# Ideology, Certiorari, and the Development of Doctrine in the U.S. Courts of Appeals

Deborah Beim\* Department of Political Science University of Michigan dbeim@umich.edu

Kelly Rader Department of Political Science Yale University kelly.rader@yale.edu

March 25, 2021

#### Abstract

We develop a new approach to empirical analysis of certiorari: one that is focused on the Supreme Court's interest in doctrinal development rather than an interest in review and reversal of individual decisions. Using a dataset of intercircuit splits, we measure the ideology of *doctrine*. Using this measure, we show that the Supreme Court is more likely to resolve ideologically polarizing questions. We then show that Supreme Court Justices' votes are more polarized when they are deciding more polarizing questions.

<sup>\*</sup>We thank Chuck Cameron, Rachael Hinkle, John Kastellec, Scott Hendrickson, Georg Vanberg, and seminar audiences at the Midwest Political Science Association and the Conference on Influences on Judicial Behavior for helpful comments. Thanks to Lena Bae, Shelby Baird, Joy Chen, Phoebe Clarke, Ian Crichton, Sarah DiMagno, Jesselyn Friley, Michelle Kim, Alisha Jarwala, Adam Kunz, Tony Nguyen, Tory Stringfellow, and Benjamin Waldman for excellent research assistance; to the Center for the Study of American Politics and the Institution for Social and Policy Studies at Yale University for research support; to John B. Nann at the Lillian Goldman Law Library at Yale Law School; to John Summers for sharing data; and to Rebecca Hilgar, Patrick Coughlin, and Christine Gaddis from the *Seton Hall Circuit Review* for their help.

## Contents

1	Ideology and the review of individual decisions	4
<b>2</b>	Ideology and the review and creation of doctrine	7
3	Ideology and the review of intercircuit splits	8
4	Our data	11
	4.1 Our measure of polarization	12
	4.2 Other variables	16
5	Model and results	
6	Polarization of Supreme Court decisions	19
7	Discussion and conclusion	20

The U.S. Supreme Court is an important national policymaker. By virtue of being the highest court in the land, Supreme Court opinions have national impact. By virtue of the common law's respect for precedent, its opinions have long-lasting impact. Since its impact is so wide-ranging and near-permanent, the Supreme Court is very purposeful in selecting which issues to address. Like other national policy-makers—Congress, for example—the Court can choose to stay silent. But, uniquely among policy-makers, the Court cannot speak on whatever it wishes; it must select *from among* a set of issues put forth in petitions for certiorari. Therefore it is both *important* to understand how the Supreme Court chooses which issues to address, and also particularly *interesting* to understand which issues the Supreme Court chooses to address, and when it chooses to address them, since the choice is both constrained and discretionary.

We advance a theory of certiorari of legal questions, that is, why and when does the Court choose to address some legal questions but not others. We argue that the Supreme Court is a resource-constrained, ideologically motivated supervisor of ideologically heterogeneous and empowered lower courts. This notion borrows from the literature on certiorari that studies interactions between the Supreme Court and the Courts of Appeals using a principal-agent framework. That literature thinks about a Court that deploys its resources to make sure lower courts are making individual decisions in line with the Court's own preferences. That is, the Court reviews decisions it does not "like" ideologically.

In an important conceptual shift, we focus on the Supreme Court's task of deploying its resources to *propagate doctrine* it likes. In this situation, the Court cares about doctrine, not correcting individual decisions. It is resource-constrained, but in the sense that it is costly to build doctrine (especially good doctrine from scratch). It supervises a diverse group of lower courts that write and follow doctrine that the Supreme Court finds ideologically appealing or ideologically unappealing. The Supreme Court is on the lookout for the best opportunities for policy-making. As such, the Supreme Court tracks doctrinal development in the lower courts, looking for legal issues that are especially attractive for review to advance its ideological goals.

We focus on intercircuit splits and explain what kinds of intercircuit splits—that is, what kinds of legal questions that have split the lower courts—an ideologically motivated Court would seek out for review.

We argue that certain circuit splits present the Supreme Court with an attractive opportunity for doctrinal policy-making. In resolving a split, the Court can cheaply adopt one (fully articulated and operable) doctrine while also obviating another. Thus, conditional on wanting to resolve a split, an ideologically-motivated Court should most want to review an ideologically polarized split, one with an ideologically allied side and an opposed side.

To test this prediction, we rely on an original dataset of circuit splits, some of which have been resolved by the Supreme Court and some of which are ongoing. Uniquely, our dataset comprises every case in every circuit involved in each split. We develop an empirical approach to measuring the ideology of reviewable legal questions using these data. Because we capture all appellate cases implicating a given legal question, our dataset of splits allows us, for the first time, to characterize the ideological valence of the legal question itself.

Our approach assumes that a legal question has pre-existing plausible answers. (In a circuit split, these answers are each articulated in precedent-setting majority opinions in different circuits.) As appellate judges decide precedent-setting cases that present a given question, they vote over those plausible answers. By observing their votes, we can infer the ideologies of those answers. That is, we create measures of doctrinal ideology based on the ideologies of the judges who endorsed, or chose not to endorse, those doctrines.

For each split in our dataset, we use appellate judges' votes in precedent-setting cases involved in the split to estimate the ideologies of each side of the intercircuit split. Our measure of split polarization, then, captures the degree to which Republican-appointed judges line up on one side of the split while Democratic-appointed judges line up on the other. This measure is theoretically-driven and also reflects empirical realities about U.S. Appellate court decision-making.

We find that, indeed, the more polarized a circuit split is, the more likely the Supreme Court is to review it. We corroborate this finding with an additional analysis of Supreme Court merits votes, which shows that when the Court decides a case to resolve a polarized split, the justices themselves polarize over the final decision.

## 1 Ideology and the review of individual decisions

Throughout the field of judicial politics, there is a sense that the Supreme Court's certiorari decisions are, at least in part, ideologically motivated. In particular, the Court is thought to review cases based on ideological distance. The further away a lower court decision is, the more likely it is to be reviewed (and reversed) by the Court.

The idea that the Supreme Court engages in ideologically-motivated review dates back to the late 1950s (Schubert (1959), see also Robert L. Boucher and Segal (1995) and cites infra). This notion was formalized in principal-agent models of the judicial hierarchy (Cameron 1993; Songer, Cameron and Segal 1995; McNollgast 1995; Cameron, Segal and Songer 2000; Spitzer and Talley 2000). Broadly, these models assert that the Supreme Court is a supervisor of lower courts and is focused on whether lower courts are making individual decisions in line with the Supreme Court's own preferences. The lower courts are a diverse group, some of whom would try to make evasive decisions if left unsupervised. However, the Supreme Court is resource-constrained, in the sense that it is costly to review any given lower court's decision. The Supreme Court then faces the classic problem of a principal who must use limited tools to induce compliance in its lower court agents. So the Supreme Court grants certiorari not only to enforce its preferences directly by reversing upon review, but also to *induce* behavior in lower courts. In particular, fear of review and reversal may cause lower courts to abide by the Supreme Court's preferences. Importantly, in this framework, the Supreme Court's focus is on monitoring individual decisions.

But the set of potential lower court cases for review, the certiorari docket, is large. In recent years, litigants have filed around 7000 petitions for certiorari each term, and the Court granted only about one percent of them. The Supreme Court cannot evaluate each petition in exacting detail and must decide which to grant before knowing all the facts of each case. Therefore, the Supreme Court uses "cues" (Tanenhaus et al. 1963) to identify those decisions most ripe for review.

From a principal agent perspective, the Supreme Court seeks to identify which cases are likely to have been "non-compliant" (Songer, Segal and Cameron 1994) with its preferred legal policy in order to reverse them. The Court uses cues like the ideology of the lower court judges who decided the case and the ideological valence of the case outcome to make its best guess of which decisions with which it would disagree.

Ideologically-distant lower courts, then, are reviewed more often than proximate lower courts, especially when they make decisions that are consistent with their relative ideological predisposition (see e.g. Cameron, Segal and Songer 2000; Epstein et al. 2007; Sommer 2014). For example, ideological review may imply that a conservative Supreme Court would review a liberal lower court that has made a liberal decision, rather than a conservative lower court that had made a liberal decision (Cameron, Segal and Songer 2000).

This literature focuses on error-correction, compliance, and punishment: the review of individual decisions with which the Supreme Court disagrees for purposes of reversal. But, as several of these papers acknowledge, the Supreme Court's job is broader than that. The Supreme Court must create doctrine before enforcing doctrine (Cameron, Segal and Songer 2000). A small handful of papers have analyzed how other Supreme Court goals interact with compliance concerns. For example, a conservative Supreme Court may want to review *low quality* liberal decisions (Carrubba and Clark 2012) (so as to improve the law while correcting a bad outcome). Because a conservative Supreme Court would implicitly trust a conservative lower court's liberal decision, the empirical test of such a theory is whether a conservative Supreme Court targets liberal decisions made by liberal judges, especially if those decisions are accompanied by seemingly low quality.

So strong is the expectation that the Supreme Court will thus seek out non-compliant decisions, that there is a secondary literature about the *implications* of ideologically motivated review (Klein and Hume 2003; Westerland et al. 2010) for lower court judges.

Indeed, there is plentiful empirical evidence to support the claim that the Supreme Court reviews decisions it disagrees with. Foremost, the Supreme Court reverses most of the decisions it reviews. It seeks those out: the Supreme Court tends to find those decisions it disagrees with and review those (Summers and Newman 2011). Therefore the Supreme Court relies on "cues" (Tanenhaus et al. 1963) to predict which decisions are most likely to be reversed upon review. Some of these cues are ideological: When the Supreme Court is conservative, it disproportionately reviews cases with liberal outcomes (see e.g. Caldeira and Wright 1988; Caldeira, Wright and Zorn 1999; George and Solimine 2001; George and Yoon 2003).

But evidence is much more limited that the Supreme Court relies on the ideologies of lower court judges to predict which cases should be reversed. Lindquist, Haire and Songer (2007) find that fewer cases from conservative circuits (as measured by Giles Hettinger Pepper scores) were heard during a time when the Supreme Court was conservative. Owens and Simon (2011) find the opposite—as the Judicial Common Space distance between the Supreme Court and lower court grows, review becomes less likely. Cameron, Segal and Songer (2000) find that liberal panels who make liberal decisions are more likely to be reviewed than conservative panels who make liberal decisions, during a time when the Supreme Court was conservative; Carrubba and Clark (2012) find that the effect of ideology is parabolic—judges who are somewhat but not too distant are most likely to be reviewed.

We share a theoretical insight developed in Bonneau et al. (2007); Black and Owens (2009), that the Supreme Court is strategic about the lay of the doctrinal land when deciding whether to grant certiorari. These papers explaint that a Supreme Court justice may want to grant certiorari if the expected Supreme Court opinion—namely, the ideal point of the median justice—is closer to his ideal point than is the current legal status quo. Empirically, however, these papers continue to predict that the Supreme Court will use lower court judges' ideologies as a cue for selecting which cases to review.

And so there are two calls for attention. First, there is insufficient empirical evidence that the Supreme Court relies on lower court judges' ideologies as a cue for non-compliance. Second, the focus on compliance paints an incomplete picture of the job of the judicial hierarchy.

## 2 Ideology and the review and creation of doctrine

We present a new perspective on the role of ideology in certiorari decisions. Integral to our perspective is the recognition that the Supreme Court does not monitor individual decisions—or at least, not merely. We argue that the traditional principle agent approach to studying ideologically motivated review largely misses the point in that the primary and most important role of the Supreme Court is to create or promulgate doctrine, not to enforce existing doctrine.

A Court that cares about enforcing doctrine cares about attributes of lower court cases and case outcomes—did the correct party prevail according to Court's preferred doctrine? A Court that cares about promulgating doctrine cares about attributes of legal questions and answers that lower courts articulate to determine which party prevailed.

As in a typical principal agent framework, we think of the Supreme Court as a resourceconstrained, ideologically motivated supervisor of ideologically heterogeneous and empowered lower courts. But in an important conceptual shift, we focus on the Supreme Court's task of deploying its resources to *make doctrine* it likes. In this situation, the Court cares about doctrine, not correcting individual decisions. The Supreme Court is unwilling to perform an error-correction function, orients itself toward doctrine rather than individual dispositions, and generally plays an "Olympian role" (Shapiro 2006). It is resource-constrained, but in the sense that it is costly to build doctrine (especially good doctrine, and especially doctrine that is built from scratch.) It supervises a diverse group of lower courts, some of which write and follow doctrine that the Supreme Court dislikes. The Supreme Court is on the lookout for the best opportunities for policy-making. As such, the Supreme Court tracks doctrinal development in the lower courts, looking for issues that are especially attractive. It looks to the doctrine articulated in lower court decisions, where that doctrine may be developed across a series of lower court decisions, across circuits and over time.

Unlike the monitoring court, the court we are imagining does not care about the ideological direction of any one given lower court decision, nor about the ideologies of lower court judges who made a particular decision. The court's view, and its ambitions, are larger. This Court cares about the ideological content of the doctrine itself.

## **3** Ideology and the review of intercircuit splits

We focus on ideologically-motivated doctrinal development *through the review of intercircuit splits*. Scholars of American courts have long known that justices are likely to review cases involved in splits (see e.g. Roehner and Roehner 1953; Tanenhaus et al. 1963; Ulmer 1984; Estreicher and Sexton 1984; Caldeira and Wright 1988, and cites infra). This early scholarship focuses on the need to resolve intercircuit splits because the underlying legal questions tend to be important and resolution provides doctrinal clarity. More recent work has considered how the presence of an intercircuit split might moderate the effect of justice ideology on the decision to grant cert to a particular petition (Epstein, Martin and Segal 2012; Black and Owens 2009). But, following the distinction in Perry (1991), scholars have considered the desire to resolve a split to be a jurisprudential (legal) motivation, as opposed to an outcome-concerned (ideological) motivation.

However one might characterize the Court's motivation to resolve circuit splits, it is not an overriding motivation. In the first systematic study of split resolution, Beim and Rader (2019) show that, while legal factors are indeed at play in the Supreme Court's decision about whether and when to resolve a circuit split, two-thirds of circuit splits are never resolved, even though almost all unresolved splits continue to generate significant litigation in federal courts. If, then, the Supreme Court is not compelled to resolve all circuit splits, or even all active and growing splits, for the sake of legal clarity, it must use additional considerations to decide which splits to resolve. In a departure from previous studies of certiorari, we argue that ideological considerations are among those reasons.

Intercircuit splits are a fertile area for ideologically-driven doctrinal development for at least two reasons. First, an ideologically-motivated Court wishes to decide legal questions that have ideological implications. When liberal judges and conservative judges line up on opposite sides of a legal question, this tells the Court that the question has a clear ideological valence. Second, the Supreme Court's goal is doctrinal development but crafting law is costly (Beim 2017; Carrubba and Clark 2012; Maltzman, Spriggs and Wahlbeck 2000). Intercircuit splits make it easier to develop ideological doctrine by offering the choice between two legallyplausible fully-articulated opposing doctrines. How would a resource-constrained, ideologically-motivated, doctrine-seeking Court choose which circuit splits to resolve? We argue that such a Court looks at the ideological polarization of a circuit split when deciding whether and when to resolve it: we claim the Supreme Court is interested in reviewing questions that are polarizing. We call a split *ideologically polarized* when one side of the split is more attractive to liberal judges than to conservative judges, while the other side attracts conservative judges more than liberal judges.

This definition rests on the premise that a legal question arises, and that question has two possible given answers—doctrine A or doctrine B.<sup>1</sup> The question, doctrine A, and doctrine B, are each exogenous. As different appellate courts hear cases about this legal question, judges sign on to one of doctrine A or doctrine B. As they do, we (the researchers) learn about the underlying ideology of doctrine A and doctrine B. The question, or the doctrines, are observed to be polarizing if doctrine A is very popular among Democratic appointees and doctrine B is very popular among Republican appointees.

Why does the Court want to review splits like this in particular? Following Posner (1993), we consider a justice whose primary objective is to maximize his leisure time. We assume his secondary objectives are reputational and ideological. Therefore, when not playing golf, the goal of a justice is to play the legal game, namely, to implement its preferred doctrine as cheaply as possible by finding a convincing, high-quality legal justification for an ideologically appealing outcome. Polarized splits offer a cheat code for the legal game (Posner 1993, 2005) so that such a justice can get back on the golf course sooner. When judges below polarize across legal alternatives, this presents the Court with the opportunity to simultaneously adopt an ideologically-preferred doctrine and obviate a not-preferred doctrine—and to do so with little effort. Therefore justices who want to engage in ideological policy-making will prefer to review a polarized split more than an unpolarized split.

<sup>&</sup>lt;sup>1</sup>As an empirical matter, this is true. Among the splits we observe, 134 out of 137 have only two sides.

Our conception of what the Court wants is also consistent both with a Court composed of purely attitudinalist justices (Segal and Spaeth 2002) and with ideologically-motivated justices who are concerned for institutional legitimacy (Epstein and Knight 1998). For the pure attitudinalist, that is, a justice who uses legal arguments instrumentally to achieve policy ends, ideologically polarized splits guarantee that the justice's ideologically-preferred doctrine has plausible legal justification. Thus, such a justice gets what she wants and cheaply. For those who pursue policy "strategically" with an eye toward maintaining institutional legitimacy, ideologically polarized splits provide the cover to engage in policymaking through the "legal" process of granting cert to a case to resolve doctrinal confusion in the lower courts.

Note that we speak of the Court as a unitary actor. This choice is intentional and justifiable based on the particular context of the choice to review polarized verses nonpolarized splits. For any given petition, a majority of the justices—namely, those who know they will be in the majority at the merits stage—prefer to review a case involved in a polarized split more than a less polarized one. In particular, the justice who knows she will be the merits median prefers a more polarized split. Therefore we don't need individual cert votes and can instead use the summary statistic of the court's decision.

## 4 Our data

Our data consists of 137 intercircuit splits, 43 of which were resolved and 94 of which have not been resolved (and likely never will be). These splits began between 2005-2013, and we observed them through 2015. For each split, we capture all appellate decisions involved in the split, including 692 precedent-setting cases (cases of first impression) within each circuit and 2,627 citing (subsequent) cases within each circuit that applied the rulings in the precedent-setting cases. (See Beim and Rader (2019) for more details.) Our interest is in which intercircuit splits get resolved, and when. The thrust of our insight is that although the Supreme Court grants certiorari to individual cases, an individual case is a mere vehicle; the object of the Supreme Court's interest is in the legal issue presented across multiple cases. Therefore, we collapse our data into opportunities for split resolution. For a given split, an opportunity for resolution is a year in which there is at least one appellate case that presented the question over which there is a split. This is a split-year unit of analysis that we call "active year." There are 409 such units in our data. Predictive variables are coded either at the split active-year or split level, but summarize information from each case involved in the split.

Our dependent variable is a dichotomous measure of whether an intercircuit split is resolved in an active year. We code the dependent variable  $\mathbf{1}$  if certiorari is granted, and that grant ultimately leads to resolution of the intercircuit split. If there is no petition for certiorari, or if the petition is denied, or if the petition is granted but the resulting opinion does not resolve the intercircuit split, we code the dependent variable  $\mathbf{0}$ .

### 4.1 Our measure of polarization

Our primary question is whether the Supreme Court is more drawn to resolving ideologically polarizing questions, than questions that are less ideologically polarizing.

In developing our polarization measure, we take into account an important institutional feature of the federal judicial hierarchy—namely, *stare decisis* within circuits. When deciding a case of first impression, judges are relatively unconstrained: since there is no clear precedent, they have relatively more leeway in making their decision. Subsequent appellate panels are expected to follow circuit precedent and maintain the "law of the circuit." Panel composition, and panel ideology, may vary over time—but intracircuit stare decisis implies that all panels within a circuit should use the same doctrine in their decisions. This practice has important implications for studying the role of panel ideology in certiorari. The com-

position of a panel is much more consequential in cases of first impression. Moreover, the composition of that first panel should be influential in future panels' decisions. Our empirical strategy acknowledges this. We distinguish precedent-setting decisions within a circuit (a.k.a. cases of first impression) from decisions following a previously-set precedent (a.k.a. citing cases). This then allows us to estimate split polarization through the ideologies of the judges who created the opposing doctrines in an unconstrained setting.

We use judicial behavior—judges' 'endorsements' of a doctrine, in cases of first impression in their circuit—as a measure of that doctrine's ideological valence. In particular, we create a measure of how popular a given doctrine is among Democratic appointees who hear cases of first impression about that legal question.<sup>2</sup> For each intercircuit split, we calculate the proportion of Democratic appointees who heard a case in that split who took side A. (Which side is A is arbitrary and is chosen without loss of generality.) We include Democratic appointees who sided with the majority in cases on in which the majority endorsed side A and also Democratic appointees who dissented from decisions of B.<sup>3</sup> Then, we construct the same measure for Republican appointees—we calculate the proportion of Republican appointees who heard a case in the same split who took side A. Our measure of polarization is the absolute value of the difference between the proportion of Democratic appointees taking side A and Republican appointees taking side A.

<sup>&</sup>lt;sup>2</sup>We use the party of the appointing president as a measure of individual circuit judges' ideologies. This is a standard measure of judicial ideology. See Epstein, Landes and Posner (2013, page 199), Kim (2008); Kastellec (2011); Hinkle (2017); Beim, Clark and Lauderdale (2020), all of which show that Democratic and Republican appointees make different decisions. The clear dichotomous nature of this measure is helpful to us in constructing our measure of doctrine ideology, and so we choose to sacrifice the additional detail offered by continuous measures such as Judicial Common Space scores.

<sup>&</sup>lt;sup>3</sup>Most of the issues in our dataset have two essential positions, so dissenters who are addressing the intercircuit split must typically take the opposite side's position. Therefore, we choose to code them as if they are taking that position. But there may be several issues at play in a case—not only the issue over which there is a split, but other unrelated issues as well. The primary risk is that the dissenter agreed with the majority on the issue over which there is a split, and disagreed on some other question that is relevant to the disposition but irrelevant to us. We estimate this is less common than a disagreement on the split-issue, so we code dissenters as on the opposite side of the split.

We illustrate our measure with an example. In Schuette v. Coalition to Defend Affirmative Action (134 S.Ct. 1623), the U.S. Supreme Court resolved an intercircuit split about the use of affirmative action in college admissions. In 1997, a Ninth Circuit panel ruled that a constitutional amendment banning the consideration of race in college admissions did not violate the Equal Protection Clause (122 F. 3d 692 (CA9 1997)). Three judges—O'Scannlain and Leavy (both nominated by Ronald Reagan), and Kleinfeld (nominated by George H.W. Bush)—participated in the decision; none dissented. We thus want to classify this doctrinal position as being quite popular with Republican appointees. In 2012, the Sixth Circuit split from the Ninth when it issued an *en banc* decision, that a constitutional amendment banning the consideration of race in college admissions *did* violate the Equal Protection Clause (701 F. 3d 466 (CA6 2012)). All of the Democratic appointees voted with the majority. We thus want to classify this doctrinal position as being quite popular with *Democratic* appointees. Of the eight Republican appointees, only one voted with the majority. The other seven Republican appointees dissented, functionally agreeing with the Ninth Circuit panel. This reinforces our estimate that the Ninth Circuit's position is popular with Republican appointees. This is a very polarized split, as "Unconstitutional" was endorsed by 100% of Democratic appointees who heard this question, and only 9% of Republican appointees. Our polarization score for this split is .91.

Most splits do not exhibit such a high degree of polarization over doctrinal choices. Figure 1 shows the distribution of our polarization measure for all splits. In most splits, a side's popularity is roughly equal with Democratic appointees and Republican appointees.

We measure polarization as a fixed quantity that does not change over time. (In particular, we use polarization at resolution or truncation.) Our reasoning behind this decision is as follows. We are interested in the ideological difference between Doctrine A and Doctrine B. Which judges join/endorse Doctrine A, and which Doctrine B, is informative to us as researchers about the distance between the two. But judges joining one side or another does not change the true distance between the doctrines. Moreover, we believe that the Supreme Court justices *always* have more information than we do as researchers. We believe their knowledge about polarization does not change over time—from the first cert petition they receive, they have all the information about how polarizing a doctrine is. (That may or may not be complete information—but time won't teach them anything further.)



Figure 1: Distribution of polarization measure. Histogram of our measure of polarization. The dotted blue line shows the median (.33) and the solid blue line shows the mean (.38). Polarization is measured once for each intercircuit split. For resolved splits, the measure is polarization at the time *cert* was granted. For unresolved splits, the measure is polarization at the time of the last observed lower court case (before 2015). N=137.

### 4.2 Other variables

We are also interested in other characteristics of the legal question—most importantly, whether one side is of higher quality. We use lopsidedness to measure this. Lopsidedness is the absolute value of the difference in the number of circuits on each side of the split in a given active year.<sup>4</sup>

Note that we measure lopsidedness as a dynamic quantity. Whereas a doctrine's ideological valence is fixed over time, other attributes—like quality and popularity—can change over time. As more circuits agree with and refine the arguments of their sister circuits, a doctrine becomes better (see e.g. Tiberi 1993; Klein 2002; Strayhorn 2020). Moreover, the Supreme Court cares about not disrupting the legal lay-of-the-land. And so, as circuits overwhelmingly join one side of the circuit split, it may become less critical for the Supreme Court to weigh in—it may even become disadvantageous for the Supreme Court to weigh in.

Beim and Rader (2019) show that several variables affect the Supreme Court's decision to resolve an intercircuit split. We control for these pertinent factors as well.

One relevant consideration is whether the intercircuit split is active. Questions that are actively troubling Americans and actively occupying courts are more likely to be addressed by the Supreme Court. To capture this, we account for whether there was a *Precedent-setting case this year*. *Precedent-setting case this year* indicates the years (after the year in which conflict began) in which one or more new circuits joined the intercircuit split. *Precedent-setting case this year* is coded "1" in years a new circuit joined an existing split, and "0" otherwise.<sup>5</sup>

We also measure whether the split is active by noting the conditions under which it

 $<sup>^{4}</sup>$ For the three splits with three sides, we took the maximum absolute value of the difference in the number of circuits on any two sides.

<sup>&</sup>lt;sup>5</sup>*Precedent-setting case this year* is also coded "1" in years a circuit issues a new precedent setting-case, either because it switches sides in the split or because it reiterates its original position in a newer opinion. This happens a total of six times in our data. Note that the first active years are all coded "0."

began. Dormant start indicates whether the first side was active or dormant when the split began. It is a split-level indicator that is coded "1" if three or more years had passed since the last case on the first side at the time the split began. Splits in which the first case on each side of the split occurred in the same year, or less than 3 years apart, receive a "0" for Dormant Start.

Relatedly, we count the number of circuits involved when conflict began in *Num Circuits* Before Start.

Several individual actors can signal to the court that they should resolve an intercircuit split. Among these are the Solicitor General, and individual judges deciding hearing cases in the split. We account for their behavior by noting whether there was a *Dissent this year* and whether there was a *SG Petition this year*.

Finally, we account for the *Issue area* addressed in the intercircuit split. We choose to use a coarse measure of subject matter, and categorize the intercircuit splits in our data as about Criminal Procedure, Economic Activity, or something else (including, for example, questions about Civil Rights or the First Amendment.) In our regression, Other is the omitted category.

## 5 Model and results

We are interested in how both fixed and time-varying characteristics of a split affect the probability that a split is resolved in a given active year, conditional on the fact that it was not resolved in a previous active year. And so we analyzed the data using a discrete time proportional hazard model (Cox 1972; Rodríguez 2007), which is a discrete time generalization of the Cox proportional hazard model. Such a model can be simply estimated using a basic logistic regression with indicators for each time period (Cox 1972).

We are primarily interested in the coefficient on Polarization. Is the Supreme Court more

likely to resolve polarized splits than non-polarized splits?



Figure 2: *Effect of polarization on resolution*. Coefficient plot of a piecewise proportional hazard model predicting whether and when the Supreme Court resolves an intercircuit split. Unit of analysis is the 'active year'—a year in which there was a case in the intercircuit split. N=409. See Table 1 for more details.

Table 1 and Figure 2 present the results of our regression analysis. The answer is yes: the Supreme Court is more likely to review polarized splits than non-polarized splits. Exponentiating the logit coefficients, we see that a change in polarization from the first quartile (about .10) to the third quartile (.375) results in a 10% increase in the odds an intercircuit split is resolved. The Court is up to 58% more likely to resolve a maximally polarized split than a completely unpolarized one (see Gelman and Hill 2007, on the divide-by-four rule).

Lopsidedness also matters; the Supreme Court is more likely to review intercircuit splits when they are more lopsided than when they are more balanced. The odds are just over 102% higher for an intercircuit split to be resolved when lopsidedness is at the third quartile (.6) than at the first (.2). Note that much of what drives this larger effect size is the range of lopsidedness—intercircuit splits tend to vary much more in their lopsidedness than their polarization.

As in Beim and Rader (2019), the control variables matter as well. Accounting for these doctrinal attributes (polarization and quality differential) does not change the results of those underlying variables.

## 6 Polarization of Supreme Court decisions

Our results show that the Supreme Court is more likely to review ideologically polarizing intercircuit splits, than intercircuit splits that are less ideologically polarizing. We believe this is because the Supreme Court is itself an ideological policy-maker, composed of individual justices who seek to issue ideological doctrine. When resolving ideologically polarizing intercircuit splits, a Supreme Court justice can more easily write good ideological doctrine. Another implication of this theory is that those justices should themselves polarize in their decisions on these same questions. In short, ideological polarization below should predict ideological voting on the Supreme Court.

To evaluate this prediction, we present the results of three equivalent regressions that each use a different measure of Supreme Court ideology. First, we created a measure of Supreme Court polarization that is analogous to our measure of polarization among lower court justices. Specifically, we measure Supreme Court polarization as the absolute value of difference between the proportion of Democratic-appointed justices who took side A and the proportion of Democratic-appointed justices who took side B. We exclude unanimous Supreme Court decisions from our analysis, and run a linear regression using split polarization to predict polarization among Supreme Court justices.<sup>6</sup>

We also present two analyses using more familiar measures, derived from Martin-Quinn scores (Martin and Quinn 2002). We use the absolute value of the difference in mean Martin-Quinn scores in the majority and minority coalitions, and again we exclude unanimous decisions from our analysis (since the difference would not exist).

Finally, we create a measure of whether the majority coalition is "connected"—that is, whether Martin-Quinn scores perfectly predict Supreme Court justices' votes, or not. Here we include unanimous decisions in the unconnected category; the result of which is that we are predicting six Supreme Court decisions that were non-unanimous connected coalitions.

Table 2 presents the results of our regressions. The Supreme Court's decisions are more polarized when resolving polarized intercircuit splits than when resolving less polarized intercircuit splits. This general result is true irrespective of the measure we choose for Supreme Court polarization. (In Model I, the coefficient on polarization is statistically significant at p=.056.)

Few intercircuit splits are very polarized; most have fairly low polarization scores. But when intercircuit splits are very polarized, they are very likely to be resolved—and resolved along ideological lines.

## 7 Discussion and conclusion

We present a theory of a Supreme Court that monitors doctrine in the lower courts, looking for opportunities to cheaply pursue its policy ends by addressing legal questions with an ideological valence. We develop a dataset and a measurement strategy that allows us to

<sup>&</sup>lt;sup>6</sup>Note that neither split polarization nor lopsidedness at time of resolution (nor both) predicts whether or not a Supreme Court decision will be unanimous. [Regression results in the appendix?TK].

characterize this ideological valence in a sample of intercircuit splits. Consistent with our prediction, we find that the Supreme Court is more likely to review ideologically polarized intercircuit splits, and, in resolving such splits, the justices themselves polarize over the outcome.

That is, ideological decision making behavior on lower courts sets the table for ideological decision making on the Supreme Court. The implications of this finding for the development of the law are profound. There is reason to believe that ideological decision-making opportunities will only increase, given the changes in the types of judges who are nominated and confirmed in lower courts (Bonica and Sen 2021).

Ideological effects in the resolution of circuit splits are of particular interest because these are the legal issues most likely to be addressed by the court. Scholars typically think this is because the Court wishes to resolve legal ambiguity. We show that (at least some of the time), it's the Court weighing in on ideology wars in the lower courts.

The major theoretical and empirical contribution of this project is a shift from the extant literature's focus on the Court as an observer of cases to a Court as an observer of legal questions, which may span many cases. We argue that doctrine is what the Supreme Court really cares about. Thus, we advance the literature on certiorari by modelling what the Supreme Court actually considers when making its docket—which legal questions to address, when, and why.

Split Begins	$-3.32^{*}$
	(0.64)
Active Year 2	$-6.00^{*}$
Active Veen 2	(1.37)
Active Year 5	-8.50 (1.73)
Active Vear 1	(1.73) $-7.13^{*}$
	(1.55)
Active Year 5	$-6.85^{*}$
	(1.59)
Active Year 6	$-7.07^{*}$
	(1.76)
Active Year 7+	$-5.27^{*}$
	(1.39)
Polarization	$2.30^{*}$
	(1.06)
Lopsidedness This Year	$2.11^{*}$
	(1.04)
Dormant Start	$-1.31^{*}$
	(0.62)
Precedent-Setting Case This Year	3.23*
	(1.18)
Num Circuits Before Start	-0.26
	(0.45)
Dissent This Year	(0.20)
SC Detition This Veen	(0.39)
SG Fethion This Tear	(0.77)
Criminal Procedure	(0.77)
Criminal I focedure	-0.70 (0.45)
Economic Activity	0.49)
	(0.51)
N	409
AIC	228.25
BIC	485.12
$\log L$	-50.12

Standard errors in parentheses

Asterisk indicates significance at p < 0.05.

Num Circuits Before Start is standardized.

Table 1: Piecewise proportional hazard model predicting whether and when the Supreme Court resolves a split. Units are active years in which there was a case in a split.  $\overset{22}{22}$ 

	Polarization	Diff. in mean M-Q score	Connected coalitions
Intercept	$0.38^{*}$	2.27*	-0.04
	(0.07)	(0.21)	(0.08)
Split Polarization	0.41	$1.53^{*}$	$0.66^{*}$
	(0.20)	(0.56)	(0.21)
N	23	23	43
$R^2$	0.16	0.26	0.19

Standard errors in parentheses

Asterisk indicates significance at p < 0.05.

Table 2: Three biv	ariate regressions
--------------------	--------------------

## References

- Beim, Deborah. 2017. "Learning in the Judicial Hierarchy." Journal of Politics 79(2):591–604.
- Beim, Deborah and Kelly Rader. 2019. "Legal Uniformity in American Courts." Journal of Empirical Legal Studies 3(16).
- Beim, Deborah, Tom S Clark and Benjamin E Lauderdale. 2020. "Republican-Majority Appellate Panels Increase Execution Rates for Capital Defendants.".
- Black, Ryan C. and Ryan J. Owens. 2009. "Agenda Setting in the Supreme Court: The Collision of Policy and Jurisprudence." *Journal of Politics* 71(3):1062–1075.
- Bonica, Adam and Maya Sen. 2021. "Estimating Judicial Ideology." Journal of Economic Perspectives 35(1):97–118.
- Bonneau, Chris W., Thomas H. Hammond, Forrest Malztman and Paul J. Wahlbeck. 2007. "Agenda Control, the Median Justice, and the Majority Opinion on the U.S. Supreme Court." American Journal of Political Science 51(4):890–905.
- Caldeira, Greg A., John R. Wright and Christopher J. W. Zorn. 1999. "Sophisticated Voting and Gate-Keeping in the Supreme Court." *Journal of Law Economics & Organization* 15:549–72.
- Caldeira, Gregory A. and John R. Wright. 1988. "Organized Interests and Agenda Setting in the U.S. Supreme Court." *The American Political Science Review* 82(4):1109–1127.
- Cameron, Charles M. 1993. "New Avenues for Modeling Judicial Politics." Paper presented at the Conference on the Political Economy of Public Law, Rochester, N.Y.
- Cameron, Charles M., Jeffrey A. Segal and Donald R. Songer. 2000. "Strategic Auditing in a Political Hierarchy: An Informational Model of the Supreme Court's Certiorari Decisions." *American Political Science Review* 94:101–16.
- Carrubba, Clifford J. and Tom S. Clark. 2012. "Rule Creation in a Political Hierarchy." American Political Science Review 106(3):622–643.
- Cox, D. R. 1972. "Regression Models and Life-Tables." Journal of the Royal Statistical Society 34(2):187–220.
- Epstein, Lee, Andrew D. Martin and Jeffrey A. Segal. 2012. "Must Grants, Clear Denials, and Mid-Level Politics: The First Step Toward a Bounded Discretion Model of Certiorari Decisions." Paper prepared for the 2nd Annual Conference on Institutions and Law-Making, Emory University. Available at https://www.researchgate.net/

publication/274286276\_Must\_Grants\_Clear\_Denials\_and\_Mid-Level\_Politics\_ The\_First\_Step\_Toward\_a\_Bounded\_Discretion\_Model\_of\_Certiorari\_Decisions.

- Epstein, Lee, Andrew D. Martin, Jeffrey A. Segal and Chad Westerland. 2007. "The Judicial Common Space." Journal of Law Economics & Organization 23(2):303–25.
- Epstein, Lee and Jack Knight. 1998. *The Choices Justices Make*. Washington, D.C.: CQ Press.
- Epstein, Lee, William M. Landes and Richard A. Posner. 2013. The Behavior of Federal Judges: A Theoretical and Empirical Study of Rational Choice. Harvard University Press.
- Estreicher, Samuel and John E. Sexton. 1984. "A Managerial Theory of the Supreme Court's Responsibilities: An Empirical Study." New York University Law Review 59(4).
- Gelman, Andrew and Jennifer Hill. 2007. Data Analysis Using Regression and Multilevel-Hierarchical Models. Cambridge: Cambridge University Press.
- George, Tracey E. and Albert H. Yoon. 2003. "The Federal Court System: A Principal-Agent Perspective." St. Louis University Law Journal 47.
- George, Tracey E. and Michael E. Solimine. 2001. "Supreme Court Monitoring of the United States Courts of Appeals En Banc." *Supreme Court Economic Review* 9:171–204.
- Hinkle, Rachael K. 2017. "Panel Effects and Opinion Crafting in the US Courts of Appeals." Journal of Law and Courts 5(2):313–336.
- Kastellec, Jonathan P. 2011. "Hierarchical and Collegial Politics on the U.S. Courts of Appeals." *Journal of Politics* 73(2):345–61.
- Kim, Pauline T. 2008. "Deliberation and Strategy on the United States Courts of Appeals: An Empirical Exploration of Panel Effects." University of Pennsylvania Law Review 157:1319–81.
- Klein, David E. 2002. *Making Law in the United States Courts of Appeals*. New York: Cambridge University Press.
- Klein, David E. and Robert J. Hume. 2003. "Fear of Reversal as an Explanation of Lower Court Compliance." *Law and Society Review* 37:579–606.
- Lindquist, Stefanie A., Susan B. Haire and Donald R. Songer. 2007. "Supreme Court Auditing of the US Courts of Appeals: An Organizational Perspective." Journal of Public Administration Research and Theory 17(4):607–624.
- Maltzman, Forrest, James F. Spriggs and Paul Wahlbeck. 2000. Crafting Law on the Supreme Court: The Collegial Game. Cambridge University Press.

- Martin, Andrew D. and Kevin M. Quinn. 2002. "Dynamic Ideal Point Estimation Via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999." *Political Analysis* 10:134–53.
- McNollgast. 1995. "Politics and the Courts: A Positive Theory of Judicial Doctrine and the Rule of Law." *Southern California Law Review* 68:1631–89.
- Owens, Ryan J. and David A. Simon. 2011. "Explaining the Supreme Court's Shrinking Docket." William and Mary Law Review 53:1219.
- Perry, Jr., H.W. 1991. Deciding to Decide: Agenda Setting in the United States Supreme Court. Cambridge: Harvard University Press.
- Posner, Richard A. 1993. "What Do Judges and Justices Maximize? (The Same Thing Everybody Else Does)." Supreme Court Economic Review 3:1–41.
- Posner, Richard A. 2005. "Foreword: A Political Court." Supreme Court Economic Review 119:32–102.
- Robert L. Boucher, Jr. and Jeffrey A. Segal. 1995. "Supreme Court Justices as Strategic Decision Makers: Aggressive Grants and Defensive Denials on the Vinson Court." *Journal* of Politics 57(3):824–837.
- Rodríguez, German. 2007. "Lecture Notes on Generalized Linear Models.". URL: http://data.princeton.edu/wws509/notes/
- Roehner, Edward T. and Sheila M. Roehner. 1953. "Certiorari: What is a Conflict between Circuits?" The University of Chicago Law Review 20(4):656–665.
- Schubert, Glendon A. 1959. *Quantitative Analysis of Judicial Behavior*. Glencoe, IL: Free Press.
- Segal, Jeffrey A. and Harold J Spaeth. 2002. *The Supreme Court and the Attitudinal Model Revisited*. New York: Cambridge University Press.
- Shapiro, Carolyn. 2006. "The Limits of the Olympian Court: Common Law Judging versus Error Correction in the Supreme Court." *Washington and Lee Law Review* 63:271.
- Sommer, Udi. 2014. Supreme Court Agenda Setting: Strategic Behavior During Case Selection. New York, NY: Palgrave Macmillan.
- Songer, Donald R., Charles M. Cameron and Jeffrey A. Segal. 1995. "An Empirical-Test of the Rational-Actor Theory of Litigation." *Journal of Politics* 57:1119–29.
- Songer, Donald R., Jeffrey A. Segal and Charles M. Cameron. 1994. "The Hierarchy of Justice: Testing a Principal-Agent Model of Supreme Court-Circuit Court Interactions." *American Journal of Political Science* 38:673–96.

Spitzer, Matt and Eric Talley. 2000. "Judicial Auditing." Journal of Legal Studies 29:649-83.

- Strayhorn, Joshua A. 2020. "Ideological Competition and Conflict in the Judicial Hierarchy." American Journal of Political Science 64(2):371–384.
- Summers, John S. and Michael J. Newman. 2011. "Towards a Better Measure and Understanding of U.S. Supreme Court Review of Courts of Appeals Decisions." *The United States Law Week* 80(393).
- Tanenhaus, Joseph, Marvin Schick, Matthew Muraskin and Daniel Rosen. 1963. The Supreme Court's Certiorari Decisions: Cue Theory. In *Judicial Decision Making*, ed. Glendon Schubert. Glencoe, IL: Free Press pp. 111–32.
- Tiberi, Todd J. 1993. "Supreme Court Denials of Certiorari in Conflict Cases: Percolation or Procrastination?" University of Pittsburgh Law Revew 54:861–892.
- Ulmer, S. Sidney. 1984. "The Supreme Court's Certiorari Decisions: Conflict as a Predictive Variable." *American Political Science Review* 78(4):901–911.
- Westerland, Chad, Jeffrey Segal, Lee Epstein, Charles Cameron and Scott Comparato. 2010. "Strategic Defiance and Compliance in the U.S. Courts of Appeals." American Journal of Political Science 54(4).