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Legislative Organization

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Legislatures, like markets, tend to be organized in ways that promote gains from bargaining, yet several political factors conspire against efficiency in legislative processes and outcomes. Societal interests are diverse, and legislatures are lightening rods for conflicting interests. The most intense political demands are often localized, so career-oriented representatives are under pressure to distribute local goods funded by national revenues. Public policies are complex, and consequently, effective legislatures need policy specialists. Specialization, however, creates informational asymmetries and, thus, raises the possibility of opportunistic use of expertise. Legislative procedures are profoundly important in determining whether, when and how bills are considered, moreover, democratic legislatures are self-organizing and, as such, nearly all legislative procedures are endogenous. In total these efficiency-impeding features in legislative politics are close counterparts to transactions costs in economics. Combined with self-interested behavior, they preclude first-best and jeopardize second-best forms of legislative organization.

This essay explores how political economists have studied problems of legislative organization. The first section summarizes three rudimentary models to illustrate the important relationship between asymmetric procedural rights and disproportionate policy benefits. The paper then turns to the two major problems of legislative organization. Many policies confer benefits that are divisible and geographically targeted, which creates a problem of *distributive politics.* For any specific distributive policy, the number of supporting legislators is much smaller than the majority or supermajority required for passage. How, then, are distributive policies passed? How durable are they, and why? An analogous problem arises for a more general class of policies. Many issues that come before legislatures are complex.

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Legislators are accordingly uncertain about the consequences of policymaking, which creates a problem of *informational politics*. How can a legislature organize itself to provide incentives for its members to specialize and to share truthfully their private information? In each case, a growing body of empirical and theoretical work is indicative of an increasingly vibrant and well-rounded field in which political economy approaches are prominent.

Foundations

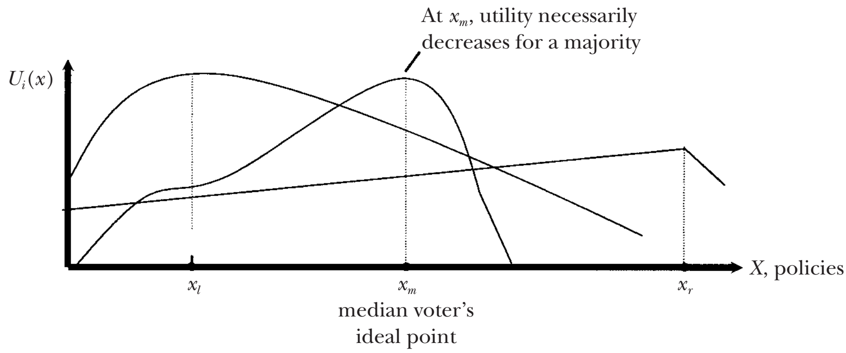
Voting is the primary mechanism of preference aggregation in democratic politics. Arrow's (1951) impossibility theorem underscores the profound limitations of preference aggregation via voting. In an influential interpretive essay of developments over the next few decades, the father of positive political science, William Riker (1980), was uncharacteristically gloomy about the discipline to which his lifetime contribution was unparalleled. He argued that political science, rather than economics, had become the "dismal science" because predicting outcomes of voting processes is much more difficult than predicting outcomes in market settings. More sanguine scholars, however, have embraced the view that either preferences are sufficiently orderly or institutions are sufficiently constraining on the expression of preferences that it is possible to derive and test refutable propositions about legislative organization and lawmaking. Three basic theories illustrate the range of ways the assignment of procedural rights may affect outcomes.

The Median Voter Theory

The necessary starting point is a tractable intuitive model that captures the essence of democracy: equal rights in the expression of preferences and a mechanism of collective choice that is likewise impartial. Figure 1 gives an example with three voters whose preferences are such that a graph of utility for each of them reaches a single peak at a distinct *ideal point* on the horizontal axis, which represents a unidimensional choice space. They consider and vote on proposals one at a time under an egalitarian, open amendment procedure. Black (1958) shows that for any odd number of voters, the unique equilibrium outcome is the policy corresponding to the median voter's ideal point. That is, given any exogenous deviation from the median, those who incur a utility loss from the deviation are adequately empowered to restore the median, and once restored, the median is impervious to any and all intralegislative attempts to upset it. For example, if a proposal were offered slightly to the right of the median ideal point, the far-right voter would gain, but both the median voter and the voter on the left would lose, so the choice of the median vote would be restored by a 2-1 vote. This uniquely majoritarian status of the legislative median gives it some normative appeal, but our primary interest will be in positive or predictive models.

Many researchers point out that actual lawmaking procedures do not fit the key assumptions of the median voter theory. For example, the ability to amend legislation is sometimes restricted to a few—not open to everyone. Policies are

Figure 1
Equilibrium in the Median Voter Theory



often too complex to be represented as points on a line. Preferences are sometimes inchoate. For these and other reasons, the median voter theory has itself been subject to amendment, usually in the form of institutional embellishments. Two distinctively clean prototypes impose restrictions on amendment rights and delegate rights of obstruction to standing committees.

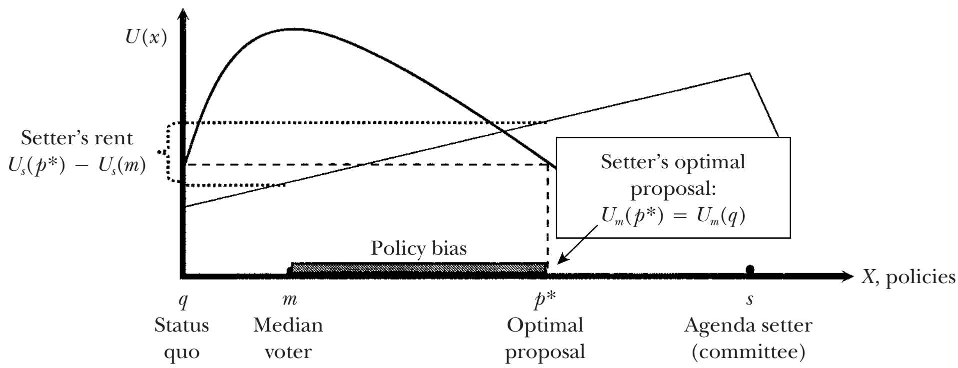
Agenda Setting

In nearly any political activity, the ability to set the agenda seems intuitively to be of strategic significance. While sometimes the role of agenda setter is up for grabs, at other times a specific agenda setter is institutionally designated. For these latter cases, Romer and Rosenthal (1978) developed what has become one of the most widely applied models in political science. The basic structure of what became known as "the setter model" is a two-stage process of decision-making. In the first stage, a committee—as a unitary actor—sets the agenda by offering a proposal to the entire legislature. In the second stage, the legislature—as a collective entity—votes on whether to enact the committee's proposed policy.

Two crucial factors differentiate Romer and Rosenthal's (1978) theory from Black's (1958) median voter model. First, Romer and Rosenthal postulate the existence of a *status quo policy*, or reversion point, that will be the outcome in the event that committee-floor decision-making fails to produce a new, majority-endorsed policy. Second, in Romer and Rosenthal's model, the second-stage actors are not allowed to amend the initial proposal. This constrained focus on a single take-it-or-leave-it proposal is called a *closed* or *restrictive rule.*

The choice space remains unidimensional and, therefore, the outcome of the setter model can be readily compared with the benchmark choice of the committee's median voter. Figure 2 illustrates the power of agenda setting. The initial policy on the far left is the status quo. An open rule allowing anyone to propose legislation would produce the outcome favored by the median voter. However, the preferences and corresponding optimal behavior of the agenda setter, whose ideal point lies at *s*, leads to a much different outcome. The agenda setter's problem is

Figure 2
The (Agenda) Setter Model



to select the proposal as close to s as possible, subject to the constraint that it commands a majority on the floor in comparison to the status quo option. Such a policy is p^*, which differs significantly from the median voter's ideal point m. Policy bias can be measured as the distance that p^* exceeds m. The agenda setter's rent will be the additional utility the setter can gain from the p^* outcome as opposed to outcome that would have prevailed under the baseline median voter theory.

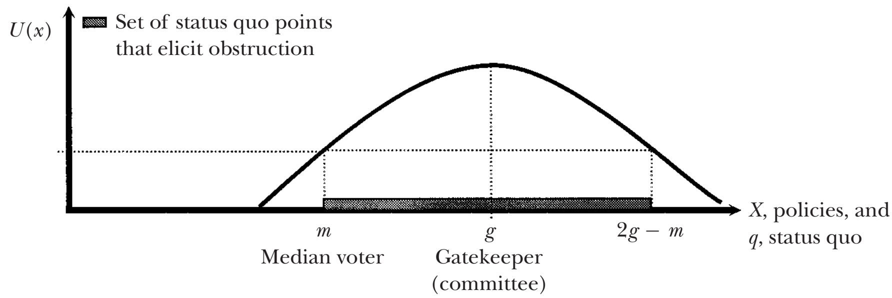
Gatekeeping

Agenda setting may also come in a more drastic and negative form, as when a committee may unilaterally keep the status quo in effect by refusing to make a proposal. This notion of committee "gatekeeping" is embodied in a model proposed by Denzau and Mackay (1983). In the first of two stages, a committee decides which proposal to offer, if any. If the second-stage is reached, the committee's proposal is considered by the legislature under an open rule that allows amendments. Therefore, the committee knows that if it makes a proposal, the open rule empowers the median voter to obtain his or her most preferred outcome. Accordingly, the committee compares its utility from the status quo with its utility from the median voter's ideal point and exercises gatekeeping whenever the former exceeds the latter. Figure 3 illustrates. Say that the median voter's and gatekeeper's ideal points are m and g, respectively, and consider the full range of status quo possibilities throughout the horizontal axis. For any such status quo q, if the committee's utility from q is greater than its utility from the median voter's ideal point m, then the committee obstructs any and all such bills to keep the status quo in effect. Gatekeeping is essentially a veto without an override provision.

If the status quo point falls anywhere between m and $2g - m$, the gatekeeper will exercise its veto. If the status quo point falls outside this range, then the gatekeeping committee will make any proposal, knowing that the result will be the outcome m preferred by the median voter.

The three models illustrate a pervasive finding in the theoretical literature on legislatures. When legislative rights are skewed, so, too, is policy. In other words,

Figure 3
The Gatekeeping Model



asymmetric procedural rights are sufficient for preference outliers to capture rents. But herein lies an elusive puzzle of legislative organization. Majoritarianism and procedural endogeneity imply that the median voter is pivotal in a procedurally neutral setting. Why would such a legislative voter consent to procedures whose foreseeable consequences are tantamount to an abdication of power? The following sections will consider two alternative theories: one of distributive politics and one of informational politics.

Distributive Politics

For decades, the standing committees of the U.S. Congress have been focal points for members' energies, lobbyists' efforts, interest groups' testimony and scholars' writing. The consensus view in the 1960s and 1970s was that some committees—particularly those whose jurisdictions included programs with geographically targeted benefits—were pockets of like-minded legislators with extreme preferences. From this generalization about committee composition, it was a short step (or so it seemed) to an argument about policy consequences. A so-called "norm of deference" to committees allowed committee members to receive disproportionate policy benefits where they wanted them most: on issues of special interest to their constituencies. Although political scientists do not often express this argument in terms of efficiency, intralegislative gains from trade are captured because of conscious choices about legislative institutions.

Committees and Logrolling

In the 1980s, political economy research became more explicit about committee-floor strategic interaction, culminating in a puzzle of committee power. In a multistage collective choice setting, where committees have neither a first-stage gatekeeping right nor an assurance that their proposals will thereafter be considered in take-it-or-leave-it fashion, how can a norm of deference be sustained? More specifically, when a preference-outlying committee proposes a bill that is out of step with the wishes of the median voter, the strategic situation on the floor invites opportunistic behavior, again based on procedural endogenity and majoritarianism. Why, then, doesn't the legislature adopt an open rule via majority vote and pass the requisite amendments to restore the bill to its median position?

The distinctively institutional answer given by Shepsle and Weingast (1987a) is centered on the notion of an "ex post veto"—the putative right of the standing committee to represent the parent body in the conference committee, an ad hoc group composed of members of the House and the Senate for purposes of reconciling differences between the two chamber's bills. Such a veto might be exercised, for instance, if the conference committee's version does not comport with the committee's relatively extreme preferences. Another procedural right embedded in the model is the right of the conference committee to have its final report protected from amendments.

By adding two stages to the conventional committee-floor setup, the ex post veto model seems to solve the puzzle. Closer inspection, however, reveals that the appended stages—conference and postconference—are virtual clones of the foundational models that typify the initial problem. The ex post veto is a perfect counterpart to gatekeeping: it simply comes later in the game than in the original Denzau and Mackey (1983) version. The single up-or-down vote on the conference report is a perfect counterpart to the setter model: it simply comes later in the game than in the original Romer and Rosenthal (1978) version. The crucial empirical question, then, is whether these latter stages are somehow immune from the fact that legislative procedures are endogenously chosen by a majority that gave rise to the originally posed puzzle.

In fact, most of the ex post veto model's institutional assumptions are violated by codified House and Senate procedures. For example, the House and Senate are not compelled to use conference committees, but rather can and often do propose amendments between the chambers directly. Committee members are not entitled to serve on conference committees, but rather are assigned on an ad hoc basis, always requiring the consent of a majority in the House or Senate. Finally, if a conference committee does try to execute an ex post veto, the House and Senate have the procedural rights sufficient to have the effect of dissolving the conference and reappointing a new slate of conferees (Krehbiel, 1987). Shepsle and Weingast's (1987b) defense is that their argument is of the "as-if" sort and that their model is more appropriate for an earlier era of Congress than for the contemporary Congress. But subsequent analysis of contemporary data on paths of legislation and preference-based characteristics of conferees are inconsistent with the "as-if" rejoinder (Krehbiel, 1991, chapter 6).

The procedural limitations of the committee-power theory hint at a more desirable analytic approach: to characterize institutional features as objects of choice and show why rational legislators choose to employ them. Weingast and Marshall (1988) develop an argument along these lines with a substantive motivation and empirical predictions compatible with the committee-power model. Their argument begins with Mayhew's (1974) well-known position that the electoral fate of legislators lies in the hands of their constituents, and constituents often have localized interests. In such an environment, re-election seeking legislators will want a legislative organization in which everyone benefits in those policy domains about which they care the most. So suppose that each dimension of an *n*-dimensional policy space represents a jurisdiction. Ideal points on each dimension would be of two distinct types: a minority of preference-outlying supporters, and a majority of relatively unconcerned opponents. The median voter theory applied dimension-by-dimension predicts that all high-demand proposals will fail.

Of course, some high-demand policies do pass, and the question remains how they do so. From an economics perspective, vote trading between legislators so that they support each others' high priorities would appear to be a logical answer. Weingast and Marshall (1988) argue, however, that implementation of vote trading is confounded by temptations to renege on an implicit contract. If Bill agrees to support Bob's pet project today in exchange for Bob's support tomorrow, how can Bill be certain that Bob will not renege on his promise once Bob's bill has become a law and Bill's bill is still a bill? Weingast and Marshall's answer is institutional and closely resembles Ferejohn's (1986) analytical narrative of agriculture subsidies and food stamps. The committee system of Congress, they argue, is constructed to cater to constituency-induced demands of legislators. Assignments to committees are made on the basis of self-selection, so committees are composed of preference outliers. Committee membership and progression to chairmanships are viewed as property rights. The system is capped off by vesting standing committees with fixed, unique jurisdictions and gatekeeping rights. Cumulatively, these institutional features insulate status quo, high-demand policies (that is, "pork barrel spending") from attack by the omnipresent majority of opponents. A giant logrolling problem is therefore solved in one fell swoop by a form of institutional lock-in.

While there is no shortage of evidence that institutional features have a bearing on outcomes, the institutional features on which Weingast and Marshall's (1988) argument depends are also arguably fictitious. Gatekeeping is central to solving the problem of intertemporal reneging, yet as Shepsle and Weingast (1987b) noted earlier, the House's rules permit a chamber majority to extract legislation from obstructive committees. Again, it becomes hard to explain why majorities would choose a legislative process that they cannot later override and, thus, undercut seemingly efficient bargaining.

Another controversial assumption in the Shepsle-Weingast-Marshall models is that committees are composed of preference outliers. Using roll call ratings of public interest groups as measures of preferences, an early study found that only rarely can one reject the null hypothesis of no difference between committee and noncommittee preferences (Krehbiel, 1990). Although this finding proved controversial, a dozen or so follow-up studies leave intact a somewhat bland but nonetheless theory-weakening claim. Committees come in many types. A few are homogeneous, many are heterogeneous; some have many preference outliers, but most are approximate microcosms of the parent chamber. Homogeneous high-demand preference outlying committees, however, seem to be the least common type.

Finally, these theories also treat committee jurisdictions as fixed. Empirical research, however, indicates that committee jurisdictions—like conference procedures and committee composition—are fluid, and that other logrolling-friendly devices are regularly challenged. For example, turf wars on committee jurisdictions are virtually everyday affairs (King, 1997). Pork barrel legislation is rarely protected by restrictive rules (Krehbiel, 1991, chapter 5). Amendment activity on the floor is substantial (Smith, 1989). Finally, when violations of related norms of universalism and reciprocity occur, there is little evidence that defectors are punished (Shipan, 1992).

Majoritarian Bargaining

An impediment to making precise statements about the distributional and efficiency consequences of early models is that these models merely hinted at the efficiency properties of institutional equilibria, and they did so informally. For example, the committee power model does not address efficiency, and the gains-from-exchange model addresses efficiency in an unorthodox, if not paradoxical, way. At its core, the model is about how legislatures enact so-called "pork barrel projects," which are by definition projects whose aggregate costs exceed aggregate benefits (Ferejohn, 1974)—that is, inefficient. Yet, the theory stresses *gains* from trade, presumably because legislators—as opposed to society at large—can increase their aggregate utility by engaging in logrolling.

As the technology for modeling advanced throughout the 1980s, the conceptual and analytic precision of models of distribution and efficiency increased. A breakthrough was Baron and Ferejohn's (1989) "Bargaining in Legislatures," which rigorously fuses majoritarian choice with bargaining theory in a setting of pure distribution called a divide-the-dollar game. The authors postulate that every legislator wants to maximize his or her share of a finite divisible good: analytically, a dollar. Using simple majority voting, legislators decide how to distribute the dollar. Voting may occur under either a closed or an open rule, with proposals being offered by randomly recognized legislators. In other words, the model employs agenda setting, but with two significant differences from the Romer and Rosenthal (1978) version: 1) no specific legislator is ordained with the sole right to be the agenda setter; and 2) the game continues into a new period, with the dollar deflating between periods, unless a majority agrees on how to divide the dollar, at which point payoffs are awarded.

Several results are noteworthy. Motivated by the prospect of a deflating dollar, most games end quickly. Consistent with earlier models, the ability to set the agenda is valuable in equilibrium. In both the closed and open amendment procedures, the legislator who is recognized constructs a coalition by allocating to enough members a proportion of the dollar that is just large enough so that the each recipient is indifferent between accepting the payoff (by voting "yes") and sending the game into a new period with discounted benefits available (by voting "no"). Many legislators are excluded from the winning coalition, because their votes are not needed and their exclusion leaves the included members greater shares of the dollar. Shares within the coalition of recipients are not equal, however, because the proposer exploits other legislators' impatience (captured by the discount factor) and their expectations regarding future exclusion from the set of recipients of benefits (an endogenously derived continuation value) and the type of rule in effect. Both the expected value of the game itself and the proposer's rent are greater under the closed rule than under the open rule.

Earlier research in this area asserted that *universalism*—defined as the inclusion of a special project or portion of the figurative dollar for everyone—was the "norm" (Weingast, 1979). In the Baron-Ferejohn framework, however, universalism arises only in a very small legislature with a very large discount factor (that is, high impatience). For all but extreme parameter values, the agenda setter is able to exploit the majority voting rule and the impatience of a small majority and thereby obtain a disproportionate share of the divisible good. However, this result does not occur because of restrictive procedures. Any legislator might be chosen to set the agenda, and the extraction of the premium by the agenda setter occurs under both open and closed rules for amendments in the divide-the-dollar framework. The power of the randomly selected proposer is attributable to impatience and majoritarian incentives. Although this class of models is not exactly data ready, empirical tests are not impossible. The divide-the-dollar hypothesis that restrictive rules hasten agreement, for example, is supported even while controlling for other factors (Krehbiel, 1991, chapter 5).

Partisan Gatekeeping

Because political parties are active in organizing legislative activity, it is somewhat surprising that models of parties in legislatures are relative newcomers to the study of legislative organization. An exception is a recent line of research that postulates that the majority party leader (or the median voter of the party) is a gatekeeper to the legislative agenda (Cox and McCubbins, 2002). Lawmaking is then analyzed as a two-stage game that is structurally identical to the basic Denzau and Mackay (1983) gatekeeping model. The unique contribution of this literature, therefore, is interpretive and empirical.

Direct empirical tests of this theory are not possible, and discriminating tests have proven difficult to construct and implement. The obstacle to direct tests is as follows. Suppose that legislators behaved consistently with the gatekeeping model. For any given piece of legislation, either the majority party exercises gatekeeping or it does not. If it does, then by definition there is no subsequent legislative action to observe. If it does not, the corresponding amendment activity on the floor has exactly the same properties as the median voter theory. A median voter outcome results. Ironically, all observable floor behavior is identical in the majority party gatekeeping and the median voter models.

However, indirect tests are possible, and the corresponding body of empirical literature is huge, particularly outside the relatively narrow domain of legislative organization. One indirect test of the power of the majority party is based on the rates at which parties are "rolled," which means that a majority of one party is in the losing coalition of a roll call vote that carries. Studying final-passage votes, Cox and McCubbins (2002) report that the majority party is much more likely to roll the minority than vice versa. They also find some support for a relationship between roll rates and the estimated width of the party gatekeeping interval in a model using an "issue space" ranging from left to right. One problem is that it is possible to generate asymmetric roll rates of the observed magnitudes using an alternative model in which legislators have partisan affiliations but do not let such affiliations affect their votes in any way (Krehbiel, 2003). Cox and McCubbins (2003), however, argue that such an alternative model is based on arbitrary and misleading assumptions.

With the possible exception of Weingast and Marshall's (1988) industrial organization approach, none of the theories reviewed thus far meets a strict analytical definition of a theory of legislative organization. That is, the models characterize institutional features as exogenous—not as objects of calculated choice by players in the game. This is not to say that such theories fail to contribute to our understanding of legislative organization. By studying the consequences of fixed institutions, and by comparing analytically derived predictions with systematic data, it is possible to obtain insights about which kinds of institutional arrangements are more likely or less likely to be used in real-world settings. At least one solid generalization is supported consistently. Restrictive procedures introduce asymmetries in procedural rights that confer power to a subset of legislators (for example, to agenda setters and gatekeepers). A shallow implication of this observation is that a recipe for legislative organization aimed at capturing efficiencies is to allocate procedural rights in a policy-specific way to high demanders, issue by issue. The shallow implication, however, leaves unresolved the deeper question. If procedural choice were a majoritarian act, why would a majority choose such an institutional arrangement? If such arrangements exist, how do they persist in an environment of majoritarian institutional endogeneity?

Informational Politics

While the overall importance of the committee system in professionalized legislatures is rarely questioned, perspectives on why and how committees are important diverge rather sharply. One such argument hinges on distributive politics, as we have just seen. Another perspective builds upon the observation that many of the public policies that legislatures address are complex, and legislators differ in their inclinations and abilities to sort through the uncertain consequences of many proposals that fall onto the legislative agenda. Indeed, from the earliest Congresses in U.S. history, legislators confronted the harsh reality that lawmaking is not simple even on rare occasions on which there is no conflict of interest. The dominant theme in Joseph Cooper's (1970) seminal historical study of the origins of the standing committee system, for example, scarcely mentions logrolling between special interests. The challenge was how to organize the House in a way that tapped policy expertise of those who had it and nurtured specialization among those who did not. As Cooper documents, this problem of information in legislative organization has changed little over the last two centuries. The only significant differences between Cooper's portrayal and those of political economists, is that the latter—by relying heavily on pioneering works in economics by Akerlof (1970), Spence (1973, 1974), Riley (1979), Crawford and Sobel (1982) and Kreps and Wilson (1982)—are concerned not only with incentives for obtaining expertise but also with the strategic use of information.

Legislative Signaling

Political economy models of legislative signaling adopt the "sender-receiver" portrayal of games with incomplete information. The sender is typically a standing committee, while the receiver is the pivotal voter in the full legislature. To study the prospects for the use of endogenous procedures as mechanisms for providing incentives for committees to specialize, and to reveal private information to the parent body truthfully, Gilligan and Krehbiel (1987) postulated that an outcome x is an additive function of a policy p selected by the legislature and a random variable ω. The legislature first chooses whether to give the committee an open or closed rule. The committee observes this choice and decides whether or not to specialize—operationally, to learn the value of the random variable at a cost, k. The legislature learns whether the committee specialized, but does not learn what the committee knows. The committee proposes a bill that acts jointly as a proposal and as a cheap-talk statement about its private information. The legislature updates its beliefs and chooses a final policy consistent with the original rule. Payoffs are awarded as a function of the outcome, $x = p + \omega$ and, for the committee, the cost of specialization k.

The substantive contribution of legislative signaling theories can be considered in the context of prior approaches that focused on distribution. The earlier literature left unresolved what appears to be a fundamental incompatibility between nonmedian outcomes, majoritarianism and procedural endogenity. In short, if there is a will from the median voter for centrally located policies, then there is also a way to obtain such policies by using majority vote to change the rules. Among the several propositions derived from within the information-theoretic framework, the one that most directly addresses the apparent incompatibility rests upon the relative ability of the committee to transmit information credibly to the legislature under the two rules. In many instances, the legislature is better off (in expected utility terms) under the closed rule rather than open rule. Therefore, even though the legislature's median voter incurs an expected distributional cost (that is, an outcome that on average diverges from its ideal point), this cost is more than offset by the benefit of uncertainty reduction due to a greater ability of the committee to communicate under the closed rule. In other words, under specified cost conditions and preference configurations, a rational median legislator benefits from delegating agenda-setting authority to a standing committee. The take-it-or-leave-it arrangement, or closed rule, serves as an inducement for the committee not only to specialize but also to communicate more freely its endogenously acquired expertise. Importantly, such communication reduces uncertainty and benefits *both* players in the game—that is, the legislature as a whole captures gains from specialization.

Recent theoretical studies of legislative signaling have made several important extensions, reservations and qualifications to some of the first sets of results. Diermeier (1996) embeds a simplified but functionally equivalent committee-floor signaling model within an overlapping generations model and derives an equilibrium interpreted as a "norm of deference"—that is, committee power. Although the conditions are strong, the result is significant in the context of the literature as a whole. One interpretation is that, as stressed above, committee power is a difficult or impossible result to obtain analytically using complete-information distributive-theoretic models that do not allow for endogenous choice of procedures. Diermeier shows that the inclusion of uncertainty, specialization and repetition can be sufficient for nonmedian outcomes provided that legislators will be around a long time and provided that signaling will occur.

Epstein (1996), similarly, brings together a component of earlier research—the Denzau-Mackey (1983) gatekeeping model—and uses the legislative signaling framework to spell out an informational rationale for committee gatekeeping. The rationale is essentially the same as the logic underlying the endogenous choice of the closed rule in Gilligan and Krehbiel (1987, 1989a): that is, the restrictiveness of the procedure provides incentives for specialization and for information transmission.

Baron (2000) contributes a study of committee-legislature interaction that uses screening models instead of signaling models. In the screening framework, the legislature is more of a mechanism designer in the sense of economics literature than a legislative organizer in the sense of Gilligan and Krehbiel (1987, 1989a). Therefore, in Baron's framework, the parent body can write much more sophisticated contracts than closed rules to elicit committees' private information. This ability turns out usually to increase the prospects for information transmission. A corresponding empirical puzzle is why legislative bodies usually seem to confine their primary methods of solving informational problems to relatively simple rules governing amendments. To date, no empirical work has addressed this question.

With similar consequences to those of Baron (2000) but within the signaling framework, Krishna and Morgan (2001) reanalyze the Gilligan and Krehbiel (1989b) model of heterogeneous committees and identify alternative equilibria with significantly greater informational efficiency than the equilibrium in the originally published version. Likewise, Battaglini (2002) elegantly extends the legislative signaling framework to two-dimensional cheap talk (when nonbinding messages can be communicated between players) and shows, quite counterintuitively, how complicating the choice environment by adding a second dimension can actually improve information transmission, provided that each dimension has a specialist. Krehbiel (2001) offers a brief response to Krishna and Morgan that makes essentially two points. First, a limitation of the signaling framework is that, typically, a wide range of equilibria exist, many of which rest crucially upon arguably strange types of beliefs. Second, because the notions of plausibility of beliefs are inherently subjective, it seems more fruitful to turn to data in the adjudication of increasingly diverse, if paradigmatically similar, theories.

Indirect Empirical Implications

Most work on legislative signaling models has been theoretical, but at least three indirect implications have been tested. These pertain to the composition of committees, the choice of restrictive rules, and (much more loosely) how self-organizing legislatures grapple with the problem of procedural commitment. Limitations in the tests will become apparent below, but one strength merits emphasis.

Because theories that addressed the gains from trade problems were developed approximately in tandem with theories that addressed gains from expertise, two sets of hypotheses—often competing—emerged at approximately the same time. Many of the tests, therefore, have the scientifically desirable attribute of discriminating between two bodies of theoretical work.

The most thoroughly inspected of these three topics—committee composition—is probably also the least important in terms of the broader questions of legislative organization. The research is somewhat handicapped from the start insofar as gains from trade theories do not predict that committees will be composed of homogeneous high demanders but rather assume it. Information-theoretical implications about committee composition are none too straightforward, either. On the one hand, the comparative statics of many such models are that information transmission is increasing as the preferences of committee and floor become closer. However, the issue is how to create incentives for information transmission and also for the acquisition of expertise. Depending on the cost of acquiring information relative to informational inefficiency, a self-interested institutional designer and/or median voter may want to have some degree of preference-outlying committees. This possibility is further illustrated by the likelihood of a negative relationship between the cost of information and preference extremity. For example, representatives from agriculture-dependent states can probably learn about agriculture policy with less effort than, say, a representative from a densely populated urban area. So contrary to casual assertions and common beliefs, it is not a simple matter of hypothesizing that distributive theories predict preference outliers and information theories predict preference inliers. Finally, the evidence itself, as noted above, is mixed. More than enough committees are not homogeneous high-demanders that it seems prudent to pare back claims about the scope of some distributive theories. Likewise, it is imprudent to reason that there is variation in committee composition, and information theories allow for such variation, therefore the theory is corroborated. Empirical work needs to be conducted that relates empirical variation with the theoretical parameters.

The second most inspected of the three empirical implications—the choice of rules—is not thoroughly studied, but has some uniquely desirable attributes. First, the predictions are sharper than in the other two areas. Initial informational theories unequivocally predict that, at the margin, the presence of restrictive rules should be associated with committee specialization, heterogeneity and moderate preferences. All of these hypotheses are supported (Krehbiel, 1991, chapter 5). Second, the gains-from-trade perspective implies that restrictive procedures are essential to keep logrolling arrangements from unraveling. Controlling for the aforementioned effects, the effect of "distributive content" on the probability of assignment of restrictive rule is consistently and strongly significantly negative. Finally, other kinds of distributive theories—namely, the Baron and Ferejohn divide-the-dollar games—receive support in multivariate analysis. Specifically, emergency legislation (for which legislators have high discount factors and, thus, strongly prefer earlier rather than later passage) indeed is much more likely to be considered under restrictive procedures. As always, there are some caveats. Measures of the explanatory variables like committee specialization and preferences in such analyses are rough, to say the least. Furthermore, additional tests with different specifications and different data produced different results. For example, Dion and Huber (1996) and Sinclair (1994) introduced a party-based argument and find empirical support for partisan hypotheses, too. Dion and Huber's theoretically derived hypothesis relates relative locations of standing committee, rules committee and chamber median preferences to the incidence of restrictive rules, portraying the rules committee as an agent of the majority party leadership. Sinclair's hypothesis is not theoretically derived but rather asserts that restrictive rules will be used on "partisan legislation."

The third implication—procedural commitment—elicits more speculation than systematic empirical work. The problem is that instead of having an explicit theory about whether, when or how legislatures can commit to procedural arrangements, we have only a set of models in which they can do so in varying degrees, or in certain stages but not in others. Procedural commitment is difficult to measure, but one rough approximation is to ask the following: given an ostensibly institutional feature of the legislative body, but not a codified institutional feature, is it at least functionally equivalent to codification? If observation of a substantial period of history uncovers semiregular violations of the supposed rule, it would seem that an "as-if" defense for building such a procedure into a model as an exogenous feature is tenuous. For example, consider the so-called seniority rule for selecting chairmen according to longest continuous service on the committee among majority party members. The seniority rule is not a rule by the codification standard; it is neither written nor enforceable. Are violations nevertheless sufficiently uncommon that it is functionally equivalent to a rule? It is a judgment call but probably not, in which case the "as-if" exception should not be invoked and procedural commitment is questionable. Such are the gray areas that political economists regularly confront in the study of legislative organization.

Conclusion

Predictions of models of legislative organization come in two distinct forms. Some models account for practices that are supposedly common or for approximate constants, such as committee power, logrolling or universalism. Other models account for variation, such as the use of restrictive procedures, the compositional biases of committees or the degree to which a legislature will codify its practices. To date, distributive theories tend to be rational accounts of perceived constants or stylized facts, while legislative signaling models are more amenable to analysis of variation.

Contrary to what it sometimes seems, summarizing this literature is not a simple matter of tallying up findings and designating the winning theory as that with the most marks. Indeed, a valid criticism of the literature as portrayed here and elsewhere is that it is artificially dichotomous (or, depending upon how one treats party models, trichotomous). Models that are labeled informational, for example, are certainly not exclusively informational. Conflict of interest about the distribution of benefits surely exists and has a major bearing on information-theoretic predictions. Nor does it follow that, because gains-from-trade models rarely embody informational asymmetries, empirical support for the gains-from-trade models somehow precludes the importance of informational asymmetries. Finally, it bears emphasis that a significant portion of what political scientists mean by "partisanship" can be represented in existing distributive or informational models by simply relabeling pivotal players. In other words, the theories are somewhat more broadly applicable than it may initially appear.

Ultimately, a much more important concern than getting labels right for various models is to get the models themselves right. When the latter goal is met, and when subsequent empirical research conforms as closely as possible to the model, the substantive conclusion—because of the multifaceted nature of the model—is unlikely to approximate the declaration of a winner in a horse race. This is not because empirical work is inherently messy in this field (although it is). Rather, it is because, in spite of their distinct labels, theories of legislative organization are more like hybrids than purebreds.

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