Legal Uniformity in American Courts

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Abstract

Intercircuit splits occur when two or more circuits on the U.S. Courts of Appeals issue different legal rules about the same legal question. When this happens, federal law is applied differently in different parts of the country. Intercircuit splits are an indicator of legal non-uniformity, an impediment to lawyering and judging, and have real, practical consequences for American law. They are also one of the best known predictors of certiorari. Despite intercircuit splits' importance, there is almost no quantitative research about them. We created an original dataset—the first of its kind—that includes intercircuit splits that arose between 2005 and 2013. For each intercircuit split, we identified every circuit and every case involved. These data reveal that one-third of intercircuit splits are eventually resolved. Two-thirds are not. We show that those that will be resolved are resolved within three years after they arise. Splits are more likely to be resolved when they exhibit contemporaneous and growing disagreement.

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Law is made in the U.S. Courts of Appeals. It is well-established that the Supreme Court is a national policy-maker (Dahl 1957). But it is less often acknowledged that *each* of the circuit courts of the U.S. Courts of Appeals is a policy-maker. There is a norm of *stare decisis* within each circuit, but there is no such expectation across circuits. If similar cases arise in multiple places and different circuits announce different rules, as they often do, then *different policies decides who gets what at whose expense.* This is known as an intercircuit split. As a result of an intercircuit split, federal statutes can be and are interpreted differently in different parts of the country. Constitutional rights and liberties are allocated differently in different jurisdictions. Federal agencies behave differently in different parts of the country (Canes-Wrone 2003).

Judges, Justices, congressmen, lawyers, and other actors widely believe the intercircuit splits are bad. During Justice Alito's confirmation hearings before the Senate Judiciary Committee, Senator Mike DeWine complained that intercircuit splits harm businesses, make judging difficult for district courts, and undermine uniformity in federal law. Justice White famously wrote a dissent from denial of certiorari every time the Supreme Court failed to resolve a conflict (Tobias 2003). During the 1970s and again in the 1990s, Congress established committees to study the prevalence and tolerability of intercircuit splits. Since splits bother so many political actors, it is not surprising that the existence of a circuit split is one of the best predictors of Supreme Court review.

But it would be an inferential mistake to claim that intercircuit splits are *likely* to be resolved, or *more likely to be resolved than not.* No existing research estimates how likely splits are to be resolved. And although there is plentiful intuition about which splits are most likely to be resolved—those that are active, growing, important, and well-percolated—virtually no analysis tests these intuitions.

In this paper, we use an original and unique dataset of intercircuit splits to show how

often and how quickly intercircuit splits are resolved. Our data includes both circuit splits that were resolved by the Supreme Court and circuit splits that may never be resolved; for each split, it includes all appellate cases involved in that split.

We show that most intercircuit splits are never resolved by the Supreme Court. Only one-third are resolved. Those splits that are resolved are resolved soon after they begin—usually within the first three years of the split's existence. We argue that the most harmful and important splits are resolved: we confirm previously untested intuitions that active splits are more likely to be resolved, as are those splits in which there are dissents, and in which the solicitor general petitions for certiorari. But those splits that are not resolved are not necessarily benign. "Well-percolated" splits—those that arise only after many circuits have weighed in on an issue, as well as those that go on for many years—are no more likely to be resolved. Unresolved intercircuit splits continue to generate decisions. The likelihood of resolution does not increase as more cases arise in a split. There are plenty of contemporaneous, growing splits that are not resolved, and likely never will be.

1 Intercircuit Splits on the Courts of Appeals

The Courts of Appeals decide over 50,000 cases every year (Administrative Office of the United States Courts 2015). When deciding cases within its own jurisdiction, a circuit court is not obligated to follow any other circuit's precedent. When a circuit declines to follow other circuits' decisions, it creates a circuit split—disagreement about federal law that means similarly-situated litigants are treated differently in different parts of the country.

1.1 The Importance of Intercircuit Splits

Intercircuit splits are important. They occur disproportionately in important areas of the law, they are responsible for the lion's share of legal development in federal courts, and while (and when) they are not resolved, they harm the normative principle of blind justice.

For political scientists, they are also known as the best predictor of certiorari: cases involved in intercircuit splits are more likely to be reviewed by the Supreme Court than cases not involved in intercircuit splits.

Intercircuit splits occur disproportionately in important areas of the law. In general, judges take seriously the creation of intercircuit splits. Though they are willing to split from other circuits' decisions—after all, circuit splits are a common phenomenon—quantitative and qualitative evidence suggests that most judges seriously consider sister circuits' positions, and many give deference to sister circuits' decisions (Tiberi 1993). Klein (2002, p. 88-90) argues that judges on the Courts of Appeals are actively attuned to the decisions in other circuits that precede them and only diverge from prior decisions when they believe there may be something wrong with the prior decisions' reasoning. Wasby (2002) argues, likewise, that circuit judges consider other circuits' decisions, are somewhat wary of creating conflicts, and tend to join the majority of circuits when a conflict already exists. Intercircuit splits also occur only when Supreme Court precedent is sufficiently vague to tolerate ambiguity. As a result, intercircuit splits involve important legal questions that need clarification.

Intercircuit splits are responsible for most legal development at the Supreme Court (Beim 2017). The Supreme Court is more likely to grant *cert* to petitions in cases involved in conflicts; as a result, much doctrine comes from the resolution of intercircuit splits. Part of the reason the Supreme Court resolves intercircuit splits is a preference for legal uniformity and a commitment to unifying doctrine across the country.

Uniformity in the application of U.S. federal law by federal courts is a value as old as Federalist 80.[1] In addition to harming the principle of equal treatment under the law,

[1] "If there are such things as political axioms, the propriety of the judicial power of a government being coextensive with its legislative, may be ranked among the number. The mere necessity of uniformity in the interpretation of the national laws, decides the question. Thirteen independent courts of final jurisdiction over the same causes, arising upon the same laws, is a hydra in government, from which nothing but contradiction and confusion can proceed."

circuit splits have other potentially undesirable consequences. On civil issues, they can make it difficult for businesses to operate in multiple jurisdictions, or to make contracts that are enforceable nationwide; on criminal issues, circuit splits can make it hard for the government to treat all violators equally. They also invite circuit shopping and additional litigation, and possibly cast doubt on the legitimacy of the legal system itself (e.g., Hellman 1985; Tiberi 1993).

These potential negative consequences have long worried members of Congress. The Congressional Commission on Revision of the Federal Court Appellate System—informally known as the Hruska Commission—proposed the establishment of a National Court of Appeals, to sit below the Supreme Court and resolve intercircuit splits (Hruska 1975). Decades later, as noted above, Senator DeWine questioned then-judge Alito about intercircuit splits during his confirmation hearing.

Congress's concern about intercircuit splits stems from the recognition that intercircuit splits *are* American law. Since a vast proportion of appellate rules are never reviewed by the Supreme Court, the Courts of Appeals are final policymakers on many questions, and when splits persist, American law is nonuniform.

2 Resolution of Intercircuit Splits

Resolution by the Supreme Court is the most formal way to bring uniformity to a body of law when circuits split. In the Supreme Court's Rule 10, the presence of a circuit split is one of the only factors explicitly mentioned as a consideration in granting writs of certiorari.[2] The Supreme Court is far more likely to grant cert petitions that implicate a conflict in the

[2]The first listed consideration is, "a United States court of appeals has entered a decision in conflict with the decision of another United States court of appeals on the same important matter; has decided an important federal question in a way that conflicts with a decision by a state court of last resort; or has so far departed from the accepted and usual course of judicial proceedings, or sanctioned such a departure by a lower court, as to call for an exercise of this Court's supervisory power."

lower courts than those that do not (Tanenhaus et al. 1963; Ulmer 1984; Caldeira and Wright 1988; Perry 1991; Caldeira, Wright and Zorn 1999; Black and Owens 2009; Epstein, Martin and Segal 2012). In a review of Burger Court cases, Hellman (1985) found that intercircuit conflict was the modal reason for granting cert and that, in some areas of statutory law, resolving conflict was nearly the only reason the Court heard a case. In recent years, conflict cases have composed about one-third of the Court's docket (Lindquist and Klein 2006). Intercircuit splits so improve a cert petition's chances that lawyers are thought to fabricate splits in their petitions (see e.g. Estreicher and Sexton 1984; Black and Owens 2009).

Not all cert petitions alleging intercircuit splits are granted.[3] This is in part a result of said fabrication—those splits that are resolved might be those that are real (Estreicher and Sexton 1984). Some conflicts implicate more important areas of the law, potentially affect more litigants, are more likely to persist, involve more contemporaneous disagreement (are more "live"), or involve cases that are harder to distinguish (are more "square") than others. That is, "there are conflicts, and there are conflicts" (Perry 1991, p. 249). By comparing granted to denied cert petitions, scholars have found that the Court is more likely to review cases involved in "true" splits (Estreicher and Sexton 1984; Black and Owens 2009); "deep" conflicts (in which many circuits have participated) as opposed to "shallow" ones (in which there are few circuits involved) (Gressman et al. 2007); and ideologically divergent splits (Grant, Hendrickson and Lynch 2012). Of course, what constitutes a conflict worthy of review is subject to interpretation. Even the justices themselves disagree over which conflicts, if any, are tolerable (Perry 1991).

More gravely, by treating each cert petition independently (instead of gathering all those about the same conflict), comparing granted to denied petitions makes researchers unable to determine which conflicts are *never* resolved and which simply *take longer to be resolved.*

[3] At least since 1950. See Tiberi (1993).

Just one paper (Clark and Kastellec 2013) considers how long conflicts percolate—finding that splits that arise after extensive percolation are more likely to be speedily resolved—but it studies only conflicts that are eventually resolved.

Thus we have very little information that allows us to understand whether a denial of review is simply procrastination, or means a split will never be resolved. The only such study is by Arthur Hellman, performed at the behest of the 1990 Federal Courts Study Committee. Hellman (1995) investigated the number, "tolerability," and "persistence" of intercircuit conflicts implicated by cases in which litigants petitioned for cert but that the Supreme Court nonetheless declined to hear. He found that many denied petitions concern important conflicts, and that those conflicts are not resolved within the next 7-8 years.[4]

All existing knowledge about whether splits are ever resolved, and if so, which and after how long, comes from studies of cert petitions or resolved splits. By collecting a sample of existing splits, some of which are resolved and some of which are unresolved, we present the first data that allows us to understand the true proportion of splits that go unresolved and how long conflicts last before they are resolved. Our data is also the first to allow a holistic view of conflict, incorporating information on all related cases to predict whether individual cases are heard. Conflict is important for American governance and is a widely used predictor in political science scholarship, but we know very little about the phenomenon of conflict in the circuit courts. Here, we remedy that.

[4]In the 1989 term, Hellman estimated that the Supreme Court denied cert to petitions implicating between 168 and 274 different intercircuit conflicts. A large majority of the denied petitions involved conflicts that were serious enough to alter the behavior of relevant actors and/or lead to different case outcomes across similar cases. About one-third of the denied petitions involved conflicts that had the potential to cause harm to multicircuit actors, either through the existence of inconsistent obligations or by necessitating compliance with the most restrictive rule. Between one-quarter and one-third involved disagreement over rules that were clear cut enough that the choice of rule would most certainly change the outcome of the case, and an additional thirty to fifty percent involved differences over rules that would favor one side or the other in a class of disputes. In a similar set of denied petitions from the 1984 and 1985 terms, Hellman found that only about one-third were resolved by the Supreme Court by the 1992 term.

3 Our data

We collected 141 intercircuit splits that arose between 2005 and 2013. Some of these have been resolved by the Supreme Court; others have not and may never be resolved. We identified these conflicts by relying on the *Seton Hall Circuit Review*'s quarterly summaries of circuit splits, which finds splits when a Court of Appeals opinion explicitly mentions a split or disagreement with another circuit.[5] Our sample of splits includes some that are resolved and some that are unresolved (as of 2016), involving civil, criminal, and bankruptcy law.[6] Since judges might choose not to acknowledge intercircuit splits when they exist, this is a small, non-random sample of intercircuit splits (though it approximates an as-if random sample of acknowledged splits.) More importantly, it includes only intercircuit splits that are certainly real splits.

After reading all the conflicts the *Seton Hall Circuit Review* identified, we conducted extensive legal research to identify every circuit and every case involved in the split. First, we used Westlaw to find all precedential opinions in the conflict—that is, to identify all circuits involved in the conflict and when they joined, even if not all circuits acknowledged the existence of a split.[7] In each conflict, some circuits are on one side of the conflict and other circuits are opposed.[8] We recorded how many circuits are on each side in each year, how many circuits are involved in the conflict as a whole in each year, and when each circuit

[5] Our data collection procedures are described in further detail in the appendix.

[6] We exclude conflicts over immigration law because of the prohibitively large number of citing cases in each conflict.

[7] In other words, we capture a split so long as one judge from one circuit mentioned it in his opinion—even if only one judge mentioned it and even if that judge mentioned it in a dissenting opinion. In doing so, we discovered that judges' citations to other circuits are not comprehensive in their listing of circuits involved in a conflict, and are very unreliable in describing the order in which circuits joined the conflict. Other studies have relied only on judges' descriptions; see Lindquist, Haire and Songer (2007), Baker and Malani (2015), and Shauku (2015), but see Bruhl (2014).

[8] While each circuit could take a different legal position; in almost all instances a conflict has only two sides. Three conflicts have three sides.

joined the conflict.

We then identified the universe of opportunities the Supreme Court had to resolve the conflict. That is, for each precedent-setting case, we identified all subsequent decisions in that circuit that cited the precedent-setting case on the point of law on which there was a conflict. In almost every conflict, there is one precedent-setting case per circuit. In only two conflicts did we find a circuit switching sides, and in these instances we counted the case in which they switched sides as an additional precedent-setting case.[9]

Finally, we collected information on each case, including the judges on the panel, the year of the decision, the composition of the circuit, whether the decision was published, whether there was a concurrence or a dissent, which party appealed from the district court's decision, and whether there was a petition for cert. If so, we noted which party petitioned for cert, whether cert was granted, and, if cert was granted, whether the Supreme Court resolved the conflict in its decision. We also collected information at the conflict level, including issue area and whether the Supreme Court resolved the conflict. For those cases in which the Supreme Court did resolve the conflict, we took case-level information on the Supreme Court's decision from the Spaeth Supreme Court Database (Spaeth 2011).

In the end, we have a dataset of 141 conflicts involving 703 precedent-setting cases and 2,636 citing cases.

4 Few Conflicts Are Resolved

Of the 141 conflicts in our data, 42 were resolved. 70% remain unresolved. All 141 conflicts are real, demonstrable conflicts that at least one appellate judge acknowledged as a real conflict in a written opinion. As a result, it may be surprising that so many are not resolved by the Supreme Court. While many scholars have drawn their own impressionistic conclu-

[9] In neither instance did the switches resolve the conflict. Circuits remained on both sides.

sions about how many conflicts get resolved, we are the first to quantify this nonuniformity in American law.

In addition to quantifying how many intercircuit splits are resolved, our data also reveals when splits are resolved. In particular, those conflicts that will be resolved are resolved soon after their creation. Figure 1a shows what proportion of the 42 *resolved* conflicts were resolved at a given age or younger. The steep curve indicates that conflicts that are resolved are typically resolved very soon after they are created. The mean number of years from the start of a conflict to its resolution is 2.8 years. The median age at resolution is 2.[10] Only 35% of conflicts that will eventually be resolved remain unresolved at age 2.

Figure 1b shows a Kaplan-Meier curve of the proportion of conflicts that are unresolved on the y-axis by the number of years since they began on the x-axis. The dashed lines show 95% confidence intervals around these proportions. The proportion of conflicts unresolved at 2 years old is .80. As the number of years increases, most conflicts remain unresolved. Even among the oldest conflicts, most conflicts are still unresolved: the proportion of conflicts still unresolved at 10 years old is .66. Conflicts that *are* resolved are resolved young. But many young conflicts are unresolved (and remain that way as long as we observe). We conclude that many conflicts that are unresolved when they are young will never be formally resolved by the Supreme Court.

5 Litigation continues in unresolved conflicts

Some conflicts that are not resolved by the Supreme Court stop on their own. Others persist. They do not dissipate, nor are they resolved by circuits overriding themselves. Instead, in many unresolved conflicts, litigation continues. Over half (56%) of all unresolved conflicts still had ongoing litigation in 2013 or later. The rate of litigation also does not slow

[10]The curve reaches 0 because all conflicts shown here were ultimately resolved, so by age 10 there are 0 unresolved conflicts in question.

substantially as time passes.

Figure 2 shows the rate of litigation over time in all conflicts, both resolved and unresolved. Each point indicates the number of cases that occurred in a given year of the conflict's existence; the trend line is a loess. (The vertical axis is cropped—a small handful of conflicts exhibited an extremely large number of cases in the year they began.) The litigation rate peaks around the time conflict begins, but even some conflicts that are 10 years old still see litigation ongoing. In the five years before conflict begins, the litigation rate is .48 cases per year. An average of 10.5 cases are heard in the year conflict begins. In the five years after conflict begins, the rate is 2.28. In the five years after that—when conflicts are between 6 and 10 years old—the litigation rate is still .70.

Figure 3 shows the continuation of litigation in unresolved splits. Although our data is right-truncated, it is clear that litigation is ongoing in unresolved splits. 43% of unresolved splits yielded a decision in the last two years we observed. Every line in the figure represents an unresolved split in our data. The splits are grouped into cohorts by the year in which conflict began. The year in which conflict began is marked by the first dark shape—the gray area is decisions issued on the issue before a split arose. Within cohort, the conflicts are sorted by the last year in which we observed a decision. Xs and Os represent each side of the conflict. Overlaid shapes indicate years in which there were cases on both sides of the split.

The figure reveals three empirical realities of the lifecycle of unresolved intercircuit splits. First, some conflicts are clearly still experiencing a lot of litigation—at the top of each cohort, notice conflicts with plentiful litigation. Second, many but not most of these conflicts have plentiful decisions *on both sides* of the split. In 1/3 of unresolved splits, decisions are still being issued on both sides. These conflicts are live and active. But most unresolved conflicts are no longer active. Of the 70 unresolved conflicts born before 2010, only 22 exhibited

decisions on both sides between 2010 and 2016. Third, even looking at those conflicts toward the bottom of each cohort—those that appear inactive—we cannot be sure that appellate litigation has stopped. This is because the overall rate of litigation is sometimes low. Looking to the left of the figure to see the rate of litigation before conflict began, the figure shows that some issues have an overall lower rate of litigation. So even for those issues that appear to have died out we cannot definitively say that they have.

6 What does predict resolution?

We have shown that some conflicts are resolved by the Supreme Court, but most are not and never will be. We argue that three factors explain which splits fall into the first category and which fall into the latter: contemporaneous and growing disagreement, sufficient percolation, and issue complexity and importance.

Contemporaneous and growing disagreement. All of the conflicts we identify are incontrovertibly conflicts. They were acknowledged as such by appellate judges in written opinions. However, we argue that while the Supreme Court cares about resolving conflicts per se, they care most about resolving conflicts in which similarly-situated litigants will be treated differently under the same laws in different jurisdictions at the same time. From this perspective, not all conflicts are created equal. Some begin with a flurry of decisions on both sides. There is simultaneous and conflicting development of doctrine across two or more circuits. Other conflicts begin when one side takes the opposing position years after a decision last occurred on the initial side. At the time the conflict begins, it is not always clear that the initial precedent is still active. We expect that the latter type of conflict, a conflict with a "dormant start," is less likely to be resolved. Previously, scholars have argued that conflicts that are inactive may not warrant resolution (see e.g. Perry 1991). We find that many conflicts are inactive in at least some senses. Live conflicts often do not exhibit

contemporaneous disagreement. In 63% of conflicts, decisions on one side stop before conflict begins, meaning all cases on one side of a conflict occur before any decisions are issued on the other side of the conflict. The median number of years between the last case on the first side of the split and conflict beginning is 1. The mean is 2.9; conflicts with a length longer than 3 years between the first and second sides of the split are in the third quartile of dormancy.

Further, not all conflicts continue to spread to different jurisdictions after they begin. Some remain contained within the circuits that were a part of the conflict when it began, while some spread to additional circuits in subsequent years. We expect that conflicts are more likely to be resolved every time an additional circuit joins after conflict begins.

Sufficient percolation. A number of scholars have recognized the tradeoff between percolation—that is, the desire to allow law to fully—versus procrastination (Tiberi 1993, e.g.). One such paper derives the implications for when a conflict is likely to be resolved: Clark and Kastellec (2013) argue that if the Supreme Court is balancing the need for percolation against the cost of ambiguity in the law, then the Court is more likely to immediately terminate conflicts that arise after many circuits have already weighed in. Because the issue has percolated through many circuits, those conflicts are easier to resolve than those in which few circuits have weighed in prior to conflict start. Therefore, we expect that issues with many circuits involved before conflict begins are more likely to be resolved and resolved quickly.

Issue complexity and importance. There is a large literature on certiorari that seeks to explain which individual cases compose the Supreme Court's docket. Based on two consistent findings from that literature, we expect that conflicts are more likely to be resolved in years in which there are dissents in the cases involved and in years in which the Solicitor General files a petition in a case involved.

Dissent indicates that there is disagreement over how to decide a case. Scholars have shown that the presence of a dissent on an appellate panel increases the chances that the Supreme Court will grant cert to that case (Tanenhaus et al. 1963; Caldeira and Wright 1988). The reasons for this are many (see Beim and Kastellec 2014; Daughety and Reinganum 2006). Dissent may be an indicator that a case is difficult or implicates a legally complex issue. Dissent may ease the burden on the Justices of understanding the issue at hand since arguments on both sides have been articulated. Of course, the existence of conflict itself also indicates that disagreement exists, an issue is difficult, and that judges have articulated two sides of an issue. We argue that dissent is nonetheless a useful predictor of whether and when the Supreme Court will resolve a particular conflict. In any given year, the cases involved in a conflict may produce zero or many dissents. While conflicts indicate disagreement or lack of clarity across circuits, dissents indicate disagreement or lack of clarity within circuits. Dissents are an indication an intercircuit split is particularly contentious or complicated. Thus, we argue that the presence of a dissent increases the likelihood that a conflict will be resolved in that year.

Similarly, scholars have shown that when the Solicitor General files a cert petition in a case, the Supreme Court is more likely to grant it (Bailey, Kamoie and Malztman 2005; Caldeira, Wright and Zorn 1999). Either the Solicitor General files petitions in already important cases, or the SG's involvement increases a case's perceived importance. In either instance, we expect that the Supreme Court is likely to regard those conflicts in which the Solicitor General participates as more important than those in which the Solicitor General does not participate. Thus, a conflict should be more likely to be resolved in the years in which the SG is involved.

6.1 Variables

We use a data structure to focus on how long the Supreme Court allows a conflict to exist before resolving it (if at all.) Specifically, we use conflict case-year level data, capturing every year in which the Supreme Court *could* have resolved the split. That is, for every conflict, we have one observation for every year in which there was at least one case in that conflict. The first year is the year in which conflict began. For resolved conflicts, the last year is the year in which the case that the Supreme Court used to resolve the conflict was decided in the lower court. For unresolved conflicts, the last year is the last year in which we observed a case (prior to the truncation of our study in 2016).

There are 415 case-years in 141 conflicts, counting only the year in which conflict begins and all subsequent years. 20 of these 141 conflicts are resolved by the Supreme Court in the year they arise. 21 conflicts do not exhibit more cases after their first year. 100 conflicts exhibit cases in future years. 14 conflicts are resolved by the Supreme Court during their second active year. 28 do not exhibit more cases after their second year. Of the 58 that remain, only 8 are resolved later on.

For each conflict-year in our data, we coded the following variables. Conflicts with a *Dormant start* are those in which three or more years had passed since the last case on the other side at the time conflict began. Conflicts 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. Precedent-setting case this year* is coded 1 in years a circuit joined the split.[11] To estimate whether a conflict has percolated enough, we count the number of circuits involved when conflict began. *Num Circuits Before Start* is the number of circuits that were involved before conflict began. (Conflicts with 0 *Circuits Before Start* have *Dormant Start*=0.) To estimate

[11]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.

the impact of external indices of cert-worthiness, we code whether there was a dissent or a petition from the Solicitor General in a given case-year. *Dissent this year* is coded 1 if there was a dissent in any case decided in that conflict in that year. *SG Petition This Year* is similarly coded 1 if the Solicitor General filed a petition for *cert* in any case in the conflict in that year.[12] We also control for the subject matter of the conflict: *Economic Activity*, *Criminal Procedure*, or other issues.

6.2 Hazard model

We are interested in how the characteristics of a conflict, both fixed and evolving, affect the probability that a conflict is resolved in a given case-year. We are also interested in how the probability of resolution changes from case-year to case-year. Thus, we run a discrete time proportional hazards model (Cox 1972; Rodríguez 2007) on our conflict case-year data. This model allows us to incorporate fixed and time-varying conflict characteristics and to estimate the probability that a given conflict is resolved in a given case-year, conditional on the fact that it has not yet been resolved and on its characteristics in that case-year. The model also reflects that our measure of time is discrete.[13]

In the discrete time proportional hazards model, the hazard $\lambda(t_j)$ is the probability of resolution in a given case-year j—conditional on not having been resolved in any previous case-years.

$$\lambda(t_j) = \lambda_j = Pr\{T = t_j | T > t_{j-1}\} = Pr(\text{resolved in year } t_j | \text{not yet resolved by year } t_{j-1})$$

For a given conflict i, the Cox proportional hazard function can be estimated using the

[12] We include instances in which the Solicitor General petitioned for certiorari (not a response to a CVSG.) The solicitor general filed a cert-stage amicus brief in only one observation in our data (634 F.3d 1131). That petition was granted, but the Supreme Court did not resolve the conflict (566 U.S. 658).

[13] This model is a discrete time generalization of the more familiar Cox proportional hazards model, which models time as a continuous function.

conditional odds of survival:

$$\frac{\lambda(t_j|\mathbf{x}_{ij})}{1-\lambda(t_j|\mathbf{x}_{ij})} = \frac{\lambda_0(t_j)}{1-\lambda_0(t_j)} exp(\mathbf{x}_{ij}\beta)$$

Taking the natural log yields the proportional hazard function, where $\lambda_0(t_j)$ is the baseline hazard for case-year t_j and $\mathbf{x}_{ij}$ is a matrix of characteristics of conflict i in case-year t_j.

$$logit(\lambda(t_j|\mathbf{x}_{ij})) = logit(\lambda_0(t_j)) + \mathbf{x}_{ij}\beta$$

Cox (1972) shows that this is equivalent to estimating a straightforward logistic regression with an indicator variable for each case-year in a conflict.[14] The coefficient on a case-year describes the conditional probability a conflict is resolved in that case-year—in other words, it provides the baseline hazard of resolution in each case-year.

The results from this model are shown in Figures 4 and 5.[15] Figure 4 plots the estimated coefficients on each case-year with 95% confidence intervals. These results are consistent with the raw data in Figure 1b. If conflicts are resolved, they are likely to be resolved very soon after they begin, and the chance of resolution is small and levels off quickly. All of the coefficients in Figure 4 are negative, meaning that splits are less likely to be resolved than not. Splits have the best chance to be resolved in the year in which conflict begins. The coefficient on *Conflict Begins* is smaller and statistically distinguishable from *Active Year 2-6* at at least the 90% confidence level.[16] In every subsequent year, the chances of resolution are lower than they are in this initial year, and the coefficients are not statistically different from one another.

The mere passage of time does not predict resolution. Old conflicts are not more *or less* likely to be resolved. Conflicts that are "stale" may not be resolved for many reasons. Conflicts that survive may be unimportant; or, if a split has existed for many years, intercircuit

[14] We pool case-years 7 and above.
[15] Table 2 in the appendix shows the results in table format.
[16] For *Active Year 7+*, $p = .33$.

heterogeneity may be more tolerable than an upheaval of long-known local law.[17][18]

Figure 5 shows the estimated coefficients and 95% confidence intervals for the substantive variables. Our expectations for how conflict characteristics predict conflict resolution were largely confirmed. The one exception is *Num Circuits Before Start*, our measure of pre-conflict percolation. We find that the amount of percolation before a conflict begins does not predict whether that conflict will be resolved.

As we expected, conflicts with a *Dormant Start* (those that began three or more years after the last case that took the opposing side) are less likely to be resolved. Only 10% of conflicts with a *Dormant Start* were resolved, while 40% of conflicts without a dormant start were resolved. Conflicts with any *SG Petition This Year*, *Dissent This Year*, and/or *Precedent-Setting Case This Year* are more likely to be resolved and to be resolved in that year than are conflicts without those characteristics.

We note here that we are the first to collect data that estimates the effect of a dissent, or the effect of participation by the Solicitor General, on *related* cases. In our data, 6 conflicts were resolved in the year the Solicitor General filed a petition for cert. Four of these were resolved using the case where the Solicitor General petitioned. Two were not—that is, two petitions were granted when the solicitor general had petition for cert in a *different* case in that same conflict in that same year. Similarly, dissent this year has a positive effect in our regression. 20 conflicts were resolved in a year there was a dissent in the conflict. 10 were resolved by granting cert to the case in which there was a dissent. 10 were resolved by granting cert to a *different* case, a case that was decided unanimously.

Finally, conflicts over issues involving *Economic Activity* are more likely to be resolved

[17]Supreme Court practitioners believe conflicts that are too old may never be reviewed because "a decision rendered decades ago that is out of harmony with modern cases elsewhere is always subject to reconsideration without Supreme Court intervention" (Shapiro 1998).

[18]We show in the appendix that resolution rate does not vary systematically by the calendar year in which conflict began.

than those involving *Criminal Procedure* and other issues (the omitted category).

7 Discussion and conclusion

Only one-third of intercircuit splits are resolved. As we have discussed, this statistic has worried many scholars and practitioners (e.g., Hellman 1985; Tiberi 1993). This concern is still present today. The Institute for Justice's Center for Judicial Engagement held a 2016 conference on the practical consequences of the Supreme Court leaving too many issues unaddressed (including intercircuit splits). However, ours is the first quantitative analysis of how likely a given legal *issue* is to be resolved by the Supreme Court. Scholars often note that the likelihood of *cert* is extremely low, and that Courts of Appeals decisions have almost no chance of being reviewed by the Supreme Court. Compared to the rate at which *cert* petitions are granted, it is remarkably *high* that 1/3 of all splits are resolved by the Supreme Court: part of the reason so few cases are granted cert is because many cert petitions are about the same question.

We can predict which splits will be resolved based on variables consistent with existing theories and intuitions about intercircuit splits. But litigation is ongoing even in many unresolved conflicts. We do not mean to suggest that all splits, or all cert-worthy splits, are resolved. In many intercircuit splits in our data, more than 10 *cert* petitions alleging real, live intercircuit conflict have been denied.

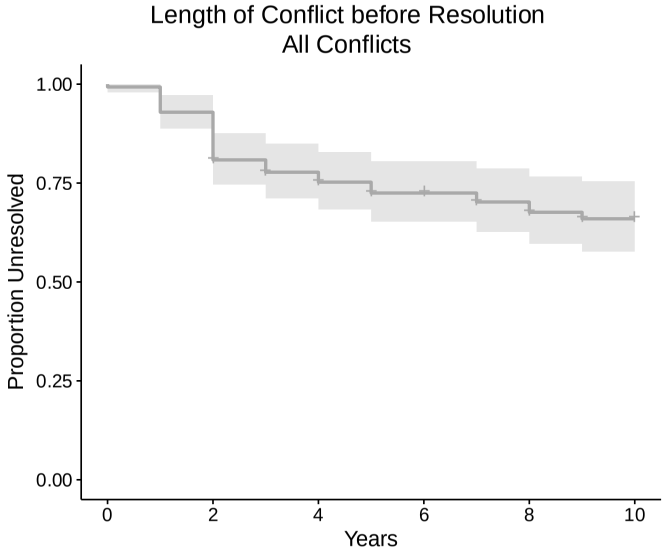
We find that conflicts that will be resolved are resolved soon after they arise—once conflicts exist, they either do not percolate for many years or percolate but are never resolved. There is a debate in the literature over whether conflict is good or bad for the development of law. When the Supreme Court allows a conflict to persist—to "percolate" in the lower courts—circuit splits may also have beneficial effects. Most notably, when many circuits consider similar issues and develop law, the Supreme Court faces the opportunity to select

among many options for the best available doctrine (e.g., Beim 2017; Estreicher and Sexton 1984). Do the justices learn something by allowing multiple circuits to weigh in before they grant *cert* to resolve a conflict (Stevens 1982; Wallace 1983; Estreicher and Sexton 1984; Clark and Kastellec 2013; Beim 2017)? Or do they cause harm to litigants by not bringing unity to application of federal laws (Rehnquist 1986; Baker and McFarland 1987; Meador 1989)? Either way, this only works if conflicts are eventually resolved, and we see that many conflicts that are actively allowed to percolate are never resolved.

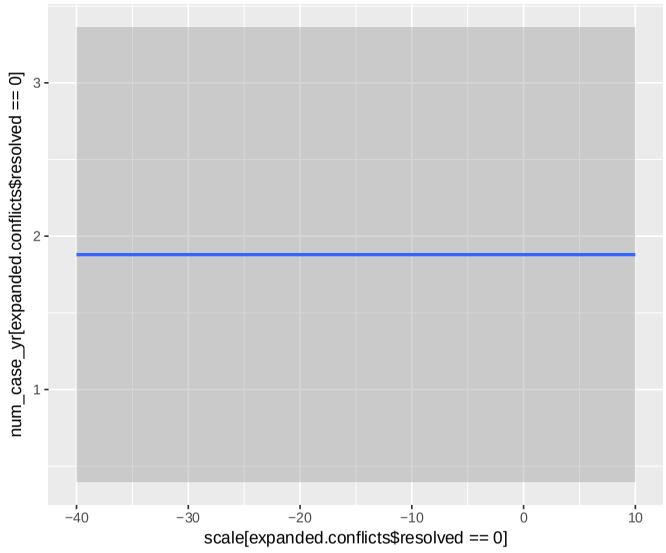
Our results speak to a large literature on certiorari. But in this paper we move from the case-level that is typically studied to the question-level by asking which issues are addressed instead of which cases reviewed. Our focus here has been on which intercircuit splits are resolved, since we analyze a dataset of cases involved in conflicts. We can also interpret this more generally, as all cases involved in a very specific legal question—-every possible opportunity for the Supreme Court to address some particular issue. In this sense, we have shown that question-level factors matter in predicting cert—a distinction that is near-impossible to disentangle when studying cases independently. In our data, we know that granting cert to one case prevents granting cert to others—but this is always true. Cert decisions are contextual. The Supreme Court plays an Olympian role, observing the outcomes of many cases before deciding to grant cert to one (Beim 2017). We are the first to acknowledge this in a quantitative empirical setting, but we hope not the last.

Much of the pre-existing literature on certiorari has focused on the ideology of the appellate judges and the decisions they make. In this paper, we set aside those concerns about ideology to establish foundational stylized facts about which splits are reviewed. Moving forward, our data can help us understand the role of ideology in the Supreme Court's choice of vehicle. Our data can disentangle which cases the Court wishes to review from which issues it wishes to review. We can understand whether ideologically polarizing issues are more

likely to be resolved, and whether the ideology of a panel really is a predictor of Supreme Court review, holding constant the precise legal decision. Before we can answer such a question, however, we must understand the outlines of the lifecycle of intercircuit splits, a task we have accomplished here.



(a) Proportion of conflicts resolved, by age of conflict in years. This graph includes all conflicts.



(b) Proportion of conflicts resolved, by age of conflict in years. This graph includes only conflicts that were eventually resolved.

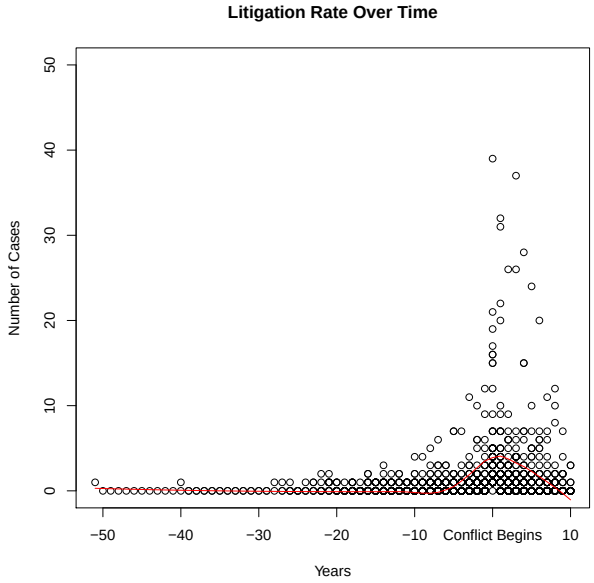


Figure 2: Litigation peaks when conflict begins. It decreases as time goes on, but does not precipitously decline.

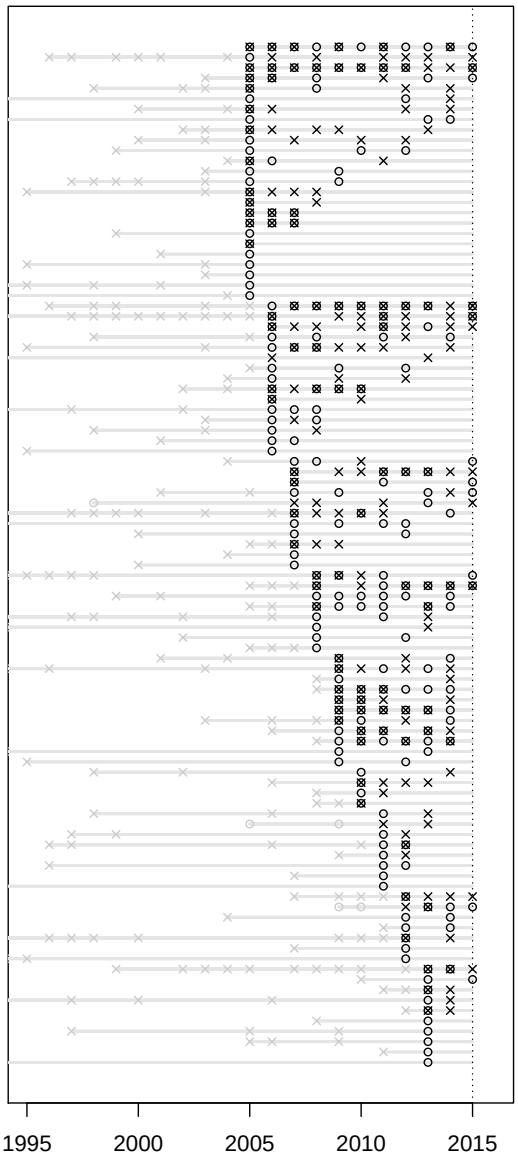


Figure 3: Litigation continues in unresolved intercircuit splits. Different shapes represent different sides of the conflict. The gray portion represents litigation on the issue before the split arose. The black portion represents litigation once the split existed. The picture is cropped on the left.

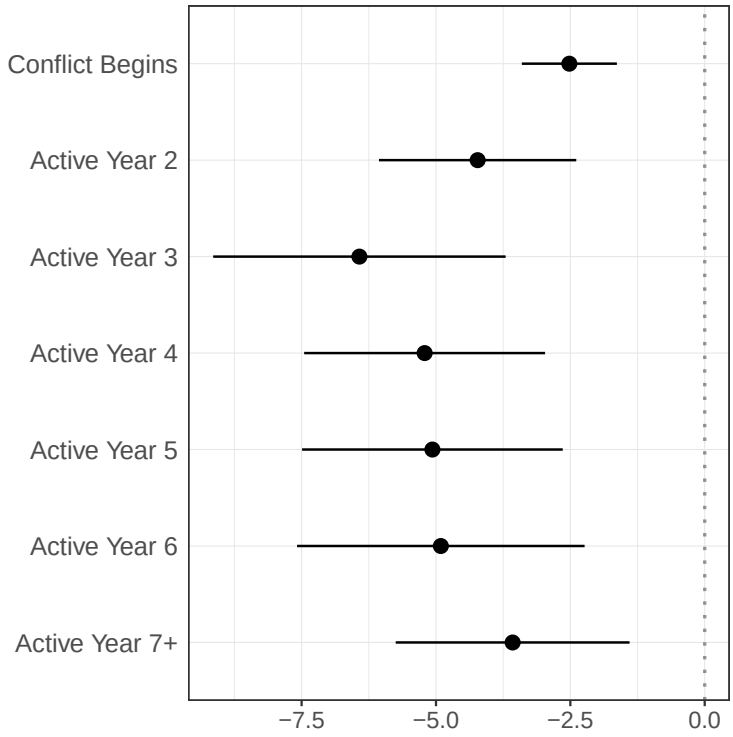


Figure 4: Dots are estimated logit coefficients from a discrete time proportional hazard model predicting whether and when the Supreme Court resolves a conflict. Coefficients represent the conditional risk of resolution in each case-year. Lines mark 95% confidence intervals. Units are conflict years in which there was a case.

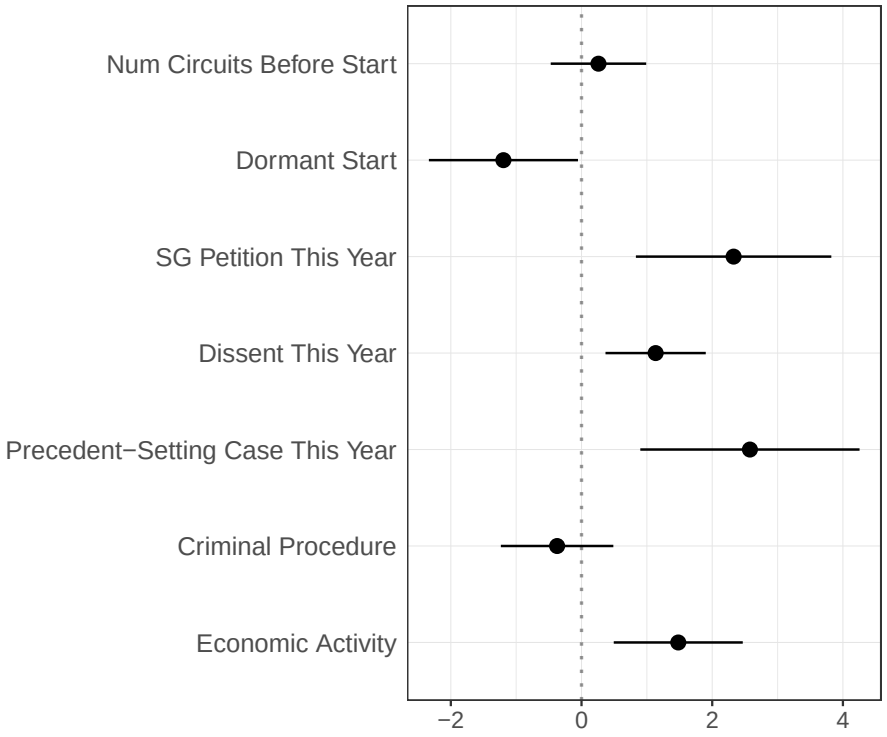


Figure 5: Dots are estimated logit coefficients from a discrete time proportional hazard model predicting whether and when the Supreme Court resolves a conflict. Lines represent 95% confidence intervals. Units are conflict years in which there was a case. *Num Circuits Before Start* is standardized.

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Appendix

Our data consist of decisions of the Courts of Appeals, clustered into conflicts, some of which have been resolved and some of which are not yet resolved. We identified conflicts using the *Seton Hall Circuit Review*'s quarterly summaries of circuit splits. The Seton Hall summaries are written by searching LexisNexis for the search terms "circuit /5 split or disagree" within the US Courts of Appeals cases (Hilgar 2015). Members of the journal then read through each of the decisions to determine whether the conflict mentioned within them meets the criteria for inclusion. According to Christine Gaddis, the Editor-in-Chief, "The journal summarizes cases in which a court either creates or enters an existing circuit split, or decides an issue of first impression. The journal does not summarize cases in which a court acknowledges the existence of a circuit split or issue or first impression." We used the circuits' descriptions of the conflict to identify all those circuits involved and which side of the conflict each circuit fell on.

Then, once we had coded which circuits were involved, and which side each circuit was on, we coded additional information about each component lower court decision by looking the decisions up in Westlaw and reading them. This included which judges were involved in the case, whether there were any concurrences or dissents, and whether the decision was published. We also read the decision to determine whether it was in fact the precedent-setting case in that circuit. If it was not, we replaced it with the precedent-setting case. Then, we used Westlaw to identify all cases from that circuit that cited the opinion on the point of law on which there was a conflict, and coded these. Finally, we read all of the cases involved in the conflict to try to identify other circuits involved in the conflict that had been previously unidentified. When we found such circuits, we identified the precedent-setting case from that circuit and coded the relevant information.

Identifying and codifying conflicts poses methodological and epistemological obstacles,

both for the Supreme Court and for researchers. How can we discover conflicts between Courts of Appeals? Some unresolved splits are well-known—the *Washington Post* wrote about the intercircuit split on gay marriage bans ultimately resolved in *Obergefell v. Hodges* as soon as the split was created, before a *cert* petition had been filed (Barnes 2014). But these salient conflicts are unusual. For example, many of the conflicts we identified are about the Employee Retirement Income Security Act (ERISA). One such conflict is over whether, when the fiduciary seeks reimbursement of funds from a beneficiary under Section 502(a)(3)'s equitable relief, the beneficiary can raise "equitable defenses". The majority of circuits held that equitable defenses cannot be raised. The minority held that they could be raised.[19] It is more challenging for a researcher to identify these everyday conflicts that go unreported in newspapers and unnoticed by many observers. Whether one decision is really in conflict with another is often arguable. For either a researcher or a practitioner in the courts, identifying all decisions that are in conflict with any given one is functionally impossible, given the number of cases decided in the federal courts each year.[20]

We therefore dealt with these measurement issues by relying on the courts' own descriptions of conflicts. Specifically, we rely on explicit mentions of conflict in Courts of Appeals' opinions to identify conflicts. This general approach of relying on judges' or Justices' descriptions is standard in the discipline (see Lindquist, Haire and Songer (2007), Baker and Malani (2015), and Shauku (2015), but see Bruhl (2014)). Unlike previous studies, however, we idependently identify other cases involved—we do not rely on judges to give a complete

[19]The Supreme Court resolved this dispute in *US Airways, Inc. v. McCutchen* (133 S.Ct. 1537, 2013), ruling that equitable defenses can be raised.

[20]Because it is so widely known that the Court is more likely to grant review to cases that implicate conflicts—and Gressman et al. (2007, p. 242) advise petitioners of this reality—allegation of conflict is common in *cert* petitions. Much of a law clerk's task is distinguishing genuine from alleged conflict (Estreicher and Sexton 1984). In a sample of all petitions filed in the 1986-1993 terms, Epstein, Martin and Segal (2012) find that over half alleged conflict but only 14% of those were genuine according to clerks. Even among those that had genuine conflict, only about 16% were granted (compared to less than 2% of petitions that did not).

description of the conflict.

In a study of circuit court judges' behavior around intercircuit conflict, Wasby (2002) argues that judges tend to know, discuss, and remark in the written opinion when they create an intercircuit conflict (Wasby 2002, pg. 162). Relying on courts' explicit mentions of conflict has some costs. This method does not capture all conflicts—many conflicts are mentioned by the Courts of Appeals, but in phrases such as, "we depart from our sister circuits" rather than using the word "split." We do not capture these (though only one judge in one circuit need use the precise language in order for us to identify the whole conflict). We also do not capture conflicts that escape acknowledgement altogether. But this method also accords us some benefits. Relying on courts' own description of conflicts sets an objective standard for what counts as a conflict. To whit: a judge may articulate a slightly different rule than did another circuit, but avoid creating a conflict by finding a minor factual distinction between his rule and the other circuit's (Hellman (1984) calls this "sideswiping"). Or a judge may articulate a slightly different rule on precisely the same facts—but the distinction may be so slight as not to qualify as a conflict. By relying on courts' descriptions of these issues, we identify only the most severe conflicts and avoid having to create our own subjective guidelines for conflict identification.

A reader may be concerned that judges intentionally avoid creating conflicts, or intentionally avoid mentioning conflicts they create. If some issues never become conflicts, that is outside the scope of our project. If some conflicts escape mention, however, that could bias our sample. We do not think it does. First, Klein (2002) writes that judges do not anticipate the behavior or reaction of the Supreme Court when deciding cases of first impression—so judges will not avoid creating splits in order to evade review. Second, as we discuss above, Wasby (2002) writes that judges tend to know, discuss, and remark in the written opinion when they create an intercircuit conflict (Wasby 2002, pg. 162).

Year Conflict Arose	Unresolved	Resolved
2005	86.21	13.79
2006	65.22	34.78
2007	91.67	8.33
2008	42.11	57.89
2009	84.62	15.38
2010	66.67	33.33
2011	61.54	38.46
2012	50.00	50.00
2013	76.92	23.08

Table 1: Proportion of conflicts resolved, by year in which conflict began. Conflicts that started earlier are not systematically more likely to have been resolved during our period of study.

Conflict Begins	-2.52^*
	(0.45)
Active Year 2	-4.22^*
	(0.94)
Active Year 3	-6.42^*
	(1.39)
Active Year 4	-5.21^*
	(1.14)
Active Year 5	-5.07^*
	(1.24)
Active Year 6	-4.91^*
	(1.36)
Active Year 7+	-3.57^*
	(1.11)
Num Circuits Before Start	0.26
	(0.37)
Dormant Start	-1.20^*
	(0.58)
SG Petition This Year	2.33^*
	(0.76)
Dissent This Year	1.13^*
	(0.39)
Precedent-Setting Case This Year	2.58^*
	(0.86)
Criminal Procedure	-0.37
	(0.44)
Economic Activity	1.48^*
	(0.50)
N	415
AIC	228.98
BIC	454.56
$\log L$	-58.49

Standard errors in parentheses

* indicates significance at $p < 0.05$

Number of circuits before birth is standardized.

Table 2: Piecewise proportional hazard model predicting whether and when the Supreme Court resolves a conflict. Units are conflict years in which there was a case.