# Testing an Informational Theory of Legislation: Evidence from the U.S. House of Representatives Supplementary Appendix NOT INTENDED FOR PUBLICATION

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# 1 Robustness checks

Below we present the results from two alternative specifications to the one presented in the main text. In the first one we estimate the biases of the actors based on the Speaker's DW-NOMINATE score, instead of the majority leader's. In the second one we revert to estimating biases relative to the majority leader, but using ADA scores, instead of DW-NOMINATE scores. Overall we see that our findings regarding the relationship between the sponsor bias and the procedural rule selection are less robust than the ones regarding the relationship between committee bias and sponsor bias.

### 1.1 Empirical analysis with the Speaker as reference point

#### Choice of rule as a function of lobbyist bias

Just as with the baseline measures, we present point estimates from a nonparametric local logistic regression model with the absolute value of the sponsor's bias explaining the probability of closed rule (see Figure 1). The bandwidth for the regression was fixed to be same that produced our baseline graphs, 0.18.

Here we see that with biases around the Speaker, the pattern is noisier than before, though there is a roughly decreasing trend over most of the range of sponsor biases. In particular, in the part of the range from which most of our observations come from (absolute biases between 0 and 0.35), the predicted

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probability of closed rule decreases from around 85% to 75%. Then for an intermediate range it increases, and finally it drops to close to zero for large absolute biases. The 95% simultaneous confidence bounds (not shown) still cover the entire range of possible probabilities for the whole domain of Sponsor biases.

Table 1 reports marginal effects of increasing the Sponsor's absolute bias on the probability of closed rule from linear and probit regressions. In contrast to the baseline case, the effects are not statistically significant, although the point estimates are similar in some specifications.

Overall we conclude that we find that the evidence from this specification does not provide a clear support for H1.

Choice of committee bias as a function of Sponsor bias

Figure 2 and Table 2 show regression results based on restricting the sample to multiple referrals.

The local linear regression analogous to the one in the main text is shown in Figure 2, with the same fixed bandwidth as before. There is still a clear positive relationship between committee and sponsor biases, for the whole range of sponsor biases. Moreover, the regression line goes very close to the origin. The slope is less than one.

The linear regressions reported in Table 2 again confirm that there is a strongly significant positive relationship between committee bias and sponsor bias. The coefficient of the constant is insignificant. These results still support H2 and H3, but not H3<sup>\*</sup>.

Table 3 presents results from regressing committee bias given a congress on average sponsor bias faced by the committee during that congress. Here we find evidence for all H2, H3 and H3<sup>\*</sup>.

## 1.2 Empirical analysis with the ADA measure

#### Choice of rule as a function of lobbyist bias

It is clear from Figure 3 and the regressions reported in Table 1, that the effect of sponsor bias on closed rule is very weak (even the point estimate) and noisy if we try to measure bias with the ADA measure. In Table 1, the point estimates of marginal effects are very close to 0 in any specification, and the standard errors are very large (resulting in t-statistics below 1, or even 0.1). Using this specification, we can clearly reject H1.

Choice of committee bias as a function of Sponsor bias

In contrast with the much weaker results on the use of procedural rules, the positive relationship (and zero intercept) between committee and sponsor bias is still conspicuous from the analogous local and linear regressions in Figure 4 and Tables 3 and 4. The evidence even in this form still supports hypotheses H2 and H3. The local linear regression suggests a positive relationship in the range of biases that are smaller in absolute value than 0.35.

	(1)	(2)	(3)	(4)
main Absolute value of sponsor bias	-0.146 (0.177)	-0.148 (0.107)	-0.490 (0.588)	-1.075 (0.680)
Observations $R^2$	$541 \\ 0.002$	$541 \\ 0.395$	541	377

Table 1: Regression analysis, bias relative to speaker (DW-NOMINATE score),

Marginal effects from linear and probit regressions of closed rule use on sponsor bias. Huber-White standard errors, clustered at the congress-committee level are reported in parentheses. Column (2) controls for committees and congress fixed effects. Columns (3) and (4) show probit models, with or without controls.

	(1)	(2)	(3)
Sponsor bias	0.599***	0.372***	0.565***
	(0.0930)	(0.0940)	(0.119)
Constant	0.0245	-0.111	0.0185
	(0.0138)	(0.0893)	(0.0142)
Observations	166	166	151
$R^2$	0.393	0.652	0.276

Table 2: Regression analysis, bias relative to speaker (DW-NOMINATE score), bills with multiple referrals only

Linear regressions of the committee bias measured as the absolute distance of chairman from the speaker, with Huber-White standard errors, clustered at the congress-committee level in parentheses. Column (2) controls for committees and congress fixed effects. Column (3) repeats column (1) for rolls with small sponsor bias (< 0.25).

	(1)	(2)
(mean) raw_bl	$0.321^{*}$ (0.122)	$0.553^{**}$ (0.155)
Constant	$\begin{array}{c} 0.00423 \\ (0.0178) \end{array}$	$\begin{array}{c} 0.00631 \\ (0.0188) \end{array}$
$\begin{array}{c} \text{Observations} \\ R^2 \end{array}$	$73 \\ 0.116$	$\begin{array}{c} 36 \\ 0.332 \end{array}$

Table 3: Committee level analysis, bias relative to speaker (DW-NOMINATE score)

OLS regressions of average committee bias on average sponsor bias, with and without controls. Huber-White standard errors, clustered at the congress-committee level are reported in parentheses.

Figure 1: Local logistic regression with fixed bandwidth, bias relative to speaker (DW-NOMINATE score)



Closed rule prevalence by sponsor bias

Point estimates for probability of closed rule using a flexible local logistic regression model with the absolute value of the sponsor's bias, using a bandwidth of 0.18.



Figure 2: Local linear regression, bias relative to speaker (DW-NOMINATE score), bills with multiple referrals only

	(1)	(2)	(3)	(4)
main Absolute value of sponsor bias	0.0308 (0.220)	$0.0615 \\ (0.123)$	$0.107 \\ (0.777)$	$0.0696 \\ (0.813)$
Observations $R^2$	$\begin{array}{c} 364 \\ 0.000 \end{array}$	$\begin{array}{c} 364 \\ 0.417 \end{array}$	364	211

Table 4: Regression analysis, bias relative to majority leader (ADA score)

Marginal effects from linear and probit regressions of closed rule use on sponsor bias (ADA score). Huber-White standard errors, clustered at the congresscommittee level are reported in parentheses. Column (2) controls for committees and congress fixed effects. Columns (3) and (4) show probit models, with or without controls.

	(1)	(2)	(3)
Sponsor bias	$\begin{array}{c} 0.491^{***} \\ (0.0951) \end{array}$	$\begin{array}{c} 0.267^{**} \\ (0.0756) \end{array}$	$0.560^{***}$ (0.109)
Constant	-0.00586 (0.0108)	$\begin{array}{c} 0.0432 \\ (0.0299) \end{array}$	$\begin{array}{c} 0.000165 \\ (0.00908) \end{array}$
$\frac{\text{Observations}}{R^2}$	$\begin{array}{c} 164 \\ 0.313 \end{array}$	$\begin{array}{c} 164 \\ 0.613 \end{array}$	$\begin{array}{c} 152 \\ 0.226 \end{array}$

Table 5: Regression analysis, bias relative to majority leader (ADA score), bills with multiple referrals only

Linear regressions of the committee bias measured as the absolute distance of chairman from majority leader (ADA score), bills with multiple referrals only. Huber-White standard errors, clustered at the congress-committee level are reported in parentheses. Column (2) controls for committees and congress fixed effects. Column (3) repeats column (1) for rolls with small sponsor bias (< 0.25).

	(1)	(2)
(mean) raw_bl	$0.291^{**}$ (0.106)	$\begin{array}{c} 0.510^{***} \\ (0.119) \end{array}$
Constant	$\begin{array}{c} 0.00505 \\ (0.0156) \end{array}$	$\begin{array}{c} 0.000307 \\ (0.0147) \end{array}$
$\begin{array}{c} \text{Observations} \\ R^2 \end{array}$	$72 \\ 0.080$	$\begin{array}{c} 36 \\ 0.372 \end{array}$

Table 6: Committee level analysis, bias relative to majority leader (ADA score)

OLS regressions of average committee bias on average sponsor bias relative to majority leader (ADA score), with and without controls. Huber-White standard errors, clustered at the congress-committee level are reported in parentheses.

Figure 3: Local logistic regression with fixed bandwidth, bias relative to majority leader (ADA score)

Closed rule prevalence by sponsor bias



Point estimates for probability of closed rule using a flexible local logistic regression model with the absolute value of the sponsor's bias, using a bandwidth of 0.18.



Figure 4: Local linear regression, bias relative to majority leader (ADA score), bills with multiple referrals only