



2007

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Recommended Citation

Micheal W. Giles, Virginia A. Hettinger, Christopher Zorn & Todd C. Peppers, The Etiology of the Occurrence of En Banc Review in the U.S. Court of Appeals, 51 Am. J. Pol. Sci. 449 (2007).

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The Etiology of the Occurrence of En Banc Review in the U.S. Court of Appeals

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The U.S. Courts of Appeals, working principally through three-judge panels, constitute important final arbiters of the meaning of the federal constitution, laws, and regulations and, hence, significant policymakers within the federal system. En banc rehearing—reconsideration of the decision of a three-judge panel by the full complement of judges appointed to the circuit—is an institutional device that ensures circuit decisions are in line with the established preferences of the circuit. The use of en banc varies in frequency across circuits and within circuits over time. Drawing on legal, attitudinal, and strategic perspectives of judicial behavior, we develop and test a set of integrated expectations regarding the causes of this variation. Our analysis finds support for the operation of all three models and suggests that the influence of ideology on the use of en banc in the recent era is not unique but part of a long-standing pattern.

On September 15, 2003, a three-judge panel of the U.S. Court of Appeals for the Ninth Circuit overturned a decision by a U.S. District Court and postponed the recall election for the governor of California.¹ This decision by three of the circuit's more liberal judges was viewed by commentators as a boon to the electoral prospects of the sitting governor, Gray Davis. For the overwhelming majority of cases decided by the U.S. Courts of Appeals, the decision of the three-judge panel constitutes the final decision in the case. In the California recall case, however, a majority of the active judges on the Ninth Circuit voted to vacate the panel decision and to rehear the case sitting en banc.² On September 23, 2003, the en banc panel unanimously affirmed the District Court judge's finding against the plaintiffs, and the recall election occurred as scheduled.

The California recall case highlights the political and legal significance of the decisions of the U.S. Courts of Appeals. In this case, and in many far less visible cases each

year, the Courts of Appeals, working principally through three-judge panels, render decisions that affect how elections are conducted, how business is regulated, and the limits of government encroachment on the rights of individuals. These decisions are subject to appeal to the U.S. Supreme Court, but such review is currently exercised in fewer than 70 cases a year, far less than one-tenth of 1% of the cases decided by the Courts of Appeals. Thus, the U.S. Courts of Appeals constitute important final arbiters of the meaning of the federal constitution, laws, and regulations and, hence, significant policymakers within the federal legal system.

The California case also highlights the problem inherent in a central institutional component of the U.S. Courts of Appeals—the use of three-judge panels. The decisions of three-judge panels constitute precedent binding on both U.S. District Courts and future panels within the circuit in which they are rendered. This is an efficient arrangement for processing cases, as it allows subsets of

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¹ *Southwest Voter Registration Education Project et al. v. Kevin Shelley, California Secretary of State*, 344 F.3d 882 (9th Cir. 2003).

² In the Ninth Circuit the rehearing en banc traditionally occurred before 10 randomly selected active judges plus the Chief Judge of the Circuit. In January 2006, the number of judges was changed to 14 judges plus the Chief Judge. We discuss the use of this “mini-en banc” procedure at greater length below.

American Journal of Political Science, Vol. 51, No. 3, July 2007, Pp. 449–463

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ISSN 0092-5853

the judges assigned to the circuit to act with finality on behalf of the whole.³ However, as scholars have noted, this institutional design creates the possibility that panels will produce circuit law that is contrary to the preferences of a majority of the judges appointed to a circuit (Abramowicz 2000; Atkins 1972; Van Winkle 1996). En banc rehearing—reconsideration of the case before the full or a larger complement of judges appointed to the circuit—is the institutional device employed by the Courts of Appeals to respond to this possibility. This procedure was first approved by the U.S. Supreme Court in 1941⁴ and subsequently confirmed by Congress, through statute, in 1948.⁵

En banc rehearing only occurs in a limited number of cases each year. For example, while the Courts of Appeals decided nearly 27,000 cases after oral argument or submission of briefs in 1999, only 94 cases, less than 1%, were decided en banc in that year. While uniformly low, the incidence of en banc varies significantly both across circuits and within circuits across time. For example, in 1999 the First and Second Circuits decided only two cases en banc while the Ninth Circuit employed en banc 22 times; since 1980 the use of en banc review in the Court of Appeals for the District of Columbia has ranged from as few as two in 1992 to as many as 10 in 1983.⁶

What explains this variation across circuits and time in the use of en banc rehearing? Previous studies addressing this question are relatively few in number and have focused principally on assessing the role of ideological conflict. Claims that en banc review was used to enforce circuit ideological discipline reached a fever pitch in the 1980s and 1990s as first Reagan and then Bush appointees to the Courts of Appeals produced conservative circuit majorities (Schwartz 1988; Wermiel 1988). The credibility of these charges was enhanced by the ideologically driven judicial recruitment of the Reagan administration and by the heightened ideological conflict that accompanied recruitment to the lower federal courts in the administrations of Presidents Clinton and George W. Bush (Goldman 1997). Moreover, some Reagan appointees to the bench openly espoused the ideological use of en banc. For example, “Judge Easterbrook of the Seventh Circuit urged the Reagan-appointed majority on that court to

make greater use of en banc review, calling it ‘a stabilizing process that makes sure the majority’s voice is heard’ ” (Note 1989, n. 3).⁷

Attempts to assess the ideological conflict explanation for variation in the occurrence of en bancs, however, have produced mixed results. Solimine, examining en banc decisions across all circuits in the years 1985–87, concluded that the data did not “. . . support the charge that the Reagan-appointed judges are using the en banc procedure as an ideological tool” (1988, 63). In contrast, Banks (1997), focusing on a single Court of Appeals, the D.C. Circuit, for a longer period of time, found strong evidence for the operation of ideological conflict in the occurrence of en banc review. A note in the *Harvard Law Review* (1989) concurs with Banks’ finding for the D.C. Circuit. Employing a slightly longer time period than Solimine (1988), it finds that the use of en banc increased in circuits where Reagan appointees gained the majority.⁸

Extant studies have also suffered from a number of shortcomings. Those studies have focused either on a few circuits for a relatively brief period of time or on single circuits for longer periods of time. Either approach, while providing useful information, raises concerns about the generalizability of the findings. For example, the Court of Appeals for the District of Columbia is often cited as an especially important court both in terms of the significance of the cases that it hears and the prominence of the judges that have served on it (including four current members of the U.S. Supreme Court; Banks 1997, 1999). Given the policy saliency of the cases it hears and the strong ideological divisions that have characterized its members, the D.C. Circuit would seem to be the most likely venue in which to find support for an ideological conflict argument for the use of en banc. Likewise, studies that focus only on the Reagan era provide valuable insights into causal processes at work in that time period, but are unable to speak to the issue of whether this was a truly unique episode, as critics implied, or merely a continuation of business as usual in the Courts of Appeals.

Second, with few exceptions extant studies have focused almost solely on the role of judicial ideology. As a result, they have not given sufficient attention to alternative explanations for variation in the use of en bancs. In particular, those studies that have not supported the

³Note, however, that from the perspective of the circuit as a whole, this arrangement may not be efficient with respect to creating efficacious policy (cf. Shavell 1995, 2006).

⁴*Textile Mills Securities Corporation v. Commissioner*, 314 U.S. 326 (1941).

⁵28 U.S.C. 46.

⁶These figures are based on our data on en banc rehearings, which we describe more fully below.

⁷Some Reagan judges, however, also spoke against such use of en banc. Kenneth Ripple of the Seventh Circuit stated that “(C)ertainly, no member of the court believes, I hope, that an en banc proceeding may be used as a vehicle to permit judges to further their own ideological predilections” *Rakovich v. Wade*, 850 F.2d 1179 (7th Cir.1987), cited in Solimine (1988, n. 16).

⁸For a somewhat more complex result, see Giles, Walker, and Zorn (2006).

operation of ideology in the use of the en banc procedure have not provided the reader with direct assessments of other plausible explanations. Finally, previous studies have adopted relatively unsophisticated models of the operation of ideology. Most critically in this regard, they have failed to consider how strategic considerations might impinge upon and condition the operation of judicial ideology.

In the present study we reexamine the question of what causes the observed variation in the occurrence of en banc review in the U.S. Courts of Appeals. Unlike previous studies, we examine the occurrence of en bancs across all circuits and across a broad sweep of time, from 1942 to 1999. Moreover, we address this question by systematically developing and assessing expectations derived from three alternative models of judicial behavior: attitudinal, strategic, and legal. Thus, the present study provides the first theoretically rigorous, comprehensive assessment of the causes of intercircuit and temporal variation in the use of en banc.

Our study is therefore important for at least two reasons. First, scholars have long recognized that agenda setting is a crucial stage in the policy process (Bachrach and Baratz 1962; Baumgartner and Jones 1993; Kingdon 1995; Schattschneider 1960). Among studies of the courts, consideration of this phenomenon has been confined largely to work on the decision to grant certiorari in the U.S. Supreme Court (e.g., Caldeira and Wright 1988; Caldeira, Wright, and Zorn 1999; Cameron, Segal, and Songer 2000; Pacelle 1991; Perry 1991; Ulmer 1984). As a rule, review by lower federal courts is nondiscretionary so long as threshold criteria such as jurisdiction and standing are met. The granting of rehearing en banc is thus a relatively rare opportunity to study discretionary agenda setting in the lower federal courts. Second, while more broadly framed than previous studies, the results of our analysis speak directly to the continuing political controversy over the selection of lower federal court judges, including those staffing the Courts of Appeals. It is well established that the ideological preferences of lower federal court judges are linked to their decisions (cf. Rowland and Carp 2000), but if attitudinal and strategic considerations loom large in the use of en banc rehearing, this suggests a much more explicitly and systematically politicized operation in the Courts of Appeals than has heretofore been established.

Models of Judicial Behavior and Variation in the Occurrence of En Banc Review

The decision to grant en banc rehearing is the end product of a complicated process that involves many actors, most

critically the judges serving a particular circuit. A majority vote of active judges in a circuit is required to grant review. Our purpose in this article is to explain variation in the frequency of en banc rehearings across circuits and time. As a first step toward that goal we explicate the principal models of judicial behavior and derive their implications for the occurrence of en banc rehearing.

The Attitudinal Model

The basis for the so-called “attitudinal model” of judicial behavior lies in the notion that in making their rulings, judges are driven by their desire to implement their policy preferences into law, subject to the constraints in the case before them. Judicial decisions are thus seen as a result of the intersection of case context (party and issues) and the ideological preferences of the judges (Segal and Spaeth 2002). Myriad studies have supported this model by documenting the operation of policy preferences in the behavior of both Supreme Court justices and the judges of the U.S. Courts of Appeals.

Viewed through the lens of the attitudinal model, the decision to grant en banc review reflects the desire of a majority of the judges on a circuit to move a panel outcome closer to its preferred policy position. While the attitudinal model predicts a causal linkage between the ideological makeup of a circuit and the occurrence of en banc review, the nature of that linkage admits at least two possible forms. First, the linkage could be relatively continuous. The attitudinal model predicts that judges whose preferences are in the minority on a circuit will nonetheless vote sincerely (that is, in favor of their most-preferred outcome) and according to those preferences. When they constitute the majority of a three-judge panel (that is, on “majority-minority” panels), such sincere, policy-based voting will yield an aggregate decision that conflicts with the preferences of the circuit majority—one that is ripe for en banc review. Thus the attitudinal model suggests that the more frequent the occurrence of majority-minority panels on a circuit, the greater the expected use of en banc review by the circuit majority. By extension, the observed variation in the occurrence of en banc review across time and circuits from the attitudinal perspective may be explained in whole or in part by variation in the ideological heterogeneity of the circuits and the resulting variation in the occurrence of majority-minority panels.

Second, the linkage between ideological voting and the occurrence of en banc review might reflect shifts in the ideological regimes within circuits. For example, in the 1980s—after majority control of the D.C. Circuit shifted to judges appointed by Republican presidents—Judge Patricia Wald of that circuit complained that “traditionally

in our Courts of Appeals, the en banc process has been utilized to test the correctness of new precedents, as soon as they are issued. What is novel in our circuit right now . . . is the increasing resort to en bancs to overrule venerable, heretofore respected circuit precedents. The shift is plainly a symptom of the rapidly changing makeup of the court” (Banks 1999, n. 91). In this view, then, en banc review is not simply a tool to monitor the current activities of panels, but also an instrument for altering long-established doctrines and precedents in the circuit to reflect the preferences of the new majority. It is this purported use of en banc review that underlies the controversies surrounding the emergence of Republican-appointed circuit majorities in the 1980s.

The ideological regime change argument thus leads to the expectation of a surge in the occurrence of en banc review following a shift in the ideological control of a circuit. In particular, it suggests that a change in the partisan majority of the circuit (say, from liberal to conservative, or vice versa) should be followed by an increase in the use of en banc review, as the new circuit majority uses the en banc procedure to overturn previous (and now disfavored) circuit precedents. Finally, we should emphasize that the two attitudinal linkages between ideological voting and en banc review are not mutually exclusive. Under this model, variation in the occurrence of en bancs may reflect both variation in the ideological diversity of a circuit and shifts in its ideological regime.

The Strategic Model

Like the attitudinal model, the strategic model begins with the premise that judges have as a central goal the furtherance of their preferred policy positions. It departs from the attitudinal model by emphasizing that judges pursue their policy preferences in a sophisticated manner—that is, while taking into account the policy preferences of other relevant actors and the institutional context in which the decision is made. While in general evidence for the operation of the strategic model in the Courts of Appeals is mixed (e.g., Blackstone and Navarro 2006; Cross and Tiller 1998; Giles, Walker, and Zorn 2006; but see Hettinger, Lindquist, and Martinek 2004; Klein 2002), the en banc rehearing, which allows the circuit majority to supervise the wayward tendencies of majority-minority panels, is precisely the type of institutional context the strategic model envisions as eliciting sophisticated behavior to avoid review.⁹

⁹Our test of the strategic model may thus be considered as one where such behavior is “most likely” to occur.

This sophisticated behavior can take several forms. Majority-minority panels may conceal their preferences and conform their decisions to the preferences of the circuit majority, thus avoiding en banc rehearing. Alternatively, minority judges may depart from their preferences to fashion an outcome close enough to the preferred position of the circuit majority that the policy gains to the circuit majority of conducting an en banc rehearing will not offset the associated costs. Finally, the majority-minority panel may produce a result in which its preferred party wins, but the decision is deeply embedded in the factual context of the case, thus reducing the value of the case as precedent and reducing the likelihood of en banc review (Smith and Tiller 2002).

As a result of the potential for sophisticated behavior on the part of judges in the circuit minority, the strategic perspective does not expect that variation in ideological heterogeneity across time, and circuits will translate straightforwardly into variation in the occurrence of en banc rehearsals. In fact, given perfect information about the preferences of the judges on the circuit, a simple strategic model predicts that the minority judges controlling panels would always fashion their decisions in ways to avoid en banc review and reversal.¹⁰ Of course, information concerning the policy preferences of the judges on a circuit is not perfect. Through the practice of rotating panel memberships, Courts of Appeals judges interact with all other members of the circuit and are likely to have reasonably good but not perfect information about the preferences of their colleagues.¹¹

The presence of imperfect information can contribute to an increase in the likelihood of an en banc rehearing in two ways. First, the minority judges controlling a panel may be more likely to vote sincerely and risk en banc rehearing because imperfect information results in uncertainty over the distribution of circuit preferences. With perfect information, minority judges know they will lose on en banc rehearing, but imperfect information makes that outcome less certain (and a sincere

¹⁰This simple model considers only a single panel decision with possible en banc review, thus ignoring the possibility of other influences. For example, it may be the case that the U.S. Supreme Court might support the panel’s decision even after en banc reversal, thus rendering sincere behavior more attractive to the panel.

¹¹As a general matter, judges in a circuit are randomly assigned to three-member panels that then hear a set of cases that have also been randomly assigned to that panel; the broad contours of this process are broadly laid out in 28 U.S.C. § 46, while the details can be found in the Internal Operating Procedures of each circuit. For example, Fourth Circuit Internal Operating Procedure 34.1 states in part that “(T)he Clerk of Court maintains a list of mature cases available for oral argument and on a monthly basis merges those cases with a list of three-judge panels provided by a computer program designed to achieve total random selection.”

vote correspondingly more likely). Second, imperfect information may simply yield more errors in prediction by the minority judges. That is, minority judges controlling panels may vote sincerely because less than perfect information leads them wrongly to predict that they have the support of a majority of the circuit judges for their position.

One factor that may affect the quality of information concerning circuit preferences is the stability of the membership of the circuit. In a circuit characterized by stable membership over several years, the judges will have interacted more frequently with their colleagues and thus will have better information about their policy preferences than will be the case in a circuit with high membership turnover and shorter tenures. Thus, whether through greater risk taking or simple prediction errors by minority judges, a strategic perspective leads us to expect that circuits with greater instability in membership will experience a higher frequency of en banc rehearing.¹²

Note that to this point our characterization of the strategic model has assumed the existence of a significant degree of ideological disagreement on the circuit in question. In fact, the strategic perspective predicts that membership stability and ideological heterogeneity will interact in their influence on the frequency of en bancs in a circuit. That is, while an attitudinal perspective predicts that en bancs will be more frequent in ideologically heterogeneous circuits than in ideologically homogenous ones, the strategic model suggests that this difference will diminish or even disappear with increases in circuit membership stability. This is because as judges on a circuit serve together longer, their information about the circuit's aggregate preferences improves in accuracy, thus allowing them to better avoid making decisions that might invite en banc review. The negative effect of increases in membership stability on the frequency of en bancs predicted by the strategic model will be exacerbated by greater circuit heterogeneity. The magnitude of that negative effect will be small on ideologically homogeneous circuits—where en bancs are less likely to occur in general—and larger on circuits that are ideologically heterogeneous.

¹²The longer judges serve together, the better internalized are circuit norms. But norms themselves can vary in their favorableness toward en bancs across circuits and over time. So longer average tenure on a circuit is consistent with both increased information and enhanced socialization, but absent a priori knowledge of circuit norms regarding en banc, it is reasonable to attribute the expectation that longer average tenure will condition the affect of attitudes on the frequency of en bancs to the strategic effects of increased information.

The Legal/Organizational Perspective

While there is extensive support for the operation of ideological preferences in the lower courts, there is also ample evidence that ideology alone does not control judicial behavior at this level. Judicial ideology, as noted previously, has been linked consistently to the voting of Courts of Appeals judges, but in most of these studies it explains a relatively small percentage of the variation in judicial behavior (cf. Songer and Haire 1992; Songer, Sheehan, and Haire 2000). Even when the traditional measure of judicial ideology, party of the appointing president, is replaced with more sophisticated measures, the percentage of variance explained under the most favorable circumstances does not exceed 20% (Giles, Hettinger, and Peppers 2001). The overwhelming majority of cases at the Courts of Appeals are disposed of without dissent, with judges of all ideological persuasions coming to the same decision. Even Segal and Spaeth (2002), the chief emissaries of the attitudinal school, allow that below the Supreme Court factors other than attitudes may influence the decision making of judges.

One set of such factors captured in the operation of the legal model is law and legal reasoning. This view asserts that the high levels of unanimity observed in decisions of the Courts of Appeals arise despite ideological diversity because the application of relatively clear rules to relatively clear factual settings results in a single, clearly appropriate outcome (Edwards 1998). This view is bolstered by the reality that absent agenda controls, the caseload of the Courts of Appeals includes a large number of relatively *pro forma* cases.

In the classic model of legal decision making, the only sources of disagreement between two judges confronted with the same set of case facts are either error in the identification of the appropriate rule or poor legal reasoning. While these sources of disagreement among judges persist in the more contemporary version of the model, its more realistic treatment of the ambiguity of language, the existence of multiple relevant but not controlling precedents, and the flexible nature of legal reasoning, admit to the possibility that competent judges, reasoning well and in good faith, can come to different conclusions regarding the same case (Cross 1997; Edwards 1998). Some of these differences may reflect differences in judicial ideology, but they may also reflect systematic differences in the weights that judges give to precedents from different circuits, approaches to treatment of language, and so forth. In short, judges may simply vary in their practice of the legal model.

Quite different expectations regarding the occurrence of en banc review arise if judges of the Courts of Appeals

are assumed to be employing the legal model than if they are employing either the attitudinal or the strategic models. First, if a legal model is operative, the likelihood of conflicting legal interpretations and perspectives can be expected to increase as the number of judges on a circuit increases. If there are systematic differences among judges in their application of the legal model, then the likelihood that such differences will arise and produce conflicts increases as the number of judges increases (Abramowicz 2000; Ginsburg and Falk 1991; Howard 1981). Even the Court of Appeals judges interviewed by Wasby (1979) assumed that an increase in the number of judges in a circuit would necessitate an increased need for en banc rehearings.¹³ Importantly, and in contrast to the models described above, this expectation occurs irrespective of the preferences of the judges on the circuit—that is, in this view it is sheer numbers, rather than ideological heterogeneity, that drive the en banc process.

At the same time, organizational considerations suggest that the effect of the number of judges in a circuit on the occurrence of en banc may be nonlinear. As the number of judges on a circuit increases, the costs associated with holding an en banc also rise, and the corresponding benefits to each judge decrease. The more judges involved in an en banc rehearing, the more cumbersome the process (Wasby 1979). Similarly, in their description of en banc hearings in the years immediately preceding the division of the Fifth Circuit, Barrow and Walker (1988) provide a graphic illustration of the difficulties associated with en banc review in circuits with larger numbers of judges. Moreover, not only are en banc rehearings procedurally cumbersome with large numbers of participating judges, but the rewards to the individual judges are also diminished. The larger number of participants means less opportunity for any single judge to impact the outcome significantly. This suggests that while the number of panel-circuit conflicts may increase geometrically with the number of judges, limited resources and decreasing returns to participation act as a constraint on granting en banc. Thus, the effect of the number of judges in a circuit is expected to be curvilinear, first increasing but subsequently decreasing as the number of judges on the circuit grows.

Second, under the legal model we expect that the judges would take seriously the admittedly vague standard for granting review. This standard essentially is that en banc review will be granted to cases raising important

¹³The logic here is similar to that for the attitudinal model concerning the emergence of majority-minority panels, but the minority referred to in the legal model is nonideological.

or significant issues.¹⁴ In general, while the mix of cases varies across circuits, it seems reasonable to assume that the likelihood of important or significant cases will increase with circuit caseload.¹⁵ Thus we expect variation in the occurrence of en banc review across time and circuits to be driven by similar variation in circuit caseloads. A positive relationship between caseloads and the use of en banc may also reflect organizational realities. The stress of higher caseloads may simply yield more errors by three-judge panels in need of correction through en banc (Abramowicz 2000).

Data

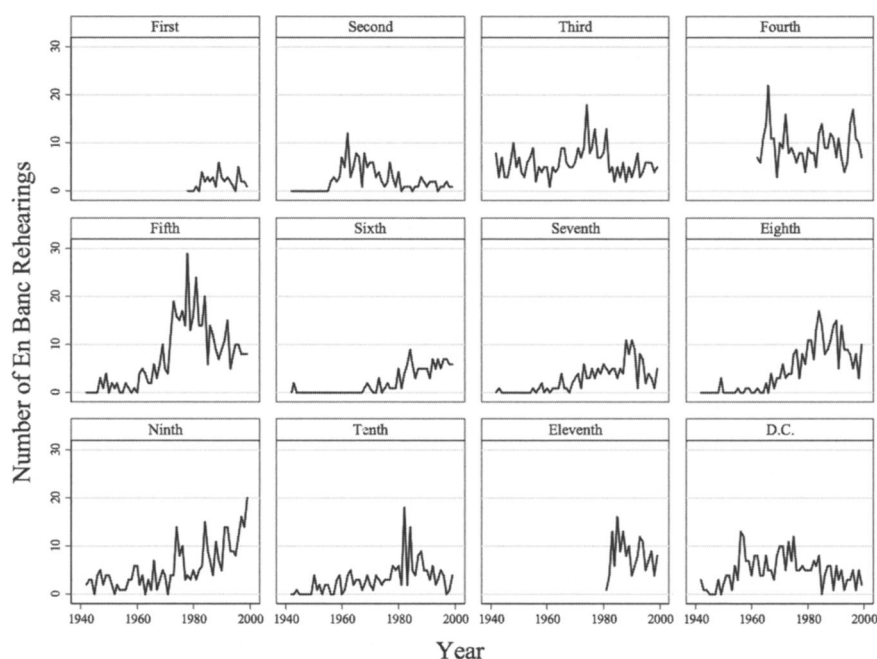
We analyze the expectations derived from the models described above using data on the incidence of en banc rehearings across all 12 circuits of the U.S. Courts of Appeals for the period from 1942—the year after the Supreme Court's validation of the use of en banc—through 1999, inclusive.¹⁶ Our central variable of interest is the incidence of en banc cases in each circuit in each year. To measure the number of en banc cases, we identified the judges sitting in a circuit in a given year and used Lexis-Nexis to search for cases containing combinations of four of the judges' names. We then examined the cases generated by this search to see if each qualified as an en banc. In doing so, our threshold for inclusion was broad; essentially, any case decided by more than three judges was included in the list. We repeated this process for each circuit/year using different combinations of judges' names. Depending on the number of judges in the circuit, the number of combinations searched ranged from six to more than a dozen. Only in the circuit/years with a small number of judges did we examine all possible combinations of judges.¹⁷

¹⁴While the wording differs somewhat from circuit to circuit, the stated bases upon which a case will be heard en banc are the following: (1) the panel's decision is in conflict with a decision of the U.S. Supreme Court or a previous decision of the circuit wherein it arises, or (2) the case is exceptionally significant. While intracircuit conflict takes primacy of place in the rules, available evidence suggests that significance of the case is the dominant consideration in granting review (Bennett and Pembroke 1985–86; Note 1989).

¹⁵The fact that arguably some circuits, such as the D.C. Circuit, have a higher frequency of important cases is captured by the fixed effects for circuits included in the analysis.

¹⁶For those years in which circuits had only three authorized judgeships and en banc rehearing was irrelevant as an oversight institution, the circuits were treated as missing and excluded from the analysis.

¹⁷Since 1966, the Administrative Office of the Federal Courts (AO) has reported the number of cases decided en banc. To assess the reliability of our approach, we compared our data to the AO data for

FIGURE 1 En Banc Rehearings by Circuit and Year, 1942–1999

The result of this process is, we believe, the first definitive, comprehensive list of cases decided en banc in the U.S. Courts of Appeals between 1942 and 1999, inclusive. Figure 1 plots the annual number of such cases for each of the 12 circuits. En bancs were comparatively rare in the 1940s and 1950s, averaging only one or two per circuit per year. They increase significantly throughout the 1960s and 1970s, attaining their highest number shortly after the division of the Fifth Circuit in 1981; since then, their numbers have remained more or less constant at six or seven per circuit per year on average.

Measuring Ideology

Both the attitudinal model and the strategic model lead to the expectation that the ideological composition of a

the years 1966 through 1970. If our approach had identified fewer en bancs than the Administrative Office, this would suggest that our method failed to identify all of the en bancs that occurred. In fact, the counts of en bancs generated by our approach were uniformly greater than those provided by the Administrative Office. George and Solimine (2001) have also noted the discrepancy between the actual number of en bancs and the number reported by the AO. It appears that the AO requests this information from the circuits, but provides little definition for what qualifies as an en banc, and uncritically accepts the reported numbers. As a further validity check, we also compared our list of en banc cases to partial lists compiled by other scholars; our method identified over 95% of the en banc cases listed in those studies.

circuit will influence the frequency with which en banc rehearings occur. Assessing these expectations requires that we have measures of the ideological preferences of judges and that we know the composition of each circuit for each year in the study.

The party of the appointing president has traditionally been the measure employed to estimate the ideological preferences of lower federal court judges. Judges appointed by Democratic presidents are assumed to be more liberal than those appointed by Republican presidents, an assumption well supported by empirical evidence.¹⁸ We accordingly employ the party of the appointing president, as obtained from the Courts of Appeals biographical database, as our measure of judicial ideology.¹⁹

¹⁸The studies supporting this point are legion; Pinello (1999) summarizes them in a comprehensive meta-analysis.

¹⁹Giles, Hettinger, and Peppers (2001) developed an alternative approach to measuring judicial preferences that employs the common space ideological scores of presidents and senators created by Poole (1998). However, the common space scores for presidents are only available for Truman forward, which prevents us from measuring the preferences of a significant number of judges appointed by Roosevelt who served into the 1960s. As a result, measures of circuit ideological diversity based on the Giles, Hettinger, and Peppers (2001) approach would be systematically biased by missing data for most circuits until the 1960s. Omitting these circuit/years would substantially and systematically truncate the time series. Moreover, while the two indicators of judicial ideology are strongly correlated, relying on the party of the appointing president provides a better

The appointment and departure dates for each judge are also available in the biographical database. Thus for each year it is relatively easy to determine if a judge is sitting on a Court of Appeals. The only difficulty comes when judges are appointed and/or leave during the year. In these instances the seats may remain vacant throughout the year, may remain vacant most of the year, or may be filled almost immediately. Moreover, the vacancy may occur early in the year or at the very end of the year. To address these issues we adopted the rule that if any judges served less than six months in a calendar year they were treated as not serving in that year. So if judges retired, took senior status or died before June, or were appointed after July of a year, those judges were treated as not serving in that year.²⁰

To measure ideological heterogeneity, we identified circuits in each year as having either a majority of judges appointed by a Democratic president, a majority appointed by a Republican president, or an equal partisan division.²¹ We used standard combinatorial formulae to determine the number of possible majority-minority three-judge panels (i.e., majority Democratic panels in Republican majority circuits and majority Republican panels in majority Democratic circuits) expected to occur in each circuit/year given the number of majority and minority judges actively serving.²² Dividing the number of majority-minority panels by the total number of possible three-judge panels in each circuit/year yields the expected proportion of all possible three-judge panels in a circuit/year that are majority-minority panels; an alternative interpretation of this measure is as the probability that a randomly constituted panel will be majority-minority

correspondence to the principle concepts of interest in this study (e.g., regime change and majority-minority panels). Data on the party of each judge's appointing president come from Zuk, Barrow, and Gryski (1996); we extended this information for judges appointed after 1994.

²⁰Forty-one judge/years were deleted on this basis. In 10 additional instances two judges served six months each in the same seat (left in June, replacement appointed in July). In these instances, the incumbent was treated as serving the entire year.

²¹Our approach does not take into consideration the majority-minority panels created by the continuing service of senior judges on circuits, or of the presence of district court judges sitting by designation. Since the number of cases in which senior and/or designated judges participate varies considerably, it was not possible to include this factor in our computation of the partisan heterogeneity of the circuits. Note, however, that neither senior nor designated judges vote on whether a case is to be granted en banc review.

²²The expected number of majority-minority panels typically does not occur, since the full complement of possible panels are usually not employed in a given year. However, our expectation is that, given random construction of the panels, the actual numbers of majority-minority panels will vary strongly across circuit/years with the expected number.

in that circuit/year. It ranges from 0—for a circuit that in a given year has either one or no minority judges, and hence no possibility of majority-minority panels—to 0.5, indicating that a circuit is evenly divided between judges appointed by Democratic and Republican presidents.²³

Partisan regime change was coded 1 in the year when the majority of the judges appointed to a circuit shifted from one party to the other and 0 in all other circuit/years. In the simplest case, regime change occurs when a circuit that in the previous year had consisted of a majority of judges appointed by Republican (Democratic) presidents, in the current year has a majority of judges appointed by Democratic (Republican) presidents. A somewhat more complex pattern occurs when a circuit moves from having a majority of judges appointed by presidents of one party one year to an even balance of partisan appointments. Since an evenly divided court cannot change circuit law, this condition is not treated as a regime change. From this “neutral” position, a regime change could only occur if in a subsequent year the majority of the judges on the circuit are appointed by presidents of the party opposite to that controlling before the court became equally balanced. Thus, a regime change is only recorded when a shift in the partisan majority on a circuit is completed.

Circuit Stability

The strategic approach leads us to expect that increases in the stability of circuit membership will dampen the positive effects of ideological heterogeneity on the frequency of en banc rehearings. Drawing on Zuk, Barrow, and Gryski (1996), we computed the length of service for each judge in each circuit and include a variable which measures the years of service for the judge with the median tenure.

Legal/Organizational Factors

Our measure of the number of judges on each circuit relies on Zuk, Barrow, and Gryski (1996); those data allow us to compute the actual number of judges sitting on a circuit in any given year. The Administrative Office of the

²³Indeed, an alternative measure of circuit ideological heterogeneity is simply the percentage of Democratic or Republican judges serving on a circuit in a given year “folded” at 50%. This measure ranges from 0 when a circuit is homogeneous in partisanship to 0.5 when it is evenly split in partisanship. This measure is strongly correlated with our measure based on the frequency of minority panels ($r = 0.92$) but does not reflect as well the logic of the attitudinal argument.

TABLE 1 Summary Statistics

Variable	Expectations	Mean	Standard Deviation	Min.	Max.
Dependent Variable					
Cases Decided En Banc		4.69	4.47	0	29
Independent Variables					
<i>Legal/Organizational</i>					
$\ln(\text{Caseload})$	+	6.40	0.92	4.84	8.46
Fifth Circuit Split	+/-	0.03	0.17	0	1
Limited En Banc	+/-	0.03	0.18	0	1
Total Number of Judges	+	9.20	4.16	3	28
Total Number of Judges Squared	-	101.9	115.1	9	784
<i>Attitudinal</i>					
Regime Change	+	0.06	0.23	0	1
Pr(Majority-Minority Panel)	+	0.21	0.15	0	0.50
<i>Strategic</i>					
Median Circuit Tenure	-	8.53	3.73	1	23.5
Pr(Majority-Minority Panel) \times Median Circuit Tenure	-	1.79	1.51	0	10

Note: $NT = 600$ ($N = 12$ circuits, $T = 50$ years, on average).

U.S. Courts provides the authorized number of judge-ships per circuit, but given vacancies, the actual number of judges sitting provides a better measure of the potential for simple disagreement and of the difficulties associated with conducting en banc rehearings. The Administrative Office of the U.S. Courts' data on the numbers of cases disposed of on hearing or submission provides our base measure of caseload. This figure is the number of cases actually resolved after significant investment of resources by the judges of the circuit. Following standard practice, we employ the natural log of caseload in the analysis (e.g., Maddala 1983).

During this time period two relevant structural changes occurred in the Courts of Appeals. First, in 1978 Congress passed the Omnibus Judgeship Act, which included a provision allowing "mini" en bancs in circuits with more than 15 judges. Such mini en bancs consist of 10 randomly selected judges plus the Chief Judge of the circuit. As noted earlier, the Court of Appeals for the Ninth Circuit adopted this innovation in August 1980, but the first mini en banc rehearings did not occur until 1981 (Hellman 1990). To date, no other circuit has followed the lead of the Ninth Circuit in adopting this procedure. The expected effect of this change on the incidence of en banc under the various models is uncertain.²⁴ Nonethe-

²⁴Hellman (1990) argues that since the outcomes from such rehearings will be unpredictable, the adoption of mini en bancs should decrease the frequency of their use. This is not inconsistent with our premise that uncertainty will increase en banc use because our fo-

less, we create a dummy variable to capture the effects of the adoption of the mini en banc by the Ninth Circuit. This variable is equal to 0 for every year through 1980 and 1 for 1981 and each following year. Second, in 1981 Congress created the Court of Appeals for the Eleventh Circuit by dividing the previous Fifth Circuit. We include a dummy variable to test the effect of this dramatic shift on the Fifth Circuit. Our Fifth Circuit split variable is equal to 0 for all other circuits. For the Fifth, it is equal to 0 for each year up to and including 1981 and 1 for 1982 and each following year. Data for the Eleventh Circuit are treated as missing in the years prior to 1982.

We provide descriptive statistics for all variables and summarize the expectations for the attitudinal, strategic, and legal/organizational models in Table 1. Note that the key test between the attitudinal and strategic models comes in our expectation vis-à-vis the interaction of *Median Circuit Tenure* and the probability of a *Majority-Minority Panel*: under the strategic account, this interaction ought to be strongly negative, while attitudinal theory suggests that its effect be undifferentiated from 0.

Analysis

Our data are cross-sectional time-series data, representing 12 circuits over periods of 18 to 58 years. Our dependent

cus is on the behavior of circuit minority judges under uncertainty rather than on that of the circuit as a whole.

variable is a count variable that ranges from 0 to 29, with the majority of observations falling in the range from 0 to 11. The nature of these data leads us to employ the method of generalized estimating equations (GEE) (Zorn 2001), assuming a conditional Poisson distribution for our measure of en banc counts; we adopt an AR(1) specification for the conditional within-unit covariance matrix. We also include fixed effects for each of the 12 circuits, with the First Circuit omitted for identifiability; these serve as controls for circuit-level factors (e.g., differences in case mix) not expressly incorporated in the model.²⁵ For example, some circuits have a practice of informally circulating opinions among all the judges on the circuit for comments and suggestions. This could have the effect of reducing the need for en banc review.²⁶ We report our model estimates in Table 2.

We begin our discussion with the variables capturing organizational changes in the Courts of Appeals.²⁷ With respect to those changes, it is interesting to note that the one most closely associated with circuit workload issues—the division of the Fifth Circuit—appears to exhibit no influence on the rate of en bancs. In the years prior to its division the Fifth Circuit averaged 5.5 en bancs per year. In the years since the division it has averaged 10.4 per year.²⁸ This difference in frequency, however, declines and becomes statistically insignificant once the other variables in the model are taken into account. In contrast, the presence of the limited en banc procedure in the Ninth Circuit seems to have increased the frequency of en bancs. In the era without the mini en banc the Ninth Circuit averaged 3.2 en banc rehearings per year, compared to 9.9 after the procedure was adopted. The results in Table 2 indicate that this mean difference was largely attributable to changes in the other variables included in the model,

²⁵The GEE approach with fixed effects thus allows us to simultaneously deal with the possibility of residual circuit-level heterogeneity in en banc counts and temporal dependence within circuits over time. Our results are substantively and statistically identical if we instead estimate either fixed- or random-effects Poisson models, or if we adopt any of those models with a negative binomial specification in place of the Poisson; those results are available upon request from the authors.

²⁶We thank an anonymous reviewer for making us aware of this practice.

²⁷Note at the outset that the effects of the 11 circuit indicators are jointly significant ($p < .001$), indicating that substantial circuit-level differences in en banc use remain even after controlling for the variables in our specification. At the same time, the relative effects of the variables in the model are, in general, stronger than those for the circuit indicators; a Wald test indicates that the explanatory power of the nine covariates is greater than that of the 11 circuit indicators ($\chi^2 = 148.1$ and 214.9 with nine and 11 degrees of freedom, respectively).

²⁸This difference in means is significant at $p < 0.01$.

but even with such factors as increases in caseload and the number of judges controlled, the mini en banc appears to have increased the frequency of en banc hearings in the Ninth Circuit.

Our variables corresponding to the legal/organizational explanation (that is, caseload and number of judges) were expected to exert a positive influence on the number of en banc rehearings. These expectations are strongly supported by the empirical results. Not surprisingly, caseload is highly related to the occurrence of en bancs; within the ranges of our data, an increase of 1,000 cases in a circuit's annual caseload yields an expected increase of roughly two en banc rehearings. The magnitude of the effect for circuit size is similar, but is as expected, curvilinear; the predicted number of en bancs increases as the number of judges in a circuit goes from four to 15, then decreases. With the other variables in the model set at their means, this corresponds to an increase in the expected number from four to six, with a subsequent decrease back to four. Since the effect of a higher number of judges on the circuit is significant with both attitudinal and strategic variables controlled, this result provides support for the operation of nonideological, legal differences among the judges in their decisions regarding granting en banc review.

We tested two variables for evidence of attitudinal influences on the number of en banc rehearings. The effect for the first indicator of ideological influence, regime change, fails to achieve statistical significance. Given the accounts in the literature of increased en banc usage to accomplish the policy goals of a new regime, we explored this relationship in considerable detail. First, we created two new indicators of regime change that capture changes in the frequency of en bancs occurring not only in the year of regime change, as does our original measure, but also changes occurring one and two years afterwards. These measures allow for the possibility that a new ideological majority may not immediately exploit its position.²⁹ The effect of neither of these alternative measures was statistically significant when substituted for our original measure.

Second, existing speculation on the effect of ideological regime changes focuses almost exclusively on the shift in partisan regimes in the Reagan/Bush era

²⁹Over the past 20 years the median time from filing in the U.S. District Courts to final disposition in the Courts of Appeals has fluctuated around two years (Administrative Office of the Courts, various years, Table B4). Thus, our longest regime change indicator, which captures three years, would seem to encompass the potential for litigants to create new cases to serve the agenda of the new majority.

TABLE 2 Poisson Estimates of En Banc Review, 1942–1999

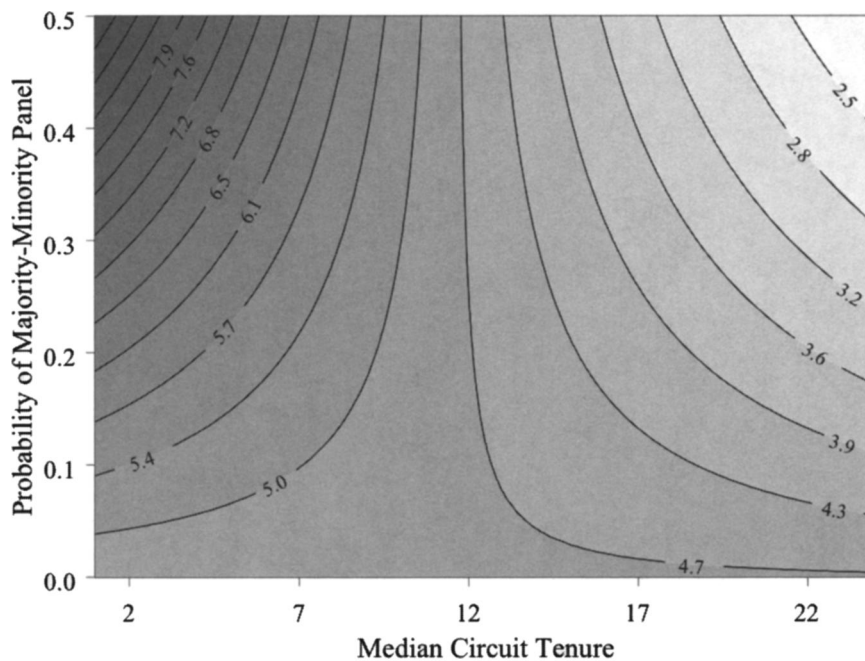
Variable	Estimate (Std. Error)	Incident Rate Ratio
(Constant)	−1.60 (1.08)	–
<i>ln</i> (Caseload)	0.36* (0.16)	1.44
Fifth Circuit Split	−0.24 (0.17)	0.78
Limited En Banc	0.58* (0.27)	1.78
Total Number of Judges	0.13* (0.07)	1.14
Total Number of Judges Squared	−0.004* (0.002)	0.996
Regime Change	−0.04 (0.09)	0.96
Pr(Majority-Minority Panel)	1.53** (0.51)	4.62
Median Circuit Tenure	−0.001 (0.012)	0.999
Pr(Majority-Minority Panel) × Median Circuit Tenure	−0.13* (0.06)	0.88
Second Circuit	−0.22 (0.19)	0.80
Third Circuit	0.91** (0.19)	2.48
Fourth Circuit	1.07** (0.23)	2.92
Fifth Circuit	0.85** (0.23)	2.32
Sixth Circuit	−0.28 (0.23)	0.78
Seventh Circuit	0.20 (0.14)	1.22
Eighth Circuit	0.71** (0.17)	2.04
Ninth Circuit	0.41 (0.21)	1.50
Tenth Circuit	0.35* (0.14)	1.41
Eleventh Circuit	0.59 (0.32)	1.81
D.C. Circuit	0.76** (0.21)	2.15

Note: *NT* = 600. Cell entries are coefficient estimates; robust standard errors are in parentheses. One asterisk indicates $p < .05$, two indicate $p < .01$.

to provide evidence for its operation. To determine if regime change, while not operative across the full time range of the study, was nonetheless operative in the Reagan/Bush era, we estimated regime change effects separately for the Reagan/Bush era by creating a dummy

variable for the appropriate years, multiplying it by the existing regime change variable and adding it to the equation in Table 2. We employed a variety of time periods to capture the Reagan/Bush era, but regardless of the specific operationalization, the coefficient for the interaction term

FIGURE 2 Predicted Counts of En Bancs, by Circuit Heterogeneity and Tenure



was nonsignificant.³⁰ These results suggest that our findings with regard to the lack of effect for regime change on the frequency of en bancs are generally robust.

The second attitudinal variable, ideological heterogeneity, performed as anticipated. The expected number of en banc rehearings increases as the likelihood of a majority-minority panel increase. Conditional on holding circuit tenure constant at 0, the expected number of en banc hearings in an evenly divided circuit is 2.1 times higher than in a circuit with zero or one minority judges. As explained below, however, this interpretation of the direct effect of ideological heterogeneity is misleading given the inclusion in the model of an interaction effect between median tenure and ideological heterogeneity. Similarly, the statistical insignificance of the strategic variable, median tenure, is also misleading in the presence of the interaction term.

A more useful interpretation focuses on the joint effects of heterogeneity, median circuit tenure, and the interaction of the two. Figure 2 provides a graphical interpretation of the influences of these variables. The contour plot shows the expected number of en banc rehearings against these two variables over their ranges in the data, holding the other covariates constant at the

³⁰Reagan took office in 1981, and Bush left office in 1993; our measures thus ranged from 1983 to 1989 at the shortest to 1983–1995 at the longest.

means (for continuous variables) or medians (for discrete covariates). Lighter regions correspond to lower expected numbers of en bancs, while darker regions indicate higher numbers. Consistent with the strategic perspective, if the probability of a majority-minority panel is 0, then the expected number of en banc rehearings stays nearly constant, regardless of how stable the membership of the circuit is. Conversely, if the probability of a majority-minority panel is high (that is, if the circuit is almost evenly split between Democrats and Republicans), the predicted count of en banc rehearings is highly responsive to circuit tenure, with increases in circuit stability yielding substantial decreases in the occurrence of en banc rehearings. Similarly, when median tenure is low, the predicted count of en bancs increases substantially with increases in the probability of a majority-minority panel. As circuit tenure increases past about 12 years, however, the relationship grows less positive, and above that level of tenure the expected number of en banc rehearings actually begins to decrease as a function of circuit heterogeneity. This last result should be taken with some caution; only about 13% of the circuit/years included in the study have median tenure greater than 12 years, and of those 70% occur prior to 1960. Thus, the slight negative effect identified for ideological heterogeneity at high levels of tenure rests on a relatively small and temporally specific portion of the data examined.

The findings for these variables are thus generally consistent with the strategic account of en banc occurrences. That is, while our results suggest that ideological heterogeneity plays an important part in determining the frequency of en banc rehearings in a circuit, they also indicate that its effects are tempered by a consciousness of the preferences and likely behaviors of the other members of the circuit. Importantly, these effects persist even in the face of controls for legal and organizational factors, lending support to the idea that en banc review occurs at least in part as a result of strategic calculi.

Conclusions

The U.S. Courts of Appeals are increasingly significant policymakers within the American political system. While their use of three-judge panels allows for tremendous efficiencies, it also raises the possibility of decisions and policy outcomes that do not reflect the views of a majority of the judges on a circuit. Rehearing of a panel decision by the members of the circuit sitting en banc is the one procedure by which the circuit majority may monitor panel decisions. In the face of steadily declining numbers of decisions by the U.S. Supreme Court and the high levels of contentiousness over many Court of Appeals decisions, the importance of en banc review is arguably greater than it has ever been in history.

Our work here is the first comprehensive, large-scale study of the phenomenon of en banc review in the U.S. Courts of Appeals.³¹ In doing so, we have assembled the most comprehensive data to date on the incidence of en banc review, finding that the frequency with which en banc rehearings have occurred varies significantly across both time and circuits. Drawing from the attitudinal, strategic, and legal/organizational perspectives on individual judicial behavior, we developed a set of integrated expectations regarding the causes of this macrolevel variation. While the significance of fixed effects for the circuits indicates that we have not captured all the factors at work, the findings of our analysis are consistent with the operation of all three models.

Our results are clearly consistent with the operation of legal and organizational considerations in the use of

en banc review: en bancs are more likely to occur with increases in caseload and the corresponding increase in numbers of cases meeting the threshold of importance and the stresses of workload pressure likely to produce errors. The frequency of en bancs also increased with the number of judges assigned to a circuit and hence, the likelihood of conflicting legal approaches increased. At the same time, the nonlinearity of this effect suggests that the judges may be deterred somewhat from employing the en banc process as the size of the circuit grows and the process becomes more cumbersome and costly. Whether this finding of nonlinearity supports a decision to divide circuits and reduce their size depends in part on whether one believes that there are cases that should be granted en banc review that are currently denied because of the constraint of size.

Our findings also provide evidence that variation in the use of en bancs across circuits and time is linked to variation in the ideological heterogeneity of the circuits. The influence of ideological considerations on the use of en banc has been a point of considerable controversy, but to date the evidence on this issue has been mixed. By contrast, our results leave little doubt that variation in the ideological heterogeneity of the circuits affects the frequency with which en bancs occur. In general, we find the greater the ideological heterogeneity on a circuit, the higher the frequency of en bancs. However, we also uncover clear evidence that the effects of ideological factors are conditioned by strategic considerations. As the median tenure in circuits increases and judges' information on majority preferences becomes clearer, the linkage between circuit ideological heterogeneity and the frequency of en bancs is diminished. This suggests that judges in the minority on a circuit—given good information about the preferences of the majority—modify their panel behavior in response to avoid en banc rehearing. Evidence on the operation of the strategic model in the Courts of Appeals is mixed, and the context of en banc rehearing may constitute a “most likely” test of the operation of the model, but our results indicate that the model passes the test.

It has also been suggested that, particularly in the Reagan/Bush era, new partisan majorities on a circuit have employed en bancs to reshape the law of the circuit in accord with their policy preferences. In fact, our analysis finds no evidence of such a phenomenon, either across the full range of data considered or within the Reagan/Bush era alone. However, this result does not mean that Judge Wald's complaint about such a use of en bancs by the new partisan majority in her court was unfounded. First, such partisan ideological behavior could have resulted in an increased use of en bancs in some circuits and for some regime changes, including the one associated with

³¹In related research Giles, Walker, and Zorn (2006) analyze in greater depth the process by which individual cases are chosen for en banc rehearing. While both studies examine the role of attitudes, strategy, and law on the use of en banc, our previous study examines a 10-year period (1981–91) in a single circuit, the Fifth. This article thus constitutes the next step in our research program focused on the role of en banc in the federal judicial hierarchy. Read together, the two papers provide an extensive and intensive examination of this seldom-studied but important institutional device.

her remarks; our results simply demonstrate that such behavior was not sufficiently systematic to be detected in a large-scale aggregate analysis. Second, new majorities may have systematically used en bancs to adjust established circuit policy to reflect their preferences, but if such cases replaced other, perhaps less partisan cases on the agenda for en banc—that is, if the change was one of the substance and not the frequency of en banc cases—that change would not be detectable here.

Our results thus place the controversy concerning the ideological use of en bancs by Republican circuit majorities in the Reagan/Bush era in a somewhat different light. While such usage may have been more blatant during this period or more openly discussed, our evidence suggests that the influence of ideology on the use of en banc during the 1980s was not unique, but instead is part of a long-standing, general pattern that has typified the Courts of Appeals since the practice was adopted in 1942.

Finally, our results provide a rare look at discretionary agenda setting in the Courts of Appeals. Studies of agenda setting at the Supreme Court have generally concluded that the decision to grant certiorari is a mixture of legal, strategic, and attitudinal factors (Caldeira, Wright, and Zorn 1999; Epstein and Knight 1998; Segal and Spaeth 2002). Our results suggest that the use of en banc review in the Courts of Appeals is conditioned by a similar mixture of considerations. At the same time, it is evident by the variation in the use of en banc left unexplained by those factors that additional work needs to be done. In particular, the importance of the circuit-level effects suggests that circuit-specific contextual norms and practices are also at work in determining the use of the en banc procedure.³²

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³²For example, idiosyncratic factors also must certainly play a role. On the Second Circuit, Judge Learned Hand adamantly opposed the use of the en banc procedure. Only after Judge Hand retired and Judge Charles E. Clark, an advocate of en banc, became Chief Judge in 1954 did the Second Circuit hold en bancs (Schick 1970).

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