Online Appendix: Challenges in Measuring the Impact of Political Actors on Federal Spending

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1 Obligation and Outlay Rates

Table A.1 shows the obligation and outlay rates for FY2009 military construction appropriations accounts. The percentages shown signify estimates of obligations/outlays from new budget authority in a given year, excluding obligations/outlays originating from prior-year budget authority. We have divided all military construction accounts between those that legislators historically earmarked and those they did not. Obligation rates are estimated by the Department of Defense in May 2009, and outlay rates are estimated by the Congressional Budget Office in January 2009. Military construction appropriations have a period of availability of five years, after which unobligated appropriations are returned to the Treasury. Thus no entries are provided for obligations beyond the fifth year. Appropriations may outlay for an additional five years after obligation, so the cumulative totals for outlays may not add to 100%. Obligation rates are not available for defense-wide family housing accounts.

Table A.1: Obligation and Outlay Rates for FY2009 Military Construction Appropriations

| | | % Appropriations Spent by Fiscal Year | | | | | | |
|-----------------------------|-------------|---------------------------------------|------|------|------|------|------|------|
| Pork accounts | | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| Military Construction, Army | Obligations | 84.0 | 8.0 | 4.0 | 3.0 | 1.0 | | |
| minute Constitution, Timiy | Outlays | 1.0 | 41.0 | 38.0 | 13.0 | 5.0 | 1.0 | 0.3 |
| Military Construction, Navy | Obligations | 80.0 | 16.0 | 2.0 | 1.15 | 0.85 | | |
| and Marines | Outlays | 12.0 | 43.0 | 32.0 | 8.5 | 2.0 | 0.6 | 0.3 |
| Military Construction, Air | Obligations | 86.0 | 7.0 | 4.0 | 2.0 | 1.0 | | |
| Force | Outlays | 12.0 | 43.0 | 32.0 | 8.0 | 2.5 | 1.0 | 0.2 |
| Military Construction, | Obligations | 65.0 | 19.0 | 9.0 | 4.0 | 3.0 | | |
| Defense-wide | Outlays | 8.0 | 41.5 | 26.5 | 10.0 | 7.0 | 3.5 | 1.0 |

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| Military Construction, Army National Guard | $Obligations \ Outlays$ | 68.0 5.0 | 13.0 38.0 | 10.0 30.0 | 6.0 15.0 | 3.0 7.0 | 3.0 | 1.5 |
|---|-------------------------|-----------------|----------------|--------------------|----------------|-------------------|------|------|
| Military Construction, Air National Guard | $Obligations\\Outlays$ | 75.0 5.0 | $15.0 \\ 51.0$ | 5.0 34.5 | 3.0 6.5 | $\frac{2.0}{2.0}$ | 0.5 | 0.0 |
| Military Construction, Army Reserve | $Obligations \ Outlays$ | $70.0 \\ 10.0$ | $23.0 \\ 45.0$ | $\frac{4.0}{30.0}$ | $2.0 \\ 11.0$ | $\frac{1.0}{2.0}$ | 0.7 | 0.3 |
| Military Construction, Naval Reserve | $Obligations \ Outlays$ | 80.0 4.0 | $16.0 \\ 49.0$ | $2.5 \\ 35.0$ | 1.0 6.0 | $0.5 \\ 2.0$ | 1.0 | 0.5 |
| Military Construction, Air Force Reserve | $Obligations \ Outlays$ | 88.0 10.0 | $6.0 \\ 46.0$ | $4.0 \\ 31.0$ | $1.31 \\ 5.5$ | $0.69 \\ 3.0$ | 1.0 | 0.5 |
| Chemical Demilitarization | $Obligations \ Outlays$ | 76.19 11.0 | $9.16 \\ 26.0$ | $7.63 \\ 30.0$ | 3.82 20.0 | 3.2 5.0 | 5.0 | 0.00 |
| Non-pork accounts | | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| NATO Security Investment Program | $Obligations \ Outlays$ | $87.0 \\ 25.0$ | $5.0 \\ 25.0$ | $4.0 \\ 25.0$ | $3.0 \\ 15.0$ | $1.0 \\ 10.0$ | 0.0 | 0.0 |
| Family Housing Operations, Army | $Obligations \ Outlays$ | $100.0 \\ 73.0$ | $0.0 \\ 19.0$ | 0.0 5.0 | $0.0 \\ 1.0$ | $0.0 \\ 0.8$ | 0.2 | 0.5 |
| Family Housing Operations, Navy | $Obligations\\Outlays$ | $100.0 \\ 65.0$ | $0.0 \\ 27.0$ | $0.0 \\ 3.5$ | 0.0 1.0 | $0.0 \\ 0.1$ | 0.0 | 0.0 |
| Family Housing Operations, Air Force | $Obligations\\Outlays$ | $100.0 \\ 67.0$ | $0.0 \\ 24.5$ | $0.0 \\ 4.0$ | 0.0 1.0 | $0.0 \\ 0.5$ | 0.1 | 0.0 |
| Family Housing Operations, Defense-wide | Outlays | 67.0 | 23.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Family Housing Construction, Army | $Obligations \\Outlays$ | 71.0 9.0 | 13.0 35.0 | 9.2 38.0 | 4.8 12.0 | 2.0 3.0 | 2.0 | 0.5 |
| Family Housing Construction, Navy | $Obligations \ Outlays$ | 51.85 4.0 | 29.82 30.0 | $11.5 \\ 34.0$ | 5.33 18.0 | $1.5 \\ 10.0$ | 2.5 | 0.5 |
| Family Housing Construction, Air Force | $Obligations \ Outlays$ | 77.0 6.0 | 14.49 25.0 | $\frac{4.6}{32.0}$ | $3.05 \\ 23.0$ | $0.86 \\ 7.5$ | 5.0 | 1.0 |
| Family Housing Construction, Defense-wide | Outlays | 6.5 | 34.0 | 33.0 | 15.0 | 7.0 | 3.0 | 1.0 |
| Family Housing Improvement Fund | $Obligations\\Outlays$ | 100.0 60.0 | $0.0 \\ 19.0$ | 0.0 9.6 | 0.0 4.2 | 0.0 3.2 | 2.5 | 0.0 |
| Homeowners Assistance Fund | $Obligations\\Outlays$ | 26.8 60.0 | 45.0 20.0 | 28.2 10.0 | 0.0 5.0 | 0.0 4.0 | 1.0 | 0.0 |

| Base Realignment and Closure, 1990 | $Obligations \ Outlays$ | 100.0 40.2 | $0.0 \\ 37.8$ | $0.0 \\ 12.7$ | $0.0 \\ 4.1$ | $0.0 \\ 3.2$ | 1.6 | 0.0 |
|------------------------------------|-------------------------|---------------|---------------|---------------|--------------|--------------|-----|-----|
| Base Realignment and Closure, 2005 | Obligations Outlays | 100.0 20.0 | $0.0 \\ 30.0$ | $0.0 \\ 25.0$ | 0.0 10.0 | 0.0 5.0 | 2.0 | 2.0 |

To give a sense of the extent of the measurement error across all federal programs, we compile the estimated outlay rates for House-reported appropriations bills in FY2019. The percentages shown signify how much new budget authority provided in each of the 12 annual appropriations bills is projected to outlay in a given year, excluding outlays originating from prior-year budget authority. Outlay projections are estimated by the Congressional Budget Office and exclude Overseas Contingency Operations. Note that the Financial Services totals include repayments to the Treasury, thus their negative outlays in certain years. On average, less than three-quarters of new budget authority provided in FY2019 House-reported bills is projected to outlay in the first year it is made available, and in no bill do outlays mirror the appropriations that originated them.

Table A.2: Projection of Outlays in FY2019 House-Reported Appropriations Bills

| | % Appropriations Outlaid by Year | | | | |
|--|----------------------------------|------|------|------|-------|
| Appropriations Bill | 2019 | 2020 | 2021 | 2022 | 2023+ |
| Agriculture | 82.5 | 12.3 | 2.8 | 1.5 | 0.9 |
| Commerce, Justice, Science | 64.3 | 21.0 | 6.2 | 1.9 | 6.5 |
| Defense | 59.1 | 23.4 | 9.2 | 4.8 | 3.6 |
| Energy and Water Development | 58.7 | 28.3 | 9.6 | 2.1 | 1.2 |
| Financial Services and General Government | 103.5 | 9.5 | -0.2 | -1.4 | -11.4 |
| Homeland Security | 55.3 | 17.3 | 13.2 | 4.6 | 9.6 |
| Interior | 66.1 | 21.4 | 8.7 | 2.9 | 0.8 |
| Labor, Health, Education | 86.4 | 10.2 | 2.8 | 0.5 | 0.1 |
| Legislative Branch | 86.0 | 11.9 | 1.5 | 0.6 | 0.0 |
| Military Construction and Veterans Affairs | 86.7 | 4.1 | 4.0 | 2.5 | 2.7 |
| State and Foreign Operations | 34.9 | 22.4 | 18.5 | 10.4 | 13.8 |
| Transportation and Housing | 35.2 | 33.9 | 13.8 | 6.6 | 10.4 |
| All Appropriations | 72.6 | 16.2 | 6.2 | 2.6 | 2.4 |

2 Measurement Error and Bias

This section provides a more detailed discussion of the measurement error that results from using spending as a proxy for the funding decisions made by Congress. By definition, the measurement error in the spending data is the difference between spending, whether obligations or outlays, and appropriations. Specifically, let u_{it} denote the measurement error for state/congressional district i in year t such that

$$u_{it} = Appropriations_{it} - Spending_{it}. \tag{1}$$

When estimating the effect of committee membership on military construction appropriations, we use a two-way fixed effects model of the following form:

$$Appropriations_{it} = \beta Committee Member_{it} + \alpha X_{it} + \gamma_i + \delta_t + \epsilon_{it}. \tag{2}$$

By using spending as a proxy for appropriations, the model is

$$Spending_{it} = \beta Committee Member_{it} + \alpha X_{it} + \gamma_i + \delta_t + \epsilon_{it} + u_{it}$$
(3)

As previously discussed, the difference between spending and appropriations is a function of obligation/outlay rates (the rates at which appropriations are spent) and the missingness in the spending data. Let $1^{st}SpendRate_{it}$ denote the first-year obligation/outlay rate of appropriations made for state i in year t, $2^{nd}SpendRate_{i,t-1}$ denote the second-year obligation/outlay rate of appropriations made for state i in year t-1, and so on such that

$$Spending_{it} = (Appropriations_{it} - Missing_{it}) \times 1^{st} SpendRate_{it} + (Appropriations_{i,t-1} - Missing_{i,t-1}) \times 2^{nd} SpendRate_{i,t-1} + \dots$$
(4)

This implies that the measurement error u_{it} is a function of the obligation/outlay rate and the missingness such that

$$u_{it} = Appropriations_{it} - (Appropriations_{it} - Missing_{it}) \times 1^{st} SpendRate_{it} - (Appropriations_{i,t-1} - Missing_{i,t-1}) \times 2^{nd} SpendRate_{i,t-1} - \dots$$
 (5)

If the measurement error were random, then it would lead to larger standard errors and imprecise estimates; however, it would not produce inconsistent or biased estimates (Wooldridge 2012, 318). If the measurement error were correlated with committee membership, then the estimates would be biased. With a single covariate, this bias would be the result of regressing measurement error on committee membership (Wooldridge 2012, 88–91). Formally, we denote

$$Bias(\hat{\beta}) = \mathbb{E}(\hat{\beta}) - \beta = \frac{Cov(CommitteeMember_{it}, u_{it})}{Var(CommitteeMember_{it})}.$$
 (6)

If distributive theory is correct, then we should expect committee members to receive more pork than non-committee members. In this case, spending will underestimate appropriations when legislators come on committee and overestimate them when legislators come off committee. Put differently, when $CommitteeMember_{it} = 1$, $u_{it} < 0$ and when $CommitteeMember_{it} = 0$ then $u_{it} > 0$. This negative correlation will result in a downward-biased estimate of the committee effect.

When the effect of committee membership is estimated with a two-way fixed effects model

(equation 3), the bias will be

$$\frac{Cov(CommitteeMember_{it}, \tilde{u_{it}})}{Var(CommitteeMember_{it})}$$
(7)

where CommitteeMember and \tilde{u} are the residuals from regressing committee membership and the measurement error, respectively, on the other covariates included in the regression: state/district fixed effects, year fixed effects, seniority, and majority party.¹ As in the simplified setting, the bias in the estimator depends on the relationship between the measurement error and committee membership.

3 Data Collection

This section provides a detailed explanation of our military construction appropriations data. These data are compiled from Title I of the Military Construction, Veterans Affairs, and Related Agencies appropriations bill, which provides budget authority for construction projects at military installations around the world.² The conference report, joint explanatory statement, or statement of managers that accompanies each enacted appropriations bill includes state tables that delineate funding for each individual project. The conference report also designates which projects were included in the President's budget request for that year and which were not. We aggregate these project-level data by military installation by year for both presidentially requested and congressionally directed appropriations.

We consider appropriations to be presidentially requested if it was included in presidential budget requests to Congress. We allow for Congress to vary the funding source of a project from what was originally submitted in the request, but we require the project itself to remain unchanged. For example, if the President requests a Navy hospital to be constructed in State X and to be funded out of the Navy's budget account, but Congress funds the hospital in State X out of the Defense-wide account, then we count the project as presidentially requested. We consider funding to be congressionally directed if it was not included in the President's budget request. For projects that were funded in excess of the the President's request, we treat the additional amount as congressionally directed funding.³

For the House analysis, we aggregate military installations by congressional district by year, and treat each congressional district-year as an observation. We then match the congressional district total with legislative organization for the year in which the appropriations bill was enacted into law. To match military installations to their respective congressional districts, we use the Simple Features for R package to overlay military installations with congressional districts. Shapefiles for congressional districts are from Lewis, Pitcher, and Martis (2013), and shapefiles for military installations are from the U.S. Census Bureau.

^{1.} As in the simplified setting, the bias will be the result of regressing the measurement error on committee membership. However, for multiple regression, the bias will also be a function of the other covariates. For notational convenience, we characterize the bias using residual regression (Frisch and Waugh 1933).

^{2.} Appropriations subcommittees were reorganized in FY2006. Before FY2006, Military Construction was a stand-alone appropriations bill.

^{3.} This categorization of the data is based on the assumption that the presidential budget requests are sincere.

For the Senate analysis, we aggregate military installations by state by year and treat each state-year as an observation. We then match the state totals with legislative organization for the year in which the appropriations bill was enacted into law.

We focus our data collection on appropriations accounts that Congress regularly earmarked from FY1984 to FY2010. Thus our analysis comprehensively covers domestic construction projects for the Army, Navy, Air Force, and Department of Defense, as well as Guard and Reserve components. Our analysis does not include projects in the U.S. territories or abroad, since these areas do not having voting representatives in Congress. Nor does our analysis include military construction projects within the family housing construction, family housing operations and maintenance, base realignment and closure, and the North Atlantic Treaty Organization security investment program accounts. Since legislators did not direct funding within these accounts during this period, we expect to find no variation of pork within them. Finally, our analysis does not include the full-year continuing resolution in FY2007.⁴ We exclude this year for two reasons. First, Congress does not systematically distribute pork under full-year continuing resolutions. Second, as a general rule, "new starts" for construction projects are prohibited by bill language carried in the front matter of the resolutions themselves.

4 Parallel Trends Assumption

In this section, we examine whether the parallel trends assumption holds. For both the House and Senate analyses, provided that different legislators follow parallel trends over time, β represents the average effect of committee position on pork. The parallel trends assumption holds if legislators who switch on or off committee would have, on average, followed the same trend as those who do not change committee position. As Berry and Fowler point out, this assumption would be violated if, for example, "legislators systematically join Appropriations as their constituents demand more pork" (2016, 696). If this were the case, then this model would overestimate the effect of committee position. However, changes in committee membership are generally caused by factors outside of a legislator's control (e.g., change from minority to majority party, retirements, or transfers of other legislators). Thus, the parallel trends assumption seems reasonable. Furthermore, the model includes covariates for majority party and seniority, which generally coincide with changes in committee membership.

To further examine the parallel trends assumption, Figures A.1 and A.2 show the average military construction spending and appropriations for states before, during, and after committee membership compared to states that were never represented by a member of the committee. To make the figure easier to read, the data have been re-centered so all states represented by members of the subcommittee join in the same year. Note that we do not do this re-centering for the analysis included in the paper. Looking at Figures A.1 and A.2, we

^{4.} State tables are not included in the FY1986 Military Construction appropriations conference report, as the conference committee for that year reported amendments in disagreement that impacted the state tables. To recreate the state tables for that year, we use the House-passed state tables as a base and make modifications using the numbered amendments that were initially agreed to in conference. Once the chambers reached agreement on the amendments initially reported in disagreement, we make additional changes.

see that the parallel trends assumption appears to hold.

Figure A.1: Average State Military Construction Spending by Years Before, During, and After Senate Appropriations Subcommittee Membership

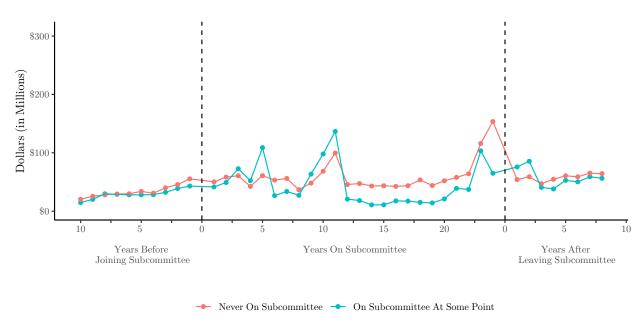
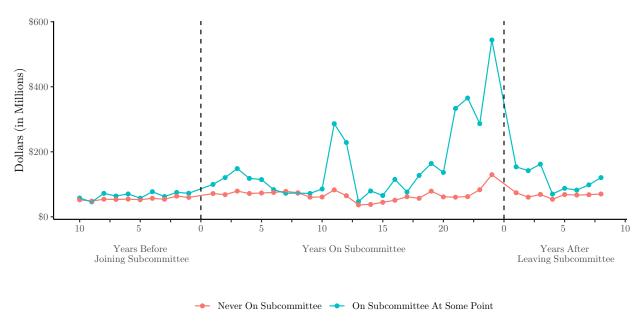


Figure A.2: Average State Military Construction Appropriations by Years Before, During, and After Senate Appropriations Subcommittee Membership



5 Alternate Model Specifications and Placebo Tests

In this section, we conduct a committee position analysis, re-estimate the model using share of funding instead of dollars, re-estimate the Senate model at the Senator level instead of the state level, and run placebo tests.

5.1 Committee Position Analysis

Berry and Fowler (2016) provide some evidence that the appropriations subcommittee chairs are able to procure additional pork for their districts or states. We also examine the effect of committee position (chair, ranking member, majority member, minority member) on military construction appropriations. Evidence that appropriations subcommittee members direct a disproportionate share of appropriations to their districts or states is particularly strong for the House, and to a lesser extent the Senate majority. We do not find that individual positions are significantly different from one another. However, some of the analyses are likely underpowered for certain committee positions, and we encourage scholars to view our null findings with skepticism.

Table A.3 shows the effect of appropriations subcommittee status on military construction spending, appropriations, and earmarks. The first column of Table A.3 replicates the regression for military construction spending included in Table 6 of Berry and Fowler (2016). The second and third columns show the same analysis using appropriations and earmarks, respectively. Unlike Berry and Fowler's findings, our analysis demonstrates that appropriations subcommittee membership affects a legislator's ability to procure pork for her district.

Table A.3: The Effect of House Committee Position on Spending, Appropriations, and Earmarks

| | Dependent Variable: Log Dollars | | | | |
|---------------------------------|---------------------------------|----------------|----------|--|--|
| | Spending | Appropriations | Earmarks | | |
| Min. Appropriations Member | -0.026 | 0.519 | 0.211 | | |
| | (0.026) | (0.808) | (0.571) | | |
| Maj. Appropriations Member | 0.012 | 0.782 | 0.013 | | |
| · · · · | (0.033) | (0.800) | (0.639) | | |
| Min. MilCon Member | -0.018 | 3.718*** | 3.920** | | |
| | (0.054) | (0.968) | (1.220) | | |
| Maj. MilCon Member | 0.041 | 2.480** | 2.614** | | |
| · | (0.045) | (0.768) | (0.988) | | |
| MilCon Ranking Member | -0.039 | 0.983 | 5.034** | | |
| <u> </u> | (0.059) | (1.769) | (1.850) | | |
| MilCon Chair | 0.112 | 1.741 | 5.007* | | |
| | (0.110) | (1.062) | (2.050) | | |
| Legislator & Year Fixed Effects | √ | √ | √ | | |
| Observations | 10,498 | 10,108 | 10,108 | | |
| Adjusted R^2 | 0.998 | 0.601 | 0.475 | | |

Note:

*p<0.05; **p<0.01; ***p<0.001 Standard errors clustered by state

Table A.4 shows a similar analysis for the Senate at the state level. We disaggregate a state's committee membership into committee position and show the effect of a state's committee position on military construction appropriations. It may be the case that these disaggregated analyses are underpowered. One possible explanation is a lack of variation in the data. In both the House and Senate, the chair and ranking member represent a very small proportion of districts and states. Additionally, the Senate Appropriations Committee and the Senate Armed Services Committee are two of the largest committees in the Senate. Since they are both 'A' committees, both parties have conference rules that limit membership on both committees. Roughly half of all states are represented on the Senate Appropriations Committee in any given Congress, and the vast majority of remaining states are represented on the Senate Armed Services Committee. Put together, a handful of states are represented on both committees, the vast majority of states are represented on one of the committees, and a handful of states—and typically the same ones over time—are not represented on either. If we expect legislators to receive pork from being on either or both of these committees, then this pork would be reflected for most states.

Table A.4: The Effect of Senate Committee Position on Spending, Appropriations, and Earmarks at the State Level

| | Dependent Variable: Log Dollars | | | | |
|----------------------------|---------------------------------|-------------------|--------------|--|--|
| | Spending | Appropriations | Earmarks | | |
| Min. Appropriations Member | 0.250 | 0.087 | -0.616 | | |
| | (0.138) | (0.210) | (0.582) | | |
| Maj. Appropriations Member | 0.206 | 0.531* | 0.112 | | |
| | (0.141) | (0.240) | (0.617) | | |
| Min. MilCon Member | 0.246* | 0.496 | 0.724 | | |
| | (0.100) | (0.286) | (0.780) | | |
| Maj. MilCon Member | 0.146 | 0.526 | 1.397 | | |
| | (0.143) | (0.308) | (0.754) | | |
| MilCon Ranking Member | 0.363 | 0.653 | 1.182 | | |
| | (0.233) | (0.355) | (1.589) | | |
| MilCon Chair | 0.104 | 1.102** | 2.183 | | |
| | (0.213) | (0.378) | (1.249) | | |
| State Fixed Effects | √ | √ | √ | | |
| Year Fixed Effects | \checkmark | \checkmark | \checkmark | | |
| Observations | 1,295 | 1,300 | 1,300 | | |
| Adjusted R ² | 0.835 | 0.315 | 0.429 | | |
| Note: | *1 | o<0.05; **p<0.01; | ***p<0.001 | | |

p<0.05; **p<0.01; ***p<0.001 Standard errors clustered by state

5.2 **Share of Funding**

As a robustness check, we perform the same analysis using the share of total military construction appropriations instead of log dollars. The results for the House and Senate are shown in Tables A.5 and A.6, respectively. For the Senate, we find a significant effect of appropriations subcommittee membership on earmarks and not spending. For the House we find an effect of subcommittee membership on earmarks, significant at the 0.1 level.

Table A.5: Effect of House Military Construction Appropriations Subcommittee Membership on Share of Spending, Appropriations, and Earmarks

| | Dependent Variable: Share of Total | | | | | |
|---------------------------------|---|----------------|----------|--|--|--|
| | Spending | Appropriations | Earmarks | | | |
| Appropriations Subcommittee | 0.00003 | -0.00001 | 0.002 | | | |
| | (0.0001) | (0.001) | (0.001) | | | |
| Legislator & Year Fixed Effects | √ | √ | √ | | | |
| Observations | 10,498 | 10,108 | 10,108 | | | |
| Adjusted R ² | 0.983 | 0.242 | 0.135 | | | |
| Note: | *p<0.05; **p<0.01; ***p<0.00; Standard errors clustered by state | | | | | |

Table A.6: Effect of Senate Military Construction Appropriations Subcommittee Membership on Share of Spending, Appropriations, and Earmarks

| | Dependent Variable: Share of Total | | | | | |
|-----------------------------|------------------------------------|-------------------|------------|--|--|--|
| | Spending | Appropriations | Earmarks | | | |
| Appropriations Subcommittee | 0.003 | 0.001 | 0.005*** | | | |
| | (0.002) | (0.001) | (0.001) | | | |
| State & Year Fixed Effects | √ | √ | √ | | | |
| Observations | $1,\!295$ | 1,300 | 1,300 | | | |
| Adjusted R ² | 0.582 | 0.772 | 0.324 | | | |
| Note: | *1 | p<0.05; **p<0.01; | ***p<0.001 | | | |
| | Standard errors clustered by st | | | | | |

5.3 Senate Estimated at the Senator Level

As an additional robustness check we re-estimate the Senate analysis at the Senator level instead of the state level. In addition, we re-estimate the analysis at the state level using senator-pair fixed effects, not state fixed effects. For the latter, this will compare within a state in years when it is represented by the same Senators. Both analyses show a positive, but not statistically significant, effect of appropriations subcommittee membership on military construction funding. One reason that the state-level analysis with state fixed effects produces significant results, and these analyses do not, is that the state-level fixed effects use up fewer degrees of freedom than the the Senator-level fixed effects.

Table A.7: The Effect of Senate Committee Membership on Spending, Appropriations, and Earmarks

| ropriations 4 3) | Earm -1.492** (0.573) | arks |
|------------------|-----------------------|---------------|
| | | |
| 3) | (0.573) | |
| | (3.313) | |
| 0.455 | | 0.836 |
| (0.268) | | (0.596) |
| √ | √ | ✓ |
| 3 2,613 | 2,613 | 2,613 |
| 0.330 | 0.459 | 0.459 |
| | *p<0.05; * | 3 2,613 2,613 |

Table A.8: The Effect of Senate Committee Membership on Spending, Appropriations, and Earmarks

| | Dependent Variable: Log Dollars | | | | | | |
|-----------------------------------|---------------------------------|-----------------|------------------|-----------------|------------------|------------------|--|
| | Sper | nding | Approp | riations | Earn | narks | |
| Authorizing Committee | -0.289 (0.214) | | -0.069 (0.296) | | -0.567 (0.711) | | |
| Appropriations Subcommittee | | 0.030 (0.077) | | 0.657 (0.430) | | 1.219 (0.773) | |
| Senator Pair & Year Fixed Effects | √ | √ | √ | ✓ | ✓ | √ | |
| Observations | 1,295 | 1,295 | 1,300 | 1,300 | 1,300 | 1,300 | |
| Adjusted \mathbb{R}^2 | 0.856 | 0.856 | 0.354 | 0.356 | 0.472 | 0.474 | |

5.4 Placebo Tests

We conduct two placebo tests. The first conducts the same analysis for the House and Senate for a subcommittee unrelated to military construction: Agriculture. Specifically, we regress military construction spending, appropriations, and earmarks on membership on the Agriculture appropriations subcommittee. Tables A.9 and A.10 show the results for the House and Senate, respectively. As expected, we find no effect of Agriculture appropriations subcommittee membership on military construction spending, appropriations, or earmarks.

Standard errors clustered by state

Table A.9: Effect of House Agriculture Appropriations Subcommittee Membership on Spending, Appropriations, and Earmarks

| | Dependent Variable: Log Dollars | | | | |
|---------------------------------|---------------------------------|--|----------|--|--|
| | Spending | Appropriations | Earmarks | | |
| Appropriations Subcommittee | -0.013 | 0.666 | 0.438 | | |
| | (0.019) | (1.565) | (0.955) | | |
| Legislator & Year Fixed Effects | √ | √ | √ | | |
| Observations | 10,498 | 10,108 | 10,108 | | |
| Adjusted R ² | 0.998 | 0.600 | 0.472 | | |
| Note: | - | 0<0.05; **p<0.01; dard errors cluster | - | | |

Table A.10: Effect of Senate Agriculture Appropriations Subcommittee Membership on Spending, Appropriations, and Earmarks

| | Dependent Variable: Log Dollars | | | | | |
|-----------------------------|---------------------------------|-------------------|------------|--|--|--|
| | Spending | Appropriations | Earmarks | | | |
| Appropriations Subcommittee | 0.240 | 0.402 | 0.758 | | | |
| | (0.123) | (0.211) | (0.728) | | | |
| State & Year Fixed Effects | √ | √ | √ | | | |
| Observations | 1,295 | 1,300 | 1,300 | | | |
| Adjusted R ² | 0.836 | 0.314 | 0.427 | | | |
| Note: | *1 | p<0.05; **p<0.01; | ***p<0.001 | | | |
| | Standard errors clustered by | | | | | |

The second placebo test conducts a similar analysis using prior committee membership. Specifically, we regress military construction spending, appropriations, and earmarks on committee membership in the previous congress. The results of this analysis are shown in Table A.11 for the House and in Table A.12 for the Senate.

Table A.11: Effect of Lagged House Military Construction Appropriations Subcommittee Membership on Spending, Appropriations, and Earmarks

| Dependent Variable: Log Dollars | | |
|---------------------------------|-------------------------|--|
| Spending | Appropriations | Earmarks |
| 0.029 | -0.750 | -0.119 |
| (0.033) | (0.726) | (1.041) |
| ✓ | √ | √ |
| 6,431 | 6,076 | 6,076 |
| 0.998 | 0.605 | 0.471 |
| - | , . | • |
| | Spending 0.029 (0.033) | Spending Appropriations 0.029 −0.750 (0.033) (0.726) ✓ ✓ 6,431 6,076 |

Table A.12: Effect of Lagged Senate Military Construction Appropriations Subcommittee Membership on Spending, Appropriations, and Earmarks

| | Dependent Variable: Log Dollars | | |
|--|---------------------------------|-------------------|------------|
| | Spending | Appropriations | Earmarks |
| Appropriations Subcommittee (Prior Congress) | 0.122 | 0.232 | 0.251 |
| | (0.100) | (0.281) | (0.541) |
| State & Year Fixed Effects | √ | √ | √ |
| Observations | 1,196 | 1,200 | 1,200 |
| Adjusted R ² | 0.834 | 0.303 | 0.421 |
| Note: | *1 | o<0.05; **p<0.01; | ***p<0.001 |

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