

Online Appendix

“Influence-seeking in the Federal Bureaucracy”

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A Data

A.1 Administrative Units

The data used in the empirical analysis includes 84 administrative units (referred to as *agencies* in the paper), where a unit is defined as the lobbying target identified in the LDA reports, as collected in the CRP data. The administrative units include executive branch “agencies” (e.g., the Environmental Protection Agency), “offices” (e.g., the Office of Personnel Management), “bureaus” (e.g., the Bureau of Alcohol Tobacco & Firearms), “commissions” (e.g., the Consumer Product Safety Commission) and, in some cases, “departments” (e.g., the Department of Veterans Affairs). Table 4 lists all of the administrative units used in the analysis. For each unit in the table, I include data on: (i) the total number of groups that lobbied the unit during the period of study; (ii) the number of lobbying reports filed during the Democratic administrations; (iii) the number of reports filed during the Republican administration; and (iv) the average ideology, as measured by the CF Scores, of the groups that lobby the unit.

Excluded administrative units. Some of the administrative units listed in the CRP data were excluded from the analysis. I excluded any congressional agencies like the Governmental Accountability Office. Units that were created or substantially reorganized during the period of study were also excluded, such as the agencies that are now housed with the Department of Homeland Security, and the newly created Federal Housing Finance Agency. I also excluded units with fewer than five observations (i.e., units that were listed by fewer than five groups in the LDA reports). Including these units makes it difficult to develop reliable estimates for the agency indicators. The six units excluded due to too few observations are: the Bureau of Economic Analysis; the Financial Management Service; the National Endowment for the Arts; the National Endowment for the Humanities; the Peace Corps; and the US Commission on Civil Rights. The exclusion of these units makes little difference to the empirical results.

Administrative units were also excluded in cases where there was overlap between upper- and lower-level units. For example, the Department of Transportation is listed as a target of lobbying in some CRP reports. But so are ten different sub-units *within* the Department of Transportation, such as the Federal Aviation Administration, the Federal Highway Administration, the Federal Motor Carrier Safety Administration, and so on. Including both the Department of Transportation and these sub-units is problematic from an estimation standpoint because the empirical models use fixed effects for each unit (referred to as “agency fixed effects” in the paper). The fixed effects for the upper-level departments cannot be jointly estimated with the lower-level units because they are linearly dependent. In cases where there are reports for both the upper-level departments and the sub-units, I use only the sub-units. My view is that the sub-units are preferable because they are more precise; they specify exactly where the lobbying is targeted. Three departments did not have associated sub-units, so they are included in the analysis—see the Department of Education, the State Department, and the Department of Veterans Affairs in Table 4 below. The departments that were excluded because reports listed sub-units are Agriculture, Commerce, Defense, Energy, Interior, Labor, Transportation, Health and Human Services, Housing and Urban Development, and Treasury.

Table 4: List of Administrative Units (“Agencies”)

Administrative Unit	N. Groups Lobbying	N. Dem Reports	N. Rep Reports	Avg. Group Ideology
1 Administration for Children & Families	62	48	3	0.03
2 Administration on Aging	17	6	1	0.05
3 Agency for Healthcare Research & Quality	15	9	0	-0.02
4 Alcohol & Tobacco Tax & Trade Bureau	15	83	5	0.28
5 Army Corps of Engineers	175	151	85	0.19
6 Bureau of Alcohol Tobacco & Firearms	24	20	6	0.34
7 Bureau of Indian Affairs	56	38	16	0.11
8 Bureau of Industry & Security	6	2	0	0.29
9 Bureau of Land Management	79	84	35	0.32
10 Bureau of Prisons	12	2	3	-0.05
11 Bureau of Reclamation	25	15	2	0.29
12 Bureau of the Census	15	3	2	-0.20
13 Centers for Disease Control & Prevention	121	105	40	0.06
14 Centers for Medicare & Medicaid Services	324	1502	789	0.06
15 Commodity Futures Trading Commission	187	453	58	0.21

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	Administrative Unit	N. Groups Lobbying	N. Dem Reports	N. Rep Reports	Avg. Group Ideology
16	Consumer Product Safety Commission	71	85	26	0.25
17	Dept of Education	249	229	138	0.11
18	Dept of State	642	1022	561	0.18
19	Dept of Veterans Affairs	200	170	91	0.08
20	Drug Enforcement Administration	69	53	25	0.14
21	Economic Development Administration	12	4	0	-0.37
22	Employment & Training Administration	9	4	0	-0.06
23	Employment Standards Administration	11	0	1	-0.07
24	Environmental Protection Agency	643	2143	962	0.23
25	Equal Employment Opportunity Commission	72	43	13	0.09
26	Export-Import Bank of the US	88	55	20	0.04
27	Farm Credit Administration	19	18	13	0.30
28	Federal Aviation Administration	223	405	204	0.10
29	Federal Bureau of Investigation	75	20	13	0.17
30	Federal Communications Commission	340	839	595	0.15
31	Federal Deposit Insurance Corporation	135	140	61	0.20
32	Federal Energy Regulatory Commission	156	222	206	0.26
33	Federal Highway Administration	96	73	30	0.20
34	Federal Housing Finance Board	53	58	33	0.15
35	Federal Maritime Commission	35	40	18	-0.00
36	Federal Motor Carrier Safety Admin	60	59	8	0.23
37	Federal Railroad Administration	47	84	31	-0.01
38	Federal Reserve System	221	316	104	0.22
39	Federal Trade Commission	353	384	242	0.19
40	Federal Transit Administration	52	30	16	0.11
41	Financial Crimes Enforcement Network	14	22	1	0.15
42	Food & Drug Administration	364	797	372	0.19
43	Forest Service	52	56	10	0.33
44	General Services Administration	156	93	45	0.20
45	Health Resources & Svcs Administration	108	116	25	0.03
46	Indian Health Service	20	9	5	-0.03
47	Internal Revenue Service	362	424	179	0.21
48	International Trade Administration	128	49	26	0.20
49	Maritime Administration	63	146	40	-0.08
50	Mine Safety & Health Administration	24	25	11	0.24
51	Minerals Management Service	31	17	11	0.49
52	National Aeronautics & Space Admin	114	111	58	0.21
53	National Archives & Records Admin	6	2	1	0.22
54	National Credit Union Administration	23	45	30	0.12
55	National Highway Traffic Safety Admin	75	72	19	0.19
56	National Indian Gaming Commission	7	16	11	-0.04
57	National Inst of Standards & Technology	56	37	3	0.22
58	National Institutes of Health	107	79	49	0.08
59	National Labor Relations Board	49	50	1	0.27
60	National Oceanic & Atmospheric Admin	101	98	44	0.21
61	National Park Service	38	22	10	0.07
62	National Science Foundation	47	11	7	0.16
63	National Transportation Safety Board	59	32	17	-0.09
64	Natl Telecom & Information Admin	92	109	33	0.13
65	Nuclear Regulatory Commission	67	122	42	0.21
66	Occupational Safety & Health Admin	160	120	38	0.17
67	Ofc of the Comptroller of the Currency	94	94	40	0.16
68	Ofc/Surface Mining Reclamation & Enforce	5	1	0	-0.24
69	Office of Government Ethics	5	7	0	0.15
70	Office of Management & Budget	733	801	403	0.17
71	Office of Personnel Management	91	100	49	-0.09
72	Office of Thrift Supervision	57	28	29	0.20
73	Patent & Trademark Office	135	191	66	0.17
74	Pension Benefit Guaranty Corporation	61	40	15	-0.20
75	Pipeline & Hazardous Materials Safety	40	34	1	0.33
76	Railroad Retirement Board	15	14	4	-0.37

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	Administrative Unit	N. Groups Lobbying	N. Dem Reports	N. Rep Reports	Avg. Group Ideology
77	Research & Special Programs Administra	11	1	0	0.30
78	Securities & Exchange Commission	257	543	218	0.19
79	Small Business Administration	194	153	94	0.27
80	Social Security Administration	68	33	22	-0.03
81	Substance Abuse & Mental Hlth Svcs Adm	31	19	3	-0.15
82	Surface Transportation Board	85	106	54	0.18
83	US Agency for International Development	134	90	51	0.18
84	US Fish & Wildlife Service	61	45	16	0.27

Note: Group ideology is the average ideology of the groups that lobbied the administrative unit.

A.2 Interest Groups

The sample of groups used in the analysis comes from the CRP data on “lobbying clients,” as described in the paper. My sample includes those groups that filed an average of one lobbying report per year under the Lobbying Disclosure Act (LDA) during the period of study from 1998 to 2016. The sample was then limited to those groups that I could match to the CF Score data from Bonica (2013)—i.e., the *matched* groups. I provide details about the matching procedure in this section. I then analyze how successful the match was by comparing the matched groups to the unmatched groups along different metrics.

Matching procedure. The groups in the CRP data are identified as the lobbying *clients*, as given by the variable names `Client` and `Ultorg`. CRP describes the `Ultorg` variable as the “parent company to the client”. I created a unique list of clients from both of these variables and matched them to the name of each political action committee (PAC) in the CF Score data using the `Comname` variable (the “committee name”). The matching was done manually by searching for each lobbying client in the universe of PAC names. I first searched for the name of the client, followed by keywords within the name when the full name failed to return a match. Ultimately, this procedure yielded 1,304 matches (only 1,269 of these matches are used in the analysis; see the section on excluded administrative units above). These matches are restrictive in that I did not automatically match subsidiaries that share the same parent company. For example, the lobbying group “Sony Pictures Entertainment”

was matched to the political action committee “Sony Pictures Entertainment, Inc. PAC.” But I did not then match the same PAC to “Sony Electronics” or other subsidiaries under Sony’s parent company.

As a robustness check, I did a less restrictive match by matching the client’s name from the CRP data to the `Ultorg` variable in the CF Score data. Like in the CRP data, the `Ultorg` variable *in the CF Score data* is a high-level entity, often a higher level than the `Comname` variable used in the first match. For example, `Ultorg` can be a parent company, a holding company, or the national office of a federated organization. There are 3,439 unique entries for the `Ultorg` variable. This second match attempt returned fewer matches ($N = 1,249$). In both matching attempts, the CF Scores were averaged in cases where a lobbying client matched to multiple entries in the CF score data.

The empirical results are similar regardless of whether the lobbying clients are matched to the `Comname` variable (the first match) or the `Ultorg` variable (the second match). Empirical results derived from matching on the `Ultorg` variable are available on request. The results in the paper and the results discussed in the remainder of this appendix use the first match.

Comparing the matched and unmatched groups. Table 5 shows the distributions of industries in the matched and unmatched groups. The first row indicates that a match in the CF Score data was found for 47 percent of the lobbying groups listed as belonging to the agriculture industry (102 and of these groups were matched to the CF Score data and 113 were not matched). The biggest category of unmatched entities is in the “Health and Universities” industry category, where 684 groups that lobbied the bureaucracy had no CF Score (see row 8).

Which types of organizations tend to be in the unmatched group. That is, which groups lobby but do not have PACs? From an examination of the unmatched groups, I offer the following generalization. The unmatched groups include organizations like universities, hospitals, medical organization (e.g., the Preeclampsia Foundation), ports, municipal govern-

ments, government agencies (e.g., the Public Broadcasting Service), media companies (e.g., the Washington Post Company), a multitude of single-issue groups and community groups (e.g., the Simon Wiesenthal Center, Teach for America, and the American Bar Association, the Rails-to-Trails conservancy), and companies that arguably have a public-interested orientation (e.g., the ACT standardized testing company). All of these groups seek to influence policymaking through lobbying, as the CRP data reveal. But they do not seek influence through electoral politics and campaign contributions, as the CF Score data reveal. Because of their public-facing orientation, by and large, these organizations may view investments in electoral politics as bad for their reputation. Whatever the case, because these organization do not give politically, there is no CF Score for them.

Does the omission of the unmatched groups bias the results? On the one hand, I find that the groups with CF Scores are responsible for the vast majority of influence-seeking *expenditures*—over 70 percent of the expenditures, by my estimates. To provide a sense of how this varies across industry groups, Figure 5 shows a scatter plot of total influence-seeking expenditures by industry among the matched groups (on the x-axis) and the unmatched groups (on the y-axis). The figure includes a 45-degree line, which makes it easier to see in which subset of groups—matched or unmatched—the spending is higher. All but one industry (the “single-issue” groups) is at or below the 45-degree line, indicating that influence-seeking expenditures are higher in the matched sample of groups. Of note, the empirical analysis includes fixed effects for all of these industries.

Despite the fact that the matched groups outspend the unmatched groups on influence-seeking by a large margin, the omission of the unmatched groups may still bias the results. In an attempt to limit the scope of this bias, I identify here those administrative units (henceforth “agencies”) where the matching has, by one metric, performed poorly. I then replicate the main results in the paper excluding these agencies.

For each of the 84 agencies in the analysis, I evaluated whether the *expenditure ratios*—

the dependent variable in the main analysis—are statistically different between the matched groups and unmatched groups. For the most of the agencies (70 out of 84), the expenditure ratios among the matched and unmatched groups are statistically identical at the .05 level. This leaves 14 agencies where the expenditure ratios differ (two-tailed t-test, $p < .05$).

Does the inclusion of *these* agencies, where the influence-seeking expenditures are noticeably different between the matched and unmatched groups, bias the results? To investigate, I reran the main analysis in Table 2 of the paper and excluded the 14 agencies. The resulting regression coefficients are shown in Table 6 below. They are statistically and substantively similar to the those in the paper, despite having a smaller sample size ($N = 5,377$).

Table 5: Matching Results by Industry

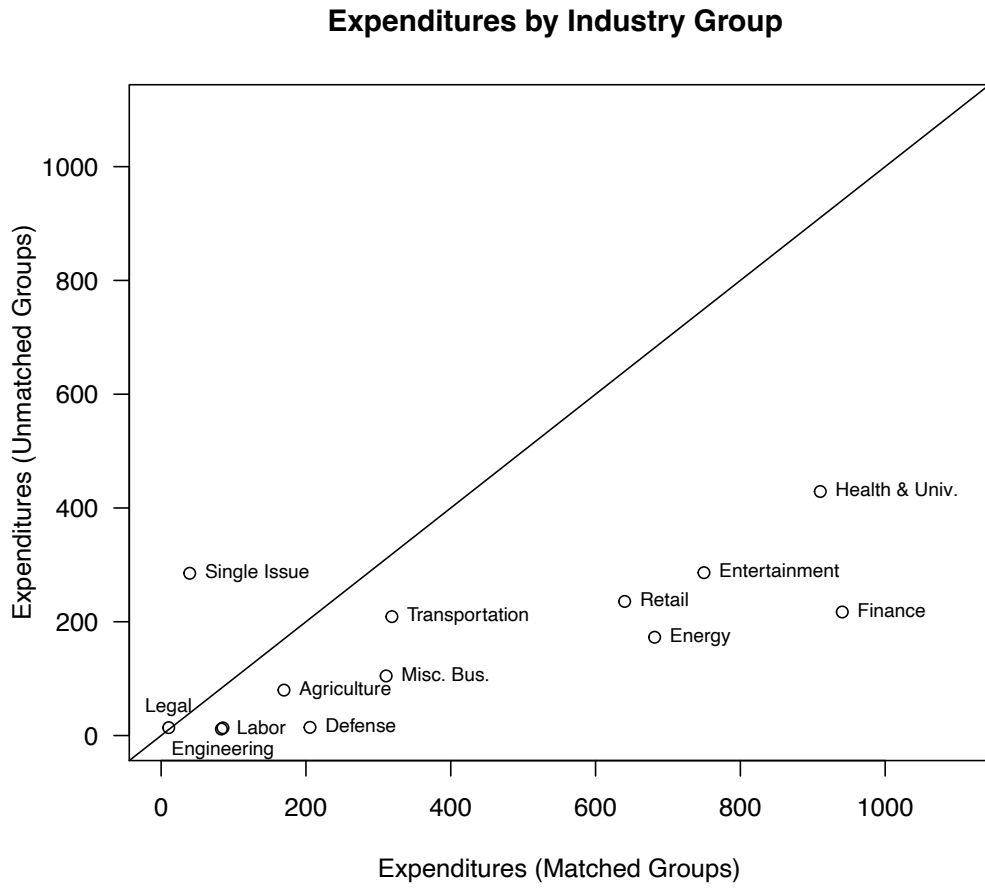
	Industry	Prct Matched	Total Matched	Total Unmatched
1	Agriculture	0.52	139	130
2	Engineering, electronics	0.54	79	67
3	Entertainment	0.39	192	295
4	Defense	0.38	79	129
5	Energy & Natural Resources	0.38	231	371
6	Finance, Insurance & Real Estate	0.57	305	233
7	Sport, amusement, consumer	0.32	155	325
8	Health and universities	0.27	307	849
9	Single-issue groups	0.08	26	309
10	Legal services	0.37	22	38
11	Labor	0.73	58	21
12	Misc. Business	0.40	123	187
13	Transportation, ports, transit authorities	0.36	178	318

Table 6: Replication of Table 2 with Limited Sample

	(1)	(2)
Group Ideology (CF Score)	-0.340 (0.560)	0.540 (0.410)
Group Ideology Squared		0.910 (0.210)
Group Controls		
Years Active	-0.075 (0.079)	-0.069 (0.076)
N. Lobbying Reports Filed (logged)	0.400 (0.330)	0.540 (0.320)
Total Spending (logged)	-0.091 (0.160)	-0.200 (0.150)
Industry Indicators	✓	✓
Agency Indicators	✓	✓
Observations	5,377	5,377

Note: Weights included for the number of campaign contributions made by each group. The standard errors, shown in parentheses, are clustered by group.

Figure 5: Influence-seeking Expenditures by Industry (Matched vs. Unmatched Groups)



Notes: Line indicates the 45-degree line. Expenditures are in millions of 1998 dollars.

B Alternative Identification Strategy

A different way to identify a group’s targeting decision is to look at how the targeting decision varies with the ideological orientation, or “mission,” of an agency. Using a measure that estimates the general ideological orientation of many of the agencies included in my sample (Acs 2020), I looked at the relationship between this measure (the ideology of agency a) and the average ideology of all the groups that lobby a . Overall, I find a positive and statistically significant relationship between the two ($\rho = .41$, $p < .05$, $N = 28$). That is, liberal groups tend to lobby liberal agencies and conservative groups tend to lobby conservative agencies, which is broadly suggestive of a lobbying pattern of influence-seeking.

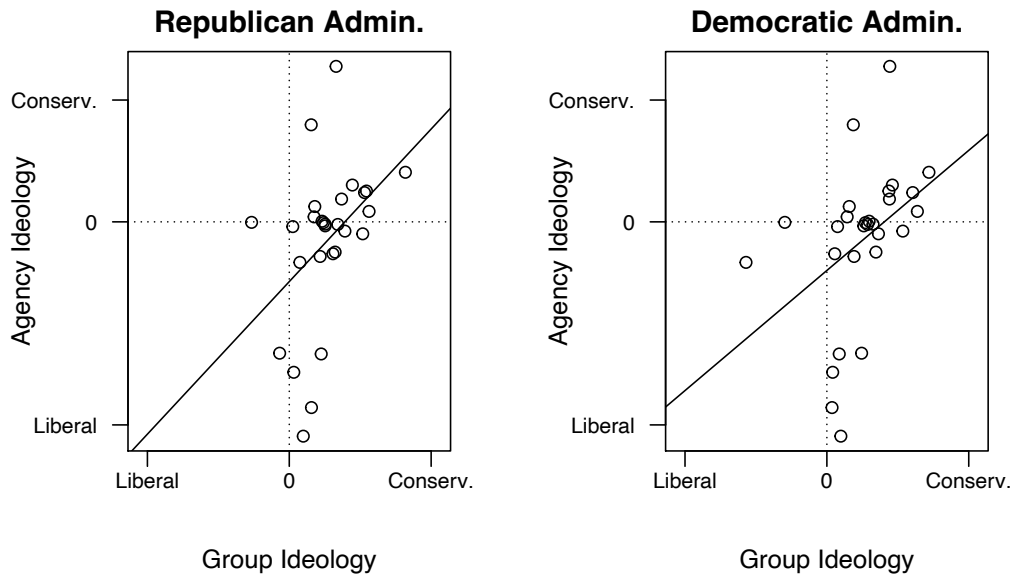
This can be seen in Figure 6. Each point is an agency. The horizontal axis is the average (expenditure-weighted) ideology of the groups that lobby agency a and the vertical axis is the measure of agency a ’s ideology, as described in Acs (2020). Each panel shows the least-squares line running through the data and suggests a positive relationship between agency ideology and the ideology of the groups that lobby the agency.

The agencies included are limited to those agencies where there is a one-to-one match between the agency listed in the CRP data and the name corresponding to the agency ideology measure. The Republican administration, Bush 43, is on the left panel and the Democratic administrations, Clinton and Obama, are on the right panel.

The approach here raises a number of inferential issues. Because the patterns are identified using the variation in lobbying that occurs between agencies, it is possible that a group is motivated to target an agency for other reasons—such as those that have to do with the policy area in which the agency operates. Interest groups, after all, often demand the creation of specific agencies, especially agencies that will share and advance their policy goals (Wilson 1991; Moe 1989). For example, the labor movement fought to secure the creation of the National Labor Relations Board and the Occupational Safety and Health Admin-

istration. And, as my data suggest, unions still lobby these agencies and, critically, both these groups and these agencies are liberal. Similar constellations exist on the conservative side. Firms and trade groups associated with the extractive industries, for example, pushed for the creation of agencies in the Department of the Interior to advance their goals, and they continue to stay engaged with these agencies through lobbying. Indeed, Congress may have “stacked the deck” to incentivize such long-term engagements (McCubbins, Noll, and Weingast 1987). More to the point, all of this suggests that the correlation I find between agency ideology and group ideology may simply reveal the natural alliances between groups and agencies. The main analysis in the paper avoids this problem because identification comes from variation in lobbying that occurs *within* an agency.

Figure 6: Correlation Between Agency and Group Ideology



C Estimating Interest Group Ideology Using IG Scores

To test the robustness of the results, I replaced the CF Scores with the group ideology measures from Crosson, Furnas, and Lorenz (2020)—the “IG Scores.” The IG Scores for group ideology are estimated using public statements that groups make about legislation passed in Congress. In essence, the public statements are treated as votes (for or against a bill) and the interest groups are treated as lawmakers in Congress. The resulting statistical model produces ideal points for actual lawmakers (those who cast votes in Congress) and interest groups (those that made statements of support or opposition to votes) on the same ideological scale. Of the 1,269 groups in my data, I was able to find an IG Score for 516 of them (41 percent). To do so, I matched the client names in the CRP data to the `Ultorg` variable in the IG Score data. Using these 516 groups, I reran the analysis in the paper. To account for uncertainty in the IG Scores, I weighted the results by the number of statements each group made. Intuitively, groups that make more statements should have their IG Score ideal points estimated more precisely. The weights make little difference to the results.

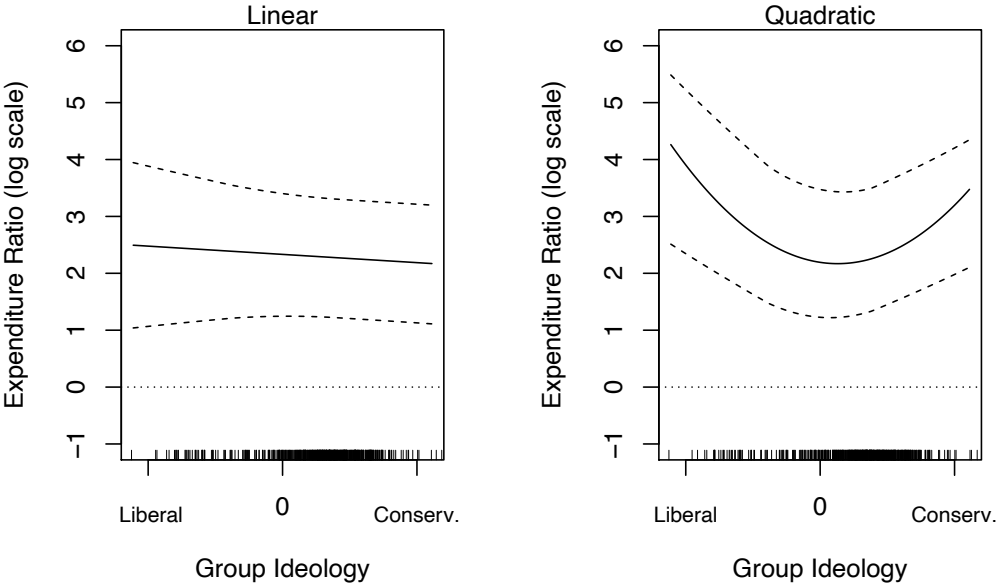
Table 7 shows the results from the linear model (Column 1) and the quadratic model (Column 2). Figure 7 plots the models from each column. A likelihood ratio test finds that the quadratic model fits the data better ($\chi^2 = 8.62, p < .01$).

Table 7: Lobbying Patterns with IG Scores (Weighted Least Squares)

	(1)	(2)
Group Ideology (IG Score)	-0.081 (0.200)	-0.200 (0.190)
Group Ideology Squared (IG Score)		0.420 (0.180)
Group Controls		
Years Active	-0.260 (0.078)	-0.250 (0.078)
N. Lobbying Reports Filed (logged)	0.810 (0.240)	0.770 (0.240)
Total Spending (logged)	-0.060 (0.140)	-0.026 (0.130)
Industry Indicators	✓	✓
Agency Indicators	✓	✓
Observations	5,090	5,090

Note: Standard errors clustered at the group level. Weights are proportional to the number of public statements (bills commented on) for each group.

Figure 7: Patterns of Influence-seeking by Group Ideology (IG Scores)



Notes: Dashed lines denote confidence intervals around the predicted values (95 percent). The “liberal” and “conservative” indicators on the horizontal axis mark four standard deviations from zero.

D Discrete Choice Model

Table 8: Probability of Targeting Only Republican Administrations (Multinomial Logit)

	(1)	(2)
Group Ideology (CF Score) – choice REP	0.200 (−0.014, 0.420)	
Group Ideology (CF Score) – choice REP		0.240 (0.014, 0.470)
Group Ideology Squared – choice REP		0.041 (−0.150, 0.230)
Group Controls		
Years Active	0.002 (−0.024, 0.029)	0.002 (−0.023, 0.028)
N. Lobbying Reports Filed (logged)	−0.870 (−1.000, −0.720)	−0.870 (−0.980, −0.750)
Total Spending (logged)	0.200 (0.110, 0.290)	0.200 (0.120, 0.280)
Industry Indicators	✓	✓
Agency Indicators	✓	✓
Observations	9,306	9,306

Note: Reference category is the choice *Both Administrations*. The confidence intervals shown in parentheses were cluster-adjusted at the group level using a common bootstrapping procedure (Esarey and Menger 2019).

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