The Waning and Stability of the Filibuster

Gleason Judd*    Lawrence S. Rothenberg†

February 12, 2021

Abstract

The filibuster has been a core feature of Senate decision-making for over a century. During the past two decades, however, the Senate has narrowed the filibuster’s scope by removing dilatory tactics for judicial appointments. Meanwhile, it has largely preserved the filibuster for lawmaking. This discrepancy suggests that the filibuster’s appeal likely varies across legislative activities. We show that the modern Senate’s coexistence of supermajoritarian lawmaking and majoritarian appointments is consistent with basic differences between canonical models of legislative lawmaking and judicial appointment under broad conditions. In contrast, the opposite discrepancy cannot arise without other substantial differences. High legislator polarization, as witnessed during the elimination of the appointment filibuster, expands the conditions where majoritarian appointments coincide with supermajoritarian lawmaking.

Keywords: legislatures, procedural choice, supermajority, filibuster, judicial appointments

*Assistant Professor, Dept. of Politics, Princeton University (gleason.judd@princeton.edu).
†Corrigan-Minehan Professor of Political Science, Dept. of Political Science, University of Rochester (lawrence.rothenberg@rochester.edu).
“With the ridiculous Filibuster Rule in the Senate, Republicans need 60 votes to pass legislation, rather than 51. Can’t get votes, END NOW!”

— Donald Trump, 9/2017 (Twitter)

“Donald Trump supports the ending of the filibuster. So you should be a little bit nervous if Donald Trump supports it.”

— Bernie Sanders, 4/2019

Since Rule 22’s adoption in 1917, the filibuster has been the keystone of Senate supermajoritarianism. Recently, however, it has faced heightened scrutiny and been weakened (Smith 2014). Two related features stand out. First, minority rights involving bureaucratic and judicial appointments have diminished substantially but largely remain for substantive legislation. Second, those who readily curbed obstruction of appointments also kept the filibuster for legislation and other assorted items.

There has been significant discussion of, and insight into, the filibuster and its reform in general (for an overview, see Wawro and Schickler (2010)), but studying differences between reforming rules for appointments versus legislation has not been central. In this paper, we ask: why keep the filibuster for legislation but eliminate it for judicial appointments? And under what conditions should we expect such a procedural discrepancy? Moreover, when rules differ, should we expect supermajoritarian lawmaking and majoritarian appointments, or vice versa?

The erosion of non-majoritarian restrictions on cloture for appointments traces to the George W. Bush administration (Kirkpatrick 2005). Frustration emerged by 2005, when the Republican majority threatened to “go nuclear” by employing a majority rather than supermajority to alter the Senate’s rule (for an analysis of

---

2 Wawro and Schickler (2006) argue that the Senate acted as if a de facto filibuster existed even before 1917.
the events, see Binder, Madonna and Smith (2007). In 2013, the Democrat majority used a voted to eliminate the 60-vote requirement for all appointments other than the Supreme Court. In 2018, Majority Leader McConnell, previously a hostile critic, analogously led the elimination of supermajoritarism for Supreme Court nominees.

In contrast, the lawmaking filibuster has been surprisingly resilient despite appearing inconsistent with the majority party’s short-term interest during several recent Congresses, such as 2009-2010 and 2017-2018. Supporters included Senators who appeared likely to benefit from abandoning supermajoritarian lawmaking. This observation is highlighted by Trump’s frustration with his Republican Senate majority, which maintained the lawmaking filibuster while acquiescing to various unconventional executive demands. Although use of more majoritarian procedures, notably budget reconciliation (Reynolds, 2017), might have somewhat reduced pressure for change, careful readings of events indicate something more to the resistance.

Our Approach. We take a strategic perspective to study why a legislature might use different filibuster rules for lawmaking versus judicial appointments. Based on the premise that the Senate is constitutionally majoritarian, we identify and compare the conditions under which a majority of senators prefer supermajority or majority rule for each activity. To do so, we provide a game-theoretic analysis to compare procedural choice between canonical models of each activity: for lawmaking,

---

3 As Ramey (2018) points out, at many times eliminating the lawmaking filibuster pivot would promise little lawmaking change, but these periods—all after the idea of going nuclear was very much in the air—should be exceptions.

4 For example, Majority Leader McConnell continually and publicly defended the lawmaking filibuster. Yet, he had raised Democratic ire for refusing to allow even hearings on Obama’s February 2016 nomination of Merrick Garland to the Supreme Court by claiming that the upcoming presidential election was too near. Several years later, however, he had no qualms about using majoritarian procedures to confirm Justice Amy Coney Barrett shortly before the 2020 election.

5 The Senate can use reconciliation to enact one bill per year involving spending, revenue, and the federal debt limit (i.e., three can pass), but there are restrictions on changes extraneous to the budget.

6 With exceptions, such as the need to override presidential vetoes.
a take-it-or-leave-it agenda setter game à la Romer and Rosenthal (1978); for judicial appointments, a move-the-median game (Krehbiel 2007; Cameron and Kastellec 2016). Furthermore, we characterize how differences in procedural choice depend on (i) ideological polarization in the Senate, and (ii) the court’s composition.

**Key Strategic Forces.** In our analysis, supermajoritarianism constrains the proposer’s ability to shift policy because successful proposals must have broader approval. From the Senate median’s perspective, this property may be good or bad: it may prevent the proposer from shifting policy too far, but it may also prevent policy from shifting far enough. Under some conditions, the median prefers supermajority rule because it profitably offsets agenda power. As this is supermajority rule’s central appeal in our analysis, any other factor that also constrains the proposer will weakly reduce the median’s desire for supermajoritarianism.

Legislative activities vary in how much they inherently constrain the proposer. Thus, we may see majority rule and supermajority rule used simultaneously for different activities even if conditions are otherwise quite similar. This general point has implications for differences in voting rules across many legislative activities beyond lawmaking and judicial appointments, such as budget reconciliation. Given our motivating puzzle, however, we focus on implications for lawmaking and judicial appointments.

There are many ways that lawmaking and appointments can differ, but lawmaking’s relative flexibility is the key distinction in the canonical models we build on. For lawmaking, passing an alternative to the status quo necessarily changes policy. But for judicial appointments, an appointee must interact with justices already on the court, constraining her ability to shift policy. Thus, policy may not change much even if the new justice is quite different from the departing justice. In turn, the proposer has a narrower scope for shifting policy through appointee ideology.
Main Results. The preceding logic suggests that supermajority rule is less appealing for judicial appointments than for lawmaking. Our analysis explores the extent to which this is true and how it depends on broader political conditions. We produce four main results that, taken together, are largely consistent with observations in Washington, D.C. over the last few decades.

Our main result, Proposition 1 shows that supermajoritarian lawmaking can coincide with majoritarian appointments under broad conditions but the opposite combination cannot arise unless there are substantial other differences between the two activities. More precisely, we show that the conditions favoring supermajority appointments are a subset of the conditions favoring supermajority lawmaking. Current Senate procedure, majoritarian appointments and supermajoritarian lawmaking, is therefore consistent with our framework, whereas the opposite arrangement would be surprising without other substantial differences in the political fundamentals of lawmaking versus judicial appointments.

Building on these observations, we characterize how the coexistence of majoritarian appointments and supermajoritarian lawmaking varies with legislative polarization. Proposition 2 demonstrates that widening the ideological gap between filibuster pivots expands the conditions producing these divergent rules. Proposition 3 then shows that a sufficiently traditionalist (status quo biased) pivot guarantees majoritarian appointments.

Finally, we study how the court’s initial composition affects procedural choice for appointments. Proposition 4 shows that a smaller gap between the pre-vacancy median justice and the vacancy court’s progressive median discourages supermajority appointments.

Outline. We begin by situating our contribution in the broader literature on procedural choice, obstructionism, and the filibuster. Next, we introduce our models
of lawmaking and judicial appointment. To begin the analysis, we provide an example that demonstrates the core results and intuition. We then present our main results and comparative statics, paying particular attention to polarization’s possible effects. Before concluding the main text, we discuss several modelling assumptions and an extension allowing party influence.

**Related Literature**

A host of analyses consider legislative obstruction and the filibuster (for book-length treatments see Binder and Smith (1996), Dion (1997), Wawro and Schickler (2006), Koger (2010), Den Hartog and Monroe (2011), and Reynolds (2017)). For our purposes, their most germane aspects focus on why such choices are made in a largely majoritarian institution. Roughly, there are two main perspectives: (1) path dependence, with the filibuster’s existence at the previous time helping ensure the subsequent choice; and (2) preference-based, in which self-interested Senators prefer the filibuster. While not aiming to adjudicate this debate, our analysis falls loosely in the preference camp. We do not model a dynamic world where changing the status quo is costly, which a path dependent perspective seemingly requires.

By using the preference-based perspective, our analysis follows in the tradition of game-theoretic studies of endogenous voting rules (e.g., Dal Bó (2006)). Existing work highlights various reasons, often driven by dynamic incentives, for why legislatures may choose supermajority rules. Prominent examples are balancing executive insula-

---

7 Such distinctions do not capture all viewpoints. For example, Peress (2009) emphasizes agenda control (e.g., by political parties), Dion et al. (2016) claims that the filibuster transmits information (see also Kishishita (2019)), and Fong and Krehbiel (2018) view obstruction as a means of fostering compromise. While we touch upon partisan influence in our extensions, we do not integrate information transmission or delay’s value for compromise.

8 See Wawro and Schickler (2018) for a recent discussion assessing this debate with respect to the Senate’s elimination of the filibuster for nominations and claiming that, while neither perspective is fully consistent, the preference view is superior.
tion against abuses of power (Aghion, Alesina and Trebbi 2004), credibly insulating future policy (Gradstein 1999), or thwarting reform-oriented groups (Messner and Polborn 2004).

All of these papers study endogenous voting rules within particular institutions. In contrast, we explicitly compare endogenous voting rules across two related, but distinct, activities: appointments and typical lawmaking. We isolate a key difference between otherwise similar canonical models of these activities and characterize (i) the endogenous coexistence of different rules and (ii) how that coexistence varies with in broader political conditions.

Technically, we study a static setting where supermajoritarianism can arise for reasons closely related to the logic for strategic delegation highlighted by Klumpp (2010); Gailmard and Hammond (2011) and Kang (2017). In these works, players can prefer delegates different from themselves who favorably constrain legislative proposers. In our setup, choosing the voting rule pins down the binding pivot, which is similar to delegating to a veto player. We depart by focusing on how this incentive interacts with an inherent different between lawmaking and judicial appointments, policy flexibility, that produces systematic differences in procedural choice.

**Strategic Settings**

For both lawmaking and appointments, the policy space is $X = \mathbb{R}$; and there is a proposer, $P$; a median legislator, $M$; and a supermajority pivot, $S$. Each player is purely policy-motivated, with preferences represented by an absolute-loss utility function. Thus, we associate each player $i$ with an ideal point, so that $i$’s utility

---

9 Absolute-loss utility is standard (see, e.g., Cameron and Kastellec 2016) and facilitates comparative statics, but is not essential. Our main result holds if legislators have policy preferences that satisfy the strict single-crossing property and can be represented by strictly quasi-concave utility
from policy $x$ is $u_i(x) = -|x - i|$. Without loss of generality, we normalize $M = 0$
and focus on $S < 0 < P^{10}$.

To ease presentation, we hold $P, M,$ and $S$ constant across activities. Our main
results do not require this simplification, however, as we can allow each to differ some-
what across activities. Substantively, we are agnostic about each player’s real-world
analogue in each activity. For example, although presidents do not formally propose
in lawmaking, they may influence proposals. And although the president is formally
the proposer for judicial appointments, observed proposals may reflect unmodeled
negotiations with others. For example, home-state Senators were sometimes given
the ability to decide whether to return a blue slip noting their approval (e.g., Black,
Madonna and Owens (2014)), meaning appointments might be obstructed. However,
blue slips have never been a formal Senate rule and their impacts were usually modest
and mitigated (e.g., Binder and Maltzman (2004)).

We now introduce features specific to each activity. Our lawmaking game is an
agenda setter model à la Romer and Rosenthal (1978) and our judicial appointments
game is a move-the-median game (Krehbiel 2007).

Lawmaking

The lawmaking game begins with $P$ making a take-it-or-leave-it policy offer $x \in X$
to replace the status quo policy $q_\ell \in X$. After observing the offer, legislators $M$ and
$S$ vote simultaneously. If the proposal passes under the given voting rule, then $x$
is enacted. Otherwise, $q_\ell \in X$ remains. Regardless, the game ends after the vote.

\footnote{We acknowledge, but do not focus on, the knife-edge case $P = 0 = M$. In this case, majority
rule always prevails for appointments and lawmaking.}
Judicial Appointment

The appointment game begins with $P$ nominating a justice $j \in X$. Next, legislators $M$ and $S$ vote simultaneously. If $j$ is approved, then she joins the court and policy is set at the ideal point of the court’s median justice, as is standard in move-the-median games. Alternatively, if $j$ is rejected, then policy remains at the pre-vacancy court median, denoted $q_a \in [j^L, j^R]$ to indicate that it plays a role analogous to $q_L$. After voting, the game ends.

Only two sitting justices are relevant for our analysis: the vacancy medians, denoted $j^L \leq j^R$. Formally, confirmation of a nominee $j$ results in policy at the post-vacancy median justice $j^M(j)$, where:

$$j^M(j) = \begin{cases} 
 j^L & \text{if } j < j^L \\
 j & \text{if } j \in [j^L, j^R] \\
 j^R & \text{else.}
\end{cases}$$  

To ease exposition, the traditionalist justice is the vacancy median opposite $q_a$ from $P$. The other vacancy median is the progressive justice.

In our analysis, player $i$’s payoff from a nominee $j$ is $u_i(j^M(j))$ if $j$ is approved and $u_i(q_a)$ if $j$ is rejected. Therefore players only care about the court outcome, as in Moraski and Shipan (1999) and Rohde and Shepsle (2007). Our main results extend to mixed motivations, i.e., preferences over court outcomes and appointee ideology (as in, e.g., Cameron and Kastellec 2016).
Analysis

We study strategic procedural choice for appointments and lawmaking. In each procedural choice game, we analyze subgame perfect Nash equilibria (SPE) and maintain the usual requirement that legislators play weakly undominated voting strategies, which ensures that players vote as if pivotal (Baron and Kalai, 1993). Under either voting rule, equilibrium behavior for each activity is well-known from existing work\footnote{In the Appendix, Lemmas A.1–A.3 provide the complete characterizations of equilibrium behavior required for our analysis.}.

Much of our analysis consists of comparing $M$’s anticipated equilibrium payoff from majority rule ($M$) versus supermajority rule ($S$). More precisely, we study the following game for each activity.

1. First, $M$ chooses the voting rule, either $M$ or $S$.

2. Using the chosen rule, actors play the activity’s associated game. Under $M$, a proposal passes if and only if $M$ approves. Under $S$, a proposal passes if and only if both $M$ and $S$ approve.

Our formulation streamlines a larger legislature where $M$ is a median member in our ordered policy space, as majoritarian procedural choice there would coincide with the median preference under broad assumptions including those maintained here.

Illustrative Example

We begin the analysis by presenting a specialized setting to highlight the core insights. Let $q_a = q_\ell = -1 < S < M = 0 < P = 1$. For both activities, $M$ is the veto player under majority rule, while under supermajority rule $S$ is the \textit{de facto} veto player in equilibrium.
**Lawmaking.** Under majority rule, $P$ will pass his ideal point, 1. Under supermajority rule, $P$ cannot pass 1 and instead will pass the rightmost policy that $S$ would accept: $2S + 1 \in (-1, 1)$. Anticipating this equilibrium behavior, $M$ prefers supermajority rule. Intuitively, $M$ gains by delegating *de facto* veto power to $S$, who is more content with the status quo and thus forces $P$ to compromise.

**Judicial Appointment.** The equilibrium policy is similar to that of lawmaking but may be constrained by the progressive justice, $j^R$ in this example. Under majority rule, $P$ appoints a justice that induces policy at $\min\{1, j^R\}$. Under supermajority rule, $P$’s appointment induces policy at $\min\{j^R, 2S + 1\}$. Thus, $M$ can prefer supermajority rule, as in lawmaking, but only if $j^R$ does not constrain $P$ very much. Intuitively, if the court’s composition already constrains the consequences of appointments quite a bit, then delegating *de facto* veto power to $S$ is excessive. For example, if $j^R \in (S, 0)$, then $M$ weakly prefers majority rule because $P$ will pass $j^R$, which is closer to 0 than $\min\{j^R, 2S + 1\}$, the supermajoritarian equilibrium outcome. Furthermore, if $S < -\frac{1}{2}$, then $M$ strictly prefers majority rule if $j^R$ is sufficiently centrist.

**Overall Lessons.** Comparing across activities, $M$ is less inclined to use supermajority rule to constrain appointments because that activity features an additional built-in constraint: the existing justices. Specifically, supermajoritarian lawmaking and majoritarian appointments can both be optimal under similar conditions, but the opposite combination cannot coexist.

This example also suggests several comparative statics about legislative polarization and court homogeneity. First, a more extreme pivot expands the conditions under which supermajoritarian lawmaking coincides with majoritarian appointments, i.e., as $S$ decreases towards $q = -1$ they coincide on a larger set of $j^R$. Second, majoritarian appointments arise only if the pivot is far enough from $M$, i.e., only if $S < -\frac{1}{2}$. Third, narrowing the gap between the pre-vacancy median justice and the progressive
justice expands the conditions producing majoritarian appointments, i.e., decreasing $j^R$ towards $q_a$ shrinks the set of $S$ in which $M$ prefers majoritarian appointments.

**Main Results**

The rest of our analysis generalizes the preceding observations and intuition. Our main result, Proposition 1, shows that divergent rules must be supermajoritarian lawmaking and majoritarian appointments unless political conditions are sufficiently different. All proofs are in the appendix.

**Proposition 1.** If (i) the ideology of each politician is sufficiently similar across activities and (ii) $q_a$ is sufficiently close to $q_ℓ$, then appointments are supermajoritarian only if lawmaking is supermajoritarian.

Broadly, Proposition 1 contains two important messages. First, lawmaking is supermajoritarian under broader conditions than appointments and, conversely, appointments are majoritarian under broader conditions than lawmaking. Second, supermajoritarian lawmaking and majoritarian appointments can coincide under similar conditions, but the opposite combination cannot. That is, the coexistence of supermajoritarian appointments and majoritarian lawmaking requires that either the status quo or key legislator ideologies are quite different across activities.\(^\text{12}\)

Substantively, Proposition 1 sheds light on the Senate maintaining the filibuster for lawmaking while abandoning it for appointments. Importantly, it also suggests that the opposite arrangement would be surprising unless political fundamentals are quite different across activities.

\(^{12}\)One obvious difference that could occur in our analysis if we explicitly integrated bicameralism is that the gridlock interval could be wider for lawmaking than appointments, as the left or right pivots might be more extreme in the House. Unless this difference is substantial, our results carry over.
Intuitively, the potential tradeoff for $M$ in our analysis of procedural choice is whether to give $P$ more or less flexibility to change the status quo. In equilibrium, the degree of constraint imposed on $P$ can vary across activities, as appointments constrain $P$ more than lawmaking, and voting rules, as supermajority rule constrains more than majority rule. These differences produce the basic logic for Proposition 1: $P$ can always shift policy weakly further in lawmaking than appointments, so supermajoritarian constraints for appointments are less valuable to $M$. Thus, $M$ prefers supermajoritarian appointments under fewer conditions.

More precisely, Proposition 1 builds on the observation that the set of $q_a$ for which $M$ prefers supermajoritarian appointments is a subset of the set of $q_\ell$ for which $M$ prefers supermajoritarian lawmaking. Figures 1 and 2 illustrate this property for a particular ideological profile of $P, M,$ and $S,$ but it holds for any profile. Thus, the conditions producing supermajority appointments are a subset of those producing supermajority lawmaking. Furthermore, continuity properties of equilibrium policy ensure that $M$'s equilibrium value is continuous for both. Therefore strict preferences over procedural choice are not sensitive to minor differences in political conditions between activities, i.e., politician preferences or status quo policy.

Figure 1 depicts $M$’s preferred lawmaking voting rule depending on $q_\ell$. In the leftmost region, $q_\ell \leq 2S - P$, the proposer can shift policy to $P$ regardless of the voting rule, so $M$ is indifferent between supermajoritarianism or simple majoritarianism, denoted formally as $M \sim_\ell S$. For an intermediate region, $q_\ell \in (2S - P, 2S + P)$, the proposer can shift policy to $P$ under majority rule, but $S$ constrains her under supermajority rule so that equilibrium policy is in $(-P, P)$. Thus, $M$ strictly prefers supermajoritarian lawmaking, denoted $S \succ_\ell M$. In the more centrist region $q_\ell \in (2S + P, P)$, majority rule allows the proposer to shift policy to $P$ but supermajority
rule constrains the proposer to policy left of $-P$, so $M$ strictly prefers majority rule. Finally, $M$ is indifferent in the most centrist region $[-P, 0]$ because the proposer passes $-q_\ell$ under majority rule and $q_\ell$ under supermajority rule. Combining the last two observations, $M$ weakly prefers majoritarian lawmaking, denoted $M \succsim_\ell S$, if $q_\ell \in [2S + P, 0]$.

Figure 1: $M$’s preference over lawmaking voting rule

\begin{align*}
q_\ell \quad & \quad 2S - P \quad & \quad 2S \quad & \quad 2S + P \quad & \quad S \quad & \quad -P \quad & \quad 0 \\
M \sim_\ell S \quad & \quad S \succ_\ell M \quad & \quad M \succsim_\ell S
\end{align*}

Figure 2 depicts $M$’s procedural preference for appointments, which depends on $q_a$ and $j^R$. Comparing against Figure 1 reveals that, regardless of $j^R$, the conditions producing supermajoritarian appointments are a (possibly strict) subset of those generating supermajoritarian lawmaking. If $j^R \geq P$, then appointments are strategically equivalent to lawmaking and $M$’s procedural preferences are identical to those just described and depicted in Figure 1. As $j^R$ shifts inward over $[0, P)$, the proposer cannot shift policy as far past $M$ under either voting rule, so supermajority rule is less appealing to $M$. Figure 2 illustrates how procedural choice changes: the interval of $q_a$ in which $M$ strictly prefers supermajoritarianism shrinks steadily from $(2S - P, 2S + P)$ and vanishes at $2P$ for $j^R = 0$, while the interval in which $M$ strictly prefers majoritarianism expands steadily from $(2S + P, -P)$ to $(2S, 0)$. Finally, $j^R < 0$ constrains the proposer so much that she cannot shift policy past 0 under either voting rule. Therefore supermajority has no appeal to $M$ and procedural choice weakly favors majority rule regardless of $q_a$.

13 If $q_\ell = 2S + P$, then $M \sim_\ell S$. 

13
Note: Unlike lawmaking (see Figure 1), $S \succ_a M$ does not always hold for $q_a \in (2S - P, 2S + P)$. Instead, $M$ strictly prefers majority rule for such $q_a$ if $j^R \in (-P, P)$.

Our discussion, and both figures, focuses on $P$ leaning away from $q$. Otherwise, $M$ prefers majority rule for both activities.\[14\] The omitted case is inconsequential for our main results because we are primarily interested in differences in $M$’s preference for supermajority rule.

\[14\] If $q \in (0, P]$, then the equilibrium policy outcome is $q$ under either voting rule for both activities. If $q > P$, then $M$ weakly prefers the equilibrium policy under majority rule for each activity. See the Appendix for more details.
Effects of Ideology on Procedural Choice

Legislative Polarization & Divergent Rules. We now study how the coincidence of divergent voting rules depends on ideological polarization, which is frequently referenced in calls for majoritarian rules. Specifically, we vary the extremism of the supermajority pivot, $S$. We show that greater polarization promotes divergent rules, as there are more conditions with majoritarian appointments and supermajoritarian lawmaking.

**Proposition 2.** As the supermajority pivot becomes more extreme, there are weakly more conditions under which majoritarian appointments coincide with supermajoritarian lawmaking.

We have seen that divergent rules coincide when supermajority rule (i) usefully constrains lawmaking but (ii) is excessive for appointments because the vacancy justices provide enough constraint. Proposition 2 shows that shifting the supermajority pivot, $S$, outward expands the conditions under which both (i) and (ii) hold. For sufficiently centrist $S$, i.e., close to $M$, the vacancy court does not constrain appointments enough for divergent rules to coexist. Specifically, the vacancy court does not constrain $P$ in majoritarian appointments unless $M$ already prefers supermajority rule for both activities. Once $S$ is sufficiently far from $M$, however, there are conditions where (i) and (ii) hold: under supermajority, $P$ cannot substantially shift policy in either activity; under majority rule, $P$ can shift policy far past 0 in lawmaking but cannot do so in appointments due to the vacancy medians. And as $S$ shifts further outward, supermajority rule increasingly constrains $P$ in both activities but the vacancy median constraint does not change. Thus, divergent rules coexist more broadly. That is, there are weakly more condition under which (i) and (ii) hold. Yet, there is a limit to the scope for divergent rules: if $S$ is extreme enough, then further extremism
does not change the size of the set of parameters producing divergent rules, as can be seen by comparing Figures 1 and 2.

Note that the gridlock interval expands as $S$ gets more extreme. Because procedural divergence does not depend on the (unmodeled) gridlock pivot who is aligned with $P$, Proposition 2 immediately yields the implies that a larger gridlock interval expands the conditions producing divergent rules.

**Corollary 2.1.** Expanding the gridlock interval produces weakly more conditions under which majoritarian appointments coincide with supermajoritarian lawmaking.

**Legislative Extremism & Majoritarian Appointments.** Building on Proposition 2, we establish that appointments are likely to be majoritarian if $S$ is sufficiently extreme. Furthermore, this expectation is especially strong if the departing justice ($q_a$) is more extreme than either $P$ or the vacancy median aligned with $P$.

**Proposition 3.** If the supermajority pivot is sufficiently extreme, then the median legislator, $M$, weakly prefers majoritarian appointments ($M \succeq_a S$). Moreover, if $q_a$ is more extreme than the proposer or progressive justice, then $M$ strictly prefers majoritarian appointments ($M \succ_a S$).

Proposition 2 builds directly on the earlier intuition that supermajority rule can benefit $M$ by preventing policy from swinging too far past 0. Shifting $S$ away from $M$ strengthens the supermajoritarian constraint, which decreases $P$’s latitude to shift policy in equilibrium, and supermajority loses its appeal if $S$ is sufficiently extreme.

To describe the logic more precisely, suppose $q_a < 0$. Regardless of the voting rule, $M$ weakly prefers the equilibrium outcome over $q_a$. Under supermajority rule when $S$ is sufficiently extreme, however, $P$ cannot pass policy that $M$ strictly prefers to $q_a$. And if $q_a$ is sufficiently extreme relative to $P$ and $j^R$, then $M$ strictly prefers
majoritarian policy to \( q_a \). In the starkest example, supermajority fully constrains \( P \) and produces gridlock if \( S \) is more extreme than \( q_a \). Gridlock is not necessary for Proposition \( 3 \) however, as it can hold for traditionalist pivots more centrist than \( q_a \) if either: \( P \) is relatively centrist, or the progressive vacancy median is centrist enough.

Substantively, Proposition \( 3 \) indicates that a polarized Senate, particularly one with a substantial portion of staunchly status quo biased members, is inclined towards majoritarian appointments. And this inclination is especially strong if the anticipated change to court policy is not too drastic, either because (i) the proposer is centrist or (ii) the existing composition of justices constrains how far the appointment can swing court policy past the median Senator.

**Court Composition & Procedural Choice.** We conclude our baseline analysis by exploring how the court’s ideological composition affects procedural choice. In reality, there are many courts and vacancies, so we can think of this exercise as capturing changes in expectations about the average departing median justice and progressive justice over courts generally.

**Proposition 4.** *Decreasing the ideological gap between the progressive justice and the departing median justice \( (q_a) \) weakly shrinks the conditions under which \( M \) strictly prefers supermajoritarian appointments.*

Shrinking the gap between the progressive justice and the departing median \( (q_a) \) also narrows \( P \)’s scope for shifting policy. Majority rule’s flexibility therefore grows weakly more appealing. Substantively, Proposition \( 4 \) suggests that majority rule is more enticing for judicial appointments in courts with a crowded center, particularly on the progressive side (biased away from \( q_a \)). This description roughly matches observations before the appointment filibuster was eliminated, at least for the Supreme Court (other courts being more difficult to aggregate). Differences between the Court
median at the time (e.g., Justice Kennedy) and the progressive justices were not especially dramatic relative to, for example, the days of Justices Douglas or Marshall.\footnote{We make these assessments using the canonical Martin-Quinn scores.}

\section*{Discussion}

Our analysis compares procedural choice between majority or supermajority rule in Romer-Rosenthal lawmaking and move-the-median judicial appointments \cite{Krehbiel2007}. Each of these parsimonious models has been useful to understand features within its domain of application. One virtue of our analysis is showing that contrasting them provides crisp insight into differences between these domains, and specifically with respect to endogenous rules. Although other theoretical models question or alter them, we use these models because of their comparability and importance.\footnote{See, e.g., \cite{Lewis2008} and \cite{JoPrimoSekiya2017} for appointments; and \cite{ChiouRothenberg2003}, \cite{CoxMcCubbins2007}, and \cite{DenHartogMonroe2011} for legislating.}

First, they share a similar structure. Each stipulates a one-shot game with a one-dimensional policy space and take as given the filibuster pivots, status quo, and configuration of existing decision-makers. Moreover, individual preferences are central, with any party influence left implicit.\footnote{We elaborate on party influence later in the discussion.} And both models are essentially unicameral—move-the-median by definition and the setter model by not explicitly modeling bicameral bargaining, thus treating the legislature as unicameral for our purposes.

Two superficial differences for interpretation are that (i) the president is a veto player in lawmaking and (ii) has proposal power for judicial appointments. But we easily deal with these discrepancies by generalizing the proposer (in a reduced form sense capturing bargaining that might impact whom the president formally nominates) and gridlock intervals (the mechanism by which the presidential veto shapes pivotal politics).
Second, each model is canonical and has offered important insight within its application. Their key features and forces are well-known. To the extent that they capture important aspects of their corresponding activities, comparing them can isolate important differences. Substantial overlap narrows the scope of potential differences that could generate distinct rules in our analysis. Despite many similarities, our approach identifies a key distinction between the two models: the feasible scope for shifting the status quo. Thus, our analysis highlights another domain where these parsimonious models are useful. Simply by using canonical models, we showed that contemporary Senate procedures are natural byproducts of well-studied strategic environments. We can draw strong conclusions about differences in filibuster persistence for appointments versus lawmaking even without introducing additional features.

Of course, skeptics might counter that other forces are prominent. Thus, we extend our analysis in two ways that are potentially relevant given our interests. Next, we discuss allowing political parties to influence co-partisans. And in the appendix we extend the baseline to include a consideration that can be crucial for success of many government initiatives—policy-sensitive investment. Our main findings from the baseline model are robust to adding these features, and we also derive additional insights.

Many Congress scholars emphasize partisan influences. For example, parties may act as cartels influencing members through mechanisms such as agenda control (Cox and McCubbins, 2007).\(^\text{18}\) Thus, it is natural to explore how party influence affects our results. Existing work incorporates partisan forces into our baseline lawmaking model (Volden and Bergman, 2006; Chiou and Rothenberg, 2009). In that tradition, party pressure essentially microfounds particular shifts in individual ideal points.

\(^{18}\) Cox and McCubbins focus on the House, but the logic can apply to the Senate. Yet, the Senate’s committee system is generally considered less powerful and the upper chamber lacks a germaneness requirement.
Depending on who is pressured and by how much, these shifts can potentially alter proposals or voting behavior. Through these channels, party influence can alter legislative constraints on the proposer and these changes can depend on the activity or voting rule. Crucially for anticipating how party influence interacts with our earlier analysis, however, judicial constraints are unaffected by changes in party pressures.

We apply Chiu and Rothenberg’s (2009) formulation. Individual politicians have primitive policy preferences, but party pressure shifts their induced preferences toward a locus of party power, e.g., a party leader. The extent to which an individual’s effective ideal point shifts depends on the amount of pressure. Other than this adjustment, the individual’s utility function is unchanged.

There are two main observations. First, our results are robust under broad conditions. Proposition 1 holds unless $P$ and $M$ share the same party-induced ideal point, which requires either that $P$ and $M$ are (i) co-partisans in a party with total influence over both, or (ii) in a relationship where one is a party locus with total influence over the other. Second, we can restate several comparative statics in terms of changes in party influence. Proposition 2 extends directly if party influence shifts $S$ further away from $M$. For instance, if the traditionalist party’s locus of power is more centrist than the pivot, then weakening the party’s influence produces weakly more conditions where majoritarian appointments coincide with supermajoritarian lawmaking. Conversely, the opposite relationship holds if the traditionalist party’s locus of power is more extreme than the pivot. Proposition 3 can also be re-expressed through party influence.
Conclusions

To many, the contemporary coexistence of majoritarian appointments and super-majoritarian lawmaking rules is surprising. At different times in recent years, the Senate’s left and right each rejected the cloture requirement for appointees. Yet, neither opportunistically eliminated the lawmaking filibuster.

We show that the observed discrepancy in rules is consistent with a fundamental difference between two otherwise similar canonical game-theoretic models of legislative behavior. The key difference between the activities is that appointees must work with others to shape policy, so appointments offer less scope to shift policy than does regular lawmaking. As favorably constraining proposals is supermajority rule’s potential upside in our analysis, it is less appealing for appointments. Consequently, a majority of legislators prefer supermajority rule for lawmaking under broader conditions than they favor it for appointments. Furthermore, we show that majoritarian appointments can coincide with supermajority lawmaking, but the opposite discrepancy cannot arise without substantial differences in other non-institutional conditions, such as agenda setter ideology. We also show that ideological polarization makes conditions more favorable for distinct rules. Our results also provide plausible, although more restrictive, conditions where supermajoritarian hurdles might be eliminated altogether.

Moreover, our core results are sustained even after incorporating relevant features such party influence and policy-sensitive investment. In most situations, party influence does not alter our main results for the baseline model or the investment extension. Our general insights hold up no matter how we answer the question, “Where’s the party?,” but party pressure may impact specific expectations.

Empirically, our legislative polarization results (Propositions 2 and 3) appear
roughly consistent with changes in the U.S. during recent decades. Specifically, compare November 1993 with November 2013. In both instances, the president’s party had a Senate majority but not a supermajority. Although saying much about anticipated policy changes throughout the judiciary is difficult, the data for the chief executive and the Senate align with our story. Not only was the Senate less polarized by conventional measures in 1993 compared to 2013, but the Republican filibuster pivot in 1993 was considerably more moderate than in 2013. Also consistent with our results, 1993 incumbent president Bill Clinton was to the left of 2013 incumbent Barack Obama (who was more centrist than any post-war Democratic president), at least using our standard preference measures. Thus, conditions were far riper for Senate Majority Leader Harry Reid to tear down the filibuster in 2013 than for Leader George Mitchell in 1993.

Of course, we have not proven why the Senate has made particular choices, but our analyses provide a useful rationale that builds on familiar foundations. Given that these foundations focus on static forces, we purposefully abstract from dynamic considerations. Future work could incorporate dynamic features to study how they interact with the static incentives studied here. Another interesting and worthwhile avenue for future research is exploring how, if at all, supermajoritarianism might arise if we had a median agenda setter, or from a status quo on the same side of the median as the proposer.

\[19\text{Using DW-NOMINATE, where scores roughly from } -1 \text{ to } 1 \text{ span liberal to conservative, the November 1993 pivot, John Chafee of Rhode Island, had a 0.084 score, i.e., was quite moderate; the November 2013 pivot, Lamar Alexander of Tennessee, was a far more conservative } .324.\]
References


URL: https://sites.ualberta.ca/klumpp/docs/representation.pdf


Appendix

Contents

Appendix A  Baseline Analysis  
A.1  Proof of Proposition 1  
A.2  Proof of Proposition 2  
A.3  Proof of Proposition 3  
A.4  Proof of Proposition 4  

Appendix B  Policy-sensitive Investment
Appendix A Baseline Analysis

Without loss of generality, we prove all results for \( P \geq 0 \) and focus on equilibria in which each legislator always accepts if indifferent. Additionally, for completeness we include the right supermajority pivot, \( R > M \), who is superfluous for the analysis in the main text.

Given a lawmaking status quo \( q \in X \), let \( A^\ell_i(q) = \{ x \in X \mid u_i(x) \geq u_i(q) \} \) denote the acceptance set in lawmaking for legislator \( i \in \{ S, M, R \} \). For voting rule \( V \in \{ S, M \} \), let \( A^\ell(q; V) \) denote the set of policies that pass given \( q \). Then \( A^\ell(q; M) = A^\ell_M(q) \) and \( A^\ell(q; S) = \cap_{i \in \{ S, M, R \}} A^\ell_i(q) \). Let \( x^*_\ell : X \times \{ M, S \} \to X \) denote the mapping from the status quo and voting rule to equilibrium lawmaking outcome. For all \( (q, V) \in X \times \{ S, M \} \), \( P \)'s equilibrium lawmaking proposal is outcome equivalent to

\[
x^*_\ell(q; V) = \arg \max_{x \in A^\ell(q; V)} u_P(x).
\]

A.1 Proof of Proposition 1

The argument proceeds in several lemmas. First, Lemma \( \[ A.1 \] \) characterizes the equilibrium majoritarian lawmaking outcome.

**Lemma A.1.** In lawmaking, \( x^*_\ell(q; M) = \min\{ P, |q| \} \).

**Proof.** Under \( M \), \( x \in X \) passes iff \( u_M(x) \geq u_M(q) \). Thus, \( A^\ell(q; M) = [-|q|, |q|] \). Because \( P \geq 0 \), we have \( x^*_\ell(q; M) = \min\{ P, |q| \} \). \( \square \)

Lemma \( \[ A.2 \] \) characterizes the equilibrium supermajoritarian lawmaking outcome.
Lemma A.2. In lawmaking,

\[ x^*_\ell(q; S) = \begin{cases} 
q & \text{if } q \in [S, R] \cup [R, P] \\
2S - q & \text{if } q \in (2S - P, S) \\
2R - q & \text{if } q \in (R, 2R - P) \\
P & \text{else.} 
\end{cases} \]

Proof. Under $S$, $x \in X$ passes iff $u_i(x) \geq u_i(q)$ for all $i \in \{S, M, R\}$.

Case 1: If $q \in [S, R]$, then $A^\ell(q; S) = \{q\}$. Thus, $x^*_\ell(q; S) = q$.

Case 2: If $q < S$, then $A^\ell(q; S) = [q, 2S - q]$. There are two subcases. First, $q \in (2S - P, S)$ implies $2S - q < P$ and thus $x^*_\ell(q; S) = 2S - q$. Second, $q \leq 2S - P$ implies $P \in A(q; S)$ and thus $x^*_\ell(q; S) = P$.

Case 3: If $q > R$, then $A^\ell(q; S) = [2R - q, q]$. There are two subcases. First, suppose $R > P$. Then arguments symmetric to Case 2 show that $q \in (R, 2R - P)$ implies $x^*_\ell(q; S) = 2R - q$, and $q \geq 2R - P$ implies $x^*_\ell(q; S) = P$. Second, suppose $R \leq P$. Then $x^*_\ell(q; S) = \min\{P, q\}$. \qed

Next, we state several preliminary observations used to characterize the equilibrium appointments outcome under each voting rule. Let $q \in [j^L, j^R]$ denote the pre-vacancy median justice.

Recall the function $j^M(x)$ defined in [1] that locates the median justice following approval of an appointee with ideal point $x$. Because $j^L \leq q \leq j^R$ implies $j^M(q) = q$, it follows that $A^a_i(q; V) = \{x \in X|u_i(j^M(x)) \geq u_M(q)\}$ is the acceptance set for $i \in \{S, M, R\}$. Then $A^a(q; M) = A^a_M(q; V)$ and $A^a(q; V) = \cap_{i \in \{S, M, R\}} A^a_i(q; V)$. Note that $A^a(q; V) \cap [j^L, j^R] \subseteq A^\ell(q; V)$ always holds.

3
For appointments, proposing \( x \notin A^a(q; \mathcal{V}) \cap [j^L, j^R] \) produces the outcome \( y \in \{q, j^L, j^R\} \subseteq A^a(q; \mathcal{V}) \cap [j^L, j^R] \) in equilibrium. Let \( x_a^* : X \times \{\mathcal{M}, \mathcal{S}\} \rightarrow X \) denote the mapping from the status quo and voting rule to equilibrium outcome. For all \((q, \mathcal{V}) \in X \times \{\mathcal{S}, \mathcal{M}\}, \mathcal{P}'s\) equilibrium nominee is outcome equivalent to \( x_a^*((q; \mathcal{V})) = \arg \max_{x \in A^a(q; \mathcal{V}) \cap [j^L, j^R]} u_P(x) \).

Lemma A.3 characterizes the equilibrium outcome from appointments for each voting rule.

**Lemma A.3.** For judicial appointments under voting rule \( \mathcal{V} \in \{\mathcal{M}, \mathcal{S}\}, \) the equilibrium policy outcome is \( x_a^*(q; \mathcal{V}) = j^M(x^*_L(q; \mathcal{V})) \).

**Proof.** Consider voting rule \( \mathcal{V} \in \{\mathcal{M}, \mathcal{S}\}. \) Lemmas A.1 and A.2 imply \( x^*_L(q; \mathcal{V}) \in A^a(q; \mathcal{V}). \) Because \( u_M(x) \geq u_M(q) \) for all \( x \in A^a(q; \mathcal{V}), \) we know \( |x^*_L(q; \mathcal{V})| \leq |q|. \)

Next, \( j^L \leq q \leq j^R \) and \( q \in A^a(q; \mathcal{V}) \) together imply \( A^a(q; \mathcal{V}) \cap [j^L, j^R] \) is nonempty and convex. It follows that \( j^M(x^*_L(q; \mathcal{V})) \in A^a(q; \mathcal{V}). \) Moreover, it uniquely solves \( x_a^*((q; \mathcal{V})) = \arg \max_{x \in A^a(q; \mathcal{V}) \cap [j^L, j^R]} u_P(x). \) Thus, \( x_a^*(q; \mathcal{V}) = j^M(x^*_L(q; \mathcal{V})). \)

Lemma A.4 characterizes the set of status quo for which \( \mathcal{M} \) strictly prefers super-majoritarian lawmaking.

**Lemma A.4.** In lawmaking, \( \mathcal{S} \succ_{\ell} \mathcal{M} \) iff \( q \in (2S - P, 2S + \min\{P, |S|\}). \)

**Proof.** It suffices to show \( u_M(x^*_L(q; \mathcal{S})) > u_M(x^*_L(q; \mathcal{M})) \) iff \( q \in (2S - P, 2S + \min\{P, |S|\}). \)

There are six cases.

**Case 1:** Consider \( q \leq 2S - P. \) Rearranging yields \( P \leq 2S - q < -q = |q|, \) where \( S < 0 \) gives the strict inequality. Lemmas A.1 and A.2 imply \( x^*_L(q; \mathcal{M}) = x^*_L(q; \mathcal{S}) = P. \) Thus, \( \mathcal{M} \sim_a \mathcal{S}. \)

**Case 2:** Consider \( q \in (2S - P, 2S + \min\{P, |S|\}). \) Lemmas A.1 and A.2 imply \( x^*_L(q; \mathcal{S}) = 2S - q \) and \( x^*_L(q; \mathcal{M}) = \min\{P, |q|\}. \) Because \( |2S - q| < \min\{P, |q|\}, \) we have \( u_M(x^*_L(q; \mathcal{S})) > u_M(x^*_L(q; \mathcal{M})). \)
Case 3: Consider \( q \in [2S+P, S) \). Lemma \( A.2 \) implies \( x^*_q(q; S) = 2S - q \). Therefore \( q < x^*_q(q; S) \leq -P \). Lemma \( A.1 \) implies \( x^*_q(q; \mathcal{M}) = P \). Thus, \( u_M(x^*_q(q; \mathcal{M})) \geq u_M(x^*_q(q; S)) \).

Case 4: Consider \( q \in [S, R] \). Lemmas \( A.1 \) and \( A.2 \) imply \( u_M(x^*_q(q; S)) = u_M(q) \leq u_M(\min\{P, |q|\}) = u_M(x^*_q(q; \mathcal{M})) \).

Case 5: Consider \( q \in (R, 2R - P) \), which requires \( R > P \). Lemma \( A.2 \) implies \( x^*_q(q; S) = 2R - q > P \). By Lemma \( A.1 \) and \( q > R > P \), we have \( u_M(x^*_q(q; \mathcal{M})) = u_M(P) > u_M(x^*_q(q; S)) \).

Case 6: Consider \( q \geq 2R - \min\{P, R\} \). Lemmas \( A.1 \) and \( A.2 \) imply \( x^*_q(q; \mathcal{M}) = x^*_q(q; S) = \max\{P, q\} \). Thus, \( u_M(x^*_q(q; \mathcal{M})) = u_M(x^*_q(q; S)) \). □

Lemma \( A.5 \) characterizes \( M \)'s procedural preference for appointments as a function of the pre-vacancy median justice ideology.

**Lemma A.5.** Let \( \zeta = \max\left\{ -j^R, \min\{P, |j^R|\} \right\} \). In the judicial appointment game,

(i) \( S \succ_a \mathcal{M} \) iff \( q \in \left(2S - \min\{P, j^R\}, 2S + \min\{\zeta, |S|\}\right) \), and

(ii) \( \mathcal{M} \succ_a S \) iff

\[
q \in \left(2S + \min\{\zeta, |S|\}, -\min\{P, |j^R|\}\right) \cup \left(\max\{P, j^L\}, 2R - \max\{P, j^L\}\right).
\]

**Proof.** Consider the judicial appointment game. There are six cases. In each, Lemmas \( A.1 \)–\( A.3 \) pin down \( x^*_a(q; \mathcal{M}) \) and \( x^*_a(q; S) \). We can focus on \( j^R > S \) because \( x^*_a(q; \mathcal{M}) = x^*_a(q; S) \) clearly holds otherwise.

Case 1: If \( q \leq 2S - \min\{P, j^R\} \), then \( u_M(x^*_a(q; \mathcal{M})) = u_M(\min\{P, j^R\}) = u_M(x^*_a(q; S)) \). Thus, \( \mathcal{M} \sim_a S \).
Case 2: Consider \( q \in (2S - \min\{P, j^R\}, 2S + \min\{\zeta, |S|\}) \). There are three subcases. We show \( S \succ_a M \) for the first two. The third is vacuous.

(i) Suppose \( j^R > P \). Then \( \zeta = P \) and \( x_a^*(q; S) \in (\max\{S, -P\}, P) \). Thus, 
\[
  u_M(x_a^*(q; S)) > u_M(x_a^*(q; M)) = u_M(P).
\]

(ii) Suppose \( j^R \in [0, P] \). Then \( \zeta = j^R \) and \( x_a^*(q; S) \in (\max\{S, -j^R\}, j^R) \). Thus, 
\[
  u_M(x_a^*(q; S)) > u_M(x_a^*(q; M)) = u_M(j^R).
\]

(iii) Suppose \( j^R \in (S, 0) \). Then \( \zeta = -j^R \). But \( 2S + \min\{\zeta, |S|\} = 2S - j^R = 2S - \min\{P, j^R\} \) implies that this case is vacuous.

Case 3: Consider \( q \in (2S + \min\{\zeta, |S|\}, -\min\{P, |j^R|\}) \). First, if \( q \geq S \), then 
\[
  u_M(x_a^*(q; S)) = u_M(q) < u_M(\min\{P, |j^R|\}) = u_M(x_a^*(q; M)).
\]

Next, if \( q < S \), then \( x_a^*(q; S) = 2S - q \). There are three subcases. In each, \( M \succ_a S \).

(i) First, \( j^R > P \) implies \( \zeta = P \) and therefore \( x_a^*(q; S) \in (S, -P) \). Thus, 
\[
  u_M(x_a^*(q; S)) < u_M(x_a^*(q; M)) = u_M(P).
\]

(ii) Next, \( j^R \in [0, P] \) implies \( \zeta = j^R \) and therefore \( x_a^*(q; S) \in (S, -j^R) \). Thus, 
\[
  u_M(x_a^*(q; S)) < u_M(j^R) = u_M(x_a^*(q; M)).
\]

(iii) Finally, \( j^R \in (S, 0) \) implies \( \zeta = -j^R \) and therefore \( x_a^*(q; S) \in (S, j^R) \). Thus, 
\[
  u_M(x_a^*(q; S)) < u_M(j^R) = u_M(x_a^*(q; M)).
\]

Case 4: Consider \( q \in (-\min\{P, |j^R|\}, P] \). Given \( j^R > S \), we know \( q > S \). Thus, \( M \sim_a S \) because 
\[
  u_M(x_a^*(q; S)) = u_M(q) = u_M(|q|) = u_M(x_a^*(q; M)).
\]

Case 5: Consider \( q \in (P, 2R - \max\{P, j^L\}) \). We can focus on \( q > j^L \) because \( q = j^L \) clearly implies \( M \sim_a S \). Then, we must have \( \max\{P, j^L\} < R \) for this case to
be non-vacuous. Thus, \(x_a^*(q; S) = \min\{q, 2R - q\} > \max\{P, j^L\} = x_a^*(q; M)\), which implies \(u_M(x_a^*(q; M)) > u_M(x_a^*(q; S))\).

Case 6: If \(q \geq \max\{P, 2R - \max\{P, j^L\}\}\), then \(u_M(x_a^*(q; S)) = u_M(\max\{P, j^L\}) = u_M(x_a^*(q; S))\). Thus, \(M \sim_a S\).

Finally, Lemma A.6 shows that if each politician’s ideal point is fixed across activities, then the set of \(q_a\) for which \(M\) prefers supermajoritarian appointments is a subset of the \(q_\ell\) for which \(M\) prefers supermajoritarian lawmaking.

**Lemma A.6.** If \((P_a, S_a, M_a, R_a) = (P_\ell, S_\ell, M_\ell, R_\ell)\), then \(\{q_a \mid S >_a M\} \subseteq \{q_\ell \mid S >_\ell M\}\).

**Proof.** Lemma A.4 implies \(\{q_\ell \mid S >_\ell M\} = (2S - P, 2S + \min\{P, |S|\})\). Lemma A.5 implies \(\{q_a \mid S >_a M\} = (2S - \min\{P, j^R\}, 2S + \min\{\zeta, |S|\})\). We verify that \(\{q_a \mid S >_a M\} \subseteq \{q_\ell \mid S >_\ell M\}\).

First, notice \(2S - P \leq 2S - \min\{P, j^R\}\).

Next, \(\zeta = \max\{-j^R, \min\{P, |j^R|\}\}\) implies that \(2S + \min\{P, |S|\} < 2S + \min\{\zeta, |S|\}\) only if \(\zeta = -j^R\). But \(\zeta = -j^R\) implies \(\{q_a \mid S >_a M\} = \emptyset\) because \(2S - \min\{P, j^R\} = 2S - j^R \geq 2S + \min\{\zeta, |S|\}\).

It follows that \(\{q_a \mid S >_a M\} \subseteq \{q_\ell \mid S >_\ell M\}\) .

**Proposition.** There exists \(\varepsilon > 0\) such that \((q_a - q_\ell, P_a - P_\ell, S_a - S_\ell, M_a - M_\ell, R_a - R_\ell) \in (-\varepsilon, \varepsilon)^5\) implies that \(S >_a M\) only if \(S >_\ell M\).

**Proof.** By the characterization in Lemma A.4, we know \(\{q_a \mid S >_a M\}\) is open and continuous in \((P_a, S_a, M_a, R_a)\). Similarly, Lemma A.5 implies \(\{q_\ell \mid S >_\ell M\}\) is open and continuous in \((P_\ell, S_\ell, M_\ell, R_\ell)\). Because \((P_a, S_a, M_a, R_a) = (P_\ell, S_\ell, M_\ell, R_\ell)\) implies \(\{q_a \mid S >_a M\} \subseteq \{q_\ell \mid S >_\ell M\}\), by Lemma A.6, the result follows.
A.2 Proof of Proposition 2

Proof. Let \( Q^o = \{ q_{\ell} \mid S \succ_{\ell} M \} \cap \{ q_a \mid M \succ_a S \} \). Note that \( j^R \leq S \) clearly implies \( M \sim_a S \). Henceforth, suppose \( j^R > S \).

The proof has three parts. Part 1 provides a general characterization of \( Q^o \) by combining Lemmas A.4 and A.5. Part 2 characterizes a partition on \( S \) that sharpens the characterization from Part 1. Part 3 delivers the result.

**Part 1.** The lower bound of \( Q^o \) is

\[
\max \left\{ 2S + \min\{\zeta, |S|\}, 2S - P \right\} = 2S + \min\{\zeta, |S|\},
\]

where the equality follows from \( \zeta \geq 0 \). Next, the upper bound of \( Q^o \) is

\[
\min \left\{ -\min\{P, |j^R|\}, 2S + \min\{P, |S|\} \right\}.
\]

Together, (3) and (4) yield

\[
Q^o = \left( 2S + \min\{\zeta, |S|\}, \min \left\{ -\min\{P, |j^R|\}, 2S + \min\{P, |S|\} \right\} \right).
\]

(5)

By (5) and the definition of \( \zeta \), we know \( j^R \geq P \) implies \( 2S + \min\{\zeta, |S|\} = 2S + \min\{P, |S|\} \) and therefore \( Q^o = \emptyset \).

Henceforth, assume \( j^R < P \). Then (5) simplifies to

\[
Q^o = \left( 2S + \min\{|j^R|, |S|\}, \min \left\{ -\min\{P, |j^R|\}, 2S + \min\{P, |S|\} \right\} \right).
\]

(6)

**Part 2.** Next, we sharpen the characterization in (6) using two cases.

First, consider \( S \in (-P, 0) \). Because \( j^R \in (S, P) \), we have \( |j^R| < P \). Then
simplifies to $Q^o = (2S + \min\{|j^R|, |S|\}, \min\{-|j^R|, S\})$, which is nonempty iff $S < -|j^R|$. Thus, $S \in (-|j^R|, 0)$ implies $Q^o = \emptyset$, and $S \in (-P, -|j^R|)$ implies $Q^o = (2S + |j^R|, S)$.

Second, consider $S \leq -P$. Then $2S + \min\{P, |S|\} \leq S < j^R < P \leq |S|$, which implies that $[6]$ simplifies to $Q^o = (2S + |j^R|, 2S + P)$. Then, $Q^o$ is nonempty iff $|j^R| < P$.

Part 3. To complete the proof, we use the characterizations from Part 2 to verify that $Q^o$ expands as $S$ decreases from 0. Note that $Q^o \neq \emptyset$ only if $|j^R| < P$. We focus on that case because otherwise the result holds vacuously.

First, $S \in [-|j^R|, 0]$ implies $Q^o = \emptyset$. Second, $S \in (-P, -|j^R|)$ implies $Q^o = (2S + |j^R|, S)$, which expands as $S$ decreases. Finally, $S \leq -P$ implies $Q^o = (2S + |j^R|, 2S + P)$, which has constant size as $S$ decreases. Because $Q^o$ is a continuous correspondence at $S = -P$, we have shown that $Q^o$ weakly expands as $S$ decreases.

A.3 Proof of Proposition 3

Proof. Fix $q_a = q$. By Lemma A.5, we know $q \geq 2S + \min\{\zeta, |S|\}$ implies $M \succ_a S$. Rearranging, $S \leq \max\{q, \frac{2-\zeta}{2}\}$ implies $M \succ_a S$.

A.4 Proof of Proposition 4

Proof. Recall $\zeta = \max\{-j^R, \min\{|P, |j^R|\}\}$ and let $q_a = q$. Lemma A.5 implies $S \succ_a M$ iff $q \in (2S - \min\{P, j^R\}, 2S + \min\{\zeta, |S|\})$. There are three cases as $j^R$ decreases over $X$. First, $j^R \geq P$ implies that $S \succ_a M$ holds iff $q \in (2S - P, 2S + \min\{P, |S|\})$, which does not depend on $j^R$. Second, $j^R \in (0, P)$ implies that $S \succ_a M$ holds iff $q \in (2S - j^R, 2S + \min\{j^R, |S|\})$, which (i) shrinks as $j^R$ decreases over this range and (ii) is a subset of $(2S - P, 2S + \min\{P, |S|\})$. Finally, $j^R \leq 0$ implies
\[ \{ q \in X \mid \mathcal{S} \succ \mathcal{M} \} = \emptyset. \] Thus, \( \{ q \in X \mid \mathcal{S} \succ \mathcal{M} \} \) shrinks weakly as \( j^R \) decreases towards \( q \). \[ \square \]
Appendix B  Policy-sensitive Investment

Policy-sensitive Investment

We extend our baseline model by allowing policy-sensitive private sector investment. Our main results go through under broad conditions. Additionally, we show that if $P$'s investment concerns increase sufficiently then supermajority prevails under fewer conditions, for both lawmaking and appointments. Finally, if investment concerns are somewhat more moderate, then supermajority rule cannot prevail for appointments but can for lawmaking.

We address our main points of interest by presenting a simple version of our investment extension. A private firm, $F$, has an investment plan that is tailored to $q$, the status quo. The political interaction unfolds according to the prevailing rule. Then, $F$ chooses an investment level $k \geq 0$. Investment returns accrue and the game ends.

Reflecting policy-sensitivity, if $x$ is enacted, then $F$'s return from investing $k$ is

$$\beta k - (1 + |x - q|)k^2. \quad (7)$$

This functional form is a simple representation of investment returns, with linear returns and convex costs. The twist is that the marginal cost increases in the distance between $x$ and $q$.

Next, $P$'s payoff from $x$ and $k$ is $u_P(x) + \alpha k$, where $\alpha \geq 0$. This generalizes our baseline model, which is equivalent to $\alpha = 0$. A proposer may ignore investment concerns because firm activity is not central for a given policy's success, or because

---

20Because it is not central to our interests, we do not allow $F$ to choose for which policy its investment is to be tailored. Under substantively reasonable conditions, $F$ tailors to $q$ if it can choose: roughly, when $F$ expects there is a reasonable chance the legislature will not actively consider this issue.
the issue involved does not affect her constituents. For example, many questions involving foreign policy likely fit one of these descriptions. Alternatively, \( \alpha \) should be high if investment is central to policy success or if the issue is central to \( P \)'s constituents.

Unlike \( P \), we assume \( S, M, \) and \( R \) are purely policy-motivated. Thus, their payoffs are identical to the baseline without investment. This conveniently normalizes a situation where the proposer has broader concerns than rank-and-file legislators, i.e., than \( S, M, \) and \( R \) in our model. For example, the legislator expending effort to draft and propose an alternative likely has constituents with greater interests at stake. But both pivots and the median may not value \( F \)'s investment because their constituencies are unaffected.

We proceed backwards from \( F \)'s investment choice given enacted policy. When selecting \( k \), \( F \) knows the gap between \( x \) and \( q \), the initial target policy. This gap pins down \( F \)'s marginal investment cost. Given \( x \in X \), \( F \) solves

\[
\max_{k \geq 0} \beta k - (1 + |x - q|)k^2. \tag{8}
\]

Because the objective function in (8) is strictly concave in \( k \), the first order condition for yields the unique solution,

\[
k^*(x) = \frac{\beta}{2(1 + |x - q|)}. \tag{9}
\]

In equilibrium, \( P \) anticipates how \( F \)'s optimal investment level depends on enacted policy. Thus, we next discuss \( P \)'s value function given \( k^*(x) \). For now, we ignore
political feasibility. Using \( k^*(x) \), we can express \( P \)'s value function as

\[
v_P(x) = u_P(x) + \alpha k^*(x). \tag{10}
\]

It is straightforward to verify that \( \arg\max_{x \in X} v_P(x) \in [q, P] \). For \( x \in (q, P) \),

\[
\frac{d v(x)}{dx} = 1 - \frac{\alpha \beta}{2(1 + x - q)^2}, \quad \text{and} \quad \frac{d^2 v(x)}{dx^2} = \frac{\alpha \beta}{(1 + x - q)^3}. \tag{11, 12}
\]

Note that \( v_P \) is strictly convex on this interval because \( \frac{d^2 v(x)}{dx^2} > 0 \) for such \( x \). In our setup, the linearity of \( u_P \) and the strict convexity of \( k^* \) imply strict convexity of \( v_P \).

Using (10), we can sharply characterize \( P \)'s endogenous ideal policy given investment consequences. For environment \( g \in \{a, \ell\} \) and voting rule \( V \in \{M, S\} \), let \( x_g^{**}(q, \alpha; V) \) denote the mapping from \((q, \alpha)\) to equilibrium policy. Lemma 1 characterizes \( x_g^{**}(q, \alpha; V) \).

**Lemma 1.** In the policy-sensitive investment extension,

\[
x_g^{**}(q, \alpha; V) = \begin{cases} 
  x_g^*(q; V) & \text{if } \alpha < \frac{1}{k^*(x_g^*(q; V))} \\
  q & \text{if } \alpha > \frac{1}{k^*(x_g^*(q; V))}
\end{cases} \tag{13}
\]

for all \((g, V) \in \{a, \ell\} \times \{M, S\}\).

**Proof.** Fix \((g, V) \in \{a, \ell\} \times \{M, S\}\). Because \( S, M, \) and \( R \) are purely policy-motivated, the acceptance set, \( A^g(q; V) \), is equivalent to the no-investment setup. Thus, \( x_g^*(q; V) \in A^g(q; V) \). Next, we know \( x_g^{**}(q; V) \in \{q, x_g^*(q; V)\} \) because \( \arg\max_{x \in X} v_P(x) \subseteq [q, P] \) and
\( v_P \) is strictly convex over \( x \in [q, P] \). Finally, \( v_P(q) < v_P(x^*_g(q; V)) \) iff

\[
-(P - q) + \frac{\alpha \beta}{2} < -(P - x^*_g(q; V)) + \frac{\alpha \beta}{2(1 + (x^*_g(q; V) - q))}
\]

which holds iff

\[
\alpha < \frac{2}{\beta}(1 + x^*_g(q; V) - q)
= \frac{1}{k^*(x^*_g(q; V))}.
\]

An analogous derivation shows \( v_P(q) > v_P(x^*_g(q; V)) \) iff \( \alpha > \frac{1}{k^*(x^*_g(q; V))} \).

Sufficiently high investment concerns, \( \alpha > \frac{1}{k^*(x^*_g(q; V))} \), imply that \( P \) proposes and passes \( q \) under either voting rule for lawmaking and appointments. Moving policy incurs great losses by diminishing investment’s value. Thus, \( M \) is indifferent between voting rules in both environments. Instead, we focus on \( \alpha < \frac{1}{k^*(x^*_g(q; V))} \).

**Lemma 2.** In the policy-sensitive investment extension, \( S \succ \ell M \) iff

\[
(q, \alpha) \in \left(2S - P, 2S + \min\{|S|, P\}\right) \times \left[0, \frac{1}{k^*(x^*_g(q; S))}\right).
\]

(14)

**Proof.** Fix \( q \). Because \( \frac{1}{k^*(x)} \) increases in \( |x - q| \), Lemmas A.1 and A.2 imply \( \frac{1}{k^*(x^*_g(q; S))} < \frac{1}{k^*(x^*_g(q; M))} \). There are three cases.

**Case 1.** Suppose \( \alpha > \frac{1}{k^*(x^*_g(q; M))} \). Lemma 1 implies \( x^*_e(q, \alpha; M) = x^*_e(q, \alpha; S) = q \). Thus, \( M \sim_a S \).

**Case 2.** Suppose \( \alpha \in \left(\frac{1}{k^*(x^*_g(q; S))}, \frac{1}{k^*(x^*_g(q; M))}\right) \). Lemma 1 implies \( x^*_e(q, \alpha; M) = x^*_e(q; M) \) and \( x^*_e(q, \alpha; S) = q \). Lemma A.1 implies \( u_M(x^*_e(q, \alpha; M)) \geq u_M(x^*_e(q, \alpha; S)) \). Thus, \( M \succ_a \ell S \).
Case 3. Suppose $\alpha < \frac{1}{k^*(x^*_\ell(q,S))}$. Lemma 1 implies $x^*_\ell(q,\alpha;\mathcal{V}) = x^*_\ell(q;\mathcal{V})$ for $\mathcal{V} \in \{\mathcal{M},\mathcal{S}\}$. Thus, Lemma A.4 implies $\mathcal{S} \succ_\ell \mathcal{M}$ iff $q \in (2S - P, 2S + \min\{|S|, P\})$. 

Although $x^{**}_g(q,\alpha;\mathcal{V}) = x^*_g(q,\alpha;\mathcal{V})$ for all $\alpha \in [0, \frac{1}{k^*(x^*_\ell(q,S))})$, $P$’s value function depends on $\alpha$. Because political constraints can prevent $P$ from enacting $x^{**}_g(q,\alpha;\mathcal{V})$, it is not immediate that Lemma A.6 carries over. Proposition 5 shows that it does.

**Proposition 5.** In the extension with policy-sensitive investment, supermajority rule is strictly preferred for appointments only if it is preferred for lawmaking.

**Proof.** We show the contrapositive, that $\mathcal{M} \succeq_\ell \mathcal{S}$ implies $\mathcal{M} \succ_a \mathcal{S}$. By Lemma 2 $\mathcal{M} \succeq_\ell \mathcal{S}$ iff $(q,\alpha)$ does not satisfy (14). Because $\frac{1}{k^*(x(q,\mathcal{V}))}$ increases in $|x - q|$, Lemmas A.1-A.3 imply $\frac{1}{k^*(x^*_\ell(q,S))} \leq \frac{1}{k^*(x^*_a(q;\mathcal{V}))}$ for all $(g,\mathcal{V}) \in \{a,\ell\} \times \{\mathcal{M},\mathcal{S}\}$. There are two cases.

- **Case 1.** Fix $q$ and suppose $\alpha > \frac{1}{k^*(x^*_\ell(q,S))}$. It follows that $\alpha > \frac{1}{k^*(x^*_\ell(q,S))}$. Lemma 1 implies $x^*_a(q,\alpha;\mathcal{S}) = q$. By Lemma A.3, we have $u_M(x^*_a(q,\mathcal{M})) \geq u_M(q)$. Therefore Lemma 1 implies $u_M(x^*_a(q,\alpha;\mathcal{M})) \geq u_M(q)$. Thus, $\mathcal{M} \succ_a \mathcal{S}$.

- **Case 2.** Consider $q \notin (2S - P, 2S + \min\{|S|, P\})$ and $\alpha < \frac{1}{k^*(x^*_\ell(q,S))}$. If $\alpha > \frac{1}{k^*(x^*_\ell(q,S))}$, then the argument from Case 1 implies $\mathcal{M} \succ_a \mathcal{S}$. Otherwise, $x^*_a(q,\alpha;\mathcal{V}) = x^*_a(q;\mathcal{V})$ for $\mathcal{V} \in \{\mathcal{M},\mathcal{S}\}$. Thus, Lemma A.6 implies $\mathcal{M} \succ_a \mathcal{S}$.

Thus, $\mathcal{M} \succeq_\ell \mathcal{S}$ implies $\mathcal{M} \succ_a \mathcal{S}$, as desired.

Proposition 5 easily connects to the logic of Lemma A.6. In equilibrium, $P$’s investment concerns endogenously discourage shifting policy away from $q$. Thus, these concerns introduce an additional constraint that applies regardless of voting rule. Crucially, they do not relax the appointment constraint. Thus, supermajority appointments again prevail under fewer conditions than supermajority lawmaking.
Proposition 4 extends similarly. For appointments and with policy-sensitive investment, a smaller ideological gap between $q$ and the progressive justice shrinks the conditions creating a strict preference for supermajority rule.

Having established that key baseline conclusions extend, we next analyze how the strength of $P$’s investment concerns affects the prevailing rule. First, we show that greater investment concerns decrease supermajority rule’s appeal for both lawmaking and appointments.

**Lemma 3.** In the policy-sensitive investment extension, $S \succ_a M$ iff $j^R > 0$, $\alpha < \frac{1}{k^*(x^*_a(q; S))}$, and

\[ q \in \left( 2S - \min\{P, j^R\}, 2S + \min\{j^R, P, |S|\} \right). \]

**Proof.** Lemma 2 and Proposition 5 together imply that we can focus on

\[ (q, \alpha) \in \left( 2S - P, 2S + \min\{P, |S|\} \right) \times \left[ 0, \frac{1}{k^*(x^*_a(q; S))} \right). \]

First, note that $\alpha > \frac{1}{k^*(x^*_a(q; S))}$ implies $M \succeq_a S$ because $x^*_a(q, \alpha; S) = q$. Also, $j^R \leq 0$ implies $M \succeq_a S$ because $x^*_a(q, \alpha; S) \leq j^R = x^*_a(q, \alpha; M)$.

Henceforth, suppose $\alpha < \frac{1}{k^*(x^*_a(q; S))}$ and $j^R > 0$. Because $\frac{1}{k^*(x^*_a(q; S))} \leq \frac{1}{k^*(x^*_a(q; M))}$, Lemma 1 implies $x^*_a(q; V) = x^*_a(q; V)$ for $V \in \{M, S\}$. Lemma A.5 delivers the result.

**Proposition 6.** Increasing the proposer’s investment concerns weakly shrinks the conditions under which supermajority rule is strictly preferred for lawmaking and, similarly, for appointments.
Proof. Follows immediately from Lemmas 2 and 3.

Proposition 6’s logic is best understood in terms of \( P \)’s investment-concern constraint. Higher concerns can only shift \( P \)’s equilibrium proposal towards \( q \). Thus, \( P \)’s investment-concern constraint tightens and, paralleling previous results, decreases the value of supermajority constraints. Therefore, higher \( \alpha \) decreases supermajority rule’s prevalence for both lawmaking and appointments. If investment concerns are high enough, then majority prevails in both environments and different rules cannot coexist.

Building on Proposition 6, we can also show that there is an intermediate investment-concern range in which there can be clear incentives favoring supermajority lawmaking, but never for appointments.

**Proposition 7.** There exist cutpoints \( \bar{\alpha} \geq \alpha \geq 0 \) (with at least one strict inequality) on the proposer’s investment concern, \( \alpha \), such that if \( \alpha \in (\bar{\alpha}, \alpha] \), then supermajority rule is never strictly preferred for appointments but can be strictly preferred for lawmaking.

**Proof.** Define \( \bar{\alpha} = \frac{1}{k^*(x^*(q;S))} \) and

\[
\alpha = \begin{cases} 
\frac{1}{k^*(x^*(q;S))} & \text{if } j^R > 0 \\
0 & \text{else.}
\end{cases}
\]

Because \( \frac{1}{k^*(x)} \) increases in \( |x - q| \), Lemmas A.2 and A.3 imply \( \bar{\alpha} \geq \alpha \geq 0 \), with at least one strict inequality. Lemmas 2 and 3 deliver the result.

Considering the interaction between constraints reveals the logic behind Proposition 7. First, recall that \( P \)’s constraints tighten with investment concerns. Also, appointment constraints are tighter than lawmaking analogues. Both constraints
increase the value of majority rule’s flexibility and shrink conditions for supermajoritarian lawmaking. Combining them further advantages majority rule. Thus, supermajoritarian lawmaking can benefit \( M \) at higher investment concern levels than does supermajoritarian appointments.

Finally, we discuss how party influence affects the policy-sensitive investment extension. Propositions 6 and 7 extend easily to incorporating party influence. Additionally, we can state how party influence affects Proposition 7. Recall that \((\alpha, \bar{\alpha})\) is the range of \( P \)’s investment concern for which supermajority lawmaking can prevail and supermajority appointments cannot. A general observation is that \((\alpha, \bar{\alpha})\) weakly expands as equilibrium supermajority outcomes shift away from \( q \). This immediately implies how \((\alpha, \bar{\alpha})\) changes with various shifts in party influence. For example, \((\alpha, \bar{\alpha})\) weakly expands if party influence shifts \( P \) away from \( q \), but it weakly shrinks if party influence shifts the traditionalist pivot towards \( q \).