity score	0.004*	0.001	0.004*	0.001
	(0.002)	(0.003)	(0.002)	(0.003)
Party unity x majority		0.008**		0.007*
		(0.004)		(0.004)
Absolute distance from median			-0.603**	-0.192
			(0.261)	(0.147)
Majority party	0.014	-0.679**	-0.189**	-0.671**
	(0.022)	(0.306)	(0.081)	(0.290)
President's party	0.047	0.032	0.035	0.030
	(0.043)	(0.036)	(0.038)	(0.036)
Committee chair	0.038	0.030	0.036	0.031
	(0.086)	(0.083)	(0.084)	(0.083)
Ranking minority member	-0.002	-0.020	-0.019	-0.023
	(0.079)	(0.063)	(0.065)	(0.062)
Party leader	0.092	0.090	0.089	0.089
	(0.085)	(0.082)	(0.089)	(0.083)
First term	0.009	0.006	0.005	0.005
	(0.028)	(0.027)	(0.028)	(0.027)
Tenure (# terms)	-0.182	-0.202	-0.193	-0.203
	(0.127)	(0.129)	(0.133)	(0.130)
Close election	0.137***	0.136***	0.138***	0.136***
	(0.036)	(0.034)	(0.035)	(0.034)
State presidential margin	0.004*	0.004*	0.004*	0.004*
	(0.002)	(0.002)	(0.002)	(0.002)
Log income	-0.121	-0.116	-0.116	-0.115
	(0.185)	(0.195)	(0.191)	(0.196)
Log population	-0.047	-0.058	-0.043	-0.056
	(0.271)	(0.278)	(0.275)	(0.279)
Constant	14.079***	14.427***	14.294***	14.459***
	(1.572)	(1.619)	(1.617)	(1.621)
Adj. $R^2$	0.220	0.221	0.220	0.221
N	71199	71199	71199	71199

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores. *Party unity score* is the percentage of votes in which at least 50% of Democrats vote against at least 50% of Republicans that a legislator voted with her party. This variable is also interacted with the dummy variable for a member's being in the majority party.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 9: Absolute Distance &amp; Rank from Median - CVP

	(1)	(2)	(3)	(4)	(5)	(6)
Distance (CVP) from median	-0.164*	-0.352	-0.347			
	(0.087)	(0.260)	(0.239)			
Rank (CVP) from median (/100)				-0.025*	-0.054	-0.050
				(0.013)	(0.035)	(0.033)
Majority party		-0.062	-0.062		-0.068	-0.062
		(0.072)	(0.067)		(0.065)	(0.061)
President's party		0.032	0.034		0.038	0.040
		(0.036)	(0.033)		(0.039)	(0.035)
Committee chair		0.039	0.006		0.038	0.006
		(0.089)	(0.088)		(0.086)	(0.086)
Ranking minority member		-0.013	-0.030		-0.016	-0.032
		(0.074)	(0.066)		(0.071)	(0.065)
Party leader		0.094	0.012		0.102	0.020
		(0.091)	(0.085)		(0.091)	(0.084)
First term		0.013	-0.002		0.014	-0.000
		(0.027)	(0.024)		(0.027)	(0.024)
Tenure (# terms)		-0.169	-0.205		-0.171	-0.208
		(0.119)	(0.136)		(0.122)	(0.138)
Close election		0.133***	0.133***		0.129***	0.129***
		(0.035)	(0.032)		(0.035)	(0.033)
State presidential margin		0.004*	0.004*		0.004*	0.004*
		(0.002)	(0.002)		(0.002)	(0.002)
Log income	-0.093	-0.128	-0.130	-0.091	-0.122	-0.126
	(0.174)	(0.187)	(0.176)	(0.173)	(0.187)	(0.176)
Log population	-0.063	-0.045	-0.027	-0.065	-0.049	-0.030
	(0.277)	(0.277)	(0.263)	(0.277)	(0.277)	(0.264)
Constant	14.588***	14.597***	14.448***	14.597***	14.617***	14.474***
	(1.640)	(1.673)	(1.528)	(1.639)	(1.662)	(1.519)
Committee dummies	No	No	Yes	No	No	Yes
Adj. $R^2$	0.218	0.220	0.221	0.218	0.220	0.221
N	71167	71167	71167	71167	71167	71167

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Distance (CVP) from median* is the absolute value of legislators' Conservative Vote Probabilities (CVP scores), which are already median-centered. *Rank (CVP) from median (/100)* is the rank ordering of the *Distance (CVP) from median* variable, divided by 100 for scaling purposes; the higher the rank, the farther a legislator is ideologically from the median.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 10: Unified Government

	(1)	(2)	(3)	(4)
Unified government	4.538*** (1.593)	4.786*** (1.659)	4.936*** (1.676)	4.900*** (1.650)
Unif. gov't x majority	0.015 (0.047)	-0.129 (0.096)	-0.214** (0.099)	-0.024 (0.152)
Absolute distance from median		-0.844** (0.392)	-0.843** (0.385)	-0.948** (0.389)
Unif. gov't x distance			-0.240 (0.143)	0.010 (0.179)
Absolute distance x majority				0.418* (0.249)
Unif. gov't x maj'ty x distance				-0.508* (0.285)
Majority party	0.037 (0.033)	-0.187** (0.087)	-0.189** (0.087)	-0.303** (0.133)
President's party	0.035 (0.045)	0.073 (0.059)	0.070 (0.059)	0.063 (0.055)
Committee chair	0.044 (0.090)	0.038 (0.085)	0.039 (0.084)	0.039 (0.085)
Ranking minority member	-0.000 (0.083)	-0.027 (0.064)	-0.029 (0.063)	-0.027 (0.062)
Party leader	0.091 (0.086)	0.088 (0.088)	0.094 (0.087)	0.095 (0.084)
First term	0.015 (0.027)	0.008 (0.028)	0.009 (0.027)	0.012 (0.027)
Tenure (# terms)	-0.167 (0.119)	-0.182 (0.125)	-0.183 (0.125)	-0.191 (0.123)
Close election	0.135*** (0.036)	0.133*** (0.034)	0.129*** (0.034)	0.130*** (0.034)
State presidential margin	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)	0.005* (0.002)
Log income	-0.129 (0.183)	-0.117 (0.191)	-0.116 (0.191)	-0.119 (0.192)
Log population	-0.049 (0.275)	-0.048 (0.280)	-0.044 (0.279)	-0.052 (0.284)
Constant	14.517*** (1.660)	14.757*** (1.676)	14.698*** (1.670)	14.863*** (1.721)
Adj. $R^2$	0.220	0.220	0.220	0.221
N	71199	71199	71199	71199

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores. *Unified government* denotes years in which the House and Senate majorities were both of the same party as the president. All models include a variable interacting *Unified government* with the dummy variable for majority status. Model 2 reintroduces *Absolute distance*, model 3 interacts *Unified government* *Absolute distance*, and model 4 fully saturates the regression by interacting all terms with the dummy variable for majority status.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 11: Polarization

	(1)	(2)	(3)	(4)
Polar index x majority	-0.037 (0.511)	-0.386 (0.596)	-0.962 (0.769)	-0.277 (1.408)
Absolute distance from median		-0.659* (0.334)	0.536 (1.263)	-0.338 (1.442)
Polar index x distance			-1.511 (1.534)	-0.499 (1.869)
Absolute distance x majority				2.033 (2.241)
Polar index x maj'ty x distance				-2.253 (2.921)
Majority party	0.073 (0.406)	0.127 (0.423)	0.583 (0.575)	-0.027 (1.048)
President's party	0.042 (0.044)	0.036 (0.042)	0.037 (0.043)	0.036 (0.043)
Committee chair	0.044 (0.090)	0.044 (0.089)	0.048 (0.088)	0.047 (0.088)
Ranking minority member	-0.000 (0.084)	-0.016 (0.069)	-0.010 (0.068)	-0.009 (0.067)
Party leader	0.091 (0.086)	0.089 (0.090)	0.097 (0.090)	0.098 (0.086)
First term	0.015 (0.027)	0.010 (0.028)	0.008 (0.028)	0.011 (0.028)
Tenure (# terms)	-0.167 (0.119)	-0.181 (0.126)	-0.183 (0.125)	-0.188 (0.126)
Close election	0.134*** (0.036)	0.135*** (0.036)	0.135*** (0.035)	0.135*** (0.035)
State presidential margin	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)	0.005* (0.002)
Log income	-0.128 (0.184)	-0.116 (0.191)	-0.113 (0.190)	-0.116 (0.191)
Log population	-0.050 (0.274)	-0.058 (0.283)	-0.049 (0.283)	-0.063 (0.288)
Constant	14.513*** (1.654)	14.756*** (1.683)	14.519*** (1.645)	14.797*** (1.660)
Adj. $R^2$	0.220	0.220	0.220	0.220
N	71199	71199	71199	71199

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores. *Polar index* denotes the Polarization Index for the U.S. House as defined by McCarty, Poole & Rosenthal (2006): the difference between the mean of Republicans' NOMINATE scores and the mean of Democrats' NOMINATE scores in a given congress. We cannot separately identify the effect of this variable from the year fixed effects, so we omit it in the models. However, all models include a variable interacting *Polar index* with the dummy variable for majority status. Model 2 reintroduces *Absolute distance*, model 3 interacts *Polar index* and *Absolute distance*, and model 4 fully saturates the regression by interacting all terms with the dummy variable for majority status.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 12: Majority Members on Far Side of Median

	(1)	(2)	(3)	(4)
Maj on far side of median	-0.134 (0.094)	-0.089 (0.067)	-0.003 (0.049)	0.009 (0.048)
Maj far side of med X abs dist			-2.654** (1.037)	-2.613** (1.010)
Absolute distance from median		-0.466** (0.225)	0.083 (0.248)	0.015 (0.231)
Absolute distance x majority				0.172 (0.228)
Majority party	0.057* (0.031)	-0.105 (0.068)	0.089 (0.105)	0.035 (0.100)
President's party	0.043 (0.041)	0.033 (0.038)	0.042 (0.042)	0.041 (0.041)
Committee chair	0.044 (0.091)	0.043 (0.089)	0.039 (0.084)	0.038 (0.083)
Ranking minority member	-0.008 (0.074)	-0.019 (0.067)	-0.031 (0.062)	-0.031 (0.061)
Party leader	0.086 (0.085)	0.085 (0.088)	0.087 (0.084)	0.086 (0.084)
First term	0.015 (0.027)	0.012 (0.027)	0.011 (0.028)	0.011 (0.028)
Tenure (# terms)	-0.188 (0.129)	-0.189 (0.130)	-0.188 (0.129)	-0.191 (0.129)
Close election	0.132*** (0.035)	0.133*** (0.035)	0.126*** (0.035)	0.127*** (0.034)
State presidential margin	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)	0.004* (0.002)
Log income	-0.121 (0.186)	-0.119 (0.190)	-0.106 (0.193)	-0.107 (0.193)
Log population	-0.053 (0.277)	-0.049 (0.279)	-0.069 (0.283)	-0.075 (0.287)
Constant	14.452*** (1.597)	14.635*** (1.651)	14.395*** (1.571)	14.496*** (1.612)
Adj. $R^2$	0.220	0.220	0.221	0.221
N	71199	71199	71199	71199

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores. *Maj on far side of median* is a dummy variable equal to one if a legislator is a member of the majority party but has an estimated ideal point in the first dimension of DW-NOMINATE Common Space scores that is on the far side of the median ideal point from the majority of the majority party. This variable is interacted in models 3 and 4 with *Absolute distance*.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 13: Absolute Distance &amp; Rank from Median - All Grants

	(1)	(2)	(3)	(4)	(5)	(6)
Absolute distance from median	-0.084*** (0.030)	-0.321** (0.133)	-0.322** (0.122)			
Absolute rank from median (/100)				-0.014** (0.005)	-0.050* (0.028)	-0.054** (0.026)
Majority party		-0.085* (0.044)	-0.085** (0.040)		-0.071 (0.052)	-0.079 (0.047)
President's party		0.004 (0.008)	0.000 (0.008)		0.010 (0.009)	0.006 (0.009)
Committee chair		0.038* (0.020)	0.031 (0.020)		0.037* (0.019)	0.031 (0.019)
Ranking minority member		0.003 (0.023)	-0.003 (0.022)		0.004 (0.023)	-0.003 (0.023)
Party leader		0.073* (0.043)	0.055 (0.042)		0.071 (0.043)	0.053 (0.042)
First term		-0.011 (0.012)	-0.013 (0.011)		-0.011 (0.012)	-0.012 (0.010)
Tenure (# terms)		-0.039 (0.030)	-0.046* (0.027)		-0.038 (0.030)	-0.045* (0.026)
Close election		0.042*** (0.010)	0.047*** (0.012)		0.042*** (0.010)	0.047*** (0.011)
State presidential margin		0.003*** (0.001)	0.003*** (0.001)		0.003*** (0.001)	0.003*** (0.001)
Log income	0.028 (0.059)	0.008 (0.059)	0.012 (0.060)	0.028 (0.059)	0.011 (0.059)	0.015 (0.059)
Log population	0.193** (0.091)	0.209** (0.086)	0.194** (0.082)	0.193** (0.091)	0.208** (0.085)	0.193** (0.082)
Constant	12.361*** (0.671)	12.481*** (0.649)	12.580*** (0.571)	12.354*** (0.672)	12.457*** (0.654)	12.571*** (0.572)
Committee dummies	No	No	Yes	No	No	Yes
Adj. $R^2$	0.672	0.674	0.674	0.672	0.673	0.674
N	71199	71199	71199	71199	71199	71199

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of *all* grants in the Consolidated Federal Funds Reports' grants category received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores. *Absolute rank from median (/100)* is the rank ordering of the *Absolute distance from median* variable divided by 100 for scaling purposes; the higher the rank, the farther a legislator is ideologically from the median.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 14: Including Multi-Member Counties

	(1) All	(2) Min dist	(3) Max dist	(4) Max share
Absolute distance from median	-0.478*	-0.605**	-0.496	-0.589**
	(0.257)	(0.259)	(0.319)	(0.272)
Majority party	-0.127	-0.161**	-0.129	-0.160*
	(0.079)	(0.076)	(0.100)	(0.083)
President's party	0.009	0.026	0.016	0.013
	(0.027)	(0.033)	(0.031)	(0.031)
Committee chair	0.024	0.032	0.029	0.027
	(0.064)	(0.074)	(0.080)	(0.077)
Ranking minority member	-0.022	-0.016	-0.022	-0.023
	(0.057)	(0.063)	(0.064)	(0.062)
Party leader	0.116	0.101	0.097	0.117
	(0.071)	(0.079)	(0.086)	(0.098)
First term	0.004	0.007	0.002	0.004
	(0.022)	(0.026)	(0.025)	(0.025)
Tenure (# terms)	-0.127*	-0.187	-0.110	-0.152
	(0.073)	(0.117)	(0.080)	(0.098)
Close election	0.110***	0.125***	0.120***	0.124***
	(0.029)	(0.033)	(0.034)	(0.032)
State presidential margin	0.003*	0.004*	0.004*	0.004*
	(0.002)	(0.002)	(0.002)	(0.002)
Log income	-0.074	-0.105	-0.107	-0.099
	(0.159)	(0.178)	(0.174)	(0.177)
Log population	-0.013	-0.059	-0.033	-0.032
	(0.235)	(0.262)	(0.250)	(0.260)
Constant	14.610***	14.979***	14.797***	14.709***
	(1.643)	(1.625)	(1.653)	(1.661)
Adj. $R^2$	0.244	0.229	0.227	0.230
N	96399	81587	81546	81835

*Notes:* Standard errors clustered by state. Year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores.

The first model includes all representatives of a county as an observation, multiply counting counties when necessary (highly-populated counties). This model still utilizes county-by-member fixed effects.

The second and third models take the representative of each county with the minimum and maximum distance to the median, respectively, as the unique entry for that county. The fourth model takes the representative of each county whose district covered the greatest share of the county's population. These models also utilize county-by-member fixed effects. Small differences in the sample size across these latter three models reflect occasional missing data among control variables for the different representatives assigned to counties across these models.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 15: Splitting up the Sample by Quartiles of Population

	(1)	(2)
Absolute distance from median x first population quartile	-0.718*	-0.773*
	(0.387)	(0.394)
Absolute distance from median x second population quartile	-0.522*	-0.476
	(0.300)	(0.295)
Absolute distance from median x third population quartile	-0.592**	-0.583**
	(0.274)	(0.266)
Absolute distance from median x fourth population quartile	-0.571**	-0.541**
	(0.241)	(0.247)
Second Quartile		-0.195**
		(0.081)
Third Quartile		-0.231*
		(0.124)
Fourth Quartile		-0.296**
		(0.131)
Majority party	-0.161*	-0.159*
	(0.091)	(0.091)
President's party	0.029	0.029
	(0.037)	(0.037)
Committee chair	0.040	0.038
	(0.087)	(0.087)
Ranking minority member	-0.019	-0.021
	(0.067)	(0.066)
Party leader	0.088	0.085
	(0.090)	(0.090)
First term	0.010	0.010
	(0.028)	(0.028)
Tenure (# terms)	-0.177	-0.175
	(0.125)	(0.124)
Close election	0.135***	0.135***
	(0.036)	(0.036)
State presidential margin	0.004*	0.004*
	(0.002)	(0.002)
Log income	-0.120	-0.115
	(0.188)	(0.189)
Log population	-0.053	-0.002
	(0.284)	(0.284)
Constant	14.770***	14.370***
	(1.739)	(1.741)
Adj. $R^2$	0.220	0.220
N	71199	71199

*Notes:* Standard errors clustered by state. County-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores.

The first model includes interactions between *Absolute distance* and dummy variables for each quartile of population in our baseline sample. The second model adds memberships in given quartiles as standalone variables.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$



Table 16: Additional Summary Statistics at the District Level

Variable	Obs	Mean	Std. Dev.	Min	Max
Absolute distance from median	10184	.369	.222	0	1.19
Majority party	10184	.56	.496	0	1
President's party	10184	.471	.499	0	1
Committee chair	10184	.049	.215	0	1
Ranking minority member	10184	.047	.212	0	1
Party leader	10184	.007	.086	0	1
First term	10184	.136	.343	0	1
Tenure (# terms)	10184	5.422	4.014	1	28
Close election	10184	.066	.249	0	1
State presidential margin	10184	12.932	8.932	0	55.94
FAADS Grants (no formula - B,P,CA) (ln)	10184	17.842	1.475	9.411	22.535
FAADS Grants (all - B,P,CA,F) (ln)	10184	19.428	1.21	16.217	23.644

*Notes:* *Absolute distance from median* is the absolute value of median-centered ideal point estimates in DW-NOMINATE Common Space scores. *Majority party* is a dummy variable equal to 1 if a legislator is in the majority party. *President's party* is a dummy variable equal to 1 if a legislator shares the same party as the sitting president. *Committee chair* is a dummy variable equal to 1 if a legislator is the chair of any standing House committee. *Ranking minority member* is a dummy variable equal to 1 if a legislator is the ranking minority member on any standing House committee. *Party leader* is a dummy variable equal to 1 if a legislator has a party leadership role. *First term* is a dummy variable equal to 1 for a legislator's first term in Congress. *Tenure (# terms)* counts the number of Congresses in which a legislator has served. *Close election* is a dummy variable equal to 1 if the margin of victory in the previous congressional election was 5% or less. *State presidential margin* is absolute value of the state-wide vote margin in the previous presidential election. *FAADS Grants (no formula - B,P,CA)(ln)* is the log value of non-formula grants (block grants (B), project grants (P), and cooperative agreements (CA)) received by a given district in a given year, as measured in the Federal Assistance Award Data System. *FAADS Grants (all - B,P,CA,F)(ln)* adds formula grants (F) to the preceding measure of outlays. The sample is restricted to include only those observations present in the estimation of model 1 of Table 17.

Table 17: District-Level Analysis - No Formula

	Full Sample			County-Analysis Sample Only		
	(1) CQ	(2) 100%	(3) 80%	(4) CQ	(5) 100%	(6) 80%
Absolute distance from median	0.017 (0.251)	0.153 (0.271)	0.207 (0.270)	0.028 (0.363)	0.196 (0.436)	0.263 (0.425)
Majority party	0.019 (0.104)	0.066 (0.109)	0.085 (0.110)	0.030 (0.148)	0.082 (0.170)	0.106 (0.167)
President's party	-0.008 (0.010)	-0.002 (0.015)	0.002 (0.017)	-0.034* (0.018)	-0.026 (0.027)	-0.022 (0.029)
Committee chair	-0.058 (0.054)	-0.047 (0.056)	-0.041 (0.056)	-0.055 (0.090)	-0.031 (0.100)	-0.004 (0.102)
Ranking minority member	-0.019 (0.050)	-0.019 (0.045)	-0.018 (0.044)	-0.050 (0.053)	-0.056 (0.051)	-0.043 (0.049)
Party leader	0.047 (0.141)	0.128 (0.157)	0.126 (0.151)	-0.093 (0.118)	-0.088 (0.117)	-0.053 (0.129)
First term	-0.039 (0.030)	-0.031 (0.030)	-0.033 (0.028)	0.022 (0.033)	0.044 (0.036)	0.045 (0.035)
Tenure (# terms)	-0.080 (0.128)	-0.080 (0.124)	-0.080 (0.124)	-0.203 (0.143)	-0.208 (0.144)	-0.200 (0.147)
Close election	0.042 (0.033)	0.037 (0.037)	0.029 (0.038)	0.057 (0.036)	0.044 (0.049)	0.035 (0.050)
State presidential margin	0.000 (0.001)	0.000 (0.001)	0.000 (0.001)	0.003** (0.001)	0.002* (0.001)	0.002* (0.001)
Constant	16.482*** (0.221)	16.379*** (0.216)	16.328*** (0.211)	16.263*** (0.263)	16.188*** (0.285)	16.120*** (0.276)
Adj. $R^2$	0.511	0.450	0.467	0.553	0.468	0.490
N	10184	10759	11090	5204	5456	5651

*Notes:* Standard errors clustered by state. District-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given district in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores. The column heads speak to redistricting, where the district-by-member fixed effects must be reset in each new redistricting period and the data on outlays from the first year after redistricting goes into effect must be excluded from the analysis. *CQ* takes Congressional Quarterly's designation of redistricting, where redistricting of any districts in a state is counted as redistricting of all districts in that state. *100* uses a requirement that 100% of a district's population be carried over for a district to be considered comparable across the redistricting. *80* uses a requirement that 80% of a district's population be carried over across the redistricting to be considered the same district. Models 1-3 consider the full remaining sample (i.e. all years other than those after redistricting), while models 4-6 analyze only those districts that appeared in the county-level analysis after counties represented by more than one congressperson were dropped. The second three columns serve to verify that the county-level results were not driven by the exclusion of densely populated areas from the sample.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 18: District-Level Analysis - All Grants

	Full Sample			County-Analysis Sample Only		
	(1) CQ	(2) 100%	(3) 80%	(4) CQ	(5) 100%	(6) 80%
Absolute distance from median	-0.089 (0.151)	-0.004 (0.181)	-0.009 (0.170)	-0.020 (0.195)	0.119 (0.267)	0.084 (0.242)
Majority party	-0.009 (0.058)	0.021 (0.066)	0.019 (0.062)	0.016 (0.080)	0.063 (0.101)	0.050 (0.093)
President's party	0.006 (0.007)	0.006 (0.010)	0.000 (0.009)	-0.003 (0.009)	-0.004 (0.015)	-0.010 (0.013)
Committee chair	-0.019 (0.022)	-0.023 (0.023)	-0.018 (0.023)	-0.021 (0.026)	-0.021 (0.042)	-0.012 (0.043)
Ranking minority member	-0.007 (0.022)	-0.007 (0.020)	-0.009 (0.020)	-0.008 (0.027)	-0.014 (0.026)	-0.014 (0.026)
Party leader	-0.069 (0.062)	-0.026 (0.065)	-0.036 (0.061)	-0.121* (0.065)	-0.121* (0.064)	-0.108 (0.068)
First term	-0.028** (0.011)	-0.020 (0.014)	-0.021 (0.014)	-0.010 (0.019)	0.011 (0.025)	0.008 (0.024)
Tenure (# terms)	-0.049 (0.039)	-0.040 (0.036)	-0.039 (0.038)	-0.130*** (0.040)	-0.138*** (0.041)	-0.135*** (0.044)
Close election	0.027 (0.017)	0.012 (0.029)	0.007 (0.029)	0.022 (0.019)	-0.001 (0.044)	-0.007 (0.045)
State presidential margin	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	0.000 (0.001)	0.000 (0.001)	0.001 (0.001)
Constant	17.996*** (0.118)	17.980*** (0.131)	17.945*** (0.124)	17.810*** (0.143)	17.756*** (0.174)	17.723*** (0.160)
Adj. $R^2$	0.734	0.561	0.586	0.765	0.598	0.624
N	10189	10767	11099	5206	5458	5654

*Notes:* Standard errors clustered by state. District-by-member and year fixed effects used in all models. The dependent variable is the log value of *all* grants in the Consolidated Federal Funds Reports' grants category received by a given district in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Absolute distance from median* is the absolute value of the median-centered first dimension of the DW-NOMINATE Common Space scores. The column heads speak to redistricting, where the district-by-member fixed effects must be reset in each new redistricting period and the data on outlays from the first year after redistricting goes into effect must be excluded from the analysis. *CQ* takes Congressional Quarterly's designation of redistricting, where redistricting of any districts in a state is counted as redistricting of all districts in that state. *100* uses a requirement that 100% of a district's population be carried over for a district to be considered comparable across the redistricting. *80* uses a requirement that 80% of a district's population be carried over across the redistricting to be considered the same district. Models 1-3 consider the full remaining sample (i.e. all years other than those after redistricting), while models 4-6 analyze only those districts that appeared in the county-level analysis after counties represented by more than one congressperson were dropped. The second three columns serve to verify that the county-level results were not driven by the exclusion of densely populated areas from the sample.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 19: District-Level Analysis - No Formula - CVP

	Full Sample			County-Analysis Sample Only		
	(1) CQ	(2) 100%	(3) 80%	(4) CQ	(5) 100%	(6) 80%
Distance (CVP) from median	-0.263*	-0.206	-0.201	-0.207	-0.170	-0.166
	(0.142)	(0.149)	(0.139)	(0.197)	(0.204)	(0.185)
Majority party	-0.079	-0.061	-0.060	-0.050	-0.046	-0.045
	(0.055)	(0.058)	(0.054)	(0.073)	(0.076)	(0.070)
President's party	-0.005	0.001	0.007	-0.031*	-0.023	-0.018
	(0.010)	(0.015)	(0.016)	(0.018)	(0.028)	(0.029)
Committee chair	-0.058	-0.046	-0.039	-0.056	-0.029	-0.001
	(0.056)	(0.057)	(0.057)	(0.091)	(0.102)	(0.103)
Ranking minority member	-0.019	-0.020	-0.018	-0.053	-0.059	-0.046
	(0.050)	(0.045)	(0.044)	(0.054)	(0.051)	(0.049)
Party leader	0.057	0.134	0.135	-0.080	-0.076	-0.039
	(0.141)	(0.154)	(0.150)	(0.125)	(0.124)	(0.137)
First term	-0.042	-0.035	-0.037	0.019	0.040	0.041
	(0.030)	(0.030)	(0.029)	(0.033)	(0.036)	(0.035)
Tenure (# terms)	-0.074	-0.073	-0.074	-0.197	-0.203	-0.196
	(0.132)	(0.129)	(0.130)	(0.146)	(0.148)	(0.151)
Close election	0.041	0.037	0.030	0.056	0.044	0.036
	(0.033)	(0.037)	(0.038)	(0.036)	(0.048)	(0.050)
State presidential margin	0.000	0.000	0.000	0.003**	0.002*	0.002*
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Constant	16.601***	16.550***	16.527***	16.359***	16.357***	16.322***
	(0.142)	(0.140)	(0.138)	(0.168)	(0.175)	(0.166)
Adj. $R^2$	0.512	0.450	0.467	0.553	0.468	0.490
N	10182	10757	11088	5202	5454	5649

*Notes:* Standard errors clustered by state. District-by-member and year fixed effects used in all models. The dependent variable is the log value of non-formula grants received by a given district in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year. *Distance (CVP) from median* is the absolute value of legislators' Conservative Vote Probabilities (CVP scores), which are already median-centered. The column heads speak to redistricting, where the district-by-member fixed effects must be reset in each new redistricting period and the data on outlays from the first year after redistricting goes into effect must be excluded from the analysis. *CQ* takes Congressional Quarterly's designation of redistricting, where redistricting of any districts in a state is counted as redistricting of all districts in that state. *100* uses a requirement that 100% of a district's population be carried over for a district to be considered comparable across the redistricting. *80* uses a requirement that 80% of a district's population be carried over across the redistricting to be considered the same district. Models 1-3 consider the full remaining sample (i.e. all years other than those after redistricting), while models 4-6 analyze only those districts that appeared in the county-level analysis after counties represented by more than one congressperson were dropped. The second three columns serve to verify that the county-level results were not driven by the exclusion of densely populated areas from the sample.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

Table 20: Imposing Redistricting on Counties

	(1)	(2)	(3)	(4)	(5)	(6)
Absolute distance from median	-0.143*	-0.000	-0.051			
	(0.075)	(0.222)	(0.202)			
Absolute rank from median (/100)				-0.029**	-0.076**	-0.083**
				(0.013)	(0.035)	(0.033)
Majority party		0.048	0.025		-0.103	-0.121*
		(0.082)	(0.071)		(0.079)	(0.072)
President's party		0.029	0.029		0.038	0.037
		(0.042)	(0.040)		(0.040)	(0.038)
Committee chair		0.135	0.116		0.132	0.113
		(0.107)	(0.105)		(0.105)	(0.103)
Ranking minority member		0.113	0.099		0.103	0.090
		(0.084)	(0.083)		(0.081)	(0.081)
Party leader		-0.052	-0.092		-0.051	-0.089
		(0.112)	(0.105)		(0.113)	(0.106)
First term		0.034	0.019		0.032	0.016
		(0.030)	(0.028)		(0.030)	(0.028)
Tenure (# terms)		-0.135**	-0.158**		-0.146***	-0.166**
		(0.051)	(0.071)		(0.053)	(0.072)
Close election		0.122***	0.119***		0.123***	0.121***
		(0.030)	(0.030)		(0.030)	(0.030)
State presidential margin		0.007***	0.007***		0.007***	0.007***
		(0.003)	(0.002)		(0.002)	(0.002)
Log income	-0.209	-0.241	-0.247	-0.208	-0.240	-0.247
	(0.213)	(0.217)	(0.207)	(0.213)	(0.218)	(0.207)
Log population	-0.063	-0.145	-0.149	-0.065	-0.138	-0.142
	(0.480)	(0.464)	(0.463)	(0.481)	(0.468)	(0.467)
Constant	17.303***	18.839***	19.141***	17.310***	18.956***	19.329***
	(2.944)	(2.746)	(2.821)	(2.942)	(2.694)	(2.787)
Committee dummies	No	No	Yes	No	No	Yes
Adj. $R^2$	0.209	0.211	0.211	0.209	0.211	0.212
N	71199	71199	71199	71199	71199	71199

*Notes:* Standard errors clustered by state. Year fixed effects used in all models. We impose “redistricting” on the estimation by interacting county-by-member fixed effects with dummy variables representing the periods 1983-1992, 1993-2002, and 2002-2009. The county-by-member fixed effects are then “redistricting-specific.” The dependent variable is the log value of non-formula grants received by a given county in a given year. The outlays data span fiscal years 1984-2010 and are matched with explanatory variables from the previous calendar year.

\* $p \leq 0.10$  \*\* $p \leq 0.05$  \*\*\* $p \leq 0.01$

## References

- Berry, Christopher R., Barry C. Burden & William G. Howell. 2010. "The President and the Distribution of Federal Spending." *American Political Science Review* 104(04):783–799.
- Bickers, Kenneth N. & Robert M. Stein. 1991. *Federal Domestic Outlays, 1983–1990: A Data Book*. Aramontk, NY: M. E. Sharpe.
- Dekel, Eddie, Matthew O. Jackson & Asher Wolinsky. 2009. "Vote Buying: Legislatures and Lobbying." *Quarterly Journal of Political Science* 4(2):103–128.
- Fowler, Anthony & Andrew Hall. 2012. "Conservative Vote Probabilities: An Easier Method for the Analysis of Roll Call Data." *unpublished - Available at SSRN 2120720* .
- McCarty, Nolan M., Keith T. Poole & Howard Rosenthal. 2006. *Polarized America: The Dance of Ideology and Unequal Riches*. Cambridge: The MIT Press.
- Nelson, Garrison. 2013. "Committees in the U.S. Congress, 1947-1992: House Committees, 98th-102nd Congresses."
- Poole, Keith T. 2005. *Spatial Models of Parliamentary Voting*. Cambridge: Cambridge University Press.
- Stewart, III, Charles & Jonathan Woon. 2013. "Congressional Committee Assignments, 103rd to 112th Congresses, 1993–2011: House Committees."