

Bargaining Power in the Supreme Court

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Abstract

How can we assess bargaining power within the Supreme Court? Do authorship and opinion assignment affect legal policy? We argue that fluidity, differences between a justice's initial vote and final vote, can indicate the location of the Court's majority opinion. Justices should be less likely to defect the happier they are with the majority opinion, and bargaining models make differing predictions for opinion location and the influences thereon. Therefore, these models can make different predictions for how opinion assignment will affect whether justices change their votes. We derive theoretical hypotheses from each model. Using multilevel probit regression and Supreme Court vote data, we show that power within the Court lies in the hands of opinion authors, and thus of the Chief Justices who pick them, as constrained by the need to maintain a majority coalition. We find evidence against three other major models of judicial bargaining (median monopoly, majority-median monopoly, and author monopoly).

The judicial opinion is the main policy-making tool of Supreme Court justices. To be sure, a win or loss when the final votes are counted might be the direct concern of the litigants directly involved, but the majority opinion is what lower court judges, lawyers, and scholars turn to, to ascertain just how the Court has reshaped legal policy. While the authorship of this opinion is usually officially attributed to a single justice, it is actually the product of the interactions between the justices seeking to influence its content. But how do these attempts to influence the majority opinion play out?

Consider recent changes on the Supreme Court. Now that Justice O'Connor has retired and been replaced by Justice Alito, the role of the pivotal swing vote has clearly shifted to Justice Kennedy. Meanwhile, Roberts has replaced Rehnquist as Chief Justice, and Justice Souter has retired, potentially to be replaced by Judge Sotomayor. Recent appointments have strengthened the Court's right wing, shifted the center a bit to the right, leaving the moderate left wing in place. How does this pattern of ideology and polarization affect legal policy? Do these changes matter? How much influence does the pivotal justice, the chief justice, or any given justice have over the majority opinion and thus legal policy?

In the 2006 term, Kennedy was in the majority in all 24 of the Court's 5-to-4 decisions. While there were only 11 5-to-4 decisions in the 2007 term, the *New York Times* insisted, "It was, once again, Justice Kennedy's Court," a conclusion which matches recent descriptions of the 2008 term. Does Kennedy's influence as swing justice trump Roberts's power to assign the majority opinion within the majority? Is it truly the "Roberts Court," or is it really the "Kennedy Court"?

The distribution of power within the Supreme Court is one of the most active debates in judicial politics today (e.g., Schwartz 1992; Epstein and Knight 1998; Maltzman, Spriggs and Wahlbeck 2000; Lax 2003; Westerland 2003; Hammond, Bonneau and Sheehan 2005; Bonneau et al. 2007; Lax and Cameron 2007; Lax 2007; Staudt, Friedman and Epstein 2007; Cameron and Clark 2007; Carrubba et al. 2007; Epstein and Jacobi 2008; Clark and Lauderdale 2009), a debate mirrored in the popular media's talk of swing justices or whose

“Court” it is. A large body of work, ranging from behind-the-scenes accounts to scholarship using the justices’ own private papers, has established that the justices interact, sometimes strategically, with an eye towards affecting legal policy.

But it is not obvious that bargaining or opinion assignment should matter. If bargaining inevitably drives the position of cases to the ideal point of the median voter (per the Median Voter Theorem), it does not matter who writes the initial opinion and thus it does not matter who makes the assignment. If all policy-making in the Supreme Court comes down to the preferences of the median justice, then the choices made along the way are simply noise, a meandering path to a predetermined end. If the price of forming a majority coalition is always the same, why does it matter who writes the check? Call this the Median Justice Puzzle.

Different theories make varying predictions about which justices will be able to influence the policy content or ideological “location” of the opinion in a given case and to what extent. In some theories, opinion assignment matters little or not at all, due to the dominance of a particular pivotal justice’s position. In others, however, policy is the result of a nuanced bargaining game. The former family of theories attributes power over opinion content to an individual justice—specifically, the median member of the Court (given the Median Voter Theorem), the median member of the majority coalition within the Court, or the majority opinion author—and so we classify these as “Monopoly Theories.” Those theories other than the median monopoly theory all wrestle with the Median Justice Puzzle in some way, explaining why he or she does not win out in the end. The second family of theories, “Author Influence Theories” say that the degree of author power will vary with the author’s bargaining leverage—all theories of this type must confront the puzzle above.

Empirically adjudicating between these theories is quite tricky. To do so, we resuscitate an old topic in judicial studies, the study of vote fluidity, heretofore unconnected to this theoretical debate. We argue that fluidity, the switching of vote by a justice between the initial internal conference vote and the final reported vote in a case, can reveal the likely

location of the majority opinion—because, all else equal, justices in the majority should be less likely to defect the happier they are with the majority opinion. Each theory we consider makes a prediction for the opinion location that results from the bargaining process among key justices, including, in particular, the opinion author. Given these predictions, we draw out the implications for how happy the Chief Justice’s initial choice of opinion author should make each justice in the majority.¹ This in turn should correlate with the probability that a given justice will defect from that majority. At a minimum, this research design will allow us to test whether bargaining matters at all and to rule out some of the theories we consider. The strongest reading of the evidence below points toward a particular theory. Moreover, this research design will have advantages unique among those that seek to adjudicate among these bargaining theories—most importantly, the existence of pre- and post-treatment observations—bringing our evidence closer to causal inference ideals.

We make use of multilevel probit regression and roughly 40 years of Supreme Court vote data. Theoretically, we draw out the implications of various theories of bargaining, laying out a framework for comparative statics that informs this project but also might serve to guide future work. We find that the evidence from fluidity supports the conclusion that opinion authorship does indeed matter, evidence against two of the theories we consider. We formally extend the author-influence model in Lax and Cameron (2007) and find evidence pointing to this model in particular.

Models of Bargaining

The models we describe below generally make the standard assumption of single-peaked preferences in a unidimensional policy space (so that, *inter alia*, there is a most preferred policy point along the line from liberal to conservative). There are two main families of

¹ Throughout, we refer to the Chief Justice as the opinion assignor. However, if the Chief is not in the initial majority, the senior justice in the majority assigns the opinion.

bargaining models or, more simply, hypotheses of final opinion location. The first is the set of theories in which some justice within the majority has monopoly power over opinion content, so that the opinion is placed precisely at his or her ideal point. The second family of theories predicts that the majority author will have influence over the opinion as mediated by the bargaining process, but that no single justice will have monopoly power.

Monopoly Theories. Within the first family, there are three contenders: the median hypothesis, the majority-median hypothesis, and the author-monopoly hypothesis. The median hypothesis predicts that the final opinion must land at the median member of the Court because bargaining is costless and governed by the Median Voter Theorem (Black 1958), as drawn out by the “median holdout” or “open-bidding” models in Hammond, Bonneau and Sheehan (2005). The majority-median hypothesis is discussed in Westerland (2003) and can arise in Carrubba et al. (2007), in which no justice in the initial majority will accept an offer from the opposing side (it is prohibitively unattractive, at least for some parameter values). Then, we get the Median Voter Theorem applied only within the initial majority coalition and not the Court as a whole. The most extreme variant in this family of hypotheses would be that the author has total control over the meaningful content of the opinion she writes, perhaps justified by assuming near-complete agenda control.

To be more concrete, the opinion location predictions from these three theories can be represented on the line in Figure 1, which depicts the current Supreme Court justices in ideological order. If Justice Scalia is the opinion author for a straightforward 5-justice conservative majority, the median-monopoly hypothesis predicts the opinion will be located at Justice Kennedy’s ideal point, the majority-median hypothesis predicts Chief Justice Roberts’s ideal point, and the author-monopoly hypothesis predicts Scalia will maintain full control, placing the opinion at his own ideal point. If the Chief Justice were writing the majority opinion, the author-monopoly prediction would now be an opinion at his ideal point. The median and majority-median hypotheses, however, would lead to the

very same predictions as before. That is, in the median and majority-median theories, opinion location does not respond to authorship and so the identity of the opinion author is irrelevant. In the author-monopoly theory, opinion location does respond to authorship (indeed, only to authorship) and so exact opinion assignment would matter. To take one more example, if there were a 7-vote majority (excluding only Breyer and Stevens), then the median hypothesis would still put the opinion at Kennedy but the majority-median would now put it at Alito instead of Scalia.

We summarize these and further implications in Table 1. In the median monopoly theory, because the policy outcome depends only on the median, no other feature of the Court matters and neither do any intermediate choices (i.e., assignment or bargaining). Whatever case is chosen, and whichever disposition wins according to the initial majority, the policy outcome will be the same. Policy moves along with the median, so that small changes in the median's identity or location will produce small change in legal policy.

On the other hand, suppose that the median member of the majority controls legal policy. This makes the selection of the initial majority of crucial importance. If the liberals control the initial majority, this puts policy at the liberal median. If the conservatives win the initial majority, policy will be at the conservative median. The median justice, if allowed to vote strategically over dispositions (which is not the case in, e.g., Carrubba et al. 2007), would likely choose in accordance with whichever of the two potential majority-medians is closer. If she cannot so do, then the initial disposition, and thus legal policy, is driven by the position of the case being heard relative to the median justice. Small movements of the median justice would change nothing... unless this changes which side wins, in which case legal policy jumps to the other side. This means that legal policy does not always move smoothly with respect to case location or Court-median location. Most importantly, case selection becomes the pivotal choice.

If case selection is shielded from strategic concerns (as in, e.g., Bonneau et al. 2007), legal policy will not move smoothly with case selection, potentially leading to interesting

non-monotonic or discontinuous policy curves. If the case falls roughly near the median, policy will fall at justice #3 or #7 (counting from left to right, the liberal majority median or the conservative majority median); if the case falls far to the left or far to the right, policy will fall at the median, #5. The resulting pattern of case outcomes will consist of some distribution of the medians of possible majority coalitions.

However, suppose that the justices pick cases looking ahead to the policies that will result. Then, if the Majority-Median Theory governs, a justice will want to pick case location that leads to an initial majority coalition with a majority-median justice closest to her own ideal point. The median would want cases far to the left or to the right. A given justice to one side will want cases within a precise range on the opposing side so that the majority coalition is centered around his or her ideal point. It can be shown that this leads to non-singlepeaked preferences over case location (results available upon request). Given strategic choice over case location, it is not clear what to expect as to the pattern of ultimate opinion locations, in equilibrium (if such exists). However, recall that even in this complicated model variant, assignment and bargaining would be irrelevant.

Moving next to the author-monopoly theory, further features of the Court and choices made by the justices come into play. Bargaining does not matter, as the author maintains complete control. Since authorship matters (indeed, it is the only thing that does), so do the Chief Justice's assignment choices, as does the selection of justices available from which to choose. This means that all appointments to the Court are important, and not just appointments that shift the median justice. Since authors are chosen from amongst within the initial majority by a justice within the initial majority, case selection and the initial majority do matter. Movements of the median would not change policy outcomes much, and not at all fixing the opinion author, but if moving the median changes who is assigned, large policy shifts can occur.

Influence Theories. In the second family of hypotheses, the opinion outcome is a function of the preferences of the various justices and does not fall under the complete dominance of any one justice. Typically, scholars associated with this position argue that the author is constrained in fulfilling her own ideological preferences and must take into account the preferences of the other justices.

Schwartz (1992) does not make an explicit prediction for opinion location in the policy space. In this model, the policy alternatives available to the author are exogenously fixed, and the author can only control the level of precedent written into the majority opinion. The level of precedent desired by a justice varies with his or her ideal point (225), and different authors would choose different levels of precedent subject to the need to get a majority. Each justice prefers an author as close as possible to her own ideal point (237). It is also possible that, because of a limit to how far the opinion can be moved in equilibrium, shifting author ideology might not change the equilibrium opinion location once this limit is reached (237). Past this limit, there will be no effect of author location on opinion location. Below it, opinion location should vary with author's ideology, as per the author-monopoly hypothesis.

The "agenda-control" variant in Hammond, Bonneau and Sheehan (2005) predicts that the opinion will lie between the author and the median because the author can make a take-it-or-leave-it offer against an exogenous status quo (see Romer and Rosenthal 1978, 1979). Specifically, the only offers that can win are those in between the status quo and the mirror image of the status quo on the other side of the median. To win, the opinion author must pick some point in this region. If the opinion author's ideal point is in this region, she can pick her own ideal point. If the author is outside of that region, she cannot do better than the endpoint of that region, and so as authorship moves rightward, the opinion location does not shift with the author. Bonneau et al. (2007, 896-7) extend the discussion of this model and argue that the status quo should be located amidst the justices' ideal points, specifically at the dividing point between the coalition of justices who grant

cert and the coalition of justices who vote to deny cert. If the status quos in the cases taken by the Court thus lie near the middle of the court, then this suggests that the distance from the median justice to the status quo should be small in many or most cases. As a result, the bargaining range is small and limits the effects of author ideology (since most opinion authors would choose the same endpoint of the bargaining region).

Maltzman, Spriggs and Wahlbeck (2000) argue that the author must deal with both the policy goals of the other justices in the majority (and only those in the majority) and with organizational needs. They predict that the author and the other justices will have influence over its location (17) and that the author will favor, in opinion writing, accommodation, and response, other justices who are as close as possible to his or her own ideal point (42, 72, 100). They do not make an explicit prediction as to where, within the majority, the opinion will fall.

Finally, Lax and Cameron (2007) predict that the degree of author power will vary with bargaining leverage and that the policy content of the opinion will place it in between the median and the author. They further argue that opinions have a second dimension, legal quality, which will also be a function of bargaining. We briefly reserve further discussion of this complication. Returning to Figure 1, if Scalia is the initial majority author, Lax and Cameron predict that the opinion will lie somewhere between Kennedy and Scalia. If the Chief Justice self-assigns, then, all else equal, they would predict that the opinion would be less extreme, closer to Kennedy's ideal point. The movement relative to Alito would be ambiguous without further information. If Scalia's equilibrium opinion would be to the right of Alito, then Roberts would likely write an opinion closer to Alito. If Scalia's opinion would be to the left of Alito, then Roberts would likely write one still further to Alito's left, which is to say one further away from Alito's ideal policy point.

We now return to the implications stated in Table 1. If authors can influence opinion (subject to the need to building a majority), then obviously opinion authors and those that choose them matter. This means that whether the liberal or conservative side gets the

initial assignment matters—and if this is affected by the case at hand, then that matters as well. Since policy is still pulled towards the median, this dampens the larger differences made possible in the author-monopoly or majority-median models, wherein the policy jumps from one extreme to the other.

Testing Bargaining Hypotheses. Most bargaining theories portray judicial bargaining in the standard one-dimensional ideological policy space, with each justice having an ideal point along the line from liberal to conservative. Various scholars have provided estimates of these preferences (e.g., Segal and Cover 1989; Martin and Quinn 2002; Bailey and Maltzman 2008). If we also had empirical measures of opinion content, which is to say the location of the final opinion in this policy space, then assessing opinion location hypotheses derived from bargaining theories would be straightforward. While some research has begun to make headway on this empirical challenge through textual analysis (e.g., McGuire and Vanberg 2005; Hall and Wright 2006), it not yet possible to generate the necessary estimates. Instead, various scholars have devised clever indirect means of getting at relative influence in the “collegial game” over opinion content, as Maltzman, Spriggs and Wahlbeck (2000) name the Court’s bargaining process. Using data from the Court’s internal memoranda, they find that the author of the majority opinion draft does respond to and accommodate suggestions and threats from the other justices in the majority. Westerland (2003) uses the decision to join the majority opinion as an indicator of likely opinion location, arguing that this evidence suggests that the final opinion lies at the median member of the majority. Bonneau et al. (2007) posit a model in which the opinion author must achieve a majority willing to reject the current status quo, estimate that status quo from the certiorari votes of the justices, and then use votes to join the majority opinion or coalition to assess the likely opinion location. While both the median-dominant and author-influence models do reasonably well, their evidence leans towards the author-influence side. Another notable example, Carrubba et al. (2007), uses the pat-

tern of concurrences with the majority opinion, arguing in favor of the majority-median model.

We add to this important debate by devising a test that, besides assessing the median-dominant hypothesis, can differentiate among the non-median-dominant theories—a test which we would argue has unique advantages for causal inference. Before we discuss the logic of our test, we explain the concept underlying it: vote “fluidity” (Howard 1968), or the shifting of a justice’s vote between the initial conference vote on the merits and the final vote on the merits in a given case.

Fluidity and Bargaining

Previous scholars studied fluidity because it might show the extent to which voting strictly fits ideological patterns or because fluid votes are mistakes that hurt productivity. Fluidity is often broken down into various categories. These include defection (justices in the initial majority who change their votes), conformity (switches by minority justices), and more complicated combinations in which vote switches flip the outcome. Assorted factors at the level of the individual justice, the level of the conference coalition, and level of the case have been explored as explanations for fluidity. Defection rates have been shown to be higher among justices who are marginal members of the initial majority;² higher among justices who are closer to the initial minority than to the majority (e.g., Brenner, Hagle and Spaeth 1989; Hagle and Spaeth 1991; Brenner and Dorff 1992); and lower by justices in important cases (e.g., Brenner, Hagle and Spaeth 1989). Defection does seem to vary by justice (Brenner, Hagle and Spaeth 1989), but not due to “freshman” status (Hagle and Spaeth 1991). Justices have been shown to be more likely to conform to larger initial majority coalitions and in less important cases, with conformity tending to lead to more

² Marginality is defined variously but usually means the most liberal member of a conservative coalition or vice versa, sometimes restricted to minimum winning coalitions.

ideologically consistent coalitions (Dorff and Brenner 1992; Brenner 1980, 1989).

Some scholarship has looked at the consequences of opinion assignment on fluidity, starting with Brenner (1982a). Both Brenner (1982b) and Brenner and Spaeth (1988) show that marginals are advantaged in their raw shares of opinion assignments. However, Brenner and Spaeth (1988) and Brenner, Hagle and Spaeth (1990) show no effect from marginal authorship on the maintenance of the initial majority coalition or on coalition size, respectively. Finally, Maltzman and Wahlbeck (1996) integrate and improve upon earlier work, basing fluidity on uncertainty, coalition-building, strategic policy considerations, and institutional considerations.

Here, we shift the focus from what drives fluidity to what fluidity can reveal about bargaining influence. We argue that *fluidity can reveal opinion location* because, all else equal, the happier a justice is with the majority opinion produced by whatever bargaining game, the less likely she is to switch from her initial vote with the majority.³ Since different theories of opinion production posit different ultimate opinion locations, we can adjudicate among these theories by examining empirical patterns of fluidity, or, more specifically, patterns of defection from the majority.

We are interested in fluidity because of the opportunity it presents, unlike previous methods, to assess power dynamics within the Court, as a quasi-experimental design. The initial vote can be seen as a pre-test, the assignment as treatment, and final vote as post-test. In this way, preliminary votes serve as controls for the predisposition to cast a vote in a particular direction, so that vote switching reveals the effects of opinion assignment. Formally, this is a “pre-post nonequivalent groups quasi-experiment” (Trochim 2001), as assignment itself is not random, and so we must include controls for other predictors of assignment that may also be correlated with defection. To the best of our knowledge, this paper is the only one to test bargaining influence using such a pre-post research design,

³ Even given rational behavior, shocks and uncertainty can lead to “mistakes” so that the choice to switch or not will depend on how happy the justice is with a given opinion.

which allows for causal inference through multiple observations of the same unit of analysis (the justice-case unit) and not only across units of analysis (the same justice across cases, or across different justices in the same case).

Above, we discussed predictions from two families of bargaining theories regarding the ultimate location of the final majority opinion. Next, given these location predictions, we derive hypotheses about what we should observe in empirical patterns of fluidity that enable us to test these theories of judicial bargaining.

Monopoly Hypotheses for Fluidity. Recall that the monopoly theories of judicial bargaining each predict that one specific justice is able to locate the final opinion at her ideal point. The implications of these models' for fluidity, then, are straightforward—a justice will be more likely to defect the further away he or she is from the monopolistic justice.

Consider a justice in the initial majority coalition who is (re)considering his or her vote in the case at hand, given that another justice was assigned to write the opinion. Under the median and majority-median hypotheses, the probability he or she will indeed defect should not vary with respect to the particular opinion assignee, since the author has no effect on the final opinion location.⁴

Under the author-monopoly hypothesis, choice of opinion assignee should affect the justice's probability of defection because authorship (and only authorship) affects opinion location. To be specific, all else equal, defection probability should rise as the assignee's distance from the justice in question increases.

Finding that opinion assignment affects defection is evidence against the median and majority-median hypotheses. If defection increases as assignee-to-justice distance increases (to either side), then that would lend affirmative support for the author-monopoly hypothesis. The latter is a *symmetric* distance effect, as movement of the author away from the

⁴ Of course, in these models, defection should depend on a justice's ideological distance to the median or to the majority-median respectively.

justice hurts the justice whether such movement is toward the more peripheral wing or toward the more moderate wing of the majority. Figure 1 summarizes these hypotheses.

Influence Hypotheses for Fluidity. The author influence family of theories posits that the opinion author is able to exert some control over the final opinion location but that this power is mediated by other factors, including exogenously-fixed policy alternatives (Schwartz 1992), the location of the status quo (Hammond, Bonneau and Sheehan 2005), the ideology of other justices in the majority (Maltzman, Spriggs and Wahlbeck 2000), and the author's bargaining leverage (Lax and Cameron 2007). Thus, unlike with the monopoly theories, it is not possible to pinpoint exactly where the final opinion will be located without further information. The opinion should be somewhere in between the median and the author, but we cannot say whether it would be to the left or to the right of a justice more moderate than the author. And so we cannot predict, for example, whether Justice Alito would be more or less likely to defect from the initial majority if Scalia were assigned to write the opinion instead of Roberts (see Figure 1).

However, in Lax and Cameron's author-influence model, the predictions for such a justice's utility from the equilibrium opinion are not so ambiguous. In that model, the utility from an opinion depends on more than just its ideological location. It also depends on legal quality. The opinion author writes the opinion to achieve a particular ideological target in the policy space and chooses the extent to which she will invest in the legal quality of the opinion. Legal quality requires costly effort, but the greater the legal quality, the greater the chances that the application of the opinion will yield an outcome close to this ideological target (that is, higher quality implies lower variance around the target, and thus a higher expected payoff, all else equal) (Lax and Cameron 2007, 282).

To maintain a majority while pulling policy away from the median, the opinion author must write an opinion with ideological and legal content sufficiently attractive such that no other justice will pay the cost to beat it with an opinion closer to the median and/or of

higher quality. In equilibrium, the more extreme the assignee, the more extreme the opinion ideology, but the higher the opinion quality, creating a trade-off for justices evaluating this opinion (Lax and Cameron 2007, 290).

In a formal appendix, we extend the implications of this trade-off. We predict that, under reasonable assumptions, more extreme authors should make justices close to the median more happy, because either (1) opinion location, as it is pulled further from the median, will still actually be moving towards them *and* quality will increase, which will also improve utility, or (2) policy will move somewhat past them but this will be more than compensated for by higher opinion quality. That is, the distance-to-assignee effect on defection will be *asymmetric*, with most or all justices more likely to stick with the initial majority when authors are more extreme given the extra investment in quality/certainty by such authors.⁵ Figure 1 depicts this hypothesis graphically.

Data and Methods

Data. The data we use on conference vote, final vote, and case characteristics are from Spaeth's Vinson-Warren Supreme Court Judicial Database and Expanded Burger Court Judicial Database, which collectively cover Supreme Court activity from 1946 to 1985.⁶ In order to examine individual justice voting behavior, we expanded the case-level data to the

⁵ While it may seem counterintuitive that a justice should prefer a more extreme opinion assignee, consider how much the extreme author has to lose in terms of policy if he cannot hold a majority relative to a more moderate author. Thus, the extreme author is more willing to invest in opinion quality than is a moderate author.

⁶ We dropped cases with six or more missing conference votes, with fewer than four majority justices coded, or with an unclear ideological direction due to missing data or issue area (per Spaeth). If the conference vote of the opinion assignor or the opinion assignee was missing from the data or was obviously incorrect, then we coded the justice as being in the conference majority. This correction affected 305 cases (mostly from the Burger

justice-case level (limited to initial majority coalitions of sizes four through eight). Each of the resulting 30,899 observations represents the vote of one particular justice in one particular case (22,793 majority observations across 4,171 cases). We also use Martin-Quinn year-specific aggregate ideology scores (“MQ scores”) to measure additional case and justice characteristics.(Martin and Quinn 2002).⁷

Our dependent variable, vote *Switch*, is a dichotomous variable that equals one when a justice’s conference vote and final vote differ and zero when a justice does not change his vote.⁸ In the raw data, defection from the majority occurs roughly 7.5% of the time.

The previous literature on vote fluidity indicates that a justice may switch his vote for reasons unrelated to his distance from the opinion assignee. Based on these findings, we code the following control variables. At the case-level, we code *Salience* using the measure in Epstein and Segal (2000), which indicates whether a case was covered on the front page of the *New York Times*. *Complex* cases are those with more than one legal provision (“Laws” in Spaeth’s database). We expect less defection in salient cases and more in complex cases. We also use the eleven major case *Issue* areas in the Spaeth database that are coded as having a liberal-conservative direction.

At the coalition level, *Coalition Size* is simply the number of justices in the initial major-

court). If the overall conference was tied (due to missing data or when the court had only eight members) and the opinion assignor and the opinion assignee were incorrectly coded as being in the minority, then we changed what was incorrectly identified by Spaeth’s default coding as the minority coalition to the majority coalition. This correction affected 55 cases. Where there are combination votes, such as reverse in part/affirm in part, we use the primary vote as indicated by Spaeth.

⁷ We have checked many of our results using alternatives, and, so far, results are similar.

⁸ When multiple conference votes occurred, we use the first vote, except in cases when re-votes took place before the majority opinion-writing duty was assigned. In these cases, we use the conference vote closest in time to the assignment.

ity with known votes. *Contiguous* majority coalitions are those in which the initial majority is not ideologically scattered, i.e., perfect spatial voting in which the justices in the majority line up according to MQ score without interruption by a minority justice.⁹ We expect less defection when voting is more “normal,” in this sense. Natural courts (*Natcourt*) are continuously serving sets of justices (20 in our data), which begin when a justice is appointed, and end when a justice leaves the Court (as coded by Spaeth).

At the justice level, *Ideology* is a justice’s MQ score recoded relative to the direction of the conference vote—the higher the score, the more liberal (conservative) a justice is in a case in which the conference decision was liberal (conservative). A justice is *Marginal* if she is the most liberal (conservative) justice, by MQ score, in a conservative (liberal) conference majority. A justice is *Closer to the Minority* if her MQ score is closer to the average score of the initial minority coalition than to the average score of the initial majority coalition, excluding her own score from either of them. Either of these relative positions would be expected to lead to greater defection, dampened perhaps by equilibrium behavior aimed at keeping such wavering justices on board.

Uncertain votes are those coded as such in Spaeth’s records (e.g., “?” or “Q”), either because of actual uncertainty on the part of the justice or because of vagueness in the record-keeping.¹⁰ This too is expected to associate with higher defection. *Assigned* indicates that a justice herself was assigned to write the majority opinion, which should lead to a lower defection probability.¹¹ *Expertise* is the natural log of the number of opinions (+1) that the justice has written (whether majority, concurring, or dissenting) on the relevant

⁹ This does not preclude having a contiguous centrist coalition lined up against the ends. For another measure of non-contiguity, see Edelman, Klein and Lindquist (2008).

¹⁰ Even if “uncertain” votes are entirely due to vagueness in record-keeping, including this is still important because it will control for non-random error in our dependent variable.

¹¹ We include all assignments, whether made by the Chief Justice or senior justice in the majority. Where multiple assignments occurred, we code the justice assigned first.

case issue up to the date of opinion assignment. Finally, *Freshmen* are justices serving their first term on the Court.

Our primary variable of interest, the one which will allow us to differentiate among the predictions made by different bargaining models, is *Distance to Assignee* (*DA*). *DA* is simply the absolute difference between a justice's MQ score and the assignee's MQ score. In addition to *DA*, we also create a variable for *Side*. A justice is coded as facing an assignee on her extreme *Side* if the assignee's MQ score is more conservative (liberal) than the justice's and the initial conference vote is conservative (liberal) (equivalently, *Side* = 1 if the justice is on the moderate side of the assignee). See Figure 1.

We interact *Side* with *DA*. This allows the marginal effects (slopes) of *DA* to vary on either side of the justice. The bottom part of Figure 1 shows two possible effects of assignee ideology. The v-shaped line shows a defection probability that increases with assignee distance from the justice in question (symmetric distance effects), as predicted by author-monopoly models of bargaining. The downward-sloping line shows a defection probability that increases with assignee moderation, not distance (asymmetric distance effects), as predicted by Lax and Cameron (2007). The effect for assignees on the moderate side of a justice are the same, while the effects for assignees on the extreme side of the justice diverge.

The coefficient on *Side* itself will capture the marginal effect of shifting the assignee from one side of the justice to the other. That is, it allows a discontinuity (a jump) in defection probability due to moving the assignee just barely past the justice.

Methods. We estimate multilevel probit models using the LMER function in R ("Linear Mixed Effects in R," Bates 2005). The data are individual votes in individual cases, but the same justice casts many votes, cases are related by issue area, a natural court fixes a set of justices, and coalition sizes repeat. Thus, we group votes by justice, by natural court, by issue, and by coalition size. We use multilevel probit models and modeled (or

“random”) effects, instead of unmodeled (or “fixed”) effects, for these groups of predictors (Gelman and Hill 2007, 244-8).¹² We assume that grouped predictors are related to each other by their hierarchical or grouping structure. The model partially pools information about data across groups, to an extent warranted by the data. Each grouping is a set of modeled random effects, assumed to be drawn from a normal distribution with estimated variance, centered at zero. Using this structure allows us to answer interesting substantive questions: Are some natural courts simply less stable than others? Do certain justices defect more than others? Are some issues more prone to defection than others?

While there is more than one way to express a multilevel model (see Gelman and Hill 2007, 262), the following is the most intuitive. In our defection model, we model the decision of justice j to switch his or her vote away from the initial majority in case c of issue i given natural court n with coalition size s as follows:

$$\begin{aligned} \Pr(\text{switch}_{j,c} = 1) = & \Phi(\beta_0 + \beta_1 \cdot \text{Ideology}_{j,c} + \beta_2 \cdot \text{Expertise}_{j,c} + \beta_3 \cdot \text{Salience}_c \\ & + \beta_4 \cdot \text{Complex}_c + \beta_5 \cdot \text{Noncontiguous}_c + \beta_6 \cdot \text{Assigned}_{j,c} \\ & + \beta_7 \cdot \text{Marginal}_{j,c} + \beta_8 \cdot \text{Uncertain}_{j,c} + \beta_9 \cdot \text{Freshman}_{j,c} \\ & + \beta_{10} \cdot \text{Extremeness}_{j,c} + \beta_{11} \cdot \text{DA}_{j,c} + \beta_{12} \cdot \text{Side}_{j,c} + \beta_{13} \cdot \text{Side}_{j,c} \cdot \text{DA}_{j,c} \\ & + \beta_{14} \cdot \text{Closer}_{j,c} + \alpha_j^{\text{Justice}} + \alpha_{n[c]}^{\text{Natcourt}} + \alpha_{s[c]}^{\text{Size}} + \alpha_{i[c]}^{\text{Issue}}) \end{aligned}$$

¹² Multilevel models are a generalization of linear and generalized linear modeling, in which relationships between the variables are themselves modeled and estimated. For data with structure such as ours, multilevel modeling is generally an improvement over classical regression—indeed, classical regression is a special case of multilevel models in which the degree to which the data is pooled across subgroups is set to complete pooling or no pooling by arbitrary assumption (Gelman and Hill 2007, 254-8).

The group effects are modeled as follows:

$$\alpha_j^{Justice} \sim N(0, \sigma_{Justice}^2), \text{ for } j = 1, \dots, 26; \alpha_n^{Natcourt} \sim N(0, \sigma_{Natcourt}^2), \text{ for } n = 1, \dots, 20$$

$$\alpha_s^{Size} \sim N(0, \sigma_{Size}^2), \text{ for } s = 4, \dots, 8; \alpha_i^{Issue} \sim N(0, \sigma_{Issue}^2), \text{ for } i = 1, \dots, 11$$

Results and Discussion

All results are presented graphically. Figure 2 shows probit coefficients from the defection model, with confidence intervals at 90% and 95% (grouped modeled effects are presented in Figures). While many of our hypotheses can be tested directly using the probit coefficients and their standard errors, others are conditional hypotheses, which can only be tested with the appropriate linear combination tests using the interaction and constitutive (main) terms.¹³ These are shown in Figure 2, below the horizontal line.

We refer to Figure 3 for substantive effects. It shows predicted probabilities of defection for various justice types or cases, for the “average” vote.¹⁴ To compare a pair of predicted probabilities and assess whether they differ significantly, one must use the hypothesis tests in Figure 2, and *not* the degree of overlap of the confidence intervals in Figure 3, which simply give a sense of prediction uncertainty (Schenker and Gentleman 2001).

¹³ For example, the marginal effect of distance from an extreme assignee is $\beta_{11} + \beta_{13}$.

¹⁴ Our results are robust for minor changes in what counts as an “average” case. Except for the target of the prediction comparison in question, we use the following. We take the average of all grouped random effects, which is zero by assumption. All continuous predictors are set as their means. We average across some dichotomous effects, by setting them to their “means” as well. This might not yield the exact prediction in a case of given type, since, for example, salience is coded as dichotomous—but it does provide a robust sense of the difference in predictions for the target comparison. We do set uncertainty, freshman, assignee, and marginal to zero. We set side equal to one.

Bargaining and Defection. We first unpack our main result, the effects of a justice's ideological distance to the opinion assignee on propensity to defect. What happens when the Chief picks an extreme justice or a more moderate justice the opinion-writing duties? What happens when the assignee is ideologically distant from a justice? What are the implications for bargaining over opinion content on the Supreme Court?

Because we model an interaction between a justice's location relative to the assignee and her distance to the assignee, we can consider multiple possibilities to sort out the various bargaining theories, as shown in Figure 1. As predicted by the author-monopoly model, defection could always be increasing in absolute ideological distance, so that justices stick with assignees who are similar ideologically, even if the degree to which this matters may vary in strength from one side of the author to the other. Or, as predicted in Lax and Cameron (2007), we could find that absolute ideological distance has opposing effects on either side of the assignee, so that all justices are less likely to defect from one particular type of assignee, in this case, an extreme one. Finally, of course, distance could have no effect at all, as predicted by the median and majority-median monopoly theories.

As shown in Figure 2, we find that distance to the opinion assignee has an effect on a justice's propensity to defect from the initial majority coalition. Distance has a significant effect on given assignees through both the extreme side and the moderate side of the justice. Thus, we can reject the null predictions of the median monopoly and majority-median monopoly theories. Distance to the assignee has the opposite effect on a justice's propensity to switch given an assignee on the justice's extreme side than it does given an assignee on the justice's moderate side. Thus, we can reject the symmetric distance prediction of the author-monopoly model. Increasing distance makes a justice more likely to switch if the assignee is on the justice's moderate side, but less likely to switch if the assignee is on the justice's extreme side. This pattern is consistent with the asymmetric distance prediction we derived from the Lax and Cameron (2007) bargaining model.

To elaborate, for extreme assignees ($Side = 1$), and thus relatively moderate justices,

there is a significant decrease in defection from an additional MQ unit in distance (see the first hypothesis test below the line in Figure 2). There is also a significant jump in defection probability, about 2 percentage points, when the assignee is moved just from one side of the justice to the other (the coefficient of *Side* itself is significant). But, for justices on the extreme side of a relatively moderate assignee (*Side* = 0), there is a significant *increase* in defection from even a single MQ shift in absolute distance (the raw probit coefficient in Figure 2). That is, fixing a justice on the extreme side of the assignee, the more extreme the assignee, the less likely defection is. Fixing a justice on the moderate side of the assignee, the more extreme the assignee is, the less likely defection is. *All* justices defect less from extreme assignees. These probability changes can seem small, but are quite large relative to the average probability of defection and are statistically significant as well. That is, with defection probabilities centering around 8%, an increase or decrease of a couple of percentage points represents a 25% increase or decrease from the base level.

A set of predicted probabilities will illustrate the rough magnitude of this effect (see the final grouping of predictions in Figure 3 or the full spread of predictions in Figure 4). Consider a Justice Smith. If the Chief assigns to a justice 10 MQs more extreme than Smith, so Smith falls on the moderate side of the assignee, then Smith defects from the initial majority coalition only 6% of the time. But, if the Chief assigns to a justice only 1 MQ more extreme than Smith, he defects 10% of the time. If the Chief were to assign to a justice 1 MQ more moderate than Smith (so that Smith falls on the extreme side of the author), the chance of switching is still 10%. But, if the assignee is 10 MQs more moderate than Smith, Smith's chance of switching increases to 23%. All of this is true even though we control for ideological compatibility with the conference vote and for idiosyncratic propensity to switch. Thus these findings are *not* due to the relative ideological position of the potential switcher herself but are due solely to the assignee's ideological position.

Our other results are broken down into case-, coalition-, and justice-level effects. We find effects across all three levels of analysis, which supports doing this analysis at the

individual level, so that all three can be included.

Case-Level Effects. We do not find an effect of case salience on defection rate. We do find that more complicated cases induce greater defection. Compared to justices voting in cases with a single legal provision, justices in cases with more than one provision at stake are 3.3 percentage points more likely to switch on average. Defection also varies across issue areas (see the random effects by issue in Figure 5). Defection by is, all else equal, lowest in first amendment cases and highest in attorneys cases, with roughly a 3 percentage point difference between the two extremes. Overall, these differences are minor, suggesting little residual variation across categories, given other predictors.

Coalition-Level Effects. The configuration of the initial majority coalition also affects defection. Justices are less likely to defect when the coalition is larger (the difference is about 3 percentage points). As shown by the random effects by size in Figure 5, coalitions of five have the greatest defection effect; those of eight the least. Each of these extremes is significantly significant compared to the average defection rate across coalition sizes. That minimum winning coalitions have higher defection probabilities suggests that the effects of opinion assignment on defection can be particularly important for such coalitions. Whether or not the initial coalition is contiguous is also significant. As shown in Figure 3, non-contiguity increases the likelihood of defection by 1.5 percentage points, close to a 25% increase from the base level of defection. Finally, some natural courts simply have more defection than others—with the variance in natural-court effects mapping to a 6 percentage point spread in the probability of defection (see Figure 6). The early years of the Warren Court have some of the lowest levels of defection, all else equal, and the early years of the Burger Court have some of the highest. That natural courts differ, holding constant a justice and distance to author and the like, means that the precise configuration of justices matters. This too points against hypotheses that reduce bargaining to the median justice.

Justice-Level Effects. Next, we consider effects that operate at the level of a single justice. First, there is variation across the modeled effects by justice (see Figure 6), with Justices Burton and Goldberg the least and most likely to defect, respectively. Justices Stevens and Frankfurter are roughly dead center among the other justices in their propensities to defect, after controlling for all other effects, including ideology. The effect of shifting from the average to the highest or lowest is roughly plus or minus 6 percentage points respectively. These effects and the natural court effects all suggest that there are subtle differences in bargaining context across cases, justices, and courts... a more complicated picture than a simple median voter model might lead one to expect.

Where a justice sits within the initial majority coalition does matter for defection rate, as does how close the justice is to the minority justices. A non-marginal jumps from a defection rate of 9% to 12% if closer to the minority. The marginal justice starts with a defection probability of 10%, which jumps to 13% if she is also closer to the minority.

Not surprisingly, a justice's ideological compatibility with the initial majority conference vote direction has a large effect on defection likelihood. Recall that the higher the ideology measure is, the more liberal a justice is in a case with a liberal conference decision, and vice versa. A justice with an ideology score one standard deviation above the mean (e.g., a quite liberal justice in a case with a liberal conference vote) has only a 5% probability of defecting from the initial majority coalition. By contrast, a justice with an ideology score one standard deviation below the mean (e.g., a quite conservative justice in a case with a liberal conference decision) has a 17% probability to defect from the coalition.

Justices that cast uncertain initial votes are indeed much more likely to switch. Uncertainty has an average marginal effect of 12% on defection probability, which is statistically significant. Issue-specific expertise does not seem to matter, but freshman are less likely to switch. A freshman with mean opinion-writing experience on a given issue (for a freshman) has an 8% chance of switching. A non-freshman with mean experience (for a non-freshman) has a 10% chance of switching (a difference which is significant at 90%).

Finally, being assigned to write the majority opinion has a small negative effect on defection. A justice who is assigned to write the opinion has an 8% probability of switching. If, instead, the opinion is assigned to another justice who is an “ideological twin” (i.e., who has the exact same ideology score), then the unassigned justice is 9% likely to defect.

The results above demonstrate just how important it is to control for propensity to switch when testing bargaining hypotheses, given that many factors across all three levels are shown to affect the likelihood of defection from the initial majority. To restate our main result, we find no support for the median monopoly, majority-median monopoly, or author monopoly bargaining models. We find clear evidence of author evidence over opinion content using the fluidity research design. Consistent with the bargaining model in Lax and Cameron (2007), we find that assignment to more extreme members of the majority coalition makes all justices less likely to defect.¹⁵

¹⁵ As explained in the Appendix, effect of distance on a minority justice’s propensity to switch into the majority (conform) are ambiguous in the Lax and Cameron (2007) model. Whether a minority justice’s utility decreases in distance from the assignee or increases in assignee extremism depends on whether or not that justice is to the left or right of a critical point. Thus, our research design does not allow us to differentiate the Lax and Cameron (2007) author influence model from the author monopoly model using a conformity test. However, finding that distance to author has any significant effect on a minority justice’s propensity to conform would be evidence against the median and majority-median monopoly models. We ran a multi-level model, similar the defection model discussed above, using vote data on justices in the conference minority. We found that, all else equal, distance does indeed affect a justice’s propensity to conform, making her more likely to conform the closer the assignee is to her. This finding is consistent with the author monopoly model and with that in Lax and Cameron (2007) and is inconsistent with the median and majority-median models. Results are available upon request.

Conclusion

Various features of cases before the Court, the ideological configuration of the initial majority coalition, and judicial characteristics all affect vote defection. Some of our findings are completely new, while others provide considerable support for prior findings and the conventional wisdom. Most importantly, using the initial conference vote as a pre-test, and controlling for other influences on assignment, we showed that defection from the initial voting majority on the Supreme Court is affected by the Chief Justice's choice of opinion assignee. This choice has a striking effect on whether justices stick to their initial positions on a case or flip to the other side, a finding which represents the cleanest and most striking evidence to date that opinion assignment matters. Moreover, it is clear evidence in favor of the author-influence family of models, and against the median-monopoly and majority-median family. The asymmetric distance effects we find in our analysis point against the author-monopoly model.

More generally, our findings are supportive of the "Strategic Model" literature (empirical and formal), which focuses to a significant extent on how justices battle over opinion content. While it is difficult (if not impossible) to decisively *confirm* any one theory of bargaining, and while we certainly do not expect this paper to be the last word on the subject, one result stands out clearly—collegial interaction on the Supreme Court matters. Scholars have long documented such interactions (most notably Epstein and Knight 1998; Maltzman, Spriggs and Wahlbeck 2000), but it has been difficult to show that the choices made by the justices truly mattered. Some of our findings are more nuanced than others, and, like any research design, some assumptions must be accepted for the most far-reaching of our conclusions (e.g., pointing to the Lax-Cameron model of author influence). But even if one does not accept all assumptions (inter alia, that defection is based on expected/actual opinion location), the core result still holds: opinion assignment affects subsequent defection.

That assignment effects extend even to this most visible choice, the ultimate vote to

reverse or affirm, suggests that there will also be effects that do not go so far as to swing a justice to the other side, but rather “only” affect opinion content. That is, we have set a very high bar by only exploring changes that actually push a justice to vote for the opposite case disposition. It seems uncontroversial to suggest that if these votes can be affected, so can opinion content. If assignment affects the justices’ final votes on the merits, it must be because the justices care a great deal about opinions and authorship. In short, collegial politics matters.

Our findings mean that even “lesser” judicial appointments can affect legal policy, more than conventional wisdom would suggest. All changes in Court personnel are relevant—not just those that move the median or those that put a new Chief Justice in place. The Chief Justice, as the most frequent opinion assignor, does obtain additional control over case outcomes. And, while replacing Justice Souter with Sonia Sotomayor may not move the median, it can change play of the Court’s collegial game. Some have called this the Kennedy Court, but our findings suggest that Chief Justice Roberts and Justice Stevens, as heads of their respective wings, are key strategic players in the judicial policymaking game. And, with the current Court fraught with fragile five-four majorities, one intriguing question is... who is better at it?

In considering such opinion assignment tactics, Murphy (1964) suggests that the Chief might assign to the most moderate member of the conference coalition (the marginal justice) to prevent defections, perhaps because a moderate author will write a mild or narrow opinion. While the moderate member is likely to write such an opinion, in the Lax-Cameron model, she is also less likely to be willing to invest the time to write a quality opinion. More extreme authors know they have to compensate other justices in the majority. This argument highlights a problem with the first-cut intuitions that dominate many “Strategic Model” arguments within the courts literature, in that they can be undercut by strategic anticipation. In the context of this paper, we should not jump to the conclusion that an extreme justice—Scalia, say—is less likely to hold onto the majority when he

knows he must write his opinion so as to hold onto it. We should not assume that justices who have extreme preferences will automatically let their preferences run wild. To expect Scalia to be more likely to lose votes than Kennedy is to assume him to be rather myopic (or, more reasonably, perhaps relatively “stubborn”). If Kennedy can figure out what to do to hold onto a majority, why couldn’t Scalia? Indeed, the latter has an even greater incentive to hold onto the initial majority, as a liberal victory will be all the more painful to a Scalia than to a Kennedy.

Moreover, a relatively extreme Chief Justice (as all have been since Warren) may have a double incentive, all else equal, to assign the opinion to a more conservative justice. He can thus achieve a more extreme ideological outcome *and*, given our findings, increase the chances that the original majority coalition would stick together. Similarly, a relatively extreme senior justice of the opposite ideological wing (like Justice Stevens today), when in the majority, will assign to the extreme of his own wing. This would lead to greater polarization of legal policy outcomes than if the Median Monopoly model held sway.

While our focus has largely been on differentiating positive political theories of judicial bargaining, there are clear normative concerns as well. If assignment and anticipated opinion content affect voting in the particular case before the Court, as our results suggest, the justices are in effect trading off case votes for opinion language—a disconcerting compromise of legal philosophy for the litigants at hand. That the justices have to compromise their preferred legal positions in pursuit of a majority coalition might be troubling to legal scholars; that actual litigants might win or lose based on strategic behavior aimed at affecting future legal policy might give pause to even a political scientist.

Whose Court is it? The answer is not simple. Our results suggest that one cannot point to any one particular justice. If defection rates are, as we argue, affected by (expected or actual) opinion location, and given the predictions we extracted from the competing theories of judicial bargaining, then opinion authors do *influence* opinion policy content, but do not have monopoly control thereof. Rather, influence is mediated by the need for

a majority. Further, since majority opinion authors are chosen most often by the Chief Justice, he too influences opinion content. And so we find that legal policy is indeed a strategic collegial product.

Appendix

We borrow the following notation and definitions from (Lax and Cameron 2007, 280-284). Justice i has ideal point j_i in a one-dimensional policy space (the point at which the justice would most prefer to place the legal doctrine as set down by the opinion). Let j_R be the ideal point of the majority author (the right wing of the Court has the initial majority); j_L be that of the potential minority counter-writer who seeks to steal the majority; and normalize the median justice's ideal point to $j_M = 0$. The issue area has a general salience weight of s and each justice has an idiosyncratic salience weight of s_i that modifies it. The marginal cost for justice i to increase quality is $c_i c$ where c is common across the justices (reflecting general issue complexity) and c_i reflects idiosyncratic ability and expertise. Let $t_i = c_i/s_i$ and $t = c/s$.

Lax and Cameron (282, 288, 297, 299) show that the utility to justice i from an opinion with policy position p and quality q is

$$u_i = s_i s \left(- (j_i - p)^2 + (q - 1) \right)$$

and that the equilibrium values p^* and q^* are

$$p^* = \frac{j_R}{t_R t} + \left(\frac{j_L}{t_L t} \right) \left(1 - \frac{1}{t_R t} \right) \quad q^* = \left(\frac{j_R}{t_R t} - \frac{j_L}{t_R t_L t^2} \right)^2 - 1$$

Then, the utility from the expected equilibrium opinion to justice i is

$$u_i = s_i s \left(\left(\frac{j_R}{t_R t} - \frac{j_L}{t_R t_L t^2} \right)^2 - \left(j_i - \frac{j_L \left(1 - \frac{1}{t_R t} \right)}{t_L t} - \frac{j_R}{t_R t} \right)^2 - 2 \right)$$

We take the partial derivative with respect to the extremism of the majority author:

$$\frac{\partial u_i}{\partial j_R} = \frac{2s_i s (j_i t_L t - j_L)}{t_R t_L t^2}$$

which is greater than zero if and only if

$$j_i > \frac{j_L}{t_L t}$$

(This is the condition for the marginal utility of justice i to be increasing with the ideal point of the majority author j_R .) For any justice i on the majority side of the median ($j_i > 0$), this is always true. For any justice to the left of the median ($j_i < 0$), this is true if and only if j_i is still to the right of the point $\frac{j_L}{t_L t}$.

In Figure 1, for example, this would suggest that there exists some point to the left of Justice Kennedy, such that, for any Justice to the right of this point, the utility from the equilibrium opinion actually rises as authorship shifts from Justice Kennedy rightward. (The justices to the right of this point would include Justices Kennedy through Thomas with certainty, and possibly Souter and so on.)

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	Class of Model			
	Median Monopoly	Majority-Median Monopoly	Author Monopoly	Author Influence
Opinion Location	median	majority-median	author	?
Which features or choices matter?				
Court Configuration	—	✓	✓	✓
Case Selection	—	✓	✓	✓
... if strategic	—	?	✓	?
Initial Majority	—	✓	✓	✓
Authorship	—	—	✓	✓
Assignment	—	—	✓	✓
Bargaining	—	—	—	✓
Sensitivity of policy to median	smooth/ small	none or large	none or large	none or medium

Table 1: *Implications of Bargaining Models for Opinions.* See text for explanations.

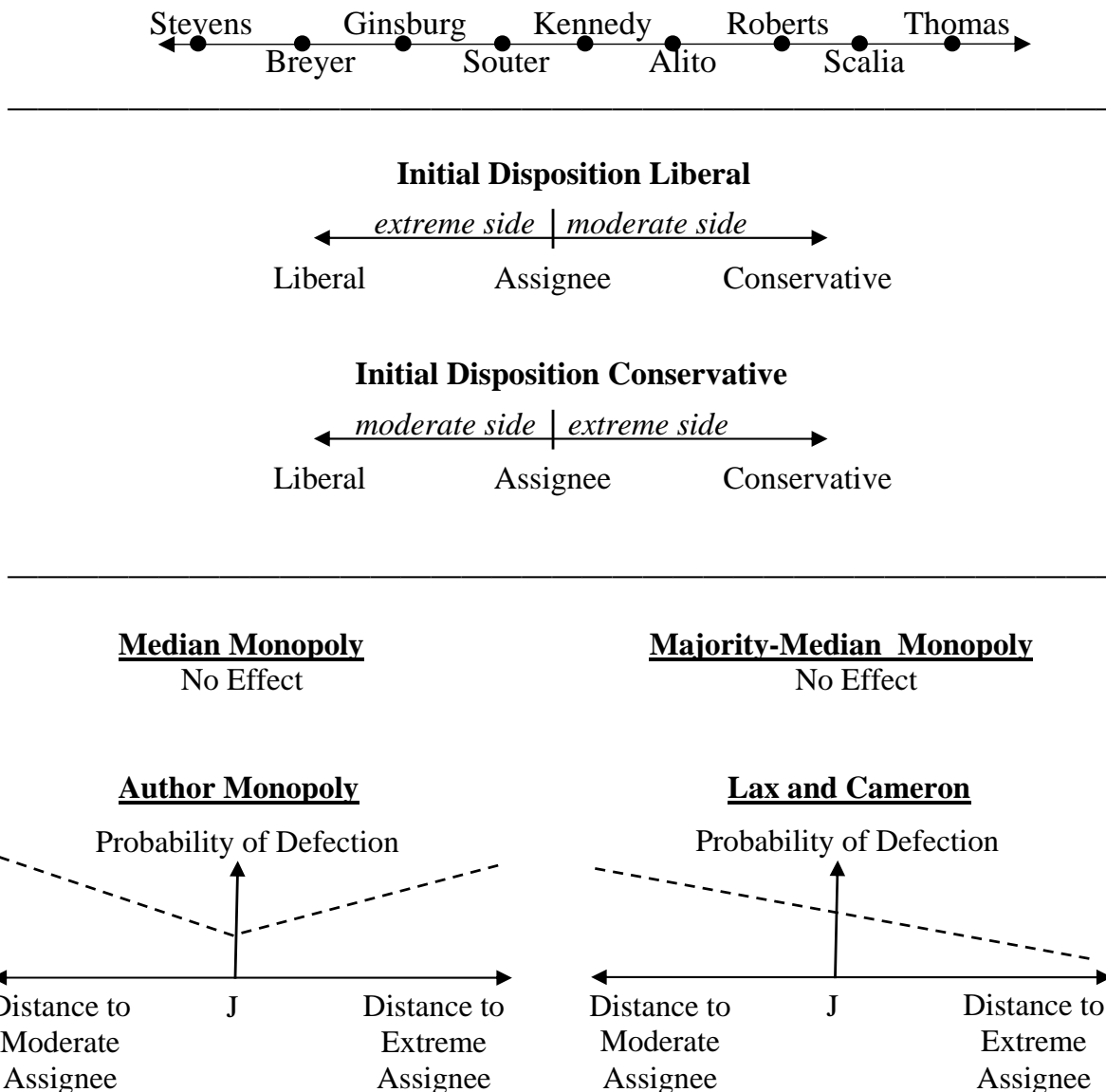


Figure 1: Predictions of Defection Probability by Bargaining Model. *The top shows the most recent full set of justices, in order of ideology as measured by Martin-Quinn scores. The middle section shows how assignees are labeled as on the moderate or extreme side of a justice (J), with initial liberal dispositions shown in the first configuration and initial conservative dispositions in the second configuration. The bottom of the figure has four panels showing the predicted effects on defection probability given the equilibrium opinion location in each model of intra-Court bargaining. The first two models predict that defection rates will not vary with assignee. The author monopoly model predicts that defection probabilities will increase as assignees become more distant (symmetric with distance). The Lax and Cameron model predicts decreasing defection as assignees become more extreme (asymmetric with distance). (As drawn here, there is no discontinuity at J, but we allow for such a discontinuity in the analysis.)*

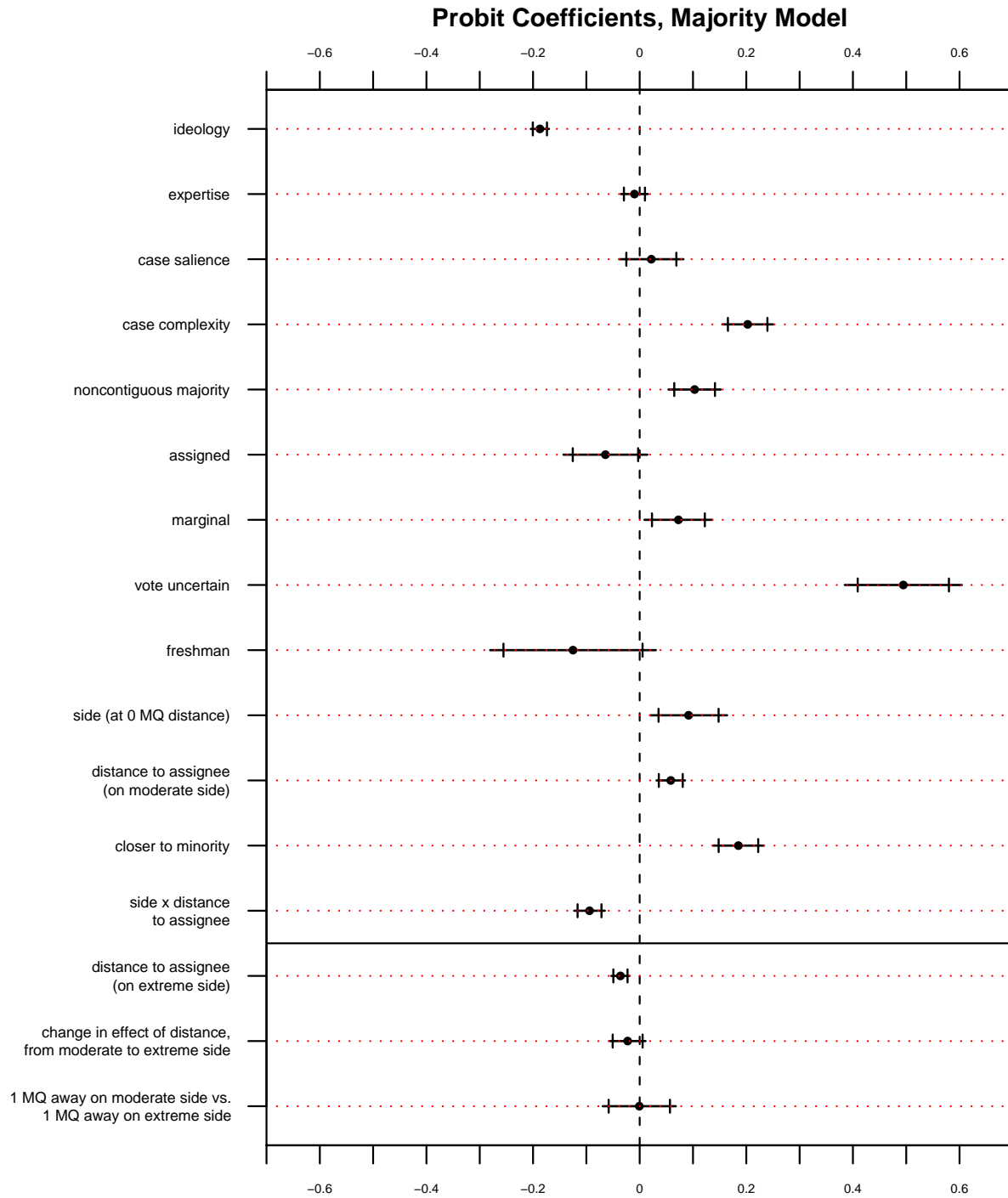


Figure 2: Defection from Majority. We show the probit coefficients (other than group effects) for the basic model, along with 90% (tick marks) and 95% confidence intervals (line segments). The dotted line at zero shows which are statistically significant. Below the horizontal line, we show estimated effects for various conditions, which are calculated given the raw coefficients above.

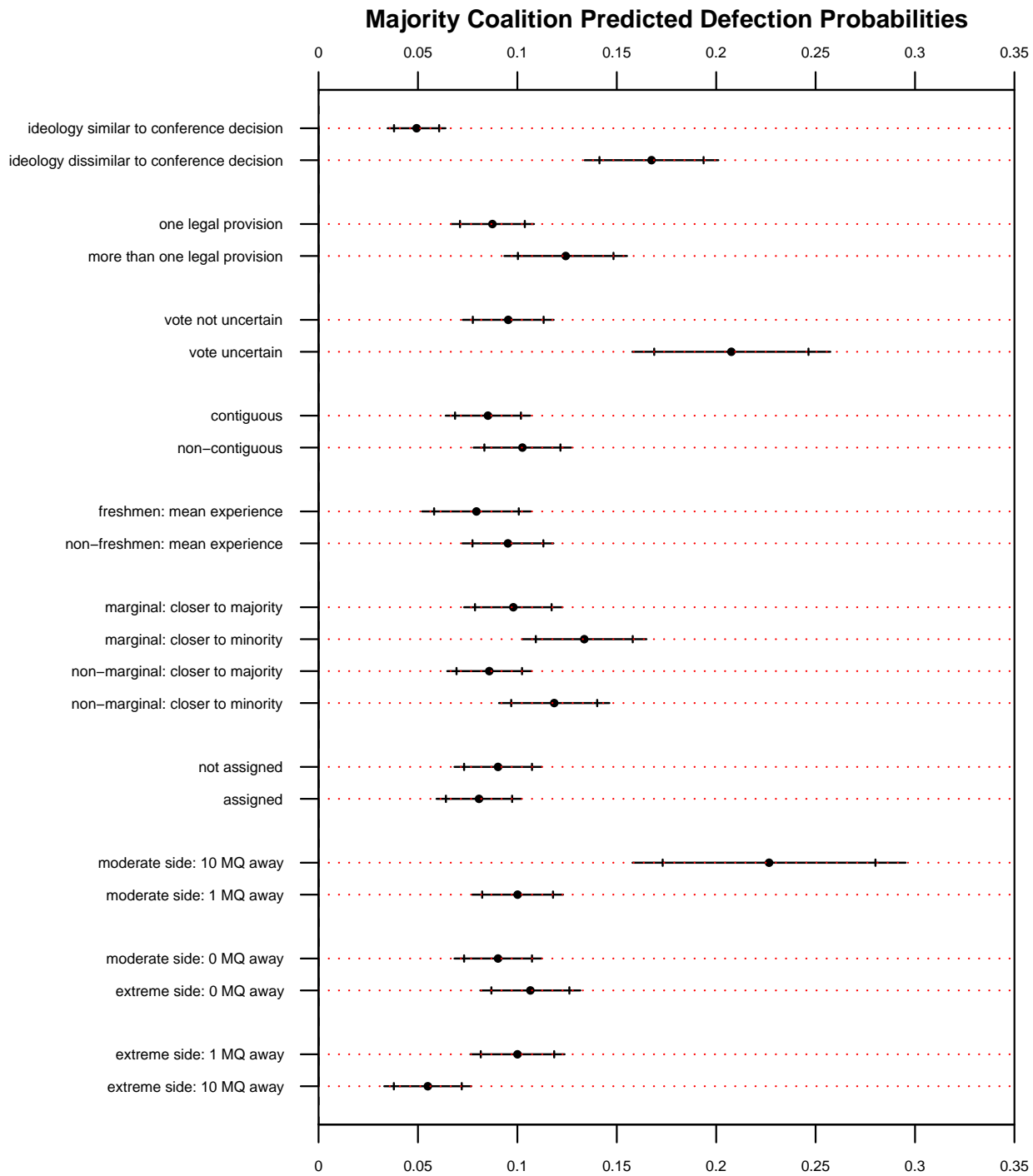


Figure 3: Predictions from Defection Model. We show predicted probabilities for various justice types and situations. Confidence intervals at 90% and 95% reveal the uncertainty in these predictions. (Note: these intervals cannot be used directly for significance testing given that sets of predictions co-vary; instead, see hypothesis tests in other figures.)

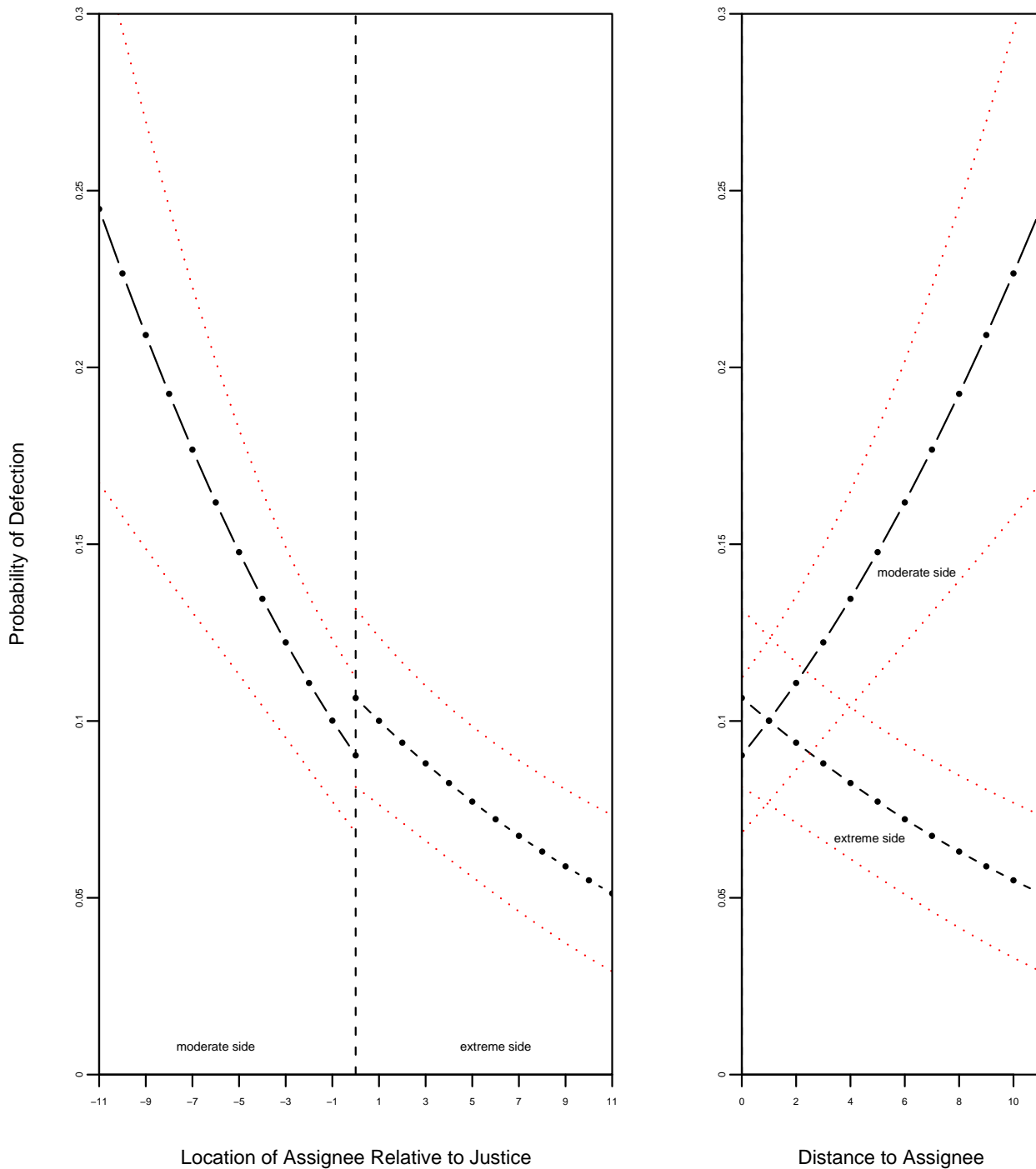


Figure 4: Predictions for Distance Effects in Defection Model. *In the left-hand panel, we show predicted defection probabilities, fixing the justice in question at zero, given relatively moderate or relatively extreme assignees. The right-hand panel measures only distance (in effect, folding the figure in half), showing clearly that distance effects are asymmetric—specifically, that assignee extremism matters, not distance to the assignee. 95% confidence intervals are shown.*

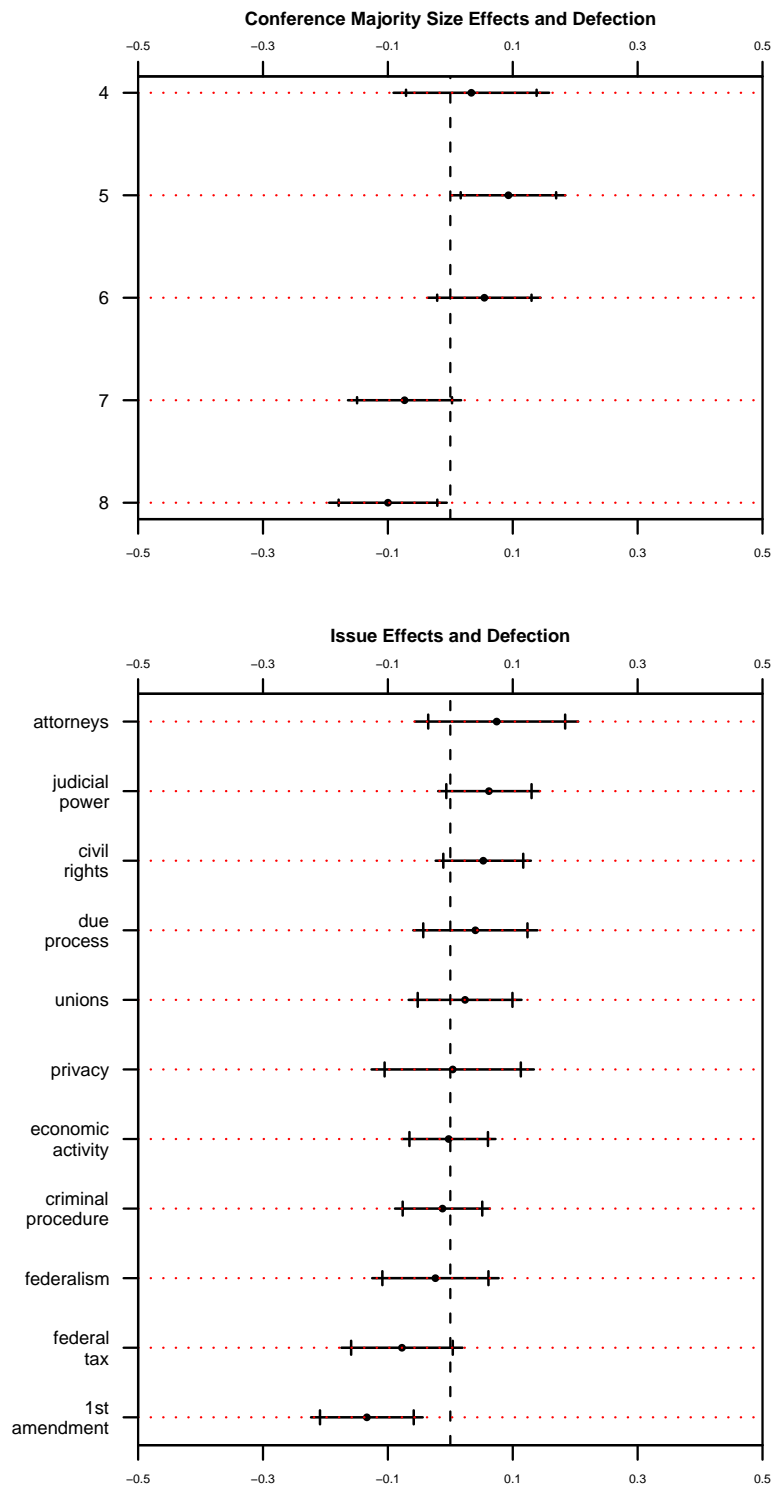


Figure 5: Coalition Size and Issue Modeled Effects. We show the estimated coefficients, along with confidence intervals at 90% (tick marks) and 95% (line segments). Issue effects are ordered by the likelihood of vote switching.

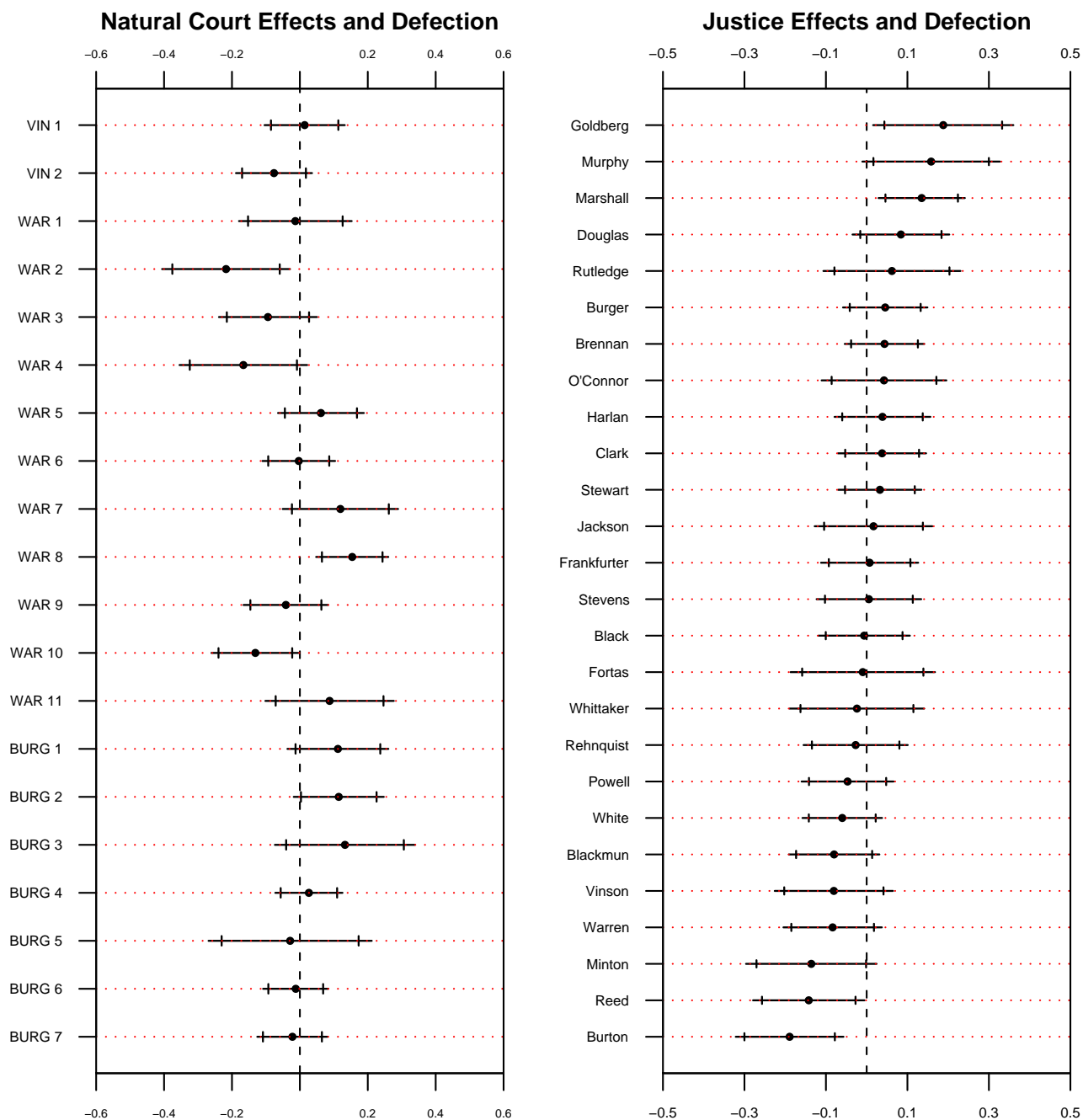


Figure 6: Natural Court and Justice-Specific Random Effects. *On the left, for the natural courts under Chief Justices Vinson, Warren, and Burger, we show the estimated coefficients, along with confidence intervals at 90% (tick marks) and 95% (line segments). On the right, we show the same for each justice.*