Hierarchical and Collegial Politics on the U.S. Courts of Appeals

Jonathan P. Kastellec Princeton University

Do hierarchical politics in the federal judiciary shape collegial politics on the U.S. Courts of Appeals and thus influence judicial voting and case outcomes? I develop a model in which the political control of the dual layer of hierarchy above three-judge panels—full circuits and the Supreme Court—affects the ability of a single Democratic or Republican judge on a three-judge panel to influence two colleagues from the opposing party. The theory predicts that panel majorities should be more strongly influenced by a single judge of the opposing party—a "counter-judge"—when that judge is aligned with the Supreme Court. Examining thousands of judicial votes in multiple issue areas, I show that the effect of adding a counter-judge to a panel is indeed asymmetric, and varies based on hierarchical alignment. The interaction of hierarchical and collegial politics increases the Supreme Court's control of the judicial hierarchy and helps promote the rule of law.

A multi-tiered judicial hierarchy creates different opportunities and different incentives for judges at each level of the hierarchy. In the U.S. federal judicial system, district court judges are subordinate to the Courts of Appeals and to the Supreme Court, but do not have to follow the precedents of their fellow trial court judges (Kornhauser 1995, 1609). One level up, three-judge panels of the Courts of Appeals have the ability to reverse district court decisions they disagree with, but must consider the possibility that they will be reversed by the full circuit sitting en banc or by the Supreme Court, should either decide to grant a petition for review. Should a majority of active judges on a circuit decide to rehear a case en banc, they too have to consider the likelihood of Supreme Court review. Finally, the Supreme Court does not have to worry about a higher court reversing its decisions, but does have to decide which cases to review and how best to achieve lower court compliance. Thus, hierarchical politics—how judges are affected by hierarchical institutions—may play a large role in judicial decision making.

In addition, the institutional structure of decision making differs at each level of the hierarchy. As trial judges, district court judges are solitary decision makers. The Supreme Court, on the other hand, is a collegial court, where justices make decisions by majority rule. However, they always sit with the same colleagues (until a justice leaves the bench and is replaced). On the Courts of Appeals, judges also hear cases as collegial courts, but sit on rotating panels of three chosen by a procedure that strongly resembles random assignment, allowing them to sit with different colleagues in different cases. Thus, collegial politics—how judges interact with their colleagues—may play a large role in decision making on appellate courts.

Do hierarchical politics shape collegial politics to influence judicial behavior? This question is particularly important with respect to the judges of the Courts of Appeals, who sit in the middle of the judicial hierarchy. The Courts of Appeals are the last resort for the vast majority of federal appeals each year. Its judges are tasked with implementing and complying with Supreme Court precedents in carrying out the thousands of decisions they make. In issues where the Supreme Court has not spoken yet or precedents may be unclear, judges of the Courts of Appeals may also look to the law of their circuit, which is enforced via en banc decisions, in which all active judges on a circuit sit together and vote by majority rule. On a given panel, the three judges may have similar or dissimilar legal preferences; at the same time, these preferences may align with those of the full circuit or the Supreme Court, or both. Whether preference agreement or disagreement on
three-judge panels among the judges themselves will affect judicial voting is a function of collegial politics; whether the panel’s relationship to the courts above it affects voting is a function of hierarchical politics.

In this article, I examine how collegial decision making on three-judge panels interacts with incentives created by the judicial hierarchy to influence judicial behavior on the Courts of Appeals. Specifically, I study the conditions when panel majorities (that is, two judges from the same party) sitting on a three-judge panel are likely to be influenced by a single judge from the opposite party—a counter-judge.1 I analyze how the dual layer of hierarchy above three-judge panels—full circuits and the Supreme Court—create asymmetric incentives for Courts of Appeals judges, depending on the alignment of judicial preferences on the panel, the full circuit, and the Supreme Court. Due to the Supreme Court’s position at the top of the hierarchy, the model predicts that appeals court judges whose preferences differ from the Supreme Court’s will be more likely to be influenced by a counter-judge on a three-judge panel; judges whose preferences are similar to the Supreme Court will be less likely to be influenced by a counter-judge. This asymmetry will be conditioned, however, by whether the panel majority is aligned with the full circuit or not.

Because the Supreme Court has been conservative in the last two decades, its preferences have generally been aligned with Republican lower court judges and opposed to Democratic judges. Accordingly, for recent years, the theory predicts that the differences in voting when sitting on a unified panel—one in which the other two judges are from the same party—and on a mixed panel with a single counter-judge from the opposite party should be larger among Democratic judges. This difference should be largest among Democratic majorities in Republican-controlled circuits, given that Democratic judges face the possibility of review and reversal by two superior reviewing courts and that the legal precedents established by both the full circuit and the Supreme Court are both likely to favor Republican judges.

To test these predictions, I analyze thousands of judicial votes in multiple issue areas in recent years. I show that the effect of adding a single counter-judge from the other party to a panel is indeed more prevalent among Democratic majorities than Republican majorities. In addition, the largest counter-judge effects occur among Democratic majorities sitting in Republican circuits, as predicted by the theory. I also delineate conditions under which one can adjudicate between two different mechanisms—internal and external—through which panel composition influences judicial voting. Thus, I am able to show that both internal dynamics within a three-judge panel and external dynamics created by the panel’s relationship to the judicial hierarchy influence voting at the judge level and hence affect the outcomes of cases. The results illustrate how the institution of three-judge panels and the politics of collegial decision making increase the Supreme Court’s ability to exercise hierarchical control over the Courts of Appeals. I also show how the intersection of collegial politics and hierarchical politics mitigate potential problems for the rule of law created by the relationship between panel composition and panel outcomes.

**Hierarchy and Collegiality on the Courts of Appeals**

Because the Supreme Court hears so few cases in a given term, the Courts of Appeals now effectively serve as the court of last resort for the vast majority of federal appeals, making them the key agent in terms of carrying out appellate oversight of trial courts and agencies. Judges on the Courts of Appeals have a duty to follow the precedents of the Supreme Court, prior panel decisions within the same circuit, and en banc decisions by the full circuit (Hasday 2000). And, in fact, studies of the Courts of Appeals generally show that they are largely compliant with higher court doctrine—even if judicial ideology still enters into decision making on the Courts of Appeals (see, e.g., Gruhl 1980; Songer and Sheehan 1990; Songer, Segal, and Cameron 1994). This high rate of compliance presents a puzzle. Given its low rate of review, and the fact that many appellate court judges hold divergent preferences, the Supreme Court faces a significant monitoring problem: how can the Court ensure that lower courts generally follow its precedents?

One explanation for the high degree of compliance focuses on the strategic interaction between the Supreme Court and the Courts of Appeals and how the Supreme Court’s ability to review (and perhaps reverse) cases selectively serves as an informal tool to promote compliance. Cameron, Segal, and Songer
(2000), for example, argue that the Court uses its discretionary docket to strategically audit cases decided by ideologically distant lower courts, a strategy, in turn, that causes lower courts in some instances to rule against their preferred legal outcome and in favor of the Supreme Court’s (see also Lax 2003; McNollgast, 1995). Kastellec (2007) demonstrates how ideological diversity on three-judge panels may further promote compliance under certain conditions. Finally, Clark (2009) extends the analysis in Cameron, Segal, and Songer (2000) and considers the implications of the fact that full circuits, when sitting together en banc, sit both above three-judge panels and below the Supreme Court. He finds that full circuits also strategically audit panel decisions, but when doing so factor in the Supreme Court’s preferences as well (see also Giles, Walker, and Zorn 2006).

While the thrust of this literature has mainly been “top down” in focusing on how a reviewing court selects cases, viewing the federal judiciary as a multi-tiered hierarchy creates opportunities for studying the behavior of three-judge panels from the “bottom up”—that is, as a function of their relationship to the levels of hierarchy above them. When the preferences of circuits and panel majorities align, how will that affect voting by panels? Alternatively, when the full circuit is aligned with the Supreme Court, does that create different incentives? Finally, does the distribution of preferences on the three-judge panel itself matter? To pursue answers to these questions, we first have to consider how collegial politics affects panel decision making.

Collegial politics on three-judge panels. The existence and scope of collegial politics depends on the relationship between ideological and judicial voting. Beginning at least as far back as Goldman (1968) and Richardson and Vines (1970), scholars have attempted to establish whether Democratic and Republican judges on the Courts of Appeals tend to vote differently. As judges themselves often emphasize (see, e.g., Wald 1999), many cases heard on the Courts of Appeals either involve issues that are not likely to implicate the ideological values of judges or involve such straightforward applications of the law that no reasonable judges could disagree, even if they have diverging ideologies. Issues in which there are broad agreement include federalism, takings and punitive damages (Sunstein et al. 2006, 49).

What are the implications of this agreement on collegial politics? Imagine a world where there are just two types of judges: “Democrats” and “Republicans.” We are interested in how judges vote differently depending on who their colleagues are in a given case. The top graph of Figure 1 depicts a hypothetical proportion of liberal votes in those cases in which Republican and Democratic tend to agree, on average, broken down by the three possible partisan combinations of a judge’s colleagues: Democrat-Democrat (DD), Democrat-Republican (DR), and Republican-Republican (RR). Because of the agreement among the two types of judges, collegial politics do not matter—judges vote the same way across all three possible panel combinations.

In many areas of the law, on the other hand, Democratic judges tend to vote more liberally than Republican judges. Democratic judges, for example, are much more likely to find in favor of plaintiffs alleging employment discrimination and sexual discrimination (Farhang and Wawro, 2004; Sunstein et al. 2006). Do these individual differences affect collegial politics on three-judge panels? It depends. First, suppose that Courts of Appeals judges were judicial automatons whose propensity to vote liberally or conservatively in a given case would be completely independent of the views of her colleagues. Assuming that Democratic judges tend to vote more liberally than Republican judges, then we would see the empirical patterns displayed in the second graph of Figure 1. Again, collegial politics do not matter: while Republicans and Democrats vote differently, their votes do not shift based on their colleagues: this produces the vertical pattern within each party. Indeed, such a pattern holds in abortion, death penalty and gay rights cases—in these issue areas, judges vote independently of their colleagues (Sunstein et al. 2006).

What if judges’ votes do depend on their colleagues? Transitioning to actual data (explained in detail below), in many areas of the law we see the patterns displayed in the bottom two graphs of Figure 1. The third plot in Figure 1 pools Republican and Democratic judges together and depicts how individual judicial voting varies depending on the colleagues of a judge in a given case. The plot shows that the likelihood of a conservative decision increases with every Republican judge added to a panel and decreases with every Democratic judge added to a panel. The bottom graph examines Republican and Democratic judges separately and shows that the same pattern holds within each party. Thus, in contrast to the vertical alignment in the

2Throughout the paper I use “Democratic” and “Republican” judges as shorthand for Democratic and Republican appointees, respectively. Readers should bear in mind that presidents occasionally make cross-party appointments (Barrow, Zuk, and Gryska, 1996) and that the party of the appointing president is only a proxy for judicial ideology.
automaton world, in many areas of the law we see a “staircase” pattern.

This phenomenon, known generally as “panel effects,” has been well documented in recent years. One line of inquiry, beginning with Revesz (1997), has examined the staircase patterns displayed in the bottom two graphs of Figure 1 by focusing on the partisan composition of panels (Cross and Tiller 1998; Kastellec 2010; Sunstein et al. 2006). A second line has examined how women and minority judges can influence their colleagues in employment discrimination, sex discrimination, and affirmative action cases, even when they are in the minority on a panel (Boyd, Epstein, and Martin 2010; Cameron and

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**Figure 1** Voting patterns, hypothetical and actual. (a) Hypothetical voting patterns when Democrats and Republicans agree on average; thus, no party or panel differences exist. (b) A hypothetical world where Democrats and Republicans vote differently from each other but independently of their colleagues on a panel; thus, no panel differences exist. (c) The actual patterns among all judges based on the data analyzed in the empirical section of this paper. Horizontal lines depict 95% confidence intervals. In contrast to (a) and (b), in these cases judges vote more conservatively with each Republican judge added to a panel, and vice versa. (d) The same as (c), but broken down by Republican and Democratic judges. The arrows indicate the respective effects of the counter-judge and on the counter-judge for Republicans and Democrats (see text on next page for details).
These studies present a puzzle: why are judges influenced by their colleagues? More specifically, why does the voting behavior of judges tend to differ depending on whether a counter-judge is present on a panel (which creates a mixed panel) or not (which creates a unified panel)? In seeking answers to this question, it is important to distinguish between two types of panel effects: the effect of a counter-judge on panel majorities and the effect on a counter-judge by panel majorities. The latter involves instances where a counter-judge, who by definition is out-numbered on a panel, decides to go along with the majority rather than cast a dissenting vote. Returning to the bottom graph of Figure 1, the difference in voting between a Democrat sitting with one Democratic judge and one Republican judge (DR) and sitting with two Republican colleagues (RR)—indicated by the dotted diagonal lines and arrows—provides an illustration of this phenomenon.

The effect of a counter-judge on panel majorities involves instances where the presence of a counter-judge leads her colleagues in the panel majority to vote differently than they would have in the absence of a counter-judge—that is, on a unified panel. This type of counter-judge effect is indicated by the solid diagonal lines and arrows in the bottom graph of Figure 1, which depict the shift in voting among: (a) Republican judges in cases where they sit with two fellow Republicans (RR) and cases where they sit with one Democratic and one Republican judge (DR); (b) Democratic judges in cases where they sit with two fellow Democrats (DD) and cases where they sit with one Democratic and one Republican judge (DR).

The mechanisms underlying the effect on a counter-judge by panel majorities seem fairly clear. In many cases where a counter-judge might disagree with the majority, the cost of dissent or a desire to maintain unanimity on the Courts of Appeals leads her to go along with the majority. Dissents entail extra work for a judge and may harm the legitimacy of a court. Casting this type of vote, which can also be called a “suppressed dissent” (Farhang and Wawro, 2004, 306) or a “collegial concurrence” (Sunstein et al. 2006), surely helps explain the high rate of unanimous opinions on the Courts of Appeals.

Explanations for the effect of a counter-judge on panel majorities, on the other hand, fall into two broad categories: internal and external. The internal explanation focuses on how adding a third judge to a panel with a different viewpoint or background may shape panel dynamics. One strand of the internal explanation argues that a judge with a different perspective may cause her colleagues to think differently about a case. This can be seen most clearly in studies of gender- and race-based effects, which emphasize how women or minority judges can provide white or male judges with information in cases salient to gender or race that otherwise they would not have. Similarly, a Democratic judge may bring a different perspective to an otherwise Republican unified panel, and vice versa. Focusing more on the costs of opinion writing, Fischman (2007) argues the threat of dissent by a counter-judge may induce externalities among panel majorities who have to respond to a dissent, leading them to side with the counter-judge rather than incurring those costs. A third (if seemingly remote) possibility is that judges may logroll across cases (Farhang and Wawro 2004, 309). Importantly, all these accounts rely on mechanisms that are orthogonal to hierarchical considerations; in other words, all could occur even if judges on the Courts of Appeals do not consider the courts above them when making decisions.

By contrast, the external explanation of panel effects focuses on the role of hierarchical considerations in panel decision making, considerations that flow directly from the hierarchical incentives and opportunities discussed above. Specifically, the external explanation examines how a counter-judge may be able to influence a panel majority if she is aligned with a higher court (or courts). This influence can take two forms. First, a counter-judge on a panel whose preferences are aligned with a higher court may credibly threaten to act as a “whistleblower” and dissent if the panel majority disobeys with the higher court’s preferred doctrine. This threat may compel the majority to vote against its own preferences and with the would-be dissenter in an attempt to prevent review and reversal by a higher court (Cross and Tiller 1998; Kastellec, 2007). Secondly, a counter-judge can marshal legal arguments to persuade her colleagues, even if she is outnumbered. If, for instance, a counter-judge can cite precedents issued by both the Supreme Court and the full circuit in support of her view on a particular case, such citation may have a persuasive effect on panel majorities, even if they do not particularly care about being reversed or believe the possibility to be unlikely. As Sunstein et al. argue, in some cases a counter-judge “can draw her colleagues attention to legally relevant arguments.
that, while not necessarily decisive, deserve careful consideration and sometimes make a difference to the outcome” (2006, 79). Thus, the external explanation encompasses collegial politics in which judges influence each other through deliberation or bargaining—when done in the shadow of hierarchy.

**A Hierarchical Model of Panel Decision Making**

To understand when counter-judge effects are likely to be largest, I turn to a model that incorporates the dual layers of hierarchy above three-judge panels. Blackstone and Smelcer (2007) argue that judges are most likely to respond to the preferences of the circuit as a whole and offer evidence that panel effects can be traced to the panel’s relationship to the full circuit. The authors’ theoretical and empirical models, however, do not consider any role for the Supreme Court in influencing panel decision making. Kim (2008) goes one step further by exploring the possibility that panel decision making is conditioned by either the full circuit or the Supreme Court. She develops and tests a policy-based spatial model in which panel majorities are likely to vote against their preferred outcomes when a counter-judge is closer to the reviewing court than the panel majority. Kim finds that while counter-judges are able to influence panel colleagues when the counter-judge is aligned with the full circuit, the same does not hold true when the counter-judge is aligned with the Supreme Court. While these results are illuminating, the influences of circuits and the Supreme Court are tested in separate models. The paper thus does not consider the possibility that judges may respond to the preferences of both the full circuit and the Supreme Court. What is needed is a theoretical model and empirical test that integrates both superiors in the hierarchy.

Consider a model in which there are only two types of judges: liberals and conservatives, represented by Democratic and Republican judges, respectively. In this simplified model, each judge on a three-judge panel can be characterized as either liberal or conservative, as can the full circuit and the Supreme Court, represented by the median judge or justice (with only two types of judges, the median is the same as the modal type). In a given case, the three-judges on the panel vote either liberally or conservatively, with voting proceeding by majority rule. Once a decision is reached, the losing litigant can either petition the full circuit for a rehearing en banc or ask the Supreme Court to review the case.

The goal of the model is to analyze decision making by panel majorities, taking into account both whether a counter-judge—one opposed to the majority—is sitting on the panel and the relationship of the preferences of the three judges to the preferences of both the full circuit and the Supreme Court. Specifically, the model is designed to make predictions about decision making by panel majorities in the presence and absence of a counter-judge. This captures the most interesting manifestation of panel effects: the effect of the counter-judge, when the addition of a single judge influences the voting of the panel as a whole. To be sure, the decision by a single judge to suppress a dissent (the effect on the counter-judge) in the event she disagrees with the majority and is unable to persuade her colleagues is an important phenomenon. But the decision to dissent has little direct effect; it can only affect case outcomes or the development of legal rules in the future (if at all). On the other hand, when the addition of a single judge with an opposing viewpoint to an otherwise unified panel affects the votes of the panel majority, and hence leads to a different case outcome than would have occurred on a unified panel, then the effect of panel composition is immediate on both the instant case and perhaps the future development of the law, since panel decisions are binding on future panels (unless overturned by the full circuit or the Supreme Court).

Figure 2 presents four possible configurations of the full circuit and the Supreme Court, across two possible panel types: unified panels, meaning there is not a counter-judge, and mixed panels, meaning there is a counter-judge. J₁ and J₂ denote the judges assumed to be in the majority of the panel. J₃ denotes the third judge in the panel, who could either be of the same party as the majority, thus creating a unified panel and the set of preferences seen in the first column of Figure 2; or J₃ could be a counter-judge from the opposing party, thereby creating a mixed panel and the set of preferences seen in the second column. For ease of exposition, the figure and my discussion assume that the panel always comprises a majority of Democratic, or liberal, judges. However, the model is symmetric: for each configuration, reversing the preferences of each judge on the panel, the full circuit and the Supreme Court would lead to the same analysis for Republican-majority panels.

Each configuration of preferences in Figure 2 leads to different predictions of how often we should expect adding a counter-judge to the panel to affect
voting by the panel majority. This can be seen by moving from a left-hand panel to its right-hand counterpart; that is, moving \( J_5 \) from the majority to the minority (in terms of partisanship, not voting). Thus, each configuration leads to different predictions (summarized in the left column of the figure) about the magnitude of counter-judge effects: the difference in voting by the judges in the panel majority depending on whether they sit with a counter-judge in a given case. If the panel majority judges are Democrats, the counter-judge effect is the decrease in liberal voting when they sit with a Republican counter-judge. If the panel majority judges are Republicans, the counter-judge effect is the increase in liberal voting when they sit with a Democratic counter-judge. If both the Supreme Court and full circuits play a role in influencing panel decision making, then the counter-judge effect should vary across configurations.

In Configuration 1 (“Both aligned”), the preferences of the panel majority are aligned with both the full circuit and the Supreme Court. In this scenario, the effect of adding a counter-judge to an otherwise unified panel should be effectively zero, given hierarchical considerations. Since both superior courts are likely to agree with the panel majority’s decision, a dissent from the counter-judge would persuade neither the full circuit nor the Supreme Court. In
addition, the law of both the full circuit and the Supreme Court will likely favor the panel majority and not the counter-judge. Accordingly, the panel majority should vote the same whether \( J_3 \) is of the same party or not. This prediction has an important implication for adjudicating between the internal and external mechanisms for panel effects: observing a significant counter-judge effect in this scenario would support a purely internal effect, given that hierarchical considerations predict no effect.

In Configuration 2 ("SC aligned"), while the Supreme Court is still aligned with the panel majority, the full circuit is aligned with the counter-judge. This means that the counter-judge now has a single reviewing court on her side, meaning she could both signal possible noncompliance by the panel majority to the other members of the circuit and cite circuit precedents in her favor. Thus, we would expect to see a larger counter-judge effect in this configuration than in the case where both reviewing courts are aligned with the panel majority. However, because the Supreme Court, at the top of the hierarchy, is still aligned with the panel majority, the ability of the counter-judge to influence her colleagues will be constrained, compared to the reverse situations (explored below) where the Supreme Court is aligned with the counter-judge.\(^3\) Thus, a counter-judge’s influence in this configuration will still be constrained by the hierarchical incentives created by the Supreme Court’s position at the apex of the judicial hierarchy.

In Configuration 3 ("Circuit aligned"), the preferences of the Supreme Court and the full circuit have reversed: the latter is aligned with the panel majority, while the former is now aligned with the counter-judge. Because the counter-judge has the Supreme Court on her side, and given the Court’s place at the top of the hierarchy, the counter-judge’s ability to influence her colleagues should increase, compared to the first two configurations where the Supreme Court was opposed to the counter-judge. At the same time, because the panel majority is aligned with the full circuit, this should mitigate the counter-judge’s influence, relative to the final configuration.

In Configuration 4 ("Both opposed"), the panel majority’s preferences are opposite to both the full circuit and the Supreme Court. Here the counter-judge can signal both reviewing courts with a possible dissent and can cite both Supreme Court and circuit precedents to support her views. The prediction here is clear: we should observe the largest counter-judge effect, or the largest difference in panel majority voting across unified and mixed panels, when the counter-judge is aligned with both the full circuit and the Supreme Court.

Thus, the model predicts that the existence and magnitude of counter-judge effects will be asymmetric: they will be seen more among judges whose preferences differ from the Supreme Court. At the same time, these effects should be conditioned by circuit control, and we should see the largest counter-judge effects among judges who are opposed to the Supreme Court and are also in the minority of the full circuit.

### Data and Methods

To test the hierarchical theory of panel decision making, I turn to the data analyzed in Sunstein et al. (2006), the most comprehensive study on the subject. The authors analyzed published cases in more than 20 areas of the law and found panel effects to exist in the following issue areas: the 11th amendment and state sovereignty; the Americans with Disabilities Act (ADA); affirmative action; campaign finance; the contracts clause; commercial speech; piercing the corporate veil; the Environmental Protection Act (EPA); the Federal Communication Commission’s interpretation of regulatory law; the National Environmental Policy Act (NEPA); decisions of the National Labor Relations Board; obscenity; racial discrimination; racial segregation; and sex discrimination. To be sure, both hierarchical and ideological effects are more likely to be uncovered in published cases in these areas, which represent some of the more political issue areas heard on the Courts of Appeals. Nevertheless, these issues comprise some of the Courts of Appeals’ more important work, and they do not represent a tiny subset of their overall body of work. Employment discrimination cases, for example, have been the most common type of lawsuit filed in federal courts in recent years (Farhang and Wawro 2004, 312). Moreover, because only published decisions are fully precedential, they are the vehicle through which the Courts of Appeals set legal policy.

The majority of cases analyzed by Sunstein et al. (2006) were decided from 1986 to 2005, and that is the time period I use to evaluate the model. This
period has witnessed a rise in ideological voting on the Courts of Appeals, allowing for more opportunities for panel effects to arise. This time frame encompasses the Rehnquist Court, a relatively conservative Supreme Court. The top panel in Figure 3 depicts Bailey’s (2007) estimates of the ideology of the median justice from 1950 to 2002. The Rehnquist Court was initially more conservative in 1986 than any Court since the 1950s and moved slightly in the conservative direction from 1986 to 2002, a pattern that accords with qualitative accounts.

Given this trend, the research design I implement is to fix the Supreme Court as conservative during this period and make specific predictions about counter-judge effects among Democratic and Republican judges. It is safe to assume that during this period most Democratic appointees were well to the left of the Supreme Court, while most Republican appointees were generally allied with a conservative Supreme Court. Changes in presidential control over this period means that there was a good deal of variation in in control of individual circuits. The bottom panel in Figure 3 shows the proportion of Democratic judges on each circuit from 1986 to 2005. While the majority of circuit-years witnessed a Republican majority, the size of the majority has varied significantly, and Democrats have controlled certain circuits in many years. Thus, given a conservative Supreme Court, we can make predictions about counter-judge effects among Republican and Democratic majorities, given which party controls a circuit.

Consider first Republican majorities. Assuming that the Supreme Court’s preferences are closer to Republican judges in this period, Republican majority judges are in either configurations 1 (“Both aligned”) or 2 (“SC aligned”), with preferences reversed from Figure 2. On the other hand, Democratic judges comprising a majority on a panel always are in either configurations 3 (“Circuit aligned”) or 4 (“Both opposed”). Given this, the predictions for whether and when we should see hierarchical counter-judge effects follow straightforwardly from Figure 2.

Beginning first with Republican majorities: in Republican circuits, these judges are aligned with both the full circuit and the Supreme Court. As a result, a single Democratic counter-judge should not influence the Republican majority. A positive counter-judge effect in such panels (that is, the rejection of a null hypothesis of no effect), on the other hand, would strongly suggest a purely internal counter-judge effect, given that hierarchical considerations predict no effect. For Republican majorities in Democratic circuits, the theory predicts that adding a Democratic counter-judge will influence Republican majorities, but the counter-judge effect should be smaller than those seen for Democratic majorities in either type of circuit. Turning next to Democratic majorities: in Democratic circuits, the counter-judge effect should be higher than in either type of circuit for Republican majorities (or “moderate”), since Democrats are not aligned with the Supreme Court. Finally, we should expect the highest counter-judge effects among Democratic majorities in Republican circuits. To summarize, due to the political control of the hierarchy, we should expect to see counter-judge effects concentrated among Democratic majorities in recent years, particularly in Republican circuits.

Returning to the Sunstein et al. data, for each issue area except racial discrimination and the FCC’s interpretation of regulatory law, I selected either all cases or a sample of cases for analysis that were decided from 1986 to 2005 (a full description of the data collection and procedure and coding is given in the online appendix). This resulted in a dataset of 2,100 cases, comprising 6,300 judge votes, which is the unit of analysis in the analyses below, unless otherwise noted. For each case, I checked the coding of the ideological direction of each judge’s vote, and collected data on each judge and each case. Following Sunstein et al. (2006), liberal votes were coded as 1, and conservative votes coded as 0. Democratic judges voted liberally 51% of the time, while Republican judges voted liberally 34% of the time.

Returning to Figure 1, the third plot depicts the proportion of liberal decisions at the judge level, broken down by panel colleagues and pooling all cases together (the horizontal lines show 95% confidence intervals). The bottom graph does the same, but breaks down voting by Democratic and Republican judges. The staircase pattern is apparent in both graphs: for each Democratic judge added to a panel, a judge is more likely to vote liberally. Even at this level of generalization, however, an asymmetry between Democrats and Republicans appears. This is especially clear when we focus only on the differences in voting by panel majorities in the presence and absence of a counter-judge, as indicated by solid lines and arrows marked “effect of the counter-judge.” Whereas a Democrat sitting with two fellow Democrats is about 15 percentage points more likely to vote in the liberal direction than when sitting with

4 All the racial discrimination cases in the dataset were decided before 1986. I was not able to replicate Sunstein et. al’s coding of the FCC cases, due to the nonideological nature of most of the decisions in this area.
The ideology of the Supreme Court, 1950-2002, and the partisan distribution on the Courts of Appeals, 1986-2005. The top graph shows the estimated ideology of the median justice on the Supreme Court from 1950-2002 (Bailey 2007). The Court has been steadily conservative since the mid-1980s. The bottom graph shows the proportion of Republican judges in each circuit, 1986-2005. The denominator in each year is the number of active judges on the circuit, not the number of seats on the circuit. Shading indicates years in which Democrats controlled a majority of the circuit.
one Republican counter-judge, a Republican sitting with two Republican colleagues is only 7 percentage points more likely to vote conservatively than when sitting with one Democratic counter-judge.

Does this asymmetry hold when we turn to a statistical model of judicial votes? Theories of judging on the Courts of Appeals emphasize that both ideological and legal factors play a role in judicial decision making (see, e.g., Cross 2007; Hettinger, Lindquist, and Martinek 2006). While the party of the appointing president serves as a useful proxy for judicial ideology, more refined measures are available to distinguish more moderate judges from more extreme ones. For each case, I identified the three judges on the panel and assigned each the scores based on the method introduced by Giles, Hettinger, and Peppers (2001), which employs the Common Space score of the appointing president and/or the nominee’s home state senator. In the data, these scores run from roughly −0.6 (most liberal) to 0.6 (most conservative).5 For each case, I also coded the direction of the decision of the lower court or federal agency from which the case was appealed (lower court vote). To the extent that one can control for the influence of the law across multiple case areas, the lower court’s vote is most suited to achieve this end, given the tendency for circuit courts to affirm lower court rulings.

Finally, for each observation, I determined whether the judge was in the majority of the panel, dropping those observations in which the judge was the sole member of her party on the panel (that is, when she was the counter-judge on the panel). As noted earlier, the most interesting question is not how such judges vote, but rather their influence on panel majorities.6 For each judge remaining in the dataset, I then identified whether they were serving on a unified panel or a mixed panel; the latter, of course, contain a counter-judge, coded as 1. This coding directly corresponds to moving from the left column of Figure 2 to the right column for a given configuration.

The dependent variable is whether the judge voted liberally in the case (coded 1) or not. The data are grouped in four ways, all of which overlap: by issue, by circuit, by year, and by judge. Cases within each group may share similarities beyond those captured by the predictors described below. For instance, judges in certain circuits may get along better with one another than in other circuits, thereby producing more collegial behavior. Likewise, on certain issues judges may hold stronger views, leading to fewer compromises in panel decision making. Accordingly, a model of judicial behavior should account for such group-level variation, something accomplished by employing a nonnested multilevel logistic model. To help ease interpretation, I run separate varying-intercept models for Democratic and Republican judges of the following form:

$$\Pr(y_i = 1) = \logit^{-1}(X_i \beta + \alpha_j^{issue} + \alpha_k^{circuits} + \alpha_l^{year} + \alpha_p^{judge})$$

where the D.C. Circuit is coded as 12, years run consecutively from 1986 to 2005, and $u$ equals the number of unique judges in a given model. Thus, the model allows the counter-judge effect to vary across the circuit control. For Republican judges, I include Democratic circuit and the interaction Democratic circuit × counter-judge.

The $\alpha$ parameters in equation (1) are the estimated group-level effects and are distributed as follows:

$$\alpha_j^{issue} \sim N(0, \sigma_{issue}^2), \text{ for } j = 1, \ldots, 13$$
$$\alpha_k^{circuits} \sim N(0, \sigma_{circuits}^2), \text{ for } k = 1, \ldots, 12$$
$$\alpha_l^{year} \sim N(0, \sigma_{year}^2), \text{ for } l = 1, \ldots, 20$$
$$\alpha_p^{judge} \sim N(0, \sigma_{judge}^2), \text{ for } p = 1, \ldots, u$$

5See the online appendix for more information on how these scores are constructed.

6As I note in the conclusion, the model could easily be extended to study the decision of counter-judges whether to dissent or not. I leave this question for future research.

7About 5% of observations occur in split circuits—those with an equal number of Democratic and Republican appointees. Rather than estimating separate counter-judge effects for such circuits, which would be imprecise due to the small number of observations, I assume for all the analyses that split circuits are equivalent to a circuit controlled by the panel majority. All the results are statistically and substantively the same if split circuit observations are excluded from the analyses.
probability of a liberal vote, beyond what is captured by the other predictors in the model.

**Results**

Table 1 presents the results of the analysis. The coefficient on lower court vote is statistically significant and of large magnitude for both Democratic and Republican judges, indicating that appeals court judges are more likely to vote liberally when the lower court makes a liberal decision, all things equal. For neither type of judge, however, is the coefficient on ideology statistically different from zero, suggesting that ideological differences among judges of the same party are not that great.

Of interest for evaluating the theory are the coefficients on counter-judge and the interaction between counter-judge and whether the circuit is controlled by Democrats or Republicans. Due to the presence of the interaction terms, the coefficient on the main effect of counter-judge in each model cannot be interpreted directly but rather requires careful evaluation. Note that throughout the discussion of these results, I use “Democratic judges” or “Republican judges” to indicate judges who are in the panel majority (whether or not there is a counter-judge panel on the panel), and either “Democratic circuit” or “Republican circuit” to indicate which party holds a circuit majority.

Beginning first with the model for Republican judges, the coefficient on counter-judge gives the estimated effect of adding a Democratic counter-judge to an otherwise unified Republican panel in Republican circuits. The coefficient is positive and statistically different from zero, indicating that adding a Democratic counter-judge leads to more liberal voting by Republican judges. Recall that the theory predicted no hierarchical counter-judge effect from Democratic counter-judges in Republican circuits, given that Republican judges are aligned with both the circuit and the Supreme Court in this configuration. The fact that this prediction is rejected strongly suggests that there is a purely internal effect from panel heterogeneity, given that the hierarchical model would predict no panel effects when the counter-judge is aligned with neither the circuit nor the Supreme Court.

Surprisingly, the coefficient on the interaction term is not statistically different from zero, meaning that the addition of a Democratic counter-judge to an otherwise unified Republican panel in Democratic circuits does not lead to a significant change in liberal voting among Republican judges, compared to the effect seen in Republican circuits. That is, there is no statistical difference in voting across Democratic and Republican circuits among Republican judges sitting with Democratic counter-judges. In fact, as seen in the estimate of the total effect of a counter-judge in Democratic circuits, Republican judges in Democratic circuits vote no differently whether they sit with a Democratic counter-judge or not. This is a striking result and shows that the counter-judge influence on Republican judges is not conditional on partisan control of the circuit.

Moving next to Democratic judges, the coefficient on counter-judge gives the estimated effect of adding a Republican counter-judge to an otherwise unified panel in Democratic circuits. The coefficient is negative and statistically different from zero, indicating that the addition of a Republican counter-judge decreases the probability of Democratic judges voting liberally even in Democratic circuits, as predicted. The coefficient on the interaction term indicates the additional counter-judge effect among Democratic judges in Republican circuits, compared to the baseline effect in Democratic circuits. The coefficient is also negative and statistically different from zero, meaning that the addition of a Republican counter-judge in Republican circuits leads to a decrease in liberal voting among Democratic judges that is significantly greater in magnitude than the effect in Democratic circuits. Thus, it is clear that Democratic judges respond to circuit control: they are more likely to be influenced by Republican counter-judges in Republican circuits. Moreover, the total counter-judge effect among Democratic judges in Republican circuits constitutes the largest such effect across the four configurations.

As a robustness check, I estimated each model in three additional ways: omitting random effects for years and judges, running a basic logit, and estimating a general estimating equations (GEE) model with an exchangeable correlation structure to account for possible non-independence of judges sitting together on the same case. The latter two models include fixed effects for years and issues—it is not possible to estimate fixed effects for circuits, since circuit itself is a predictor, or judges, since doing so would consume too many degrees of freedom. The results, which can be found in the web appendix, are substantively and statistically the same, except that the coefficient on Republican circuit × counter-judge in the GEE model is not statistically different from zero, though its substantive magnitude is unchanged.

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or mixed panel and in a Democratic or Republican circuit, along with 95% confidence intervals. The shaded regions indicate estimates from Democratic circuits. Beginning first with Republican panel majorities, the top graph in Figure 4a reveals that in Democratic circuits, the addition of a Democratic judge does not affect the predicted probability of a liberal vote; on both unified and mixed panels Republican judges vote liberally about 35% of the time. However, in Republican circuits, the addition of a Democratic judge increases the probability of a liberal vote from about 27% to 34%.

The bottom graph of Figure 4a shows that among Democratic majorities in Democratic circuits, the addition of a Republican judge decreases the probability of a liberal vote from about 62% to about 52%. In Republican circuits, adding a Republican judge decreases the probability of a liberal vote from about 67% to about 48%. This decrease of 19 percentage points is substantively very large and means that in Republican circuits the random assignment of a Republican judge to a panel with two Democrats is likely to affect the outcome of a significant percentage of cases in these issue areas.

One way to further summarize these results is, for each pair, to compare the difference in predicted probabilities between the top estimate and the bottom estimate, which gives the size of the estimated counter-judge effect. These differences are displayed in Figure 4a, with positive numbers indicating the increase in liberal voting by Republican judges when they sit with a Democratic counter-judge, and negative numbers indicating the decrease in liberal voting by Democratic judges when they sit with a Republican counter-judge. These estimates confirm that counter-judge effects are asymmetric: unlike Republican judges, Democratic judges are influenced by a single Republican counter-judge in both Republican and Democratic circuits, and the largest difference in voting across mixed and unified panels occurs among Democratic judges in Republican circuits.

### Panel Composition and Case Outcomes: Positive and Normative Implications

While the analysis so far has been at the level of individual judicial voting, the results also speak to the collective output of the federal judiciary. More
specifically, they have normative implications about the relationship between panel composition, panel voting, and various aspects of the rule of law, and positive implications about the Supreme Court’s ability to see its agents in the lower courts carry out its preferred doctrine, even though the high court is delegating the vast majority of its appellate duties to three-judge panels.

Shifting the unit of analysis from the judge level to the case level, Figure 4b (Second column) depicts the proportion of liberal decisions in the dataset, broken down by the four possible panel types: DDD, DDR, RRD, and RRR. The top graph shows the aggregate pattern for all cases; the bottom two graphs depict decisions made in Democratic and Republican circuits, respectively. Consider first the two unified
panel types. The solid circles for RRR and DDD show the actual proportion of liberal decisions made by unified Republican panels and unified Democratic panels. DDD panels are about 40 percentage points more likely to reach a liberal decision than an RRR panel. This discrepancy is striking, and as Sunstein et al. argue, “creates serious problems for the rule of law” (2006, 11). That is, if some degree of consistency and uniformity across three-judge panels is desired, a judicial system in which panel composition consistently predicted case outcomes would severely compromise that goal.

However, only a minority of panels are unified. In fact, due to turnover in the party of the president, over the last 60 years a majority of panels have been mixed; that is, consisting of at least one judge from each party (RRD or DDR) (Kastellec 2010). How much do mixed panels differ from unified panels? Imagine a hypothetical world in which there was pure majoritarian control—DDR panels voted on average the same way as DDD panels, and RRD panels voted on average the same way as RRR panels. This scenario is depicted by the open circles in Figure 4b, which show the hypothetical voting rates among mixed panels we would observe. Such a world would be highly problematic for the rule of law, since a litigant’s chance of success at the Courts of Appeals would in many cases simply depend on the “lottery” of random assignment to the three-judge panel in the case (Hasday 2000).

Returning to the actual distribution of case outcomes, the solid circles for RRD and DDR panels depict their actual proportions of liberal decisions. In contrast to the majoritarian control world, where the distribution of cases was more clustered at the extremes of liberal and conservative outcomes, the existence of counter-judge effects effectively “pulls” the actual distribution in a moderate direction. It is clear that panel composition is still important in these areas of the law: each additional Democratic judge on a panel increases the likelihood of a liberal vote. But it is just as clear that counter-judge effects mitigate the potential problems for the rule of law created by the relationship between panel composition and case outcomes.

This would be the case even if panel effects were symmetric. However, the fact that they are asymmetric means that these potential problems are mitigated even further. Because Democratic majorities vote more conservatively when sitting with a Republican counter-judge than vice versa, the distribution of case outcomes is clustered more toward the conservative side of the scale, especially in Republican circuits. Combined with the fact that most cases are heard by mixed panels, and that more cases in recent years have been decided in Republican-controlled circuits, the existence of asymmetric effects means there is substantially more overlap in case outcomes across mixed panels than if panel effects did not exist or if they were symmetric.

Finally, from a positive standpoint, the finding of asymmetric effects illustrates how the institution of three-judge panels and collegial politics therein enhances the Supreme Court’s ability to oversee its agents in the lower courts, even though it has no formal sanctions to levy against its subordinates and it delegates most of its appellate duties to the Courts of Appeals. Given the low probability of review by either the full circuit or the Supreme Court, we might expect Democratic majorities to vote liberally more often and take their chances that their decisions will not be reviewed. It seems, however, that this only occurs on unified Democratic panels, which have occurred relatively rarely in the last two decades due to the fact that a Republican president has appointed judges in all but eight of the last 28 years.\(^\text{10}\) The presence of a single Republican counter-judge, especially in Republican circuits, significantly reduces the likelihood that Democratic judges will vote liberally, even though they are in the panel majority. And even though a significant percentage of cases in the Courts of Appeals are heard by Democratic-majority panels, most of these also include a single Republican counter-judge. Frequently in such cases, hierarchical politics combine with collegial politics to enhance the Supreme Court’s political control of the lower courts.

\section*{Conclusion}

Collegial politics on lower courts interact strongly with hierarchical incentives to affect the degree to which counter-judges shape voting by panel majorities. I argued that a counter-judge’s ability to influence her colleagues through the process of collegial decision making on a three-judge panel increases if her preferences are aligned with the full circuit and increase further if her preferences are aligned with the Supreme Court. Fixing the Supreme Court as conservative in the past two decades, I then showed that Democratic majority judges are more likely to be influenced by counter-judges than Republican majorities, particularly in Republican

\(^{10}\)Eight percent of the cases analyzed in the article were heard by unified Democratic panels.
The finding of asymmetry confirms the importance of hierarchy in structuring judicial behavior. Backed by a Republican circuit and a conservative Supreme Court, Republican counter-judges are able to convince Democratic judges to vote conservatively much more often than they would on a unified panel. At the same time, the finding that Republican majorities are not influenced by Democratic counter-judges in Democratic circuits does suggest that the Supreme Court’s preferences at the top of the hierarchy mitigate the ability of full circuits (in this case, Democratic circuits) to control panels whose preferences differ from the full circuits.

The results also speak to the underlying mechanisms of panel effects. While the theory predicts that Republican majorities should be more influenced by Democratic counter-judges in Democratic circuits, the analysis shows that Republican judges are in fact only influenced in Republican circuits. This finding constitutes the first direct empirical test that adjudicates between the internal and external explanations of panel effects, provides strong evidence of a purely internal source of panel effects, given that Democratic judges in Republican circuits can make appeals to neither the full circuit nor a conservative Supreme Court.

We cannot conclude, of course, that internal dynamics play no role in creating the counter-judge effects seen among Democratic judges—it is only possible to isolate the internal effect in Configuration 1 (“Both aligned”), into which Democratic judges never fall in the period of analysis. But even if internal factors are in play, the difference among Democratic judges across circuit control shows that external factors increase the likelihood of counter-judge effects, as predicted by the theory. If they did not, we would not expect to see such a large counter-judge effect among Democratic judges in Republican circuits compared to Democratic circuits.

More generally, the model and empirical results demonstrate the importance of fully incorporating the institutional structure of the federal judicial hierarchy into studies of judicial decision making. It is unlikely that the patterns seen in the article would have been uncovered without a theoretical approach integrating collegial and hierarchical institutions on the Courts of Appeals. The model developed and tested here also is an example of “taking law seriously” (Friedman 2006): while the hierarchical counter-judge effects are consistent with a whistle-blowing story, they are also consistent with more legalistic explanations that stress the importance of doctrine and precedent in judicial deliberation and bargaining (Cross 2007).

Finally, I also showed how the combination of collegial politics and hierarchical politics combat potential problems for the rule of law induced by the relationship between panel composition and panel outcomes on three-judge panels. And given that panel effects will only arise in the areas of the law that are likely to be contested by Democratic and Republican appointees, the prospect of consistency and uniformity in the law is much greater than it might appear at first glance when examining the differences in voting rates between both how Democratic and Republican judges vote at the individual level and between unified Democratic and unified Republican panels (Kastellec 2010).

These findings suggest opportunities to reevaluate existing questions about appellate court questions and ask new ones, keeping the possibility of asymmetric incentives and asymmetric effects in mind. Perhaps the most relevant is the question of when appeals court judges choose to write a dissent. While Van Winkle (1997) argues that judges are more likely to dissent when they are in the circuit majority and can signal noncompliant behavior by circuit minorities, Hettinger, Lindquist, and Martinek (2006) find that dissent is caused solely by ideological distance among judges on panels and is not driven by hierarchical concerns. Neither study, however, considers the possibility that both circuit and Supreme Court preferences may affect the decision to dissent. While the analysis in the article only examines the decision making of panel majorities, the model presented could easily be extended to study the decision to dissent by counter-judges, should they not be able to convince the panel majority to agree with them. Dissents by counter-judges aligned with at least one reviewing court would even further enhance the ability of full circuits and the Supreme Court to monitor three-judge panels, and whether in fact such dissents occur systematically remains an open question worthy of future study.

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Jonathan P. Kastellec is Assistant Professor, Department of Politics, Princeton University, Princeton, NJ, 08544.