Sense and Sensibility: The Role of Rules

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I. Introduction[1]

In Dion and Huber (1996), we argued that previous analyses of restrictive rules in the United States House had neglected the importance of the policy preferences of members on the Rules Committee. Using a formal model of legislative choice, we derived a simple condition which suggested that restrictive rules should be more likely when the median of the substantive committee and the median of the Rules Committee were on the same side of the floor median. Keith Krehbiel (1997) analyzes our theory using his rich rule-specific dataset and finds the support less than compelling.

Our response provides additional analysis of Krehbiel's empirical conclusions.[2] First we argue that Krehbiel's own evidence provides compelling support for the effect of Restrictive Rule Profile[3] (the variable used to test our theory) on procedural choice. We then use alternative specifications of the statistical model that Krehbiel has previously advocated (Krehbiel 1991) and find that the effects of Restrictive Rule Profile are even larger and more significant than those presented in Krehbiel (1997). Finally, we argue that the Restrictive Rule Profile cannot, as Krehbiel asserts, be interpreted as an informational effect in disguise.

II. Some Preliminaries

Although we find Krehbiel's description of our paper quite accurate, we would like to clarify two points. We start with the quotation Krehbiel takes as his focus:

> *If we begin with the premise that the Rules Committee plays an autonomous part in the legislative process, our understanding of the role of restrictive*

[1]We are grateful to Keith Krehbiel for sharing his data, and for identifying the four missing observations in our original committee data set.

[2]Although our response focuses on empirical concerns, we would like to point out that the theoretical issues raised by Krehbiel concerning gatekeeping and amendment of the rule are addressed in our original paper (1996, 41–3). In particular, we state that eliminating the gatekeeping assumptions does not affect our substantive results (and cite Dion and Huber 1995 for the formal proof).

[3]The Restrictive Rule Profile dummy variable takes the value 1 when the committee and Rules Committee medians are on the same side of the floor median and 0 otherwise. A positive coefficient supports our model.

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> *rules changes.* Restrictive rules are not simply the glue holding vote trades together, as distributive theories conclude, nor are these rules precommitments that encourage legislative specialization, as informational theories argue. Instead, restrictive rules facilitate noncentrist policy outcomes that are preferred by both substantive committees and the Rules Committee to the policy outcome that would result if the Floor had been allowed an unconstrained choice of policies (Dion and Huber 1996, 43; ital. added).

Although Krehbiel argues that our paper develops a party-based theory of legislative organization, the quote indicates that we explicitly draw attention to the importance of the Rules Committee, not to party organization. There has been a great deal of research on the role of party in legislative politics, and both of us feel quite comfortable being placed in the camp of those who believe that political parties are important (e.g., Dion 1997 and Huber 1996). But in Dion and Huber (1996), there is no requirement that the Rules Committee act in a way that is contrary to the wishes of the floor median. It can act that way under certain circumstances and in certain periods, but our paper has little to say explicitly about the more general issue of party leadership.

The passage also restores a sentence, set in italics, that Krehbiel omits. The context provided by that sentence makes it clear that we are only making a theoretical claim: that is, if our model is correct, then we need to think in different ways about how restrictive rules operate. We never claimed nor intended to make any definitive empirical determination about distributive politics: indeed, we explicitly stated (1996, 36–7) that we lacked adequate data to make such claims. And as to informational theory, one of our most interesting empirical findings was that when the preferences of members on the Rules Committee are statistically indistinguishable from the preferences of the floor median, informational theories accurately describe legislative behavior. But when these preferences shift away from the floor median—as occurred between the 95th and 96th Congresses—our model accurately describes legislative behavior (1996, 39–41). Thus, we hardly dismissed the informational theory. Instead, we simply argued that analyses of restrictive rules should take into account the preferences of members on the Rules Committee.

III. A Second Look at the Data

Taking into account the preferences of the Rules Committee is precisely what Krehbiel does. His empirical conclusions regarding the Restrictive Rule Profile variable are explicit and unambiguous. Krehbiel states in his abstract that "[i]n the rule-level data set and in the presence of both informational and distributive variables, the rule-profile is barely

or not at all distinguishable from zero." He also claims that "when a broader class of theory-based predictors of restrictive rules is considered, the partyleadership theory has little or no marginal predictive significance" (1997).

Do Krehbiel's results justify these conclusions? His primary evidence is the first equation presented in Table 1 (our replication of Krehbiel's Table 3, Equation 4). Using these estimates Krehbiel rejects our Rules Committee model because (a) the Restrictive Rule Profile variable is not statistically significant at the .05 level (using a two-tailed test), (b) the model which includes the Restrictive Rule Profile variable correctly predicts two fewer cases (out of 208) than the model without this variable, and (c) the coefficient is of marginal magnitude.

Dismissing a variable because it is not significant at the .05 level, while not uncommon in political science, is strongly discouraged (e.g., Achen 1982; Freedman et al. 1991; Phillips 1973, 332–4). Krehbiel himself has argued that "the .05 level of significance is not sacred" and that *t*-statistics are to be preferred since they leave one "free to choose his or her preferred level of significance and make inferences accordingly. . ." (Krehbiel 1991, 127, fn. 23). Caution regarding a strict .05 standard is especially important here: the *p*-value for Restrictive Rule Profile is .069, barely failing the .05 level, and the magnitude of the coefficient is far from marginal. Assuming that the baseline probability of observing a restrictive rule is .27 (the mean in the sample), a coefficient of .969 implies that restrictive rule legislative profiles increase the probability of observing a restrictive rule by an additional .26. Put differently, being on the same side of the floor median as the Rules Committee roughly doubles the probability of a committee receiving a closed rule.

For those who believe that a .05 standard is crucial, we reestimated the model correcting for the likely presence of heteroskedasticity (as in our original paper).[4] The relevant *t*-statistics are presented in italics in Table 1. The results indicate that regardless of one's subjective beliefs about appropriate levels of significance, the Restrictive Rule Profile variable is highly significant ($p = .029$). Thus, using the model specification that Krehbiel (1997) defends, one should not dismiss as irrelevant the preferences of members on the Rules Committee.

It is not clear, however, that this is the best model, especially in light of the specifications Krehbiel has presented in his book. One difference is the addition of the Congress variable. While this addition seems reasonable, we know of no theoretical or empirical justification for its inclusion. Equa-

[4]As we argued in the original paper, we should expect heteroskedasticity because of differences across committees.

Table 1. Probit Models of Restrictive Rules

Independent Variables	(1)	(2)	(3)	(4)	(5)	(6)
Restrictive rule profile	.969	1.011	—	2.060	—	1.302
	(1.821)	(1.975)		(3.152)		(2.275)
	(2.184)	*(2.398)*		*(3.533)*		*(2.845)*
Distributive content	−2.138	−2.190	−6.963	−7.253	−6.949	−7.255
	(−2.066)	(−2.178)	(−2.924)	(−3.142)	(−3.068)	(−3.201)
	(−1.366)	*(−1.536)*	*(−2.932)*	*(−2.780)*	*(−3.217)*	*(−3.114)*
Urgency	.921	.862	.942	.769	1.043	.937
	(2.360)	(2.244)	(2.015)	(1.577)	(2.733)	(2.426)
	(2.373)	*(2.237)*	*(2.066)*	*(1.726)*	*(2.703)*	*(2.400)*
Laws cited	.084	.081	.041	.047	—	—
	(4.010)	(3.960)	(1.068)	(1.318)		
	(3.718)	*(3.650)*	*(1.225)*	*(1.503)*		
Committee seniority	.015	.020	.086	−2.53	.214	.111
	(.186)	(.242)	(.634)	(−1.460)	(2.838)	(1.289)
	(.218)	*(.279)*	*(.731)*	*(−1.605)*	*(3.277)*	*(1.523)*
Preference outlier	−.057	−.050	−.121	−.266	—	—
	(−3.226)	(−2.927)	(−1.312)	(−2.552)		
	(−2.963)	*(−2.815)*	*(−1.271)*	*(−2.597)*		
Heterogeneity	.022	−.014	.143	−.063	.140	.003
	(.283)	(−.189)	(2.773)	(−.765)	(2.790)	(.038)
	(.285)	*(−.189)*	*(3.004)*	*(−.781)*	*(2.857)*	*(.044)*
Republican cosponsors	.030	.028	.034	.032	.035	.029
	(1.856)	(1.759)	(1.675)	(1.468)	(2.363)	(1.976)
	(2.354)	*(2.302)*	*(2.277)*	*(1.852)*	*(3.077)*	*(2.817)*
Democratic cosponsors	−.002	−.002	.0005	−.001	—	—
	(−.439)	(−.399)	(.099)	(−.202)		
	(−.470)	*(−.399)*	*(.107)*	*(−.216)*		
Scope	—	—	−.002	−.003	—	—
			(−.745)	(−1.061)		
			(−.749)	*(−1.096)*		
Preference outlier × laws cited	—	—	.004	.003	.006	.006
			(1.290)	(1.004)	(3.344)	(3.320)
			(1.617)	*(1.355)*	*(3.502)*	*(3.231)*
Preference outlier × committee seniority	—	—	.003	.025	−.015	−.015
			(.249)	(1.631)	(−4.504)	(−4.569)
			(.247)	*(1.667)*	*(−4.320)*	*(−4.381)*
Distributive content × preference outlier	—	—	.333	.372	.369	.429
			(2.388)	(2.782)	(2.743)	(3.213)
			(3.379)	*(3.607)*	*(3.953)*	*(4.271)*
Distributive content × urgency	—	—	5.112	7.515	—	—
			(.583)	(.834)		
			(.567)	*(.851)*		
Congress	.583	—	—	—	—	—
	(2.530)					
	(2.576)					

Table 1 (*continued*)

Independent Variables	(1)	(2)	(3)	(4)	(5)	(6)
Constant	−59.572	−.960	−5.493	2.409	−6.300	−1.894
	(−2.555)	(−.360)	(−2.813)	(.766)	(−3.231)	(−.683)
	(−2.587)	*(−.366)*	*(−3.136)*	*(.761)*	*(−3.665)*	*(−.802)*
Log likelihood	−86.3	−89.6	−84.4	−78.7	−86.0	−83.2
Pseudo R^2	.288	.261	.303	.350	.290	.314
N observations	208	208	208	208	208	208
N correctly predicted	165	167	170	173	168	173
Pct correctly predicted	79.3	80.3	81.7	83.2	80.8	83.2

Note: Asymptotic *t*-statistics are presented in the parentheses below the coefficients. The italicized *t*-statistics are calculated using Huber standard errors. Equations 1 and 2 are based on Krehbiel (1997). Equations 3 through 6 are based on Krehbiel (1991, Table C.1). The data were provided by Keith Krehbiel.

tion 2 of Table 1 therefore reestimates Equation 2 dropping the undermotivated Congress variable. The results strengthen our case. The magnitude of Restrictive Rule Profile increases slightly from Equation 1, and now passes even the strict two-tailed .05 test advocated by Krehbiel (the significance level is .048 using conventional standard errors, .016 using Huber standard errors). Moreover, regarding the importance Krehbiel attaches to the percentage of cases correctly predicted, we would note that the model without the newly introduced Congress dummy actually predicts two more cases correctly than does the model with the Congress variable.

The inclusion of the Congress variable is not the only new wrinkle in Krehbiel's (1997) empirical work. In *Information and Legislative Organization,* Krehbiel (1991) argued for the inclusion of several interaction terms, as well as a variable measuring the scope (or complexity) of legislation. We therefore reestimated the statistical models based on the specifications that Krehbiel defends in his book.

Columns 3 and 4 of Table 1 use Krehbiel (1991, Table C.1, Equation 1) as a baseline. Column 3 reestimates Krehbiel's original model,[5] and column 4 adds the Restrictive Rule Profile variable to the equation. Every goodness of fit measure improves when the omitted variables are included, and when the Restrictive Rule Profile variable is added, the overall fit improves even further. Much more importantly, the coefficient for Restrictive Rule Profile is more than double the size of the coefficient that Krehbiel presents in his

[5]The replication is imperfect because subsequent to the publication of his book, Krehbiel has found several minor errors in the calculation of his heterogeneity variable.

Table 3, column 4 (our column 1), and the standard error for the variable is very small, with a conventional *t*-statistic of 3.15 (and a *t*-statistic based on Huber standard errors that is much larger). In this case, if we assume the same .27 baseline probability of observing a restrictive rule used above, the coefficient of 2.060 implies that restrictive rule legislative profiles increase the probability of observing a restrictive rule by .42 (to .69).[6]

Krehbiel (1991) uses a series of statistical tests to eliminate variables, and the resulting, more parsimonious model provides the basis for empirical claims in his book (Krehbiel 1991, Table C.1, Equation 2). Do our results hold up when we consider the more parsimonious model? The estimates are provided in columns 5 and 6. We again find that including the Restrictive Rule Profile variable improves the overall fit of the model. And more importantly, we again find that the coefficient for this variable is statistically significant at a high level regardless of the type of standard error that is used, with a quite large substantive effect. Assuming the baseline probability of .27, the coefficient for Restrictive Rule Profile in column 6 implies an increase in the probability of observing a restrictive rule of .32.[7]

The results show that regardless of the specification one wishes to use—the most recent specification presented in Krehbiel (1997), the more comprehensive specification of Krehbiel (1991, Table C.1, Equation 1), or Krehbiel's preferred, parsimonious specification (1991, Table C.1, Equation 2)—Restrictive Rule Profile has a statistically significant and substantively large effect. This constitutes strong evidence of the influence of the Rules Committee in legislative organization.

IV. Heterogeneity in Disguise?

It would be a strange twist of fate if we were to devote this much energy to showing the importance of the Restrictive Rules Profile variable, only to have the results reinterpreted as direct evidence for the informational theory. Unfortunately, this is quite possible: Krehbiel argues that the impact of Restrictive Rules Profile is simply a heterogeneity effect in disguise.

We find his arguments unconvincing. First, there is no theoretical basis in informational theory for believing that the relative location of the Rules Committee has any impact at all on the pattern of restrictive rules. Indeed,

[6]We also estimated the models in columns 3 and 4 with the new Congress variable. The coefficient for Restrictive Rule Profile is 1.791, with a conventional *t*-statistic of 2.659, and a *t*-statistic based on Huber standard errors of 3.056. Moreover, when Restrictive Rule Profile is included, the model predicts two more cases.

[7]We also estimated the models with the Congress variable included, with no effect on the substantive results. Tables with the models including the Congress variable are available from the authors upon request.

since the Rules Committee acts as the agent of the majority in the majoritarian view, the policy preferences of that committee should have no effect at all. It is, however, the preferences of the members on the Rules Committee that define the value of the Restrictive Rule Profile variable.

Second, while the correlation between heterogeneity and Restrictive Rule Profile is large, it is imperfect, and when both variables are put into the regression equation the effect of heterogeneity always vanishes, while that of Restrictive Rule Profile retains its significance. Moreover, when Krehbiel controls for Restrictive Rule Profile by rerunning his model only on committees with restrictive rule profiles (see his Table 3, column 5), the coefficients for heterogeneity and Republican cosponsors are insignificant at the .10 level. The model using the full data set and including the Restrictive Rule Profile also predicts a larger proportion of cases than does the model on the restricted set without our variable (see his Table 3, columns 4 and 5).

Third, and most importantly, we feel that none of the heterogeneity variables permit a direct test of informational theories. This is a strong claim, and to justify it we must revisit in some detail the model in Gilligan and Krehbiel (1989), which provides the basis for the heterogeneity hypothesis. In that model, a committee is assumed to consist of two actors, whose ideal points are equally distant from but on opposite sides of the floor median. Members of the committee are assumed to have expertise, and the results focus on how much information committees reveal to the floor.

The heterogeneity model does not explicitly consider rule choice, but predictions can easily be obtained by assuming procedural precommitment.[8] A comparison of the ex ante expected utility from an open rule (or the modified rule, which yields the same expected utility) and a closed rule shows that as the ideal point of the committee member with proposal power becomes sufficiently extreme (and thus by the symmetry assumption the location of the second member also becomes extreme), the Floor has a greater incentive to precommit to a closed rule.[9]

[8]For their discussion of procedural precommitment, see Gilligan and Krehbiel (1989, 485). In the absence of precommitment, we should expect the use of open rules to be a weakly dominant strategy.

[9]To see this, note that the *ex ante* expected utility to the Floor under a closed rule is given by $Eu = -\sigma_\omega^2 (4x_c)^3[1 - 3x_c] - [x_c(1 - 4x_c)]^2$, where x_c is the ideal point of the committee member with proposal power, assumed to be located between 0 and .25 (because if the committee is more extreme than this it will never reveal any information in equilibrium) and σ_ω^2 is the variance of the random component, which given the assumption of a uniform distribution of ω on [0,1] equals 1/12 (see Gilligan and Krehbiel 1989, 478). The expected utility of the floor under either an open or modified rule is given by $Eu = -\sigma_\omega^2 (4x_c)^3$ (Gilligan and Krehbiel 1989, 469, 476). By simple algebra, the floor strictly prefers a closed rule when $x_c > 1/8$.

On its face, this comparison would seem to support Krehbiel's hypothesis that "heterogeneous" committees should receive closed rules. Krehbiel (1991, 97–8) claims that heterogeneous committees are more likely to receive restrictive rules because "confirmatory signaling" makes it more likely that these committees will "propose bills whose realized outcomes correspond to the chamber median's ideal point." That is, Krehbiel's hypothesis emerges from noting that informational benefits to the floor from a closed rule are greater in the model from Gilligan and Krehbiel (1989)—when there exists a committee member (with proposal and/or speech rights) on both sides of the floor median—than in the model from Gilligan and Krehbiel (1987)—when there is only a committee member on one side of the floor median.

Introducing committee heterogeneity into the model has an unrecognized but profound impact on the preference outlier prediction from informational theory. In the closed rule model from Gilligan and Krehbiel (1989), only one of the two committee members can make a legislative proposal. Consistent with the majoritarian view, one should think about this member with proposal rights as the median member of the committee. Given our comments regarding rule choice in the precommitment case, this implies that subject to the existence of one committee member with speech power on the opposite of the floor median as the committee median, *preference outlying committees should receive more closed rules.*[10] This result stands in sharp contrast to the preference outlier result under the assumption of homogenous committees. Gilligan and Krehbiel (1987) show that if committees are homogeneous, meaning that only the pivotal member of the committee has speech or proposal rights (and that the floor therefore receives information from only one side), then the committee will receive *open rules* when its pivotal member is a preference outlier.

These distinctions lead us to a different test of the heterogeneity hypothesis than that advocated by Krehbiel. The key indicator of heterogeneity is the ability of committee members on both sides of the median to convey information to the floor. This is not well captured by the standard deviation of committee members' ADA ratings or by the number of Republican cosponsors, the heterogeneity measures used by Krehbiel. Committee members may exhibit considerable variation in their ideal points, but if these members are all on the same side of the floor, this carries no informational value in terms of heterogeneity as modeled in Gilligan and Krehbiel (1989). Conversely, we could have a committee with a very slight degree

[10]Gilligan and Krehbiel assume that the member with speech power is the same distance from the floor median as the member with proposal power, but they also note (1989, 465) that relaxing this assumption does not change their results.

of variation in terms of preferences, but with legislators on both sides of the floor median. This would be informationally advantageous.

How then should we measure committee heterogeneity, and how should we include this measure in a statistical model of restrictive rule choice? The appropriate approach in our view is to classify committees as either homogeneous or heterogeneous (as these terms are used in the formal models), and then for each type of committee to test the appropriate prediction regarding preference outliers. Krehbiel's (1991, 128–30) definition of committee heterogeneity works well for this purpose. He classifies committees as heterogeneous when the median Republican committee member and median Democratic committee member are on opposite sides of the floor median (and as homogenous otherwise). We can use this classification to define two preference outlier variables. Homogenous Preference Outlier takes the value of the original preference outlier variable if the committee is homogenous and 0 otherwise. It should have a negative coefficient to support the predictions from Gilligan and Krehbiel (1987). Unfortunately, the Homogenous Preference Outlier variable cannot yield precise coefficients because Armed Services is the only homogenous committee (which underlines the fact that virtually all committees in Congress satisfy the definition of heterogeneity in Gilligan and Krehbiel 1989). Heterogeneous Preference Outlier takes the value of the original preference outlier variable if the committee is heterogeneous and 0 otherwise. It should have a positive coefficient to support the predictions from Gilligan and Krehbiel (1989).

Table 2 presents results from several models that use the two heterogeneity-based outlier variables in place of the previously used preference outlier variable. In addition, consistent with the arguments above, we omit heterogeneity, Republican cosponsors, and Democratic cosponsors, which we do not feel adequately test the predictions from informational models.

Column 1 presents the model specified in Krehbiel (1996), replacing Krehbiel's heterogeneous variables with the theoretically derived heterogeneity/outlier interaction terms discussed above. Restrictive Rule Profile continues to have the correct sign, is substantively large, and has a *t*-statistic of approximately 4. Informational theories perform less well. As expected, Homogenous Preference Outlier is not statistically significant (and has the wrong sign). More surprisingly, Heterogeneity Preference Outlier is significant but in the wrong direction. We also find that the model predicts three cases more than the equivalent model set out in Krehbiel (1997). These results do not change when the Congress variable is dropped (see column 2). In fact, the number of cases correctly predicted increases by five over column 1.

Based on our argument about the appropriate interpretation of the heterogeneity model, columns 3 and 4 reestimate the models from Krehbiel's

Table 2. Probit Models of Restrictive Rules Using Revised Tests of the Heterogeneity Hypothesis

Independent Variables	(1)	(2)	(3)	(4)
Restrictive rule profile	2.201	2.023	2.148	2.247
	(3.977)	(3.853)	(3.968)	(3.960)
	(4.439)	*(4.294)*	*(4.209)*	*(4.368)*
Distributive content	−2.277	−2.431	−6.196	−6.022
	(−2.283)	(−2.486)	(−2.766)	(−2.587)
	(−1.272)	*(−1.491)*	*(−2.579)*	*(−2.241)*
Homogenous preference outlier	.029	.030	−.114	.014
	(1.101)	(1.161)	(−.872)	(.093)
	(1.235)	*(1.275)*	*(−.997)*	*(.110)*
Heterogeneous preference outlier	−.102	−.096	−.199	−.092
	(−4.674)	(−4.469)	(−1.794)	(−.745)
	(−4.293)	*(−4.500)*	*(−1.947)*	*(−.865)*
Urgency	.980	.962	.726	.744
	(2.472)	(2.435)	(1.493)	(1.526)
	(2.708)	*(2.505)*	*(1.630)*	*(1.722)*
Laws cited	.054	.055	.072	.077
	(2.745)	(2.872)	(2.971)	(3.010)
	(3.016)	*(3.082)*	*(2.913)*	*(3.115)*
Committee seniority	−.129	−.108	−.182	−.049
	(−1.742)	(−1.470)	(−1.116)	(−.274)
	(−1.981)	*(−1.628)*	*(−1.352)*	*(−.357)*
Scope	—	—	−.0045	−.006
			(−1.442)	(−1.754)
			(−1.544)	*(−1.959)*
Preference outlier × committee seniority	—	—	.014	−.003
			(.846)	(−.168)
			(.980)	*(−.204)*
Distributive content × preference outlier	—	—	.274	.292
			(2.152)	(2.191)
			(2.977)	*(2.830)*
Distributive content × urgency	—	—	10.33	10.94
			(1.128)	(1.178)
			(1.199)	*(1.268)*
Congress	.583	—	—	.658
	(2.533)			(2.543)
	(2.508)			*(2.630)*
Constant	−58.231	−.846	−.161	−65.99
	(−2.567)	(−1.232)	(−.140)	(−2.541)
	(−2.533)	*(−1.544)*	*(−.177)*	*(−2.658)*
Log likelihood	−81.919	−85.221	−80.374	−76.973
Pseudo R^2	.324	.297	.337	.365
N observations	208	208	208	208
N correctly predicted	168	173	173	176
Pct correctly predicted	80.8	83.2	83.2	84.6

Note: Asymptotic t-statistics are presented in the parentheses below the coefficients. The italicized t-statistics are calculated using Huber standard errors.

book. The equations include the interaction of outlier and distributive politics, the interaction of distributive politics with urgency of the legislation, and the interaction of preference outlier with committee seniority because these variables test the distributive theory. The other interaction effect, preference outlier multiplied by the number of rules cited, is clearly an informational variable. Since existing theories give no explicit indication as to whether or how this variable should influence the assignment of restrictive rules, we ran the estimations both with and without this term. It is insignificant in the presence of the distributive variables, so we report only the model excluding this variable.[11] Once more, Restrictive Rules Profile is significant. And except for Homogenous Preference Outlier in Equation 3 (which is not significant), our derivations of preference outlier measures exhibit the incorrect sign. Moreover, the model in Equation 4 correctly predicts more cases than any of the models presented in Krehbiel (1991), Krehbiel (1997), or our Table 1.

The significant negative coefficient for Heterogeneous Preference Outlier is very disconcerting from the point of view of informational theory. There is one possible explanation. If committees are sufficiently extreme ($x_c > 1/4$ in the model), then even in the model with heterogeneity, committees will be totally uninformative and thus will receive all open rules. (As we point out in note 9, Gilligan and Krehbiel 1989 assume that such extreme outlying committees do not exist.) Thus, if there are a large number of committees that are extreme, and few or none close to the floor median, we should expect a negative coefficient on the Heterogeneous Preference Outlier variable. While this seems a reasonable possibility, it contradicts a central majoritarian claim of informational theory, which is that preference outlying committees will be rare (because such committees are uninformative to the floor median; see Krehbiel 1991, chap. 4).[12]

We began this section by asking whether Restrictive Rule Profile, correlated as it is with previous heterogeneity measures, should be treated as an informational effect in disguise. Since these previous measures of heterogeneity do not adequately capture the logic of the formal model of heterogeneity, one cannot conclude that the effect of Restrictive Rule Profile can be interpreted as support for informational theories. In addition, our more

[11]The coefficients and standard errors for all the variables (except Laws Cited, which loses statistical significance) are virtually identical when Preference outlier × Laws Cited is included. The overall fit of the model is also unaffected (with one less case correctly predicted when the variable is included).

[12]Preference outliers can be tolerated in informational theory when the costs of specialization are low. But if a committee is sufficiently extreme ($x_c > 3\sigma_0^2$), then no matter how low the costs of specialization, the committee will have no incentive to gather or reveal information.

appropriate measures of heterogeneity have the wrong *sign* in empirical tests. Thus, given the strong and consistent results for Restrictive Rule Profile, there can be little justification for interpreting this variable as supportive of informational theories.

Conclusion

Despite the concerns raised by Keith Krehbiel, we remain as convinced as ever of the need to incorporate key procedural actors such as the Rules Committee in any model of procedural choice. Three arguments seem especially compelling to us in reaching this conclusion. First, the impact of our Restrictive Rule Profile variable, even in the analysis presented in Krehbiel's article, is far from insignificant. Given that Krehbiel's results are the weakest we have found for our variable, this says something about the explanatory power of our theory. Second, Restrictive Rule Profile has an exceptionally robust effect. Adding our variable to models of rule assignment previously used to test informational theories produces evidence even stronger than that found in Krehbiel's article. In every case, our variable is significant at the .05 level. More importantly, the variable has a large substantive effect, typically doubling the probability of observing a restrictive rule. Finally, we find little evidence that our variable is simply tapping an informational effect. Any similarities between our variable and existing heterogeneity measures are uninformative because existing heterogeneity measures are insufficient for evaluating the formal theories that produce them. When better measures are incorporated, Restrictive Rule Profile has a strong effect, while the more appropriate variables for testing the heterogeneity hypothesis are insignificant, or, when significant, contradict the predictions from the informational models. Our empirical work has therefore not discovered an informational effect in disguise: if anything, previous findings regarding heterogeneity were likely picking up the influence of the Rules Committee.

While these arguments are persuasive, they are also limited, resting as they do on the assumption (which we share with Krehbiel) that the way to proceed in understanding restrictive procedures is to introduce the variables of theoretical interest in an additive fashion and see what comes out. But the relationships are unlikely to be as simple as that. We thus conclude with the hope that future work on institutional choice will come to grips, not with whether distributive, informational, or partisan theories are correct, but instead with how distributive, informational, and partisan factors interact to shape legislative politics.

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