# Allocating Costly Influence in Legislatures* 

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#### Abstract

Committee seats endow holders with both policy influence and labor obligation. These benefits and costs present the organizational majority with an interesting choice: how many seats should it allocate to the opposition? We present a theoretical framework for understanding the allocation of committee seats by the majority coalition that incorporates both procedural and electoral concerns in the decision calculus and predict that when the majority is strong, the minority will be overrepresented on committees, but when the majority is weak, the minority will be underrepresented. Mechanistic, institutional, and contextual moderators to this choice framework are also discussed. We test our predictions by examining original data on the composition of over 2,000 committees across 98 American state and federal legislative chambers. The analysis yields strong support for our central predictions while suggesting interesting and intuitive contextual constraints on the majority's tendency to exploit its position.


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Replication files are available in the JOP Data Archive on Dataverse (http://thedata.harvard.edu/dvn/dv/.

[^0]"The greater part of his legislative time, with the exception of errand running for his constituents, will be spent on committee work."
-Goodwin (1970, 64)

The composition of legislative committees is a critical determinant of the breadth, depth, and direction of policy change in democratic governments. In many legislatures, committees control which proposals are eligible to make it to the floor for final passage consideration and, of course, their content. As such, how committee seats are allocated is a well-studied question, albeit one that legislative scholars have disproportionately studied from a single vantage point: the ideological composition of committees or committee contingents vis-á-vis the ideological composition of the chamber or party groups (e.g., Weingast and Marshall 1988; Krehbiel 1990; Cox and McCubbins 1993). The ideological composition of committees is self-evidently important to the legislature's policy output, but the question of which individuals will occupy a given a committee seat is secondary to choosing the group from which those individuals will be drawn. That is, committee seats are most often first allocated to parties by the head of chamber (or committee chair) before party leaders divide those seats amongst their membership. This is the case in Congress and the American state legislatures, as it is the case in the overwhelming majority of legislative chambers around the world, either de jure or de facto.

Investigating the partisan allocation of committee seats is not as simple as it may first seem when one considers that committee seats are not an unfettered good, even if political economists often assume (usually implicitly) that they are - more is not strictly preferable to less. As we will discuss in more detail below, committee seats are beneficial because they enable policy influence and allow for position taking, but committee seats are also costly because they bear the burden of obligation and responsibility. This tradeoff creates a fascinating strategic choice for majority leaders: how many seats should they assign to their own coalition and how many should they allocate to the opposition?

Our answer is that the majority should be "generous" to the minority when its margin of control is large and miserly when its margin of control is small. In so doing, the majority assures that, when margins are tight, it retains both procedural control and the luxury of tolerating occasional
defections within its contingent. As its margin expands, however, it gains the ability to conserve its members' time and resources by overburdening minority members with excess assignments. To test the observable implications of our arguments, we examine the composition of legislative committees in 98 American state and national legislative chambers. We find robust support for the central expectation and explore institutional and contextual factors that may condition the majority's tendency to exploit its status suggested by the extant literature. The data suggest that a concentration of procedural power in the majority leadership makes the majority more exploitative, but that competition (or expectations for reciprocity), proportionality rules, and conference procedures that guarantee the minority's ability to deliberate with the majority leader tend to restrain the majority's propensity for exploitation. We conclude the study with discussion of the implications of our findings for both policy outcomes and representation in addition to how our findings may inform the study of legislatures outside of the United States.

## Perspectives on committee assignment

The majority of the theoretical and empirical scholarship on committee composition focuses on the the ideological distribution of members and whether that distribution mirrors the composition of the chamber as a whole, the party caucuses, or neither, i.e., whether committees are composed of preference outliers or so-called high demanders. Respectively, these distributions are predicted by the three leading models of legislative organization in imperfectly disciplined chambers: the informational model, where the floor organizes committees to limit its uncertainty in policy formation and implementation (Gilligan and Krehbiel 1990; Park 2020); the partisan model of organization, where majorities organize committees to safeguard its procedural cartel and policy brand (Cox and McCubbins 1993; Anderson, Butler and Harbridge 2016); and the distributive model of legislative organization, where committees are composed of high-demanders that form log-rolling coalitions to deliver electorally beneficial polices to the participants (Weingast and Marshall 1988; Clemens, Crespin and Finocchiaro 2015). Indeed, attempts to adjudicate which of these theoretical models provided better explanatory power for observed patterns of committee membership were a central
focus of empirical legislative research from the early 1990's (Krehbiel 1990; Groseclose 1994) up until fairly recently (Fortunato 2013; Feigenbaum, Fouirnaies and Hall 2017).

A related, but still fairly separate stream of literature sought to understand how and why individual representatives were issued their assignments. These factors include members' seniority (Goodwin 1970; Taylor 2019), party loyalty (Smith and Deering 1984; Heberlig and Larson 2015; Asmussen and Ramey 2018), constituency interests (Rohde and Shepsle 1973; Miler 2017), and reelection prospects (Shepsle 1978; Meinke 2018). The primary motivation here is the observation that committee assignments provide opportunities for members to build reputation and experience, are important to members as individuals in reaching their careerist goals (i.e., reelection and advancement within the chamber), and important to parties as organizations as these safer and more experienced legislators are better able to serve the party's collective interests (Bullock 1985; Lewallen 2020).

With very few exceptions, the study of committee seat allocation has focused almost exclusively on which members get assigned to which committees, with little attention paid to the number of seats allocated to partisan groups. That is, the study of committee membership has nearly always been concerned with understanding which members are given which qualitative seats (i.e., agriculture, banking and finance, etc.) and whether the collection of legislators that compose particular committees are representative of particular groups. Contrast this with the study of the allocation of departmental portfolios under coalition governance in parliamentary systems, ${ }^{1}$ which is overwhelmingly preoccupied with the division of ministries amongst cabinet member parties and whether or not payoffs are strictly proportional to seat share, or, "Gamsonian" (Gamson 1961; Pukelis 2016). After finding that proportionality tended to hold (more or less), the agenda evolved to trying to understand the institutional foundations of the empirical regularity (Carroll and Cox 2007; Spoon and West 2015), or to explain small observed divergences from proportionality such as whether or not formateur parties are overcompensated relative to their seat share and how this relationship may be conditioned by the importance of various departments (Warwick and Druckman 2001; de Marchi and

[^1]Laver 2020). We recommend Bäck, Debus and Dumont (2011) for a recent review of this scholarship and empirical extensions of the state of the art.

Despite all of this rigorous theoretical and empirical research on the division of ministerial portfolios in perfectly disciplined party systems, there are very few complementary studies of the division of committee seats in imperfectly disciplined party systems. Of particular note here is research by Hedlund and Hamm (1996) and Hedlund et al. (2009), who seek to answer a closely related question to ours: do majorities adhere to proportionality when allocating committee memberships or do they "stack" committees with their own members, overrepresenting their caucus in order to dominate the committee agenda? Hedlund and Hamm $(1996,386)$ argue that a strong majority behaving in accord with its incentives for agenda domination is one that "appoints member from its party to both committee chairs and a proportion of committee seats greater than its representation in the legislature." Similarly, Cox and McCubbins (1993) observe that the majority takes a larger-thanproportional share of seats on key committees in the US House, such as Appropriations and Ways and Means. From a more traditional, normative perspective, this overrepresentation is preferred to proportionality as it smoothes governance and eases responsibility attribution for outcomes, which should therefore increase accountability. For example, in reference to near parity in committee seat allocation, Woodrow Wilson wrote that, "it is plainly the representation of both parties on the Committees that makes party responsibility indistinct and organized party action almost impossible" $(1885,81)$.

More recently, this empirical regularity and theoretical interpretation has also been found by McGrath and Ryan (2019) who reveal discontinuities in party representation given majority status that majority leaders overrepresent their caucuses on committees. As will become more clear below in our theoretical discussion and analysis, this discontinuity is predicted by our theoretical argument, as are Hedlund et al.'s (2009) observation that majorities tend to overcompensate themselves. Interestingly, there is some support for the other side of our argument in both of these articles as well both analyses reveal seeds of evidence that minority parties may be overcompensated relative to their seat share in the chamber under certain conditions, but neither study discusses this. Why is this case? We believe it is a function of two factors. First, both articles are focused squarely on majority
overrepresentation and are, of course, therefore reasonably more concerned with presenting evidence for majority overrepresentation than identifying potential instances of minority overrepresentation. ${ }^{2}$ Second, these articles - like all other studies of committee representation and portfolio allocation that we have found - have operated under the presumption (either explicit or implicit) that more is always better. While this is almost certainly the case in reference to ministerial portfolios, where posts are exclusive ${ }^{3}$ and come with substantial unilateral agenda control and an army of bureaucrats to support the minister with informational and labor resources, we argue that this almost certainly not the case in reference to committee seats.

## Committee seats as costly influence

There can be little doubt that committee seats endow representatives with outsized influence (or at least the potential for such) relative to their counterparts on the floor within their jurisdiction. Collectively, committee members routinely possess perfect negative agenda control and substantial positive agenda control - no bill to which the status quo is preferred will make it out of committee alive without a) strong expectations for its failure on the floor or, b) extraordinary parliamentary procedure. ${ }^{4}$ Indeed, committees are integral in shaping policy outcomes in the United States and around the world, inspiring a literature far too voluminous to summarize here on both the sources of this influence and how it is directed. ${ }^{5}$ Beyond aggregate policy influence, there is also a robust literature devoted to the rent-seeking, or individually-oriented benefits of holding a committee seat

[^2]- the idea that committee members have an enhanced ability to capture targeted goods that will help them win reelection. ${ }^{6}$

Conversely, the number of studies on the origins or allocation of committee influence that give due consideration to the cost of holding a committee seat is, by comparison, quite small. But committee service can, in fact, be quite burdensome to legislators. One piece of evidence for this is the degree to which "members will 'fight tooth and nail' for favorable assignments" (Goodwin 1970, $64)$; the implication, of course, is that unfavorable assignments are of marginal value, or, more likely, a net negative because each and every avenue through which committee seats confer policy influence upon the legislators controlling them comes at some cost. The review and scrutiny of draft bills requires time, information, and effort, as does drafting and proposing amendments to those bills. Members must then rally support for their proposed changes to the draft bills in order to protect them from being voted down before the legislation is proposed to the floor. Even simply killing legislation, rather than scrutinizing and marking it up, requires rank and file members to win over their colleagues or, at least, persuade the committee chairperson. These are time-intensive tasks that require the expenditure of effort and political capital.

Of course, these are also tasks that legislators may delegate (at least in part) to their staff or even simply choose to shirk. However, the essential business of committee membership, in particular attending hearings and voting, can almost never be delegated and can only rarely be shirked without running the threat of censure, fine, or heavy criticism during a future campaign. ${ }^{7}$ Moreover, in many less professionalized legislatures, staff are limited and may lack the expertise necessary to take on the delegation of committee work. This means that, at a bare minimum, committee membership comes at the cost of time - time that could be spent performing constituency service, advertising one's accomplishments, or fundraising. This is time that legislators would almost certainly prefer to spend on a great many things other than extraneous committee service.

Importantly, this time drain is not insignificant. Setting aside the informational and labor costs

[^3]of actual committee work, we can begin to get a sense of how onerous assignments may be by just considering the number of days devoted to hearings or votes. McGrath (2013) describes the depth of hearing obligations and shows that, over the period from 1946 to 2006, each of the standing committees of Congress have spent an average of 27 days per year - roughly one fifth of the chamber's annual session days - in hearings and that the annual obligation has been increasing steadily over that time. Further, over that same period, the typical number of standing committee assignments that members receive has increased as well, meaning that entire months of session time are earmarked for hearings.

In the state legislatures, committee service is similarly demanding. Take the California State Assembly as an example. In the 2017-2018 session, members of the Committee on Banking and Finance were referred 50 bills, requiring 18 open hearings. The Committee on Accountability and Administrative Review (not at all as glamorous as Banking and Finance) was referred 76 bills, requiring 11 open hearings. Even the Committee on Arts, Entertainment, Sports, Tourism, and Internet Media received 34 bills, requiring 16 open hearings. And, of course, each bill requires several votes for which members must be present and each public hearing (for which members must also be present) opens members to media and constituent scrutiny.

We can get a more nuanced picture of this burden by examining the Connecticut General Assembly - far closer to a "citizen" body than the California State Legislature - one of the few legislatures that publishes comprehensive data on committee procedure, including votes, to its online archives. Here, in the 2017-2018 session, the Appropriations Committee received 37 bills requiring 56 hearings and 262 committee votes. Even the Veterans' Affairs Committee, a relatively unattractive post, received 8 bills, requiring 13 hearings, and 93 committee votes - 93 committee votes for an unattractive assignment in a chamber that is in session for less than 100 days per year. ${ }^{8}$

With these numbers in mind, imagine a scenario where the majority party increased the size of a chamber's committees to the point where every member of the majority held a seat on every committee. Of course, this would be unmanageable and obviously undesirable for all individual majority

[^4]members. But it would also be detrimental to the party as a whole. The party would surrender any ability to shape the output that each committee would generate through the tailoring of its composition, while also suffering the loss of all benefits that come from division of labor, specialization, and comparative advantage. In other words, from the majority's perspective, committee overrepresentation can erode the attractiveness and predictability of policy outputs while simultaneously eroding the efficiency with which policies are made. This is to say nothing about the potential electoral costs of overburdening membership with committee service and therefore limiting their time for constituency service, fund-raising, and campaigning.

In sum, even if some individual legislators delegate and shirk as much of their committee work as possible, the opportunity cost of the mandatory business of committee membership, in particular hearings and votes, can be substantial, inspiring Goodwin's (1970, 64) famous description of legislators with which we led the manuscript: "The greater part of his legislative time, with the exception of errand running for his constituents, will be spent on committee work."

## Allocating seats to the minority

To date, the dominant view in the literature is that the majority should overrepresent itself on committees relative to its seat share in the chamber (e.g., Hedlund et al. 2009; McGrath and Ryan 2019). We argue that the majority should only overrepresent itself when its margins are slim and, in all other cases, choose instead to overload the minority with shares of committee seats far in excess of its share of seats in the chamber. For simplicity, we consider a decision theoretic context in which the majority leader, as dictator, chooses the division of seats allocated to both party groups for all committees. We assume that the leader values control of policy outcomes, but also values their members' capacity for non-committee work (constituency service, fund raising, etc.).

We argue that from the majority's perspective, the optimal proportion of seats allocated to the minority, is: $0.5-\epsilon-\delta$, where $\epsilon$ is the proportion of the committee represented by a single seat ${ }^{9}$ such that $0.5+\epsilon$ is the minimal winning coalition, and $\delta$ represents the majority's requirement for a

[^5]vote surplus. We can think of $\delta$ as the majority's expectation for defection or shirking within its own coalition, or, the degree to which maintaining voting majorities for procedural control is made more or less necessary by institutional structures. For example, where the committee chair can unilaterally kill a draft bill, realizing a voting majority becomes superfluous for negative agenda control. In other words, where $0.5+\epsilon$ constitutes a minimum majority, $0.5+\epsilon+\delta$ constitutes a minimum safe majority.

Once a minimum safe majority is achieved, the majority party (as a collective) has no further need for committee seats and should unload all remaining seats onto the minority contingent (thus, minority $=0.5-\epsilon-\delta)$. Over the long run, the burden that these extraneous seats impose upon the minority contingent should redound to the majority's benefit. This is because each additional committee obligation levied upon a minority member steals time and effort away from that member. Each additional seat decreases the member's time available to raise funds, author their own legislation for credit claiming and position signaling, or engage in constituent outreach. In the aggregate, this should reduce the member's ability to defend their seat in the coming election. As such, the majority's control over the allocation of committee memberships allows it to redirect a portion of the minority's resources away from electorally beneficial pursuits, therefore increasing the majority's ability to maintain its status. Importantly, it should not be forgotten that each extraneous seat dealt to a minority member frees a majority member from its obligation, therefore increasing that member's time and resources to pursue more electorally advantageous activities, including through work on (only) their most preferred committees.

Our primary empirical expectation, then, is that, relative to their chamber seat share, minority parties will be undercompensated in committee memberships when the majority's margin of control in the chamber slim, but overburdened with committee memberships as the majority's margin grows. We can give this expectation more formality by contrasting it with its competitors. Consider a statistical model of minority committee share, where the dependent variable, the minority's share of seats on committee, is regressed on the minority's share of seats in the chamber: committee $=$ $\alpha+\beta$ (chamber). In a world where allocations are perfectly proportional (or, "fair"), the model would recover $\alpha=0 ; \beta=1$ as illustrated in the top-left panel of Figure 1. If the majority uniformly overcompensated itself - gave itself a fairly constant excess margin across all seat shares - the model
would recover $\alpha<0 ; \beta \simeq 1$, reflecting a proportional relationship, less the majority's consistent bonus, as illustrated in the top-right panel of Figure 1. If the majority always overcompensated itself, but did so more egregiously as its chamber margins declined, the model would recover $\alpha<0$; $0<\beta<1$, as illustrated in the bottom-left panel of Figure 1. Finally, as we have argued here, if the majority overcompensates itself when its margin is small, but increasingly overburdens the minority as its margin grows, the model would recover $\alpha>0 ; 0<\beta<1$, as illustrated in the bottom-right panel of Figure 1. Our central prediction, then, is that we recover a positive intercept and a chamber seat weight greater than zero, but substantially less than one.

Figure 1: Graph of expectations under alternate allocation models


The next parameter in the decision, $\epsilon$, is strictly mechanical. Smaller committees demand a smaller proportion of seats be allocated to the minority, all else equal, because minimal winning coalitions are a larger proportion of total seats for smaller committees. For example, the minimal winning coalition on a three seat committee is $2 / 3$, whereas on a five seat committee it is $3 / 5$. Because committee sizes vary widely both within and across chambers, it is important to account for size in
our empirical models because the total size of the committee will be positively and mechanistically related to the minority's seat share. The larger the committee, the smaller the "rounding errors" in the formation of the majority's minimal winning coalition. See Todd (2019) for a thoughtful and detailed discussion of these mechanistic determinants of seat distributions.

The majority's surplus vote requirement, $\delta$, should vary as a function of two factors. The first is the level of ideological variability amongst its members. When variance is high, members' likely behaviors, such as their inclination to support or kill particular bills referred to their committee, become less reliable and expectations for defections within the majority coalition increase. Conversely, when variance is low, the coalition is ideologically cohesive, and the likelihood of defection decreases. The expectation, then, is that as intrapartisan ideological heterogeneity increases within the majority, the majority's tendency to underrepresent the minority should increase.

Second, institutional factors that make leadership more powerful vis-à-vis the rank and file, should secularly decrease $\delta$, exacerbating the majority's tendency to overburden the minority whenever possible. More specifically, rules concentrating procedural authority in leadership should make the maintenance of voting majorities on committees both less necessary and less costly. Such rules include nonhearing rights, which endow a committee with the power to simply ignore any draft bill referred to it, rather than placing them on the committee agenda, or nonreporting rights, which endow a committee with the power to withold any draft bill from the floor for final consideration. These rules allow committees more autonomy over their workload allow them to kill any bill by letting it "die on the vine." As these powers are vested in chairpersons, controlling the outcome of procedural votes becomes less valuable or less important to gatekeeping in expectation. As such, these procedural levers grant slim majorities greater control over the activities of committees and the chamber and should therefore encourage the majority to heap excess committee seats upon their opposition.

In sum, the costly nature of holding a committee seat provides incentive for the majority party to minimize the burden on its own members while maximizing the burden on the minority party. When doing so it is first limited by the competing concern of losing agenda control, and thus must ensure the presence of a safe winning coalition. Expectations regarding the interplay of these factors can be summarized as follows:

H1a: When the minimum safe majority coalition is large relative to the majority's margin of chamber control, minority parties will be undercompensated in committee memberships.

H1b: When the minimum safe majority coalition is small relative to the majority's margin of chamber control, minority parties will be overcompensated in committee memberships.
which simplifies to the empirical expectation: $\alpha>0 ; 0<\beta<1$. A corollary of these expectations is that an increase in the size of the minimum safe majority coalition through increased majority party ideological heterogeneity would result in a decrease in the minority share of committee seats. Conversely, a decrease in the size of the minimum safe majority coalition due to the concentration of procedural power in the majority leadership would see an increase in the minority share of committee seats.

## Competing theoretical considerations

We have intentionally opted for a very parsimonious, decision theoretical model of the committee seat allocation process. However, we wish to highlight several potential conditioning factors that that may constrain (or exacerbate) the majority's tendency to overburden or underrepresent the minority on committees apart from $\delta$, as they will help inform our empirical analysis. If strict one-to-one proportionality is the ideal of a "fair" allocation of committee resources, then what may compel the majority to deviate from its natural inclination toward strategically overburdening and underrepresenting toward a fair, proportional division of committee seats? We consider three potentially salient contextual factors.

The first is competition, or, expectations for reciprocity. ${ }^{10}$ If the majority has good reason to suspect that its hold over the chamber is tenuous and that it is likely to find itself out of power in

[^6]the near future, then it may be more willing to treat the minority party more fairly in the present, hoping that it will be treated similarly in the future. This is an intuitive expectation and it comports with Binder's (1997) arguments concerning the distribution of procedural protections to the minority. There is also ample evidence across a wide array of disciplines, particularly behavioral economics and social psychology, to expect this reciprocity effect (e.g., Ben-Ner et al. 2004; King-Casas et al. 2005).

Second, some chambers have proportionality rules, mandating an even split of committee seats between majority and minority parties. In practice, these rules prescribe a minimum number of seats allocated to the minority conditioned on the both the number of total seats on the committee and the number of total seats in the chamber controlled by the minority. For example, the Uniform Rules of the Alaska State Legislature prescribe that, in the 20 seat senate, a minority controlling 7 seats in the chamber is to be allocated at least 1 seat on a 5 -member committee and at least 2 seats on a 7-member committee and that a minority controlling 9 seats in the chamber is to be allocated at least 2 seats on a 5 -member committee and at least 3 seats on a 7 -member committee (Alalska Legislative Affairs Agency 2018). Provided that the majority does not choose to overrule the standing order, such rules should increase the probability of a proportional allocation of committee seats, all else equal.

Third, some chambers have formal conference procedures that mandate consultation between majority and minority leadership in the allocation of committee seats to party groups. Though such conference procedures may seem less toothsome than formalized proportionality rules, there is still good reason to expect that they lead to more proportional allocations of committee seats. In particular, there is the well-documented (especially in repeated interactions) relationship between fairness and contact, observability, and familiarity in bargaining and dictator games (e.g. Hoffman et al. 1994; Hoffman, McCabe and Smith 1996).

Our empirical models account for these potential disruptions to the majority's optimal seat allocation by including a measure of competition and indicators for proportionality rules and conference procedures. Our expectations for these covariates - which will be estimated as interactions with minority chamber seat share - are that the constituent terms will be negative, but of an equal or smaller absolute value than the estimated constant $(\alpha)$, and that the interaction terms will be
positive, but that the sum of each interaction term and the estimated slope on minority chamber seat share $(\beta)$ will be less than or equal to 1 . Each of these expectations will be provided alongside the model estimates.

## Data and model specification

We gather data from 98 American state and federal legislative chambers to test our theoretical expectations. This includes both houses of Congress and all state legislative chambers less the two bodies of the Connecticut General Assembly and the Nebraska Unicameral. Connecticut is excluded because all standing committees are joint between the House and Senate which complicates identification of actors relevant in allocation as well as the relevant procedural rules. ${ }^{11}$ Nebraska is excluded because it is non-partisan. Using both state legislatures and Congress allows us to leverage the substantial variation in our dependent variable and key covariates across the legislative chambers, while holding constant other salient factors, such as government structure, party system, etc., that may differ in other comparative contexts.

Our state-level data include seat distributions for all standing committees in the 96 state legislative chambers for the 2013-2014 session. These are original data, collected by consulting each respective chamber's archives. For the Congress, we employ data on chamber composition and committee seat assignments for $97^{\text {th }}$ through the $114^{\text {th }}$ Houses and the $103^{\text {rd }}$ through $114^{\text {th }}$ Senates collected by Stewart and Nelson (2005) and Stewart and Woon (2017). Combining state and Congressional committee compositions, we are able to observe the distribution of committee seats between the majority and minority party over 2,144 standing committees in 126 chamber sessions. Our dependent variable is the proportion of seats on each standing committee allocated to the minority party and our independent variable of interest is the proportion of seats in each chamber controlled by the

[^7]minority party.
Figure 2 presents the observed relationship between the minority's chamber seat share and its committee seat shares by plotting the (slightly jittered) raw data, along with a fitted summary. The figure shows that support for our central expectation is clearly "in the data," which is encouraging. Of course, we want to estimate this relationship more precisely as well as the extent to which it is moderated by the factors discussed above.

Figure 2: Raw data

> Observed Relationship Between Chamber Seats and Committee Share


In addition to these committee and chamber seat shares, we record the total number of seats on each committee, which determines $\epsilon$, or the proportion of seats above 0.5 needed for a minimal winning coalition. ${ }^{12}$ Testing our predictions pertaining to $\delta$, the necessary surplus to build a minimum safe coalition, requires information on the ideological cohesiveness of the majority party and the

[^8]concentration of procedural power in the majority leadership. For cohesiveness, we use Bonica's (2019) campaign finance, or "CF" scores. These are estimates of legislator preferences derived from campaign donations over time and across contexts. As such, they provide measures of legislator preferences on a common scale for all legislative chambers in our data and, as they are not a direct of function of parliamentary voting behavior like alternative measures (e.g., Shor et al. 2013), they are preferable for this application. The measure entering the model is simply the standard deviation of majority party preferences for each chamber session multiplied by -1 such that larger values indicate a more cohesive majority. Our expectation is that increasing cohesiveness makes voting defections in the majority less likely, reducing the size of the minimum safe coalition and therefore increasing the proportion of seats allocated to the minority.

For procedural power we use the chamber rules data collected by Anzia and Jackman (2013) (supplemented with codings of Congressional rules) to derive a measure of the concentration of procedural power in majority leadership and create a summary measure. These are most comprehensive data available on the structure of procedural power in state legislatures and denote the presence of five rules. The first two are whether committees are endowed with nonhearing rights and nonreporting rights - whether they may kill a bill on arrival by refusing to hear it and whether they may let bills die on the vine by refusing to report them to the floor. The third is whether the majority leader enjoys autonomy over the floor's calendar (choosing which bills come to the floor and when) and the fourth indicates the presence of a committee, appointed by the majority, that sets the floor calendar - where both of these rules are absent, Anzia and Jackman write that, "bills are automatically placed on the calendar in a fixed order or in which a seniority-appointed committee sets the calendar" $(2013,215)$. Finally, the fifth rule indicates that the majority leader need not subject committee assignments to a full floor vote for approval, but rather may make them autonomously. We decompose these these five binary variables into a single summary measure of procedural power, where larger values indicate a greater concentration of power, using the factor analytic model described by Quinn (2004). ${ }^{13}$ Our expectation is that increasing this procedural power reduces the

[^9]necessity of assembling voting coalitions for agenda control, making larger majorities on committees less necessary, and therefore increasing the proportion of seats allocated to the minority.

Moving to factors that may constrain the majority's tendency to exploit the minority, we begin with an estimate of inter-party competition. Conceptually, we define inter-chamber party competition as the majority party's expectation that its status will change in the following election. The greater the probability it will find itself in the minority, the more restraint it should practice in making its committee allocation decisions in order to encourage reciprocity. When its expectations for losing its majority are quite low, it is free to exploit the minority.

Following Fortunato and Turner (2018), we presume adaptive expectations and use past instances of turnover to generate our measure. Using the changes in party control of each legislative chamber from data made available through The Correlates of State Policy Project (Jordan and Grossmann 2020) and data from the US House and Senate archives, we sum the total number of times that a chamber switched partisan control since 1970 and divide this by the total number of elections over the period. We also calibrate the measure such that more recent changes in party control bear more weight than more distant changes, just as Fortunato and Turner (2018) did (more detail is available in their article). We opt for this measure over the alternatives enumerated by Hinchliffe and Lee (2016) because those alternatives are built (at least in part) from the parties' present vote/seat share, making identification and interpretation difficult given that minority seat share is the focal covariate in the model. We also note that Hinchliffe and Lee (2016) find that their turnover measure outperforms the vote/seat based alternatives in predicting the behavioral effects of competition. Our expectation is that greater values of the competition measure will increase the proportionality of minority assignments, where the constituent term is negative (and not greater than the model intercept in absolute terms) and the interaction with minority chamber share is positive.

Next, we include an indicator for chamber proportionality rules which we hand-coded from the chamber rules of the individual houses. These rules typically come in one of two forms in the thirtymajority calendar committee is least informative (which suggests that the single dimension being captured is, in fact, agenda control). We note that replacing the factor analytic measure with an equal-weights index, produces substantively similar estimates, albeit with reduced efficiency and overall model fit.
eight state chambers that have them. They either prescribe minimum allocations of committee seats to the minority party based upon the size of the party in the chamber and the size of the committee, as in Alaska, or, they indicate, in less precise language, that committee seat allocations should be proportional to chamber seat shares. Importantly, these rules are less toothsome than proportionality rules in parliamentary democracies. In such countries, like Denmark or Norway, committees are perfectly proportional microcosms of the chamber as a whole - the proportionality rules are strict and effectively unbreakable (Strøm 1998). This is not the case in American legislatures where these rules may be overridden with a majority vote, so we are unlikely to observe such a mechanical relationship. Nonetheless, the rules do pose an obstacle to majorities wanting to exploit the opposition and we expect the data to bear this out. Our prediction is that the rules will increase the proportionality of minority assignments, where the constituent term is negative (and not greater than the model intercept in absolute terms) and the interaction with minority chamber share is positive.

Finally, we include an indicator for chamber conference procedures, also hand-coded from the chamber rules of the individual houses. These rules require the majority party leadership to formally consult with the minority party leadership when making committee seat assignments. There are 51 state legislative chambers that have chamber conference rules in addition to the conferencing norms in the US House and Senate. Our expectation, following the literature from behavioral economics and social psychology finding positive relationships between contact and fairness, is that these rules will increase the proportionality of minority assignments, where the constituent term is negative (and not greater than the model intercept in absolute terms) and the interaction with minority chamber share is positive. These data are described in Table 1.

The final point to consider before estimation is how to handle the hierarchical structure of our data. Each line of data pertains to one committee in one chamber session and we observe several committees within each session. Rules are unchanging within individual chambers, but the cohesiveness of the majority, competition, and, of course, minority seat shares do vary across chambers. We want to both allow this variation to inform our estimates of the relationships of interest and account for the possibility that there are correlations across observations within states or sessions due to

Table 1: Descriptive statistics

| Covariate | Min | Mean | SD | Max |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| Minority committee seat share | 0.000 | 0.361 | 0.097 | 1.000 |
| Minority chamber seat share | 0.040 | 0.382 | 0.094 | 0.500 |
| Committee size | 1.099 | 2.705 | 0.639 | 4.344 |
| Majority cohesiveness | -0.688 | -0.257 | 0.088 | -0.100 |
| Concentration of procedural power | -1.583 | 0.307 | 0.667 | 0.772 |
| Pattern of competition | 0.000 | 0.170 | 0.122 | 0.462 |
| Proportionality rule | 0.000 | 0.203 | 0.402 | 1.000 |
| Minority conference rule | 0.000 | 0.323 | 0.468 | 1.000 |

unmeasured factors. We approach this in two ways. The first is unit fixed effects, where the relevant units are the legislative sessions, e.g., North Carolina 2013-2014 or the $105^{\text {th }}$ Congress. In this model the estimated effect of the covariates on the outcome will be constrained to variation across chambers within session. For example, the while the South Dakota Senate has a proportionality rule, the South Dakota House does not. The effect of proportionality rules in the fixed effects model is only informed by this type of within-unit variation. This approach additionally presents a strategy for handling threats to inference stemming from omitted variable bias, as heterogeneity correlated with both the explanatory and dependent variables of interest will be captured in the unit fixed effects. ${ }^{14}$

Our second approach is unit random effects. This modeling strategy allows all cross-sectional variation to inform the model estimates and similarly tackles the issue of time-invariant confounding conditional on related heterogeneity being uncorrelated with the explanatory variables in the model. On the one hand, this approach is preferable because the majority of the variation in our data, particularly in reference to the institutional parameters, is cross-sectional; relatively few legislatures have differing rules across chambers. On the other hand, reasonable people can disagree over whether cross-sectional variation cleanly identifies the effects of these institutional parameters. Our position

[^10]is that the cross-sectional (random effects) model is more efficient due to the abundance of crosssectional variation, and we therefore focus our interpretation on those results, but we display both sets of estimates for transparency.

The dependent variable in the models below is the proportion of committee seats allocated to the minority party on a given committee in a given chamber session. On the right-hand side of the equation, the central covariate is the proportion of seats in the chamber controlled by the minority party. This is interacted with our three moderating variables: competition, proportionality rules, and minority conference rules. We also include the size of the committee as the logged number of seats $(\epsilon)$ as well as the level of ideological cohesiveness within the majority party and the concentration of procedural power $(\delta)$.

## Results

In Table 2 we display the results of both the within- and across-unit models - the raw parameter and standard error estimates - along with our theoretical expectations for each of the covariates. ${ }^{15}$ Given our sharp expectations, hypothesis testing here is not merely a question of determining whether or not a coefficient is differentiable from zero. Rather we take an approach analogous to Hartman and Hidalgo's (2018) equivalence test, where we assess the probability that the data are inconsistent with the observable implications of our model. In other words, we estimate the probability that each parameter falls outside the hypothesized interval. These probabilities are given in the columns labeled "tests" in Table 2 and are calculated with 1,000 posterior draws taken from the respective information matrices in the usual way (King, Tomz and Wittenberg 2000). ${ }^{16}$ For example, our estimate of the coefficient on chamber seat share $(\beta)$, is predicted to fall in the interval $0<\beta<1$. Our test reveals that all posterior draws are less than 1, but in the case of the across-units model, 2

[^11]of 1,000 fall below 0 , hence the test score of 0.002 .
Table 2: Model results: dependent variable is share of committee seats controlled by minority

| Variable | Expectation | Within |  | Across |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Estimate | Test | Estimate | Test |
| Constant ( $\alpha$ ) | $\alpha>0$ | $\begin{gathered} 0.283 \\ (0.025) \end{gathered}$ | 0.000 | $\begin{gathered} 0.255 \\ (0.022) \end{gathered}$ | 0.000 |
| Minority seat share ( $\beta$ ) | $0<\beta<1$ | $\begin{gathered} 0.113 \\ (0.064) \end{gathered}$ | 0.043 | $\begin{gathered} 0.171 \\ (0.056) \end{gathered}$ | 0.002 |
| Committee size ( $\epsilon$ ) | $\epsilon>0$ | $\begin{gathered} 0.010 \\ (0.003) \end{gathered}$ | 0.000 | $\begin{gathered} 0.009 \\ (0.003) \end{gathered}$ | 0.003 |
| Majority cohesiveness ( $\delta$ ) | $\delta>0$ | $\begin{gathered} -0.025 \\ (0.037) \end{gathered}$ | 0.758 | $\begin{gathered} -0.045 \\ (0.033) \end{gathered}$ | 0.917 |
| Concentration of procedural power ( $\delta$ ) | $\delta>0$ | $\begin{gathered} 0.031 \\ (0.005) \end{gathered}$ | 0.000 | $\begin{gathered} 0.027 \\ (0.004) \end{gathered}$ | 0.000 |
| Pattern of competition ( $\alpha_{z}$ ) | $-\alpha \leq \alpha_{z}<0$ | $\begin{gathered} -0.168 \\ (0.120) \end{gathered}$ | 0.088 | $\begin{gathered} -0.198 \\ (0.110) \end{gathered}$ | 0.047 |
| Proportionality rule ( $\alpha_{z}$ ) | $-\alpha \leq \alpha_{z}<0$ | $\begin{gathered} -0.083 \\ (0.035) \end{gathered}$ | 0.010 | $\begin{gathered} -0.073 \\ (0.028) \end{gathered}$ | 0.005 |
| Minority conference rule ( $\alpha_{z}$ ) | $-\alpha \leq \alpha_{z}<0$ | $\begin{gathered} -0.092 \\ (0.023) \end{gathered}$ | 0.000 | $\begin{gathered} -0.097 \\ (0.021) \end{gathered}$ | 0.000 |
| Minority seats $\times$ competition $\left(\beta_{z}\right)$ | $0<\beta+\beta_{z} \leq 1$ | $\begin{gathered} 0.491 \\ (0.288) \end{gathered}$ | 0.049 | $\begin{gathered} 0.572 \\ (0.264) \end{gathered}$ | 0.033 |
| Minority seats $\times$ proportionality ( $\beta_{z}$ ) | $0<\beta+\beta_{z} \leq 1$ | $\begin{gathered} 0.167 \\ (0.106) \end{gathered}$ | 0.072 | $\begin{gathered} 0.195 \\ (0.080) \end{gathered}$ | 0.011 |
| Minority seats $\times$ minority conference ( $\beta_{z}$ ) | $0<\beta+\beta_{z} \leq 1$ | $\begin{gathered} 0.211 \\ (0.059) \\ \hline \end{gathered}$ | 0.000 | $\begin{gathered} 0.214 \\ (0.053) \\ \hline \end{gathered}$ | 0.000 |
| Unit fixed effects Unit random effects |  | $\checkmark$ |  | $\checkmark$ |  |
| Observations |  | 2,144 |  | 2,144 |  |
|  |  | 0.560 |  |  |  |
| Log Likelihood |  |  |  | 2,677.944 |  |

As we mentioned above, we focus our interpretation on the across-units random effects model,
though, it is worth noting that the results between the two are quite similar, despite institutional parameters varying more across units than within. Recall that our central expectation is that our constant and the slope on minority chamber share would be estimated as $\alpha>0$ and $0<\beta<$ 1, respectively. ${ }^{17}$ The data strongly support this expectation - the probability that the data are inconsistent with this expectation is less than 0.002. ${ }^{18}$ This means that the hypothesized relationship between minority chamber share and minority committee shares that was so clearly apparent in the raw plots in Figure 2 are still strongly manifest in a more rigorous, controlled comparison that accounts for institutional context and unmeasured factors.

The data also support our expectations for $\epsilon$, or the mechanical relationship between committee size and minority seat share. As the total size of the committee increases, the difference between 0.5 and a minimal winning coalition shrinks, and the expected proportion of committee seats controlled by the minority should increase. We are quite certain that the parameter estimate conforms to this expectation.

While there is strong support for our central prediction and our expectations for $\epsilon$, the estimates for our $\delta$ covariates are mixed. The data are rather conclusive that the parameter estimate on majority cohesiveness is outside of the predicted interval. Less than $10 \%$ of the posterior draws fall within the expected interval. We note that substituting the Shor et al. (2013) estimates of legislator ideology for the Bonica (2019) measures produce nearly identical results, though they eliminate a good portion of the sample due to missingness.

The concentration of procedural power, on the other hand, does yield estimates in the predicted interval. The substantive effect, as predicted, is an increase to the minority's committee seat share. That is, as procedural power is increasingly concentrated in majority leadership, the relative value of controlling large voting majorities decreases and the majority and may safely increase the committee seat burden heaped upon the minority. The variable's mean is about 0 with a maximum of 0.77 and a minimum of -1.58 . Thus, increasing procedural power from its mean to its maximum is associated with increasing the minority's committee seat share by 0.02 (e.g., from 0.4 to 0.42 ) and decreasing

[^12]procedural power from its mean to its minimum is associated with decreasing the minority's committee seat share by 0.04 (e.g., from 0.4 to 0.36 ). Averaging over the sample, an increase in procedural power from $1^{\text {st }}$ to the $3^{\text {rd }}$ quartile is predicted to increase the minority committee shares by $0.012 .{ }^{19}$

To sum up the results thus far, the data bear quite strong support for H 1 a and H 1 b , that majorities overburden minorities when they are weak and underrepresent minorities when they are strong. The data also support our expectation for the mechanical role of committee size in determining minority seat share and our expectation regarding the role that the distribution of procedural power will play in the allocation of committee seats. The data do not, however, suggest that the ideological cohesiveness within the majority is strongly associated with the partisan allocation of committee seats. This is a somewhat surprising null result, however, it is important to keep in mind that the overwhelming majority of our data come from contemporary legislatures where within-party ideological variability is quite small in historical context. It is possible that we simply lack sufficient variation on this covariate in the contemporary era for the relationship to manifest. More generally, we note that the primary threat to external validity is that the majority of our data (all state-level observations) come from a single session period in the modern era.

We now move on to parameters that may potentially constrain the majority's natural tendency to exploit the minority. Recall that each of the covariates are expected to increase the proportionality of minority committee shares to minority chamber share. This means that the constituent term should drive $\alpha$ toward 0 (but not below) and that the slopes on the interaction terms should drive $\beta$ toward 1 (but not above). This is indeed the case for all three moderators: competition, proportionality rules, and conference procedures. All three have constituent terms that are negative, but smaller in absolute terms than the model constant, and all three have interaction terms that are positive, but smaller than one when summed with the slope on chamber seat share.

We plot the effects of each of these moderators individually and all together in Figure 3. In all

[^13]Figure 3: Substantive effects of moderators

panes the x -axis the chamber seat share of the minority party. In panes $1-3$, the y -axis is the change in minority committee share resulting from turning the moderator on. In the case of competition, this is a change from $1^{\text {st }}$ to the $3^{r d}$ quartile of the variable. In the case of proportionality rules and minority conference procedures, the change is $0 \rightarrow 1$. In pane 4 , the $y$-axis is the predicted proportion of committee seats allocated to the minority, full stop, and we plot these predictions for a case where all of the moderators are "off" and a case where all of the moderators are "on." Finally, in each of plots, the points correspond to the unique, observed values of minority chamber share and the polygons plot the $5^{\text {th }}$ and $95^{\text {th }}$ quantiles.

Figure 3 shows that each of the moderators appears to deter the majority somewhat from exploiting weak minorities and overburdening them with excess valueless committee seats - a negative effect on minority committee shares when the minority's chamber share is small. While competition and conference procedures also seem to help alleviate some of the undercompensation of strong minorities, a proportionality rule does not. Thus, while proportionality rules seem to be honored
enough to prevent some exploitation of weak minorities, majority coalitions are not deterred from building safe committee majorities when their advantage in the chamber is small. We find this particularly interesting because proportionality rules are the most formal shield that minority parties may have, yet, empirically, they seem to provide the least protection. It is expectations for reciprocity (or expectations for the need of reciprocity) and mandated consultation that seem to be the most toothsome defense that minority parties have against majority exploitation.

In pane 4 we plot the aggregate effects of all three moderators by calculating the predicted minority committee share for all values of minority chamber share when competition is low ( $1^{\text {st }}$ quartile) and proportionality rules and conference procedures are absent. This mix of institutional parameters is present in the data in, for example, the Arizona Senate and Florida House. This is the light band. We also plot the predicted minority committee share for all values of minority chamber share when competition is high ( $3^{r d}$ quartile) and proportionality rules and conference procedures are present. Again, this mix of institutional parameters is present in the data in, for example, the New Hampshire Senate and Ohio House. This is the dark band.

The differences are striking. When these moderators are absent, committee shares are only weakly responsive to chamber seat shares. Indeed, the light band is nearly flat, an almost perfect representation of our choice model prediction: minority $=0.5-\epsilon-\delta$. But when these moderators are all present, however, the story is quite different. Indeed the dark band deviates only slightly from proportionality (still in the manner that our theoretical story predicts) and committee shares appear to be substantially more "fair." That is, the overall correspondence between chamber share and committee shares is just about 0.2 with the moderators turned off, but, when the moderators are turned on, the correspondence jumps to about 0.73. Further, under these protections, the constant is driven down to effectively nothing at 0.03 . These are levels that our colleagues studying portfolio allocation in coalition cabinets would commonly refer to as "proportional" (e.g., Carroll and Cox 2007; Falcó-Gimeno and Indridason 2013), but still statistically and substantively differentiable from true proportionality.

Before moving to discussion, it is reasonable to ask how the aggregation of state legislative and Congressional observations drives the model results, or, how disaggregating these two levels
of data may change the results. The answer is that it comes down to variation. Analyzing only the Congressional data constrains analysis to the size (minority chamber share and total committee seats), and competition measures, as there is no variability at all in the rule structure within the subsample and effectively no variability in cohesiveness. The estimates on the retained parameters are directionally consistent, but fall short of traditional level of significance, with the exception of total committee size, which remains robust. Analyzing only state data yields results are that are relatively unchanged from the those presented here, with the exception of the competition effect, which is subdued relative to what the full sample recovers, and falls just shy of traditional levels of significance. While we believe noting these differences is in the interest of scientific transparency, we remind the reader that comparative analysis is the point of our research design and disaggregating data will always change empirical results according to the variability and power of the subsamples.

## Discussion

In both presidential and parliamentary democracies, there is consensus that seats on legislative committees provide their holders with valuable policy influence (e.g, Shepsle and Weingast 1987; Martin and Vanberg 2011, respectively). This influence, however, comes at a cost to seat holders - committee work requires time, effort, and sundry other legislative resources that, for members facing tight budget constraints, may very well be better allocated elsewhere. These costs create an interesting (and heretofore understudied) decision for leaders of majority coalitions: how many seats should be allocated to the opposition?

We have argued that the majority coalition has strong incentives to overburden minority members with excess committee assignments when its majority is safe, but underrepresent minority members on committees when its majority is unsafe. In so doing, it can simultaneously spend down the resources of the opposition and conserve its own resources when its margin of control is thick, but protect its procedural cartel when its margin is thin. The majority party is not always free to make the optimal (from its perspective) allocation of committee seats, however - there are institutional and contextual factors that constrain the majority's tendency to exploit its organizational powers. Our analysis uncovers evidence for both the majority's tendency toward exploitation and the
moderating impact of competition (or expected reciprocity), proportionality rules, and conference procedures, although, even the three of these parameters combined cannot completely overcome the majority's incentives. Further, we also find evidence that concentrated procedural power exacerbates the majority's tendency toward exploitation.

These findings bear interesting implications for our understanding and study of policymaking, representation, and the role of organization rules. First, our central findings indicate that the distribution of the policy influence granted by committee membership (assuming there is influence apart from majority-making) is disproportional to overall legislative seat share. This exacerbates the already well-known distortive effects of drawing legislative districts (Katz, King and Rosenblatt 2020) and translating votes into seats (Powell 2000) that perturb the connection between voters and political outcomes. This may be a "correcting" effect in some cases, empowering small minorities that may have suffered due to electoral system effects, but more often these allocation choices will disadvantage the minority coalition. Second, this disproportionate allocation of committee seats may further encumber minority members attempting to hold onto their seat in the chamber, by spending down their time and effort on superfluous committee assignments. ${ }^{20}$ Third, we found that chamber rules constraining the range of allocation choices available to the majority are helpful in constraining its tendencies toward exploitation of small minorities, but only conference procedures and competition were helpful in allowing larger minorities to acquire "fairer" seat allocations. We interpret these findings as evidence that personal relationships still matter in legislative negotiation and that perhaps expectations for reciprocity are more constraining than some formal procedures majorities are rapacious but not without concern for their future prospects.

We see several potential ways to build on these findings in the US and abroad. One of the most straightforward would be examining the impact of committee assignments, that is, the number of assignments and the depth of obligation they bear, on reelection prospects. Though there is no shortage of research attempting to connect committee seats to reelection (Bullock 1972; Grimmer

[^14]and Powell 2013, etc.), this work has tended to focus on just the lead assignment, even though most members in most chambers juggle several assignments and not all assignments are equally costly. Equally straightforward would be to assess the manner in which disproportional committee allocations effect policy outcomes. This is a more challenging endeavor, however. Because identification is difficult, much of what we have come to know about the effects of the partisan composition of the legislature on policy outcomes in the US comes from the comparison barely Democratic to barely Republican chambers in regression discontinuity models (e.g., Caughey, Xu and Warshaw 2017; de Benedictis-Kessner and Warshaw 2020) and this approach does not lend itself to assessing the effects of disproportionality. There are opportunities, however, to assess these effects outside of the US, where changes to electoral systems, the rules governing legislative organization, and parliamentary institutionalization are more common within countries and vary considerably across countries. For example, the institutional and procedural structure of Norway's Storting and Sweden's Riksdag are quite similar, however, when individual members are given their committee assignments, Norway has multiple membership restrictions and Sweden does not. Austria's Nationalrat and Germany's Bundestag are similarly comparable, however, committee chairs (and their agenda control powers) may be monopolized by the majority coalition in Austria but must be proportionally allocated in Germany. These rules are powerful constraints on the majority's ability to exploit the minority and allow purchase to scholars wanting to assess the impact of committee seats and committee powers on the minority's ability to influence policy outcomes. ${ }^{21}$ Likewise, Opalo (2019) documents a wealth of variation in the structures and institutionalization of the African parliaments facilitating both within- and across-unit comparison for theory testing.

Finally, we believe that we can learn more about the organization of legislatures by borrowing from other related literatures. For example, the study of the allocation of ministerial portfolios has proceeded on a path not too dissimilar from the study of committee composition - until recently, both focused primarily on either the qualitative or quantitative aspect of the process. Whereas those researching committee seat allocation primarily focused on the qualitative portion (i.e., do House members from Iowa get seats on the Committee on Agriculture or, is the committee more

[^15]extreme than the floor?), those researching portfolio allocation principally engaged the quantitative portion (i.e., how many portfolios do the Christian Democrats control?). More recently, parliamentary scholars have begun to study the qualitative allocation of ministerial portfolios (e.g., Bäck, Debus and Dumont 2011) and that was quickly followed by a harmonization of the two approaches (Martin and Vanberg 2020). A natural progression in the study of committee organization would be to progress in kind and follow this study of the quantitative allocation of committee seats with a harmonization of the two approaches. More generally, those interested in organization questions in presidential and parliamentary systems have much to learn from one another and we hope that barriers between the fields will continue to disintegrate.

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[^0]:    *The authors are very grateful to Haifeng Huang for feedback on the theoretical argument and for quite a bit of help formalizing the reciprocity argument which interested readers can find in the appendix. We are also grateful to Sarah Anzia and Rob McGrath for generously making their data available, Jim Curry, Christian Grose, and participants at the 2018 Annual Meeting of the American Political Science Association for helpful feedback, and three anonymous reviewers and the editorial team at JOP for thoughtful criticism and excellent advice. Any remaining errors belong to the authors.

[^1]:    ${ }^{1}$ The literatures on committee organization and coalition formation are very closely related. Most notably, the Laver and Shepsle (1990) model of coalition formation is firmly rooted in the Shepsle (1979) model of committee organization.

[^2]:    ${ }^{2}$ It is also important to note that McGrath and Ryan (2019) were focused primarily on discontinuities between bare majority and bare minority contingents and overburdening of the minority occurs outside of that interval.
    ${ }^{3}$ That is, only one person may occupy any one post and all persons may occupy a maximum of one post.
    ${ }^{4}$ More specifically, under condition a), the committee's controlling coalition may choose to report a bill it does not care for if it believes that bill's failure is imminent and there is position-taking benefit to be had from its failure (Fortunato and Monroe 2019). Under condition b) there are some chambers with floor recall (or discharge) procedures under which a petition to force a bill out of committee may be successful if it collects the necessary number of signatories (Lindstädt, Vander Wielen and Green 2017).
    ${ }^{5}$ We recommend Shepsle and Weingast (1987) and Squire (2006) for the American perspective and Strøm, Müller and Smith (2010) and Martin and Vanberg (2011) for a parliamentary view.

[^3]:    ${ }^{6}$ See Rohde and Shepsle (1973) for classic work on this, Fouirnaies and Hall (2018) for a modern perspective, and Martin and Mickler (2018) for a comparative treatment.
    ${ }^{7}$ In the California Assembly, for example, unexcused absences from committee meetings result in a loss of per diem payments.

[^4]:    ${ }^{8}$ Descriptive statistics on the California State Legislature and the Connecticut General Assembly were taken from the states' respective databases.

[^5]:    ${ }^{9}$ Technically, where $n$ is the number of seats on the committee, $\epsilon=\frac{1}{n}$ when $n$ is even and $\epsilon=\frac{0.5}{n}$ when $n$ is odd.

[^6]:    ${ }^{10}$ Interested readers may find in the appendix a repeat play dictator game version of the argument that formally recovers the reciprocity expectation. We opted to omit this from the main text for two reasons. First, the implications of repeat play dictator games are already well understood, and thus this added complexity would not offer a general contribution. Second, for the purpose of understanding committee seat allocation, the predictions from our more parsimonious decision theoretic model are consistent with the expectations generated by the more complex version of the model.

[^7]:    ${ }^{11}$ That is, each chamber has rules for making appointments, but there is anecdotal evidence that, from time to time, a party leader in one chamber may "borrow" a member from her party contingent in the other chamber to fill one of their allocated seats. This adds noise to the relationship between chamber shares and committee shares (particularly given the large difference in the size of the two chambers - 151 in the House and 36 in the Senate) and hinders our ability to estimate the impact of procedural power, competition, etc., on committee seat allocations.

[^8]:    ${ }^{12}$ There are 49 chambers where the rules fix the number of seats on each committee. While these rules do not dictate who gets these seats, we note these constraints since it might restrict the majority's ability to create allocations that are optimally exploitative or exactly proportional, particularly for committees that are smaller in size. Of course, our size variable will capture these effects.

[^9]:    ${ }^{13}$ The factor analytic model finds that non-hearing and non-reporting rights are by far the most informative factors to the index, leader calendar control and floor approval of committee assignments are moderately informative, and

[^10]:    ${ }^{14}$ To be clear, the omission of any and all unit-invariant factors, including legislative professionalism (Squire 1992), cannot perturb the estimates of our focal covariates in this analysis. Of course, we also do not see how differences in professionalism could reshape the majority's incentives for allocating committee seats and ancillary models including professionalism measures do not change the substance of the empirical results.

[^11]:    ${ }^{15}$ We have included model results in the appendix that estimate fixed effects for chamber type (upper or lower house). There are no major shifts in the results in this specification.
    ${ }^{16}$ For the binary variables, we simply make these calculations for the raw parameter estimate. For the continuous variables, however, such as majority cohesiveness or pattern of competition, we use the parameter estimate and the value of the covariate that creates the most difficult test (typically the sample maximum).

[^12]:    ${ }^{17}$ For the within-units model, we calculate $\alpha$ as the sum of the intercept and the average unit effect.
    ${ }^{18}$ As in all model interpretation, probabilistic statements are conditional on design choice - the included covariates, their functional forms, estimation procedure, etc.

[^13]:    ${ }^{19}$ We note that interacting this variable with minority chamber share does not change the substance of the results. The interaction is negative and only marginally significant at the upper bound of minority chamber share meaning, of course, that the positive constituent effect of procedural power will never bump a quite strong minority into being predicted to control a majority of committee seats. We do not lose a more nuanced interpretation of the relationship by not interacting the two covariates.

[^14]:    ${ }^{20}$ Feigenbaum, Fouirnaies and Hall (2017) and Fortunato and Monroe (2019) find no electoral benefit to majority status or majority domination of the agenda for the party collective or individual party members. However, this research does not allow us to assess the impact of excess committee assignments on members' ability to fend off challengers.

[^15]:    ${ }^{21}$ See Mattson and Strøm (1995) and Strøm (1998) for an accounting of such rules.

