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THE PERVASIVE INFLUENCE OF IDEOLOGY AT THE FEDERAL CIRCUIT COURTS

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The Pervasive Influence of Ideology at the Federal Circuit Courts
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ABSTRACT

This paper seeks to contribute to the long-standing debate on the extent to which the ideology of federal circuit court judges, as proxied by the party of the president nominating them, can help to predict case outcomes. To this end, I combine and analyze a novel dataset containing about 670,000 circuit court cases from 1985 to 2020. I show that the political affiliation of judges is associated with outcomes, and thus can help to predict them, throughout the vast universe of circuit court cases – and not only in the ideologically contested cases on which prior empirical research has focused.

In particular, I find an association between political affiliation and outcomes in each of six categories of cases in which the two litigating parties could be perceived by judges to have unequal power. In each of these six case categories, which together add up to more than 550,000 cases, the more Democratic judges a panel has, the higher the odds of the panel siding with the seemingly weaker party.

Furthermore, I identify evidence of polarization over time in circuit court decisions. Consistent with such growing polarization, in the important subset of published cases, the identified patterns are more pronounced in the last two decades of the examined period than earlier.

Going beyond the very large sample of cases with parties of seemingly of unequal power, I identify how political affiliation can help to predict outcomes in most of the cases outside this sample. In particular, I show that panels with more Democratic judges are less likely than panels with less Democratic judges to defer to the lower-court decision in civil cases between private parties that seem to be of equal power. Altogether, my analysis shows that political affiliation can help to predict outcomes in over 90% of circuit court cases.

Overall, my results highlight the pervasiveness with which – and the array of ways through which – the political affiliation of judges can help to predict the outcome of circuit court cases.

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I. Introduction

Using a large sample of about 670,000 circuit court cases from the period 1985–2020, this paper investigates the extent to which the ideological inclinations of circuit court judges, as proxied by the party of the U.S. president nominating them, can help to predict the outcomes of circuit court cases. My analysis shows that political appointment can help to predict outcomes in a vastly larger universe of cases than has been suggested by prior research. Also, consistent with growing polarization, my analysis shows a strengthening of the identified patterns over time.

There is a large empirical literature on circuit court decisions, and much of it has examined whether judges appointed by Democratic and Republican presidents (hereafter “Democratic judges” and “Republican judges,” respectively) systematically differ in their decisions.¹ However, the literature has generally focused on documenting such differences in small sets of published cases on subjects that are ideologically contested or salient. For example, one early influential study documented “party effects” in a set of cases involving the First Amendment, civil rights, labor relations, and criminal appeals (Songer and Sue (1990)), and another influential early study (Revesz (1997)) documented such effects in a set of cases reviewing decisions by the Environmental Protection Agency. Similarly, the subsequent seminal works of Sunstein et al. (2004, 2006) identified sets of cases on “controversial issues” – such as abortion, affirmative action, capital punishment, and sex discrimination – and created a dataset of “ideological cases” that much subsequent literature used. Although much empirical work has been done in the intervening years, I am unaware of any prior study that identified pervasive party effects throughout the vast universe of all circuit court cases.

Explaining the focus on the domains of ideologically contested cases, Sunstein et al. (2004) explained that “outside of such domains [Republican and Democratic judges] are far less likely to differ.” Indeed, Sunstein et al. reasoned that the absence of party effects that they found in several sets of ideologically controversial cases they studied emphasizes “the limited nature of these effects” and that the forces of “professional discipline and legal consensus” can preclude such

¹ See, e.g., Sunstein et al. (2004, 2006), Farhang and Wawro (2004), Cox and Miles (2008), Chew and Kelley (2009), Boyd et al. (2010), and Hall (2010)). For broad discussions of the subject and the literature, see Epstein, Landes, and Posner (2013) and Bonica and Sen (2021).

effects from showing up in many other areas. The authors remained agnostic on whether “ideological voting” might be present in “apparently non-ideological cases involving, for example, bankruptcy, torts, and civil procedure,” and viewed answering this question as an important challenge for future work.

In this study, I seek to contribute to meeting this challenge. I show that systematic differences between Democratic and Republican judges can be found in a very broad universe of circuit court cases. Knowing the political composition of the circuit court panel can help to predict outcomes in the great majority of circuit court cases. Thus, notwithstanding the forces of “professional discipline and legal consensus,” how parties fare in cases decided by a circuit court depends significantly on the “luck of the draw” – the political composition of the panel randomly assigned to hear the case.

Much of my study focuses on analyzing how political affiliation can help to predict outcomes in six categories of cases in which one of the parties has characteristics that could lead to its being perceived by judges to be weaker. These six categories of cases add up to more than half a million cases, or over 80% of circuit court cases. I hypothesize that Democratic judges and Republican judges systematically differ in their tendency to side with the seemingly weaker party. Consistent with this *Pro-weak* hypothesis, I find that panels with more Democratic judges are more likely to side with:

- (i) non-institutional private parties in civil litigation against institutional private parties;
- (ii) private parties in civil litigation against the U.S. government;
- (iii) convicted offenders in criminal appeals litigated with the U.S. government;
- (iv) immigrants in litigation against immigration agencies;
- (v) prisoners serving a sentence in litigation with the government and prisons; and
- (vi) petitioners in *habeas corpus* and other petitions against public officials for which the circuit courts have original jurisdiction.²

² To the best of my knowledge, prior research has not examined whether political affiliation can help to predict outcomes in five of my six categories of cases. With respect to the sixth category of criminal appeals, Sunstein et al. (2004, 2006) and Hall (2010), used a sample of about 1,000 such appeals to examine whether Democratic and Republican judges systematically differ in their decisions in such cases. Sunstein et al. (2004, 2006) report that they do not, but Hall (2010) suggested that they do.

In each of the above six categories of cases, having more Democratic judges on the panel is associated with higher odds of a *Pro-weak* outcome to an extent that is both statistically significant and meaningful in size. Moreover, this *Pro-weak* tendency is shown not to be driven by the mere tendency of Democratic judges to reverse lower-court decisions. In cases with a seemingly weak party, Democratic judges are more likely to reverse the lower-court decision when the weaker party appeals the lower-court decision, and less likely to reverse the lower-court decision when the stronger party appeals these decisions.

The identified association is not merely statistically significant but also meaningful in magnitude. To illustrate, for the approximately 550,000 cases in the six categories of cases as a whole, switching from an all-Republican panel to an all-Democratic panel is associated with an increase of 55% in the baseline odds of a *Pro-weak* outcome. Thus, the odds of a *Pro-weak* outcome would very much depend on the political affiliations of the judges randomly assigned to the case, and thus on the “luck of the draw.”

I find that my results regarding this association are not limited to cases on topics that are ideologically contested; in fact, they are present in the large majority of cases that are not on such topics. These results indicate that seemingly “non-ideological” cases – cases on topics that are not ideologically contested or salient – are commonly still ideological in the sense that they involve dimensions or aspects that judges of different political affiliations are systematically likely to approach or react to differently. In particular, the results indicate that Democratic and Republican judges have different inclinations toward perceived inequalities of power between litigants – aspects that are present in a vast number of cases that are not about ideologically contested issues. For this reason, the ideological leanings of circuit court judges are associated with outcomes, and can help to predict them, in almost all circuit court cases.

I also examine whether the identified association and predictive power are limited to published cases on which prior research has tended to focus. I find that these patterns are significantly present in the unpublished cases that represent a majority of circuit court cases. Similarly, partitioning cases by circuit or by decade, and partitioning the large set of criminal appeals by the type of offense, I do not find any significant set of cases for which ideology cannot help to predict outcomes.

In addition, I address empirically a challenge put forward by Harry Edwards, the senior chief judge of the D.C. Circuit Court of Appeals, to the view that judicial ideologies have a non-negligible predictive power for circuit court decisions (see Edwards 1985, 1998, and Edwards and Livermore 2009). Edwards presented evidence that the vast majority of circuit court cases end up with unanimous decisions and argued that the general lack of a dissenting opinion in this vast majority of cases implies that they present questions on which all circuit court judges agree. Focusing exclusively on cases with unanimous decisions, however, I find that the panel composition in these cases still helps predict what decision is unanimously reached. To illustrate, comparing the vast number of cases in which all-Republican and all-Democratic panels reach unanimous decisions, there are systematic differences between the decisions of the two groups of panels. Similarly, comparing the vast number of cases in which mixed-party panels reach unanimous decisions, there are systematic differences between the unanimous decisions made by majority-Republican panels and those made by majority-Democratic panels.

My analysis also seeks to contribute to the large literature on political polarization over time and, in particular, to the smaller literature on whether polarization has grown over time in federal court decisions. Hazen (2019) discusses the growing politicization over time of the process for selecting federal judges, and Epstein et al. (2015) and Bonica and Sen (2021) document growing polarization over time in Supreme Court decisions. To the best of my knowledge, however, my study is the first to empirically investigate the presence of polarization over time in circuit court decisions. I show that the systematic differences that I identify between the decisions of Democratic and Republican circuit court judges became stronger in the past two decades than in the preceding period.

My analysis concludes by showing the presence of an association between political affiliation and outcomes in cases beyond those in which one of the litigating parties is seemingly weaker than the other. I show that political affiliation can help to predict outcomes in a sample of about 80,000 civil appeals for which I was unable to identify case dimensions that make one party seemingly weaker than the other. This sample consists of civil litigation between two institutional private parties and civil cases between two non-institutional private parties. For cases without an apparent inequality in power between the parties, I hypothesize that the more Democratic judges the panel has, the higher the odds of the panel not deferring to the district court decision and being open to reversing it.

This *Less-deference* hypothesis is due to the possibility that Democratic and Republican judges might attach different weights to the costs and benefits of less deference to lower-court decisions. Relative to Republican judges, Democratic judges might attach greater weight to the “costs” of leaving in place “mistakes” in individual lower-court decisions, or they might attach lower weight to the resource-saving efficiency gains from deference to district court decisions. Testing the *Less-deference* hypothesis, I find that the outcomes in the large sample of cases with parties of seemingly equal power are consistent with this hypothesis.

Overall, my analysis finds that political affiliations are associated with outcomes and can thus help to predict outcomes in over 95% of circuit court decisions. These results highlight the importance of ideological leanings as proxied by political affiliation for predicting circuit outcomes, as well as the array of ways in which such ideological leanings might affect outcomes. The association between political affiliation and outcomes is far more pervasive, I show, than has been documented by prior research.

My ability to contribute to the literature in the ways discussed above is facilitated by the large dataset that I compiled for this study. Most prior empirical studies on circuit courts have used small samples of published cases,³ with a significant number of studies using the sample of about 5,000 published cases compiled by Sunstein et al. (2006),⁴ and a significant number of other studies using the sample of about 22,000 cases compiled by the Songer Project (Songer (2008), Kuersten and Haire (2011)).⁵ Recent exceptions to this use of small samples are studies by Carlson et al. (2020), Battaglini et al. (2022), and Ash et al. (2023),⁶ but each of these studies focuses on different questions from the ones explored in this paper.

³ Studies using such small samples include, for example, Boyd, Epstein, and Martin (2010), Epstein, Landes, and Posner (2011), Kastellec (2013), Glynn and Sen (2015), Sen (2015), Szmer, Songer, and Bowie (2016), and Schorpp and Reidd (2017).

⁴ The sample of Sunstein et al. (2006) is based on published cases that saliently involve ideological issues.

⁵ The Songer project is named for Donald Songer, who initially directed the construction of the database. The database, which was subsequently expanded by Kuersten and Haire, includes a sample of about 22,000 published cases during the long period of 1925–2002, with cases randomly selected from all the circuit courts. <http://www.songerproject.org/data.html>.

⁶ Carlson et al. (2020) uses the CourtListener portal to construct a dataset of about 150,000 published cases from the period of 1970–2010. Battaglini et al. (2022) uses Leagle.com to construct a dataset of about 50,000 published cases from the period of 2004–2017. Ash et al. (2023) uses Bloomberg Law to compile a

Before proceeding, I would like to stress that although I find systematic differences between the decisions of Democratic and Republican judges, my analysis does not take a view on whether one of the approaches is in some way better. For example, while I find that Democratic judges are more likely to side with the weak party in litigation, the data do not tell us, and I take no view on, whether Democratic judges are too protective, or Republican judges are insufficiently protective, of such weak parties. My contribution is merely to show that the two types of judges systematically differ in their decisions in litigation between parties that could be perceived to be unequal in power, and that political party effects can help to predict the outcome in such cases.

It is also worth stressing that my results do not imply that political affiliations fully determine outcomes. Decisions are undoubtedly likely to be influenced substantially by legal dimensions, such as relevant legal rules and precedents, and on the factual conclusions reached by the lower court. Political affiliations are shown by my analysis not to determine outcomes but to *influence* them. Thus, whereas knowing the political composition does not enable us to predict with certainty the panel's decisions, knowing this political composition can help to assess the odds of particular outcomes.

Furthermore, whereas my analysis identifies ways in which political affiliation can help to predict outcomes, there are good reasons to expect that future work might be able to improve on this predictive ability. My analysis uses the political party of the nominating president as the (noisy) measure of the political affiliation of a judge, and future work might seek to employ more accurate measures for political leanings. Similarly, my analysis uses very simple, coarse, and easily observable characteristics of cases to identify parties that could be perceived as weak, and future work might employ for its predictive model richer and more accurate measures of the imbalance of power between parties and additional aspects of cases. The contribution of my paper is to show that even when using a simple and noisy measure of ideological leanings and using simple and noisy measures of the relative power of parties to litigation, ideological leanings can nonetheless help to predict outcomes in a vast number of cases belonging to these categories.

The remainder of the paper is organized as follows: Section II discusses the institutional background. Section III discusses my data sources and coding protocols and provides summary

dataset of about 380,000 published cases from the period of 1890–2013. The sample of circuit court cases used in my study seems to be significantly larger than any that has been used by prior studies.

statistics. Sections IV–VII present my empirical analysis, and Section VIII concludes. Finally, in addition to the tables incorporated in the text of this paper, the Appendix includes a number of supplemental tables.

II. Institutional Background

A. *The Federal Courts of Appeals*

The U.S. federal courts system has three main levels. The first level consists of the federal district courts. As of the end of 2020, there were 620 active district court judges and 479 senior district court judges, who held trials in ninety-four districts and made decisions in about 420,000 cases during 2020. Cases brought to the district courts are heard by a single judge, and they may or may not have a jury. Each final ruling by a district court can be appealed to the court of appeals in the federal judicial circuit in which the district court is located.⁷

The second level is that of the circuit courts, which are the federal courts of appeals. The ninety-four district courts are organized into twelve regional circuit courts of appeals. In addition, the Court of Appeals for the Federal Circuit has nationwide jurisdiction to hear appeals in certain types of cases. As of the end of 2020, 180 active and 120 senior circuit court judges served in the circuit courts, and these judges made decisions in about 50,000 cases during 2020. The great majority of cases heard by circuit courts are appeals of district court decisions. In addition, circuit courts hear some cases that represent appeals of decisions by special federal trial courts, such as the Tax Court, immigration courts, patent courts, or bankruptcy courts, as well as a relatively small number of cases for which the circuit courts have original jurisdiction, such as *habeas corpus* cases. In the large dataset of circuit court cases I compiled, appeals of district court decisions in civil and criminal cases represent about 55% and 31% of the cases, respectively, appeals over decisions by federal administrative courts and federal bankruptcy courts represent about 11% and 2% of the cases, respectively, and original jurisdiction cases represent about 2%.

The third level is that of the U.S. Supreme Court, the highest court of the land. A majority of cases in the Supreme Court are appeals of decisions by the circuit courts that the Supreme Court

⁷ In rare cases, the appeal may be brought directly to the U.S. Supreme Court.

elects to review. The Supreme Court considers only a tiny number of cases each year, and thus only a minuscule fraction of cases considered by the circuit courts reach the U.S. Supreme Court; in 2020, for example, the Supreme Court issued decisions in about seventy cases. According to Bonica and Sen (2021), because the Supreme Court makes decisions in only a minuscule fraction of federal cases, circuit court and district court decisions can be viewed as the “bread and butter” of the federal courts system.

B. Federal Judges

All federal judges are selected by the U.S. president and confirmed by the Senate. This is the case both for judges of the circuit courts of appeals and for the judges of the federal district courts. Federal judges are nominated for life and are rarely removed by impeachment. Federal judges thus generally serve until they resign, retire, or pass away.

In both circuit courts and district courts, active judges refer to judges who are serving on a full-time basis. When judges retire, in certain circumstances, they may and often choose to take on a senior status and continue to hear cases on a part-time basis.⁸ Senior judges have the same responsibilities as active judges, except that they have a reduced caseload and some flexibility in managing their workload. When a judge takes a senior status, this creates a vacancy on the court that can be filled. After the number of active circuit court judges stopped expanding around 1990, federal courts sought to encourage long-serving judges to take on a senior status in order to increase the number of judges who can hear cases. Among other things, judges assuming this senior status are eligible to maintain their chambers and staff and enjoy considerable financial benefits as long as they maintain a workload of at least 25% of an active judge’s workload.⁹

Many studies in the literature (see, e.g., Nagal (1961), Ashenfelter et al. (1995), Chew and Kelley (2008), Cox and Miles (2008), Cohen and Yang (2019), Huang et al. (2019), and Lie (2020)) assume, for the purposes of analysis, that all federal judges are “affiliated” with the

⁸ A judge may leave regular active service and become a senior judge if the judge satisfies two conditions: (i) the judge is sixty-five or older and (ii) the judge’s age plus the judge’s years of service on the bench exceed eighty. Regardless of age, the judge must have served at least ten years to qualify for senior status.

⁹ See Levy (2021) for a discussion of the benefits offered to judges taking on senior status.

political party of the president who nominated them. This assumption is based on the belief that the presidents prefer to nominate candidates whose views, connections, and affiliations align at least somewhat with members of the president’s party. Bonica and Sen (2021) attribute the wide use of the party of the nominating president to the simplicity of this measure, as well as to the evidence (Segal and Spaeth (2002)) that this measure provides a strong predictor of the decisions of Supreme Court justices across a variety of subject matters. Following this approach of the literature, I use the term “Republican judges” to refer to judges nominated by a Republican president, and “Democratic judges” to refer to judges nominated by a Democratic president. During the study period, serving circuit court and district court judges in the data were nominated by one of the thirteen presidents from Franklin D. Roosevelt through Donald J. Trump.

Although this method of classifying the political ideology of federal judges seems to be the most common, alternative measures for judicial ideology have been put forward by some studies in the literature,¹⁰ and future work could use such measures to further examine the questions I consider.

C. *Circuit Court Panels*

Unlike in the district courts, where most cases are heard by one district court judge, most circuit court cases are heard by a panel of three judges. In a very small number of cases, which are excluded from my analysis, cases are heard *en banc* – i.e., reviewed by all active judges in the specific circuit. Three-member panels consist of active and senior judges. In a small number of cases, the panel also includes a visiting judge from another circuit or from another district court, who is assigned temporarily to a specific case or for a specific period of time.

The working premise of the empirical literature on circuit courts is that judges are randomly assigned to panels and that cases are also randomly assigned to panels. Examples of the many studies that are based on this working premise are those of Tiller and Cross (1999), Sunstein et al. (2004, 2006), Sunstein and Miles (2009), Epstein et al. (2011), Kastellec (2011), Chen and Sethi

¹⁰ See, e.g., Segal and Cover (1989), Martin and Quinn (2002), Poole and Rosenthal (1997), Giles, Hettinger, and Peppers (2001), Boyd (2015), and Bonica and Sen (2017a, 2017b).

(2018), and Battaglini et al. (2022). Bonica and Sen (2021) regard this assumption as “extremely useful for scholars” and support its use.

Some recent empirical studies have examined this random-assignment assumption (Fischman (2011), Chilton and Levy (2015), Levy (2017), Dobbie, Golding, and Yang (2018)). Chilton and Levy (2015) and Levy (2017) identify several technical factors (e.g., time commitments of judges) that could cause deviations from a strictly randomized process,¹¹ but their analysis suggests that any such deviations are small and stem from technical factors that are generally independent of the dimensions on which researchers have focused, and they argue that random assignment is thus an adequate working premise for causal inference. Similarly, Fischman (2011) concludes that “the characteristics of the cases assigned to a particular panel [are] independent of the [preferences] of the judges on that panel.”

In this paper, I follow the standard premise that cases are assigned to panels in a pseudo random fashion. I examine this premise in the Appendix. In particular, Table A1 in the Appendix examines whether the distribution of the political composition of the three-judge panels that we see in the dataset is similar to the one that will result from pure random assignment. To this end, I examine how the distribution of the political composition of the three-judge panels in my sample compares with the distribution that would be expected to result from a pure random assignment. I find that the two distributions are quite similar, and this result supports my use of the standard working premise of random assignment.

D. The Appeal Process

In civil cases heard by the federal district courts, either party may initiate an appeal of the district court’s decision. In criminal cases, the criminal defendant may appeal a conviction, but the government may not appeal an acquittal; in the case of a conviction, however, both sides may

¹¹ These factors include the need to accommodate vacation schedules, to space judicial assignments so that no judge has several week-long sittings in a row, to honor the scheduling preferences of senior judges (whose services provide much-needed support), and to honor recusals for disqualification, health, or other valid reasons. Since there is no single federal rule governing the subject, each circuit has adopted its own practices for forming panels.

appeal the sentencing decision. Parties in appeals may not introduce new evidence, and circuit court panels make their decisions based on the trial court's record. The burden of showing that a legal error affected the district court's decision is borne by the appellant. A substantial majority of appeal cases are decided solely on the basis of the written briefs submitted by the parties, with only a small minority decided following an oral argument held after the submission of written briefs. The panel issues a written decision, which in many cases is accompanied by an opinion explaining the court's reasoning.

The panel's decision is determined by a majority rule. The great majority of cases are decided 3-0, with all three members of the panel joining the decision of the panel. A minority of cases are decided 2-1, with one member of the panel opposing the panel's decision.

E. Published and Unpublished Cases

In addition to making a decision, the panel elects whether to "publish" the opinion – that is, whether to have it included in the *Federal Reporter*. Prior to 1960, almost all cases decided by the circuit courts were published. However, in response to a growing caseload, the Judicial Conference of the United States decided in 1964 that circuit courts should publish only opinions that are of general precedential value.¹² In a subsequent 1972 decision, the Conference required each circuit court to develop a publication plan.¹³

Consequently, only a minority of decisions during the four decades examined by my study were published. During this period, the circuit courts experienced a significant increase in their caseloads, which resulted in more unpublished cases. In my dataset, the percentage of unpublished cases steadily decreased from about 51% in 1985 to about 22% in 2000, landing at around 15% by the end of the study period.

¹² Reports of the Proceedings of the Judicial Conference of the United States: 1964 Annual Report of the Director of the Administrative Office of the United States Courts 11 (1965).

¹³ Reports of the Proceedings of the Judicial Conference of the United States: 1972 Annual Report of the Director of the Administrative Office of the United States Courts 33 (1973).

Many empirical studies of circuit court decisions have examined only published cases (see, e.g., the influential studies by Boyd et al. (2010) and Kstellec (2013)).¹⁴ Furthermore, the standard datasets of Sunstein et al. (2004) and of the Songer Project (Songer (2008), Kuersten and Haire (2011)) include only published cases. However, the literature has suggested that published cases are likely to be unrepresentative of all cases (see, e.g., Edwards and Livermore (2009), Keele et al. (2009), Fischman (2015), and Carlson et al. (2020)).¹⁵ Indeed, as early as 2000, Songer (2000) stated that focusing only on published opinions “... no longer makes sense as a strategy for answering many of the questions that public law scholars have typically asked.” Thus, a significant advantage of the dataset that I put together for this study is that it includes the unpublished cases that represent a majority of circuit court decisions.

III. Data Sources and Summary Statistics

A. Data

To obtain the data used in this study, I combined data from three main datasets. The first source was PACER (Public Access to Court Electronic Records), an electronic public access service for U.S. federal court documents, managed by the Administrative Office of the United States Courts. PACER contains detailed information on a large fraction of cases considered by the various U.S. federal courts. For this study, I used the data that PACER provides on circuit court decisions. The PACER dataset provides rich information, including, among other things, docket number, circuit, district court, dates, outcome, case type, whether the case was published, whether there was a dissenting or concurring opinion, and whether there was an *en banc* decision.

¹⁴ Fischman (2015) reports that a majority of the studies in the literature exclude unpublished cases.

¹⁵ An early study of employment discrimination cases by Siegelman and Donohue (1990) shows that published and unpublished cases differ significantly. Keele et al. (2009) find that publication decisions are not independent of the political affiliation of judges on the panel and report that Democratic panels are more likely to elect to have the case with a liberal outcome published. Choi et al. (2012) and Grundwald (2018) suggest that circuit court judges are strategic in choosing whether to have a case published. Finally, Carlson, Livermore, and Rockmore (2020) present evidence indicating that published cases are unrepresentative of the pool of all cases.

I supplemented the information from PACER with information from two additional sources. One source was LexisNexis, which is provided by RELX, an information and analytics company. Another source was the Biographical Directory of Federal Judges provided by the Federal Judicial Center, which provides basic biographical information for all past and current federal court judges.

When I merged the PACER and LexisNexis datasets, the cases appearing in PACER that I was unable to match with data from LexisNexis were largely ones in which the appeal had been terminated on procedural grounds, such as late filing, and for which PACER also did not have any information on the decision. For the cases for which PACER reported decisions, I was able to merge about 85% of these cases with LexisNexis data. My dataset thus includes a large majority of cases whose decisions were reported by PACER.

I excluded several sets of cases from the dataset I analyze: (i) *en banc* cases that do not have three-member panels; (ii) cases that were not terminated on the merits; and (iii) cases from the Twelfth Circuit (the Federal Circuit) for which PACER does not have information.

Altogether, after the above exclusions, I was left with about 780,000 cases during the study period of 1985–2020. For about 670,000 of these cases, I was able to identify the three members of the panel and their characteristics. This dataset of about 670,000 cases provides the basis for my empirical investigation.

B. Coding Ideological Cases

In their influential 2004 study, Sunstein et al. (2004) directed the attention of researchers to cases that can be viewed as “ideological” and put forward a protocol for identifying such cases. As a basis for this protocol, the authors of this study identified fourteen legal topics that should be regarded as ideological because they involve issues that are saliently ideological.¹⁶ A case was classified as involving a given topic if the opinion of the case included specified keywords or cited

¹⁶ These topics are abortion, capital punishment, the Americans with Disabilities Act, criminal appeals against the United States, takings, the Contracts Clause, affirmative action, Title VII race discrimination, cases brought by African American plaintiffs, sex discrimination, campaign finance, sexual harassment, cases in which plaintiffs sought to pierce the corporate veil, industry challenges to environmental regulations, and federalism challenges to congressional enactments under the Commerce Clause.

key Supreme Court opinions on the issue. Using this protocol, Sunstein and his co-authors and colleagues identified about 5,000 published cases as ideological, and the sample they combined was subsequently used by many other studies.

I followed the approach of this protocol to identify ideological cases in my sample. Because my sample includes a large number of cases (both published and unpublished) from a long period of time, my implementation of the protocol of Sunstein and his co-authors produced a much larger number of ideological cases than the number of ideological cases included in the sample compiled by these authors and employed by many subsequent studies. I also further expanded the set of cases classified as ideological in two ways. First, for many of the legal topics classified as ideological by Sunstein et al., I identified additional cases on these topics by searching for citations to major cases on these topics (in addition to any such citations used by Sunstein et al.).¹⁷ In addition, I added two legal topics that are ideologically contested – LGBTQ and Second

¹⁷ In particular, I added searches in opinions for citations to the following cases:

To identify additional cases for the category of abortion, I searched for citations to *Roe v. Wade*, 410 U.S. 113 (1973), *Planned Parenthood v. Casey*, 505 U.S. 833 (1992), and *Whole Woman’s Health v. Hellerstedt*, 579 U.S. 582 (2016);

To identify additional cases for the category of capital punishment, I searched for citations to *Furman v. Georgia*, 408 U.S. 238 (1972), *Gregg v. Georgia*, 428 U.S. 153 (1976), *McCleskey v. Kemp*, 481 U.S. 279 (1987), and *Roper v. Simmons*, 543 U.S. 551 (2005).

To identify additional cases for the category of takings, I searched for citations to *Dolan v. City of Tigard*, 512 U.S. 374 (1994).

To identify additional cases for the category of the Contracts Clause, I searched for citations to *Energy Rsrvs. Grp. v. Kan. Light & Power Co.*, 459 U.S. 400 (1983), and *General Motors Corp. v. Romein*, 503 U.S. 181 (1992).

To identify additional cases for the category of affirmative action, I searched for citations to *Gratz v. Bollinger*, 539 U.S. 244 (2003), *Grutter v. Bollinger*, 539 U.S. 306 (2003), and *Fisher v. Univ. of Tex.*, 570 U.S. 297 (2013).

To identify additional cases for the category of campaign finance, I searched for citations to *Davis v. Federal Election Comm’n*, 554 U.S. 724 (2008), *Citizens United v. Federal Election Comm’n*, 558 U.S. 310 (2010), and *McCutcheon v. Federal Election Comm’n*, 572 U.S. 185 (2014).

To identify additional cases for the category of Commerce Clause, I searched for citations to *United States v. Morrison*, 529 U.S. 598 (2000), *Gonzales v. Raich*, 545 U.S. 1 (2005), and *Nat’l Fed’n of Indep. Bus. v. Sebelius*, 567 U.S. 519 (2012).

Amendment – and I identified cases on these legal topics using a search for key terms and citations to major decisions on these topics.¹⁸

C. *Summary Statistics regarding the Political Affiliation of Judges*

Table 1 reports the number of circuit court judges, and the percentage of which are Republican or Democrat, at the beginning of each half-decade during the study period. The first three columns provide this information for active judges, and the last three columns provide this information for senior judges. As the Table shows, whereas the number of active circuit court judges increased by only 12.5% from 1985 through 2020,¹⁹ the number of judges with senior status almost doubled during this period.

¹⁸ For cases on LGBTQ-related issues, I searched in the text of opinions for the terms “sexual orientation,” “same-sex,” “gay,” “lesbian,” “transgender,” or “bisexual” and for citations to *Romer v. Evans*, 517 U.S. 620 (1996), *Lawrence v. Texas*, 539 U.S. 558 (2003), *United States v. Windsor*, 549 Fed. 630 (2013), or *Obergefell v. Hodges*, 576 U.S. 644 (2015).

For Second Amendment cases, I search in the texts of opinions for the terms “Second Amendment” and “right to keep and bear arms” and for citations to the cases of *District of Columbia v. Heller*, 554 U.S. 570 (2008), and *McDonald v. City of Chicago*, 561 U.S. 742 (2010).

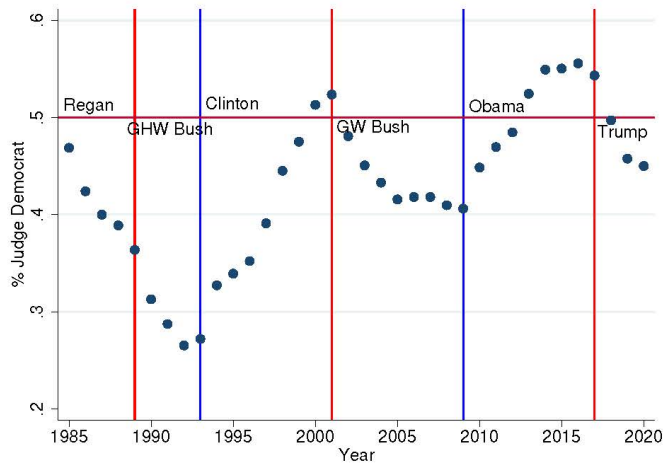
¹⁹ For a count of the number of federal appellate judgeships and when they were added, see *Chronological History of Authorized Judgeships – Court of Appeals*, [<https://www.uscourts.gov/judges-judgeships/authorized-judgeships/chronological-history-authorized-judgeships-courts-appeals>].

Table 1: Political Affiliations of Circuit Court Judges

Selected Years	Active Judges			Senior Judges			Total
	Count	%Rep	%Dem	Count	%Rep	%Dem	
1985	160	53%	47%	62	52%	48%	222
1990	163	69%	31%	76	49%	51%	239
1995	168	66%	34%	91	46%	54%	259
2000	154	49%	51%	101	60%	40%	255
2005	166	58%	42%	107	64%	36%	273
2010	165	55%	45%	115	68%	32%	280
2015	169	45%	55%	112	63%	37%	281
2020	180	55%	45%	120	67%	33%	300

There is significant fluctuation in the political composition of circuit court judges over time. Among active judges, the percentage of Republicans stood at 53% in 1985, rose to 69% by 1990, declined to 49% by 2000, and ended the study period at 55%. As for senior judges, the percentage of Republicans trended upward from 52% in 1985 to 67% in 2020. Figure 1 provides a graphic depiction of the fluctuation in the percentage of Democrats among active circuit court judges. The figure displays vividly how this percentage increased during Democratic administrations and decreased during Republican administrations.

Figure 1: Percentage of Democrats Circuit Court Judges



IV. Litigation between Unequal Parties

A. *The Pro-Weak Hypothesis*

The first hypothesis I would like to put forward focuses on the large universe of cases, in many areas of law, in which the two sides seem to be of unequal power. Below, I identify nine sets of cases in which this seems to be the case.

I hypothesize that in cases with seemingly unequal parties, Democratic judges are more likely than Republican judges to side with the seemingly weaker party. There are several factors that, individually or together, might operate to produce such a systematic tendency in the data. First, in some sets of cases, Democratic judges might be more likely to support substantive legal positions – such as a broader definition of unconscionability in contracts or a broader definition of the rights of immigrants or prisoners.

that favor the weaker party. Second, Democratic judges might be more likely than Republican judges to view the litigation process as biased against weak parties, and thus might be more on the lookout for outcomes that could have been produced by the litigation disadvantages of the weak party.²⁰ Third, Democratic judges might be more likely than Republican judges to feel sympathy or compassion for the weaker party, which might lead them to have some preference for outcomes that are more favorable to this party.

B. *Sets of Cases with Unequal Parties*

To test the *Pro-weak* hypothesis, I identify six large samples of cases in which parties have some characteristics included in my dataset that could lead judges to perceive the parties as having unequal power. In particular, the six sets of such cases are as follows.

²⁰ Galanter (1974) (see also Galanter and Gordon 2014) provides an iconic classic statement of the view that civil litigation is biased against weak parties.

First, there are about 200,000 cases of appeals of district court decisions in criminal trials. The parties in these cases are the U.S. government and criminal defendants, with the latter being the seemingly weaker party.

Second, there are about 125,000 cases in which prisoners serving a jail sentence litigate against public officials regarding prison conditions and other matters. In these cases, I classify prisoners as being the seemingly weaker party.

Third, there are about 57,000 administrative cases of litigation between immigrants and immigration agencies. In these cases, I classify immigrants as the seemingly weaker party.

Fourth, in civil cases between private parties,²¹ I identified about 103,000 cases as ones in which the judges could perceive one of the parties as having more power because it was likely to have more resources or sophistication or to be a repeat player in such litigation. To identify such cases, I searched the names of private litigants for terms that are associated with institutional parties, such as “Inc.,” “Company,” “Corp,” or “Bank.”²² A party whose name included any such term was defined as the “institutional party,” and a party whose name did not include such terms was defined as the “non-institutional party.”

Fifth, there are about 56,000 cases of litigation between private parties and the U.S. government.²³ In these cases, I classify the private parties as the seemingly weaker party.²⁴

Sixth, there are about 12,000 cases for which the circuit courts have original jurisdiction rather than hear appeals on lower-court decisions. These cases involve *habeas corpus*, mandamus, and other petitions against public officials. In these cases, I classify the petitioners (many of whom are individuals who are under arrest but not yet convicted) as the seemingly weaker party.

²¹ I identify these cases using PACER’s variable TYPE OF OFFENSE that labels these cases as “Civil, Private.”

²² Other terms for which I searched include company, association, department, bank, institution, hospital, university, church, business, services, and utilities.

²³ I identify these cases using PACER’s variable TYPE OF APPEAL that labels these cases as “Civil, US.”

²⁴ To be sure, this might well not be the case when the private party is a giant company (say, Google or Walmart), but such cases are a small minority of the cases. Thus, using private party status is a noisy proxy for the weaker party in this set of cases, and my findings are likely to understate the results that would be obtained if this minority of cases were examined separately.

Altogether, the six categories of cases contain about 550,000 cases, over 80% of my sample of about 670,000 circuit court cases. Below, I examine for each of these categories whether the *Pro-weak* hypothesis can help to explain outcomes of cases in this category.

C. Testing the *Pro-weak* Hypothesis

For each of the cases with parties that are seemingly unequal parties, I first defined the *Pro-weak* outcome – that is, the outcome that is relatively more favorable to the weaker party. For the six categories of cases that consist of appeal cases, we need to distinguish between cases in which the appeal was initiated by the weaker party and cases in which it was initiated by the stronger party. When the weaker party initiates the appeal of a lower-court decision, allowing the decision to stand is presumably disfavored by the weaker party. In such cases, I define the outcome as *Pro-weak* if the panel decides to reverse, reverse in part, or remand the decision for reconsideration by the lower court. By contrast, when the stronger party initiates the appeal, allowing the decision to stand would presumably be favorable to the weaker party. Therefore, in such cases, I define the outcome as *Pro-weak* if the panel allows the lower-court decision to stand as is – that is, if the panel does not decide to reverse, reverse in part, or remand the lower-court decision. Finally, for original jurisdiction cases, in which the party submitting the petition is classified as the weaker party, I classify the outcome as *Pro-weak* if the circuit court panel grants the petition.

Formally, I define the variable *Reversal* to be equal to 1 if the outcome (as reported by PACER) is a reversal, partial reversal, or remand of the decision. The variable *Pro-weak* is then defined as follows: If the appeal was by the weaker party, the variable is equal to the variable *Reversal*; and if the appeal was by the stronger party, the variable *Pro-weak* is equal to 1 if the variable *Reversal* is 1 and equal to 0 otherwise. For original jurisdiction cases, the variable *Pro-weak* is equal to 1 if the panel granted the motion, and 0 otherwise.

Table 2 provides summary statistics, for each of the six categories of cases, on the fraction of *Pro-weak* outcomes by the political composition of the panel. I use *RRR* to denote a panel that consists of three Republican judges, *RRD* to denote a panel with one Democratic judge and two Republican judges, *RDD* to denote a panel with two Democratic judges and one Republican judge, and *DDD* to denote a panel with three Democratic judges.

Table 2: *Pro-weak* Outcomes – Summary Statistics

	(1)	(2)	(3)	(4)	(5)	(6)
	No. of	RRR	RRD	RDD	DDD	Percentage
	Cases					Increase
						from
						DDD to RRR
Criminal Appeals	199,476	0.11	0.12	0.14	0.16	50%
Prisoner Litigation	125,395	0.14	0.14	0.14	0.17	20%
Immigrant Litigation	57,212	0.10	0.11	0.15	0.20	100%
Civil cases of Non- Institution vs. Institution	102,970	0.25	0.27	0.29	0.33	30%
Civil Cases of Private Parties vs. US	56,049	0.18	0.20	0.22	0.27	50%
Original Proceedings	12,192	0.07	0.07	0.06	0.08	10%
All	553,231	0.15	0.16	0.17	0.20	40%

Table 2 indicates that the six categories with seemingly unequal parties vary considerably in the fraction of cases with *Pro-weak* outcomes. Most importantly for our purposes, for each of the six categories, the fraction of cases with *Pro-weak* outcomes is higher for panels with more Democratic judges than for panels with more Republican judges. For example, moving from the group of *RRR* panels to the group of *DDD* panels, the fraction of *Pro-weak* outcomes increases by as much as 100% for immigrant cases and by 50% for criminal appeals and civil cases between private parties and the U.S. government.

The above summary statistics are merely suggestive, as they fail to control for various variables that might affect the odds of a *Pro-weak* outcome. I therefore turn to examining the subject more systematically. In particular, I run, for each of the six categories of cases, a regression in which the dependent variable is *Pro-weak*.

There are three independent variables of chief interest, all of which relate to the political composition of the three-judge panel. In particular, I used the following three dummy variables: *RRD*, which is equal to 1 if the panel has one Democratic judge and two Republican judges, and 0 otherwise; *RDD*, which is equal to 1 if the panel has two Democratic judges and one Republican judge, and 0 otherwise; and *DDD*, which is equal to 1 if the panel has three Democratic judges and no Republican judges, and 0 otherwise.

I also included other independent variables as controls. Because gender and race have received attention as potentially affecting judicial decisions (see, e.g., Boyd et al. (2010), Kastellec (2013)), I included the following two variables: *At Least One Woman* is a dummy variable that is equal to 1 if the panel includes at least one woman, and 0 otherwise; and *At Least One Minority* is a dummy variable that is equal to 1 if the panel has at least one minority (i.e., non-white) judge, and 0 otherwise. I also controlled for *Panel (Mean) Tenure*, which is the mean of the tenure of the three panel members. Finally, I included *circuit* \times *year* fixed effects, which control for specific changes that happened in a specific circuit in a specific year, as well as fixed effects for the type of appeal.²⁵

It is worth noting some basic statistics for the various independent variables in my analysis. About 16% of the cases are reversed, reversed in part, or remanded to the lower court. During the study period, about 20% of the cases had an *RRR* panel, about 40% had an *RRD* panel, about 30% had an *RDD* panel, and the remaining cases (about 10%) had a *DDD* panel. There were no women on the panel in about 49% of the cases studied, there was one woman on the panel in about 40% of the cases, there were two female judges on the panel in about 10% of the cases, and the panel had three female judges in about 1% of cases. As to racial diversity, there were no minority judges on the panel in about 64% of the cases studied, there was one minority judge on the panel in about 31% of the cases, there were two minority judges on the panel in about 5% of cases, and there were three minority judges in only a few cases. On average, judges hearing cases have a tenure of about sixteen years (with a standard deviation of sixteen years).

To test the *Pro-weak* hypothesis, I use the following ordinary least squares regression model:

$$\begin{aligned}
 (1) \textit{Pro_weak}_{pctdia} &= \beta_1 \textit{RRD}_{pct} + \beta_2 \textit{RDD}_{pct} + \beta_3 \textit{DDD}_{pct} + \beta_4 \textit{Panel_Includes_Women}_p \\
 &+ \beta_6 \textit{Panel_Includes_Minority}_p + \gamma_{c \times t} + \mu_a + \delta_d + \varepsilon_{pctda}
 \end{aligned}$$

²⁵ For civil cases, I also included dummies reflecting the nature of the suit filed (using the categories formed by PACER using the first two digits of the *Nature of Suit* variable). For criminal cases, I also included dummies representing the statutory offense charged against the criminal defendant (using the categories formed by PACER using the first two digits of the *Criminal Offense Code* variable).

In the subscript letters, p stands for panel, c stands for circuit, t stands for year, d stands for district court, i for the case, and a for the appeal type. Standard errors are clustered by $circuit \times year$.

Table 3 reports the results of the regression. Each of the columns of the table runs the regression separately for one of the six categories, and the seventh column runs the regression for the set of all cases in the six categories.

Table 3: The Determinants of *Pro-weak* Outcomes

Dependent Variable: <i>Pro-Weak</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Criminal Appeals	Prisoner Litigation	Immigrant Litigation	Civil Cases of Non-Institution vs. Institutions	Civil Cases of Private Parties vs. US	Original Proceedings	All Cases
<i>RRD</i>	0.007** (0.003)	0.011*** (0.003)	0.025*** (0.006)	0.019*** (0.004)	0.015*** (0.005)	0.015* (0.008)	0.013*** (0.002)
<i>RDD</i>	0.025*** (0.004)	0.024*** (0.004)	0.066*** (0.007)	0.053*** (0.005)	0.046*** (0.007)	0.018* (0.009)	0.036*** (0.003)
<i>DDD</i>	0.048*** (0.005)	0.056*** (0.006)	0.122*** (0.015)	0.097*** (0.008)	0.093*** (0.010)	0.029*** (0.010)	0.073*** (0.005)
At least One Woman	-0.006** (0.002)	-0.003 (0.003)	0.011* (0.006)	-0.002 (0.003)	-0.006 (0.005)	-0.007 (0.005)	-0.003 [†] (0.002)
At least One Minority	0.000 (0.003)	-0.002 (0.003)	-0.014*** (0.005)	-0.002 (0.004)	-0.008* (0.004)	-0.008 (0.006)	-0.004** (0.002)
Panel (Mean) Tenure	0.001*** (0.000)	0.001*** (0.000)	0.001 [†] (0.000)	0.001*** (0.000)	0.001*** (0.000)	-0.001 (0.001)	0.001*** (0.000)
Constant	0.101*** (0.004)	0.116*** (0.006)	0.071*** (0.012)	0.232*** (0.007)	0.161*** (0.008)	0.074*** (0.016)	0.132*** (0.004)
N	199,208	125,385	57,185	102,902	56,038	12,147	552,964
<i>Adj.R</i> ²	0.0446	0.0409	0.0380	0.0373	0.0433	0.1815	0.0532
Mean	0.1221	0.1411	0.1349	0.2762	0.2069	0.0695	0.1638
Fixed Effects:							
Circuit × Year	✓	✓	✓	✓	✓	✓	✓
District	✓	✓	✓	✓	✓	✓	✓
Appeal Type	✓	✓	✓	✓	✓	✓	✓

Note: Standard errors are in parenthesis and are clustered by circuit X year. Stars denote the level of statistical significance [†] $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

The results in all of the columns of Table 3 are largely consistent with the hypothesis. The coefficients of *RRD*, *RDD*, and *DDD* are positive in all twenty-one instances in the seven regressions, and they are statistically significant in all of the twenty-one instances, with a

significance level of 1% in eighteen of the twenty-one instances, 5% in one instance, and 10% in two instances.

D. Magnitude of Effects

Furthermore, Table 4 below analyzes the coefficients in Table 3 to identify the magnitude of the effects of increasing the number of Democratic judges on the panel on the odds of a *Pro-weak* outcome relative to the baseline of such odds. Column (1) provides the baseline *Pro-weak* odds, which refers to a panel with three Republican judges (equal to the coefficients of the constants in the regressions in Table 3). Columns (2)– (4) provide the increase in percentage of *Pro-weak* from increasing the number of Democratic judges by 1, 2, and 3 as compared to the baseline *Pro-weak* odds in a panel with 0 Democratic judges.

Table 4: Magnitude of Effects – Percentage Increase in Odds of *Pro-Weak* Outcome

	(1)	(2)	(3)	(4)
	RRR Baseline	Switch to RRD	Switch to RDD	Switch to DDD
Criminal Appeals	0.10	7%	25%	48%
Prisoner Litigation	0.12	9%	21%	48%
Immigrant Litigation	0.07	35%	94%	172%
Civil Cases of Non- Institution vs. Institution	0.23	8%	23%	42%
Civil Cases of Private Parties vs. US	0.16	10%	28%	58%
Original Proceedings	0.07	20%	24%	39%
All	0.13	10%	28%	55%

As the Table indicates, increasing the number of Democratic judges on the panel is associated with an increase of meaningful size in the baseline odds of a *Pro-weak* outcome. In particular, for the six categories of cases as a whole, switching from an *RRR* panel to a *DDD* panel is associated with an increase of 55% in the baseline odds of a *Pro-weak* outcome. Furthermore, for each of the six categories, a switch from an *RRR* panel to an *RDD* panel is associated with an increase of no less than 39% in the baseline odds of a *Pro-weak* outcome. Thus, for parties in the large sample of about 550,000 cases in which the parties could be perceived by judges to have unequal power, the

odds of a *Pro-weak* outcome would very much depend on the political affiliations of the judges randomly assigned to the case, and thus on the “luck of the draw.”

E. Pro-weak or Pro-reversal?

A substantial majority of the cases in the considered sample of about 550,000 cases are appeals by the seemingly weak party. In these cases, the *Pro-weak* outcome is a reversal. Thus, it might be asked whether the pattern I identify could be fully driven by a *Pro-reversal* tendency of Democratic judges and thus might not reflect a *Pro-weak* tendency of such judges. To examine this question, I carry out below a separate analysis for appeals initiated by the weaker party and appeals initiated by the stronger party.

Among the six categories of cases with seemingly unequal cases, three of these categories – (a) criminal appeals, (b) civil cases between institutional and non-institutional parties, and (c) civil cases between the U.S. government and private parties – include a significant number of appeals both by the weak party and by the strong party. I divide the cases in each of these three categories into a subset of cases initiated by the weak party and a subset of cases initiated by the stronger party.

For each of the resulting six subsets of cases, I run regression (2), which is similar to regression (1) (see Table 3), except that I use the dependent variable *Reversal* instead of the dependent variable *Pro-weak*. Thus, the specification of the regression is as follows:

$$\begin{aligned}
 (2) \text{ Reversal}_{pctdia} &= \beta_1 RRD_{qct} + \beta_2 RDD_{qct} + \beta_3 DDD_{qct} + \beta_4 \text{Panel_Includes_Women}_p \\
 &+ \beta_6 \text{Panel_Includes_Minority}_p + \gamma_{c \times t} + \mu_a + \varepsilon_{pctdia}
 \end{aligned}$$

The results are reported in Table 5 below. Columns (1), (3), and (5) of the table report the results for the cases initiated by the weaker party in each of the three categories (a)–(c). In these three columns, the coefficients of *RRD*, *RDD*, and *DDD* are all positive, and they are significant at the 1% level in eight out of the nine instances, and significant at the 5% level in one. Because *Reversal* is the *Pro-weak* outcome whenever the appeal is initiated by the weaker party, these findings can reflect, and thus are consistent with, both a *Pro-weak* tendency by Democratic judges and a *Pro-reversal* tendency of such judges. Therefore, Columns (1), (3), and (5) do not enable

ruling out the possibility that the results are fully driven by a *Pro-reversal* tendency and thus do not reflect any *Pro-weak* tendency.

Columns (2), (4), and (6) of Table 5, however, enable us to disentangle the *Pro-weak* and *Pro-reversal* hypotheses for the considered sample of cases. These three columns provide the results of the regression for the cases initiated by the stronger party in each of the three categories (a)–(c). In Columns (2) and (4) of categories (a) and (b), the coefficients of *RRD*, *RDD*, and *DDD* are all negative and in the opposite sign than the one obtained when the weaker party initiated the effect, and they are significant at the 1% level in four of the instances, and significant at the 5% level in one out of the six instances. In Column (6), covering category (c), the coefficients on the political composition of the panel are small and all insignificant, which is still quite different from what we obtained in Column (5) for cases in category (c), in which the weaker party was the one who initiated the appeal.

When the appeal is initiated by the stronger party, *Reversal* is the outcome that disfavors the weaker party. Therefore, the negative coefficients in Columns (2) and (4) are consistent with the *Pro-weak* hypothesis. However, these results are *inconsistent* with a *Pro-reversal* hypothesis. If the identified pattern were driven by a *Pro-reversal* tendency of Democratic judges, then one would expect the results in Columns (2), (4), and (6) to be similar to those in Columns (1), (3), and (5). But this is not the case: the results in Columns (2), (4), and (6) are quite different than, and in Columns (2) and (4) are in a completely opposite direction to, the results in Columns (1), (3), and (5). Taken as a whole, the results in Table 5 can be explained only by the existence of a *Pro-weak* tendency of Democratic judges.²⁶

²⁶ Whereas I do not find support for a *Pro-reversal* tendency in the sample of cases between parties that are seemingly of unequal power, I do find evidence for such a tendency in the sample of civil cases between private parties of seemingly equal power examined in Section VII below.

Table 5: Appeals by the Weak Party vs. Appeals by the Strong Party

Dependent Variable: *Reversal*

Initiation	Criminal Appeals		Civil Litigation Between Institution and Non-Institution		Civil Litigation Between US and Private	
	(1)	(2)	(3)	(4)	(5)	(6)
	Government	Defendant	Institution	Non-Institution	US	Private
<i>RRD</i>	0.007** (0.003)	-0.023 (0.018)	0.015*** (0.004)	-0.031*** (0.010)	0.019*** (0.005)	0.011 (0.025)
<i>RDD</i>	0.024*** (0.004)	-0.077*** (0.024)	0.050*** (0.006)	-0.050*** (0.012)	0.052*** (0.007)	0.029 (0.027)
<i>DDD</i>	0.047*** (0.005)	-0.098** (0.039)	0.090*** (0.009)	-0.093*** (0.015)	0.098*** (0.010)	-0.018 (0.040)
At least One Woman	-0.005** (0.002)	0.005 (0.018)	0.001 (0.004)	0.003 (0.007)	-0.007* (0.004)	0.000 (0.018)
At least One Minority	0.001 (0.003)	0.017 (0.020)	-0.006 [‡] (0.004)	-0.014* (0.009)	-0.008* (0.004)	0.017 (0.020)
Panel (Mean) Tenure	0.001*** (0.000)	-0.000 (0.002)	0.001*** (0.000)	0.001 [‡] (0.001)	0.001*** (0.000)	-0.002 (0.002)
Constant	0.096*** (0.004)	0.665*** (0.030)	0.150*** (0.007)	0.418*** (0.014)	0.149*** (0.008)	0.618*** (0.031)
N	194,711	4,456	83,322	19,570	51,948	4,046
<i>Adj. R</i> ²	0.0425	0.1638	0.0387	0.0210	0.0488	0.0391
Mean	0.1164	0.6299	0.1997	0.3985	0.1920	0.6047
<i>Fixed Effects:</i>						
Circuit×Year	✓	✓	✓	✓	✓	
District	✓	✓	✓	✓	✓	
Appeal Type	✓	✓	✓	✓	✓	

Note: Standard errors are in parenthesis and are clustered by circuit X year. Stars denote the level of statistical significance
[‡] $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

V. Further Partitions of the Universe of Cases

A. Ideological Cases vs. Other Cases

Because the literature has devoted substantial attention to cases on ideologically contested or salient topics, I turn to examine whether the results obtained are driven by and limited to such cases, and I use for this purpose the protocol for identifying such cases put forward by Sunstein et al. (2004). Some of the sets of cases for which I identified an association between political affiliation and outcomes, such as those involving immigrants or prisoners, have not been identified as involving ideological topics by prior research, but it is conceivable that they could be argued to involve such topics. I therefore focus my analysis below on civil cases, which have been viewed by prior research as involving both cases on ideological subjects and cases on non-ideological

subjects. Sunstein et al. (2004) provide examples of several areas of civil litigation that the authors view as patently non-ideological.

The Sunstein et al. (2004) protocol identifies fourteen types of civil cases as ideological. Implementing this protocol identifies about 47,000 of the 160,000 civil cases that I classified as cases between unequal parties in my sample as ideological. Below, I examine whether the results I obtained for these civil cases were driven by and limited to the subset of cases that were classified as ideological according to this protocol (about 29% of the 160,000 civil cases classified as cases between unequal parties).

The results of the tests I did are reported in Table 6 below. Column (1) reports results regarding the subset of all such cases that are not classified as ideological (71% of such cases), and Column (2) focuses on the subset containing ideological cases (29% of such cases). In both cases, I ran regression (1) with the dependent variable *Pro-weak* that I used in my earlier analysis of such cases (see Table 3).

Column (1) indicates that the results I obtained for civil cases with unequal parties are not fully driven by ideological cases, for the patterns that I identified are fully present in Column (1) as well. In this column, the coefficients of *RRD*, *RDD*, and *DDD* are all statistically significant at the 1% level.

Furthermore, although the coefficients of these variables in Column (1) are a bit smaller in magnitude than those in Column (2), calculations similar to those in Table 4 above, and reported in Table 7 below, indicate that when an increase in probability of the *Pro-weak* defendant is stated relative to the baseline probability, the increase associated with adding Democrats to the panel is similar in the two sets of cases. As Table 7, Column (4) indicates, a switch from *RRR* to *DDD* is associated with an increase (relative to the baseline probability in the relevant category) of about 44% for non-ideological cases and about 47% for ideological cases.

Table 6: Ideological vs. Non-Ideological Cases

Dependent Variable: <i>Pro-Weak</i>		
	(1)	(2)
	Non-Ideological	Ideological
<i>RRD</i>	0.015*** (0.004)	0.022*** (0.006)
<i>RDD</i>	0.048*** (0.005)	0.055*** (0.007)
<i>DDD</i>	0.089*** (0.008)	0.106*** (0.012)
At least One Woman	-0.004 (0.003)	-0.004 (0.005)
At least One Minority	-0.005* (0.003)	-0.001 (0.005)
Panel (Mean) Tenure	0.001*** (0.000)	0.001*** (0.000)
Constant	0.201*** (0.006)	0.225*** (0.009)
N	111,830	47,112
<i>Adj.R</i> ²	0.0415	0.0421
Mean	0.2400	0.2797
<i>Fixed Effects:</i>		
Circuit × Year	✓	✓
District	✓	✓
Appeal Type	✓	✓

Note: Standard errors are in parenthesis and are clustered by circuit X year. Stars denote the level of statistical significance ^t $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 7: Magnitude of Effects – Percentage Increase in Odds of *Pro-Weak* Outcome

	(1)	(2)	(3)	(4)
	RRR	Switch to	Switch to	Switch to
	Baseline	RRD	RDD	DDD
Non-Ideological	0.20	7%	24%	44%
Ideological	0.23	10%	24%	47%

In my view, the results reported in Table 7 are best interpreted not as suggesting that politics and outcomes are associated in non-ideological cases but as suggesting that circuit court cases, including the many cases not involving ideologically salient or contested issues, are generally still ideological in the following sense: they involve issues and dimensions, such as the balance of power between the parties or the desirable level of deference to lower-court decisions, which

judges of different ideologies and political affiliations might react to or approach in systematically different ways. Therefore, as my results have shown, ideological leanings, as proxied by political affiliation, do have predictive power for outcomes in the universe of cases on topics that are not ideologically salient or contested.

B. *Published Cases vs. Unpublished Cases*

Published cases are more likely than unpublished ones to receive greater attention from circuit court judges and users of circuit court decisions. Thus, circuit court judges might attach more importance to having their preferences reflected in the outcomes of published cases than in the outcomes of unpublished cases. Therefore, I turn to examine whether the results I obtained are limited to published cases only. I find that even though circuit court cases might attach relatively less importance to the outcomes of unpublished cases, the ideological leanings of circuit court judges can still help to explain the outcomes of such cases.

To examine the question, I divide my sample of cases between parties with seemingly unequal power into published and unpublished cases. For both of these subsets, I run regression (1) with the dependent variable *Pro-weak* that I used in my earlier analysis of cases between unequal parties (see Table 3). The results of my tests are reported in Table 8 below. Column (1) of the Table focuses on unpublished cases (78% of the cases), and Column (2) focuses on published cases (22% of the cases). The results of the table indicate that the identified pattern is present not only in published cases but also in unpublished cases. In particular, in Column (1), the coefficients of *RRD*, *RDD*, and *DDD* are all positive, they all increase as the number of Democratic judges goes up, and they are all significant at the 1% level.

Table 8: Unpublished vs. Published Cases

Dependent Variable: *Pro-Weak*

	(1)	(2)
	Unpublished	Published
<i>RRD</i>	0.006*** (0.002)	0.024*** (0.004)
<i>RDD</i>	0.021*** (0.003)	0.069*** (0.005)
<i>DDD</i>	0.047*** (0.005)	0.130*** (0.008)
At least One Woman	0.000 (0.002)	-0.008** (0.004)
At least One Minority	-0.002 (0.002)	-0.004 (0.004)
Panel (Mean) Tenure	0.000 (0.000)	0.001** (0.000)
Constant	0.099*** (0.004)	0.290*** (0.006)
N	429,230	123,734
<i>Adj.R</i> ²	0.0376	0.0522
Mean	0.1140	0.3368
<i>Fixed Effects:</i>		
Circuit×Year	✓	✓
District	✓	✓
Appeal Type	✓	✓

Note: Standard errors are in parenthesis and are clustered by circuit X year. Stars denote the level of statistical significance [†] $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 9 reports results regarding the magnitude of the effects of more Democratic judges in the two subsets of cases. As the table indicates, although the size of the coefficients is smaller in Column (1) than in Column (2), the magnitude of the effects relative to the baseline probability is somewhat similar for unpublished and published cases. For example, as the table indicates, a move from *RRR* to *DDD* increases the probability of a *Pro-weak* outcome, relative to the baseline probability, by about 47% for unpublished cases and by about 45% for published cases.

Table 9: Magnitude of Effects – Percentage Increase in Odds of *Pro-Weak* Outcome

	(1)	(2)	(3)	(4)
	RRR	Switch to	Switch to	Switch to
	Baseline	RRD	RDD	DDD
Unpublished	0.10	6%	21%	47%
Published	0.26	8%	24%	45%

Altogether, the results in Tables 8 and 9 highlight the breadth of cases in which political affiliation can help to predict outcomes. Despite the lesser attention that unpublished cases commonly get, either from circuit court judges or from users of their decisions, the identified association is significantly present in the majority of circuit cases that are unpublished.

Before moving on, for my large sample of cases between parties that are of seemingly unequal power, I also partitioned the cases *both* by whether the case is classified as ideological *and* by whether the case is published. I examined whether the identified associations exist in each of the four produced subsets. Table A2 in the Appendix presents the results of these regressions. These results indicate that the *Pro-weak* hypothesis can help to predict the outcome of cases in all the resulting four sets of cases: published and ideological; published and non-ideological; unpublished and ideological, and unpublished and non-ideological.

Table A3 in the Appendix provides the interpretation of the magnitude of the coefficient of Table A3. The table indicates that the magnitude of the effects is somewhat similar, with the effect of the subset of unpublished cases a bit larger for non-ideological cases than for ideological cases; and for the subset of published cases, the effect is a bit larger for ideological cases than for the non-ideological cases.

C. *Partitioning by Period, Circuit, and Offense Type*

To further examine the pervasiveness of the identified associations, I proceed to partition my sample of cases in three additional ways, and I examine whether the patterns identified earlier are present in the various resulting subsets.

First, I divided the cases into groups based on the circuit, with each group consisting only of the cases issued in a given circuit. To examine whether the identified patterns were driven by and limited to several circuits, I ran the key regressions separately for the cases with seemingly unequal parties in each of the circuits. The results, which are reported in Table A4 in the Appendix, indicate that the identified patterns were largely present in each of the circuits.

Second, I divided the cases into groups of cases in five different time periods, each covering the presidency of one or more presidents: (i) 1985–1992 (presidencies of Ronald Regan and G.H.W. Bush); (ii) 1993–2000 (presidency of Bill Clinton); (iii) 2001–2008 (presidency of G.W. Bush); (iv) 2009–2016 (presidency of Barak Obama); and (v) 2017–2020 (presidency of Donald Trump). I then ran the key regressions separately for the cases in each of the decades. The results, which are reported in Table A5 in the Appendix, indicate that the identified patterns were present in each of the five periods.

Third, because a large fraction of my sample (about 36%) consists of criminal appeals, I examine whether the results in this large set of criminal appeals were driven by and limited to several types of offenses. To this end, I used the many offense codes provided by PACER to group offenses into eight main categories: violent, property, fraud, sex/family, immigration, drug, firearm, and other (for the remaining criminal offenses). I then ran the key regressions separately for the cases in each of these eight categories. The results, which are reported in Table A6 in the Appendix, indicate that the identified patterns are present in each of the eight categories of cases.

D. Unanimous Decisions and the Edwards Critique

In a series of well-known articles, former chief judge Harry Edwards of the D.C. Circuit Court of Appeals put forward a critique of the view that circuit court judges' decisions are influenced by their ideology and political affiliations (Edwards (1985), Edwards (1998), see also Edwards and Livermore (2009)). A key point made by Edwards is that the great majority of circuit court cases are decided unanimously, and the 3-0 decisions in these cases indicate that they are ones with respect to which legal professionals do not differ.

Below I explore this argument empirically.²⁷ Because dissenting opinions appear only in published cases, I limited my analysis to these published cases, and I focused on those published cases without dissenting opinions, which make up about 91% of all published cases. Table 10 reports the results from running regression (1) on the set of all unanimously decided published cases in the sample of cases with seemingly unequal power.

Table 10: Unanimously Decided Cases

Dependent Variable: <i>Pro-Weak</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Criminal Appeals	Prisoner Litigation	Immigrant Litigation	Civil Cases of Non-Institution vs. Institutions	Civil Cases of Private Parties vs. US	Original Proceedings	All Cases
<i>RRD</i>	0.024*** (0.006)	0.027*** (0.010)	0.033 [†] (0.021)	0.031*** (0.008)	0.030*** (0.011)	0.090* (0.054)	0.027*** (0.004)
<i>RDD</i>	0.052*** (0.007)	0.065*** (0.013)	0.158*** (0.023)	0.081*** (0.009)	0.059*** (0.013)	0.066 (0.064)	0.067*** (0.005)
<i>DDD</i>	0.115*** (0.012)	0.151*** (0.018)	0.275*** (0.033)	0.146*** (0.014)	0.118*** (0.019)	0.017 (0.091)	0.138*** (0.008)
At least One Woman	-0.014** (0.006)	-0.014 (0.010)	-0.029* (0.016)	0.001 (0.006)	-0.008 (0.010)	0.001 (0.050)	-0.009** (0.004)
At least One Minority	0.002 (0.006)	-0.018* (0.010)	-0.010 (0.016)	-0.008 (0.006)	-0.020** (0.009)	0.019 (0.052)	-0.008** (0.004)
Panel (Mean) Tenure	0.000 (0.000)	0.000 (0.001)	0.002 (0.001)	0.001 [†] (0.001)	0.002** (0.001)	0.002 (0.004)	0.001** (0.000)
Constant	0.209*** (0.009)	0.307*** (0.017)	0.224*** (0.030)	0.348*** (0.011)	0.301*** (0.015)	0.242*** (0.085)	0.282*** (0.006)
N	41,486	14,787	4,781	34,246	16,945	650	113,084
<i>Adj. R</i> ²	0.0489	0.0674	0.1152	0.0221	0.0290	0.0787	0.0551
Mean	0.2403	0.3443	0.3202	0.4059	0.3608	0.3311	0.3262
<i>Fixed Effects:</i>							
Circuit × Year	✓	✓	✓	✓	✓	✓	✓
District	✓	✓	✓	✓	✓	✓	✓
Appeal Type	✓	✓	✓	✓	✓	✓	✓

Note: Standard errors are in parenthesis and are clustered by circuit X year. Stars denote the level of statistical significance [†] $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

The results in Table 10 indicate that for the sets of cases decided unanimously, the coefficients of *RRD*, *RDD*, and *DDD* are all positive and increase with the addition of each Democratic judge. Furthermore, the coefficients are all significant at the 1% level.

²⁷ For a conceptual engagement with Edwards' view, see Epstein et al. (2015, Chapter I).

These results imply that Edwards' observation that most cases are unanimously decided does not indicate, as he argued, that these cases are ones that judges of different ideologies and political affiliations generally agree on. Indeed, the results indicate that this is *not* the case. The table indicates that in the large set of unanimously decided cases, panels with different political compositions were associated with substantially different odds of *Pro-weak* outcomes. While the groups of cases with *RRR*, *RRD*, *RDD*, and *DDD* panels all decided their cases 3-0, these four groups of panels made decisions that *systematically differed* from one another.

In particular, for the sample including all categories, using calculations similar to those in Tables 4, 7, and 9, the fraction of *Pro-weak* outcomes in 3-0 cases with *DDD* panels is more than 49% higher than the fraction of *Pro-weak* outcomes in 3-0 cases with *RRR* panels. This contradicts Edwards' belief that Democratic and Republican judges generally agree in these cases.

VI. Polarization over Time

A. *The Polarization Hypothesis*

There is a substantial literature suggesting that political polarization in the United States has been growing in recent decades (see, e.g., Abramowitz and Saunders (2008), Gentzkow 2023)). According to this view, the positions of individuals supporting each of the two major parties have become more correlated with the positions of other supporters and more divergent from the positions of supporters of the other major party, and disagreements between supporters of the two major parties on given issues have become more oppositional and adversarial. A Pew Foundation Report concluded in 2014 that “Republicans and Democrats are more divided along ideological lines – and partisan antipathy is deeper and more extensive – than at any point in the last two decades,” and a 2022 update stated that the situation has only gotten worse in the intervening years (Pew Foundation (2014, 2022)). Indeed, polls have found that over time, individuals supporting one of the major parties have even increasingly expressed preference that their children will not marry an individual supporting the other major party (Iyengar et al. (2012)).

It is thus natural to examine whether polarization has also been growing among federal judges of different political leanings. Scholars examining Supreme Court decisions over time have documented a pattern of growing polarization in such decisions. Over the years, Democratic and

Republican justices have increasingly tended to concentrate on the opposing sides of divided cases (Epstein et al. (2015), Hasen (2019)).

But what about the vastly larger set of circuit court decisions? There are reasons to expect to find a pattern of growing polarization in these cases as well. In particular, there is evidence that the process of selecting circuit court judges has become more “politicized” over time, with candidates’ political affiliations and inclinations playing an increasingly significant role in the president’s selection process (see Bonica and Sen (2017)). Some scholars have suggested that the partisan aspects of judicial selection have become stronger, especially since the end of the last century. For example, Bartels (2015) suggests that the influence of political considerations on judicial nominations started growing during the Clinton administration, when the president started placing more emphasis on ideological compatibility and reliability, and more attention began to be paid to the possibility of “strategic retirement” among Supreme Court justices. In the empirical analysis below, I therefore test whether the data on circuit court outcomes are consistent with the hypothesis of growing polarization.

B. Post-2000 and Pre-2000 Cases

To test for the presence of polarization over time, this subsection examines whether there are systematic differences regarding the identified association between cases in the later parts of the study period and those in the earlier parts. For simplicity, I focus on testing whether the identified association is stronger in post-2000 cases or pre-2000 cases. As explained below, however, I also document robustness to the choice of some alternative breaking points.

Table 11 below provides the results of my tests from using regression (1) – but adding three interaction variables as main variables of interest. Since the hypothesis is that things are different after the end of the last century, I defined a new dummy variable, *After*, which is equal to 1 if the year of the circuit court decision is after the breaking-point year of 2000, and 0 otherwise. The three variables of interest are all interactions of the political composition of the panel with the variable *After*: (i) $RRD \times After$, (ii) $RDD \times After$, and (iii) $DDD \times After$. Thus, the regression I use is as follows:

(3) $Pro - weak_{pctjia}$

$$\begin{aligned}
 &= \beta_1 RRD_{qct} + \beta_2 RDD_{qct} + \beta_3 DDD_{qct} + \beta_4 Panel_Includes_Women_p \\
 &+ \beta_6 Panel_Includes_Minority_p + \beta_7 RRD_{qct} \times After_t + \beta_8 RDD_{qct} \times After_t \\
 &+ \beta_9 DDD_{qct} \times After_t + \gamma_{c \times t} + \mu_a + \varepsilon_{pctja}
 \end{aligned}$$

The results, in Table 11 below, indicate that the patterns I identified for association for cases between unequal parties are present in both pre-2000 and post-2000 cases. In both columns, the coefficients of RDD and DDD are positive and statistically significant at the 1% level for almost all of the cases, indicating that the identified associations exist in both the pre-and post-2000 periods.

Table 11: Polarization over Time

Dependent Variable: <i>Pro-Weak</i>		
	(1)	(2)
	Unpublished	Published
<i>RRD</i>	0.005* (0.003)	0.020*** (0.005)
<i>RDD</i>	0.018*** (0.004)	0.060*** (0.007)
<i>DDD</i>	0.046*** (0.006)	0.105*** (0.012)
<i>RRD</i> × <i>After</i>	0.002 (0.004)	0.010 (0.008)
<i>RDD</i> × <i>After</i>	0.004 (0.006)	0.020** (0.010)
<i>DDD</i> × <i>After</i>	0.001 (0.009)	0.047*** (0.016)
At least One Woman	0.000 (0.002)	-0.008** (0.004)
At least One Minority	-0.002 (0.002)	-0.004 (0.004)
Panel (Mean) Tenure	0.000 (0.000)	0.001*** (0.000)
Constant	0.099*** (0.004)	0.287*** (0.006)
N	429,060	123,714
<i>Adj. R</i> ²	0.0376	0.0523
Mean	0.1322	0.3849
<i>Fixed Effects:</i>		
Circuit × Year	✓	✓
District	✓	✓
Appeal Type	✓	✓

Note: Standard errors are in parenthesis and are clustered by circuit X year. Stars denote the level of statistical significance † $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

But is the strength of the pattern different between pre-2000 cases and post-2000 cases? In Column (1), where only unpublished cases are considered, the coefficients of the three interaction terms of interest are all statistically insignificant and very small. This indicates that for unpublished cases, the patterns of association between political affiliation and outcomes are similar in the pre- and post-2000 periods, and no polarization is evident.

However, in Column (2), where only published cases are considered, the coefficients of the interaction terms are all positive, with the coefficients of *RDD* and *DDD* statistically significant at the 1% level and meaningful in magnitude. That is, the association between political appointments and outcomes that already existed pre-2000 substantially strengthened in the post-2000 period, consistent with polarization over time.

Finally, whereas the above tests used 2000 as the dividing point between the later and earlier periods, I also ran the regressions using 1994, 1996, 1998, 2000, 2002, 2004, and 2006 as alternative breaking points. The results of this analysis are reported in Table A7 in the Appendix. As the table indicates, using any breaking point from 1996 forward, I obtain results regarding differences between cases before and after this point in time that are similar to those presented in Table 11 above regarding differences between post-2000 and pre-2000 cases.

VII. Beyond Cases with Seemingly Unequal Parties

Much of the preceding analysis focused on the very large set of about 550,000 cases for which I identified characteristics that could lead judges to perceive the parties as having unequal power. To further investigate and expand the scope of cases for which political affiliation can help to predict outcomes, I now turn to the set of cases in which parties could be perceived by judges as having equal power.

Recall that among the approximately 183,000 civil cases between private parties in my sample, I classified about 103,000 as being between a non-institutional private party and an institutional private party. This leaves a group of about 80,000 cases that are either between two non-institutional private parties or between two institutional private parties. Below, I put forward and test a hypothesis that enables using judges' political affiliations to help to predict outcomes in this set of about 80,000 cases. I show that political affiliations can indeed help to predict outcomes in

this set of about 80,000 cases. This finding, together with my earlier finding about the set of about 550,000 cases between parties with seemingly unequal power, indicate political affiliations are associated with outcome in about 630,000 cases, significantly over 90% of all circuit court cases.

A. *The Less-Deference Hypothesis*

For the cases examined in this subsection, in the absence of a weaker party, the *Pro-weak* hypothesis is not applicable. For these cases, I put forward another hypothesis regarding party effects that could assist in protecting outcomes. Democratic judges, I hypothesize, are more likely than Republican judges to be willing to intervene in lower-court decisions rather than defer to them. I refer to this hypothesis as the *Less-deference* hypothesis.

Consider the judicial approach of circuit court judges to their review of lower-court decisions. Regardless of whether the cases involve ideologically salient issues, different judges might have different approaches regarding the extent to which they should defer to lower-court decisions. On the one hand, the benefit of being ready to intervene whenever an error or a problem can be detected in the lower-court decision could be viewed by circuit court judges as increasing the odds that the outcome would be “correct” and the risk of an error would be reduced in each individual case. On the other hand, deference to lower-court decisions might be viewed as beneficial on the grounds that it could provide efficiency benefits from resource-savings and that errors in individual cases cancel each other out and thus do not represent a major social concern.

Democratic judges might view differently than Republican judges either the benefits of intervention or the benefits of deference. Compared to Republican judges, Democratic judges are likely to attach more weight to the benefits of securing correct outcomes in each individual case or to attach less weight to the efficiency and resource-saving benefits of deference. Accordingly, I hypothesize that in civil cases for which I was unable to identify a party that could be viewed as weaker by judges, panels with more Democratic appointees should be expected to be associated with higher odds of reversals of the lower-court decisions.²⁸

²⁸ Revesz (1997, at 1729) suggested that Republican judges might be more inclined than Democratic judges to defer to lower-court decisions because of their views about the appropriate relationship among the

B. *Testing the Less-Deference Hypothesis*

To test this hypothesis, I run regression (2) (see Table 5) on the civil cases I classify as being between seemingly equal parties. In this regression, the dependent variable is *Reversal*. Table 12 reports the results.

Table 12: Civil Litigation between Seemingly Equal Parties

Dependent Variable: <i>Reversal</i>	
	(1)
	Civil Equal
<i>RRD</i>	0.004 (0.005)
<i>RDD</i>	0.021*** (0.006)
<i>DDD</i>	0.052*** (0.008)
At least One Woman	-0.007* (0.004)
At least One Minority	-0.006 ^t (0.004)
Panel (Mean) Tenure	0.000 (0.000)
Constant	0.239*** (0.008)
N	78,726
<i>Adj.R</i> ²	0.0346
Mean	0.2526
Fixed Effects:	
Circuit × Year	✓
District	✓
Appeal Type	✓

Note: Standard errors are in parenthesis and are clustered by circuit X year. Stars denote the level of statistical significance ^t $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

branches. However, he did not find support for this hypothesis in his small sample of administrative law cases.

The results are consistent with the *Less-deference* hypothesis. The coefficients of *RRD*, *RDD*, and *DDD* are all statistically significant at the 1% level. Furthermore, the coefficients go up in value as each additional Democratic judge is added to the panel.

Finally, it is worth noting that the identified effects are significant in magnitude. Proceeding in a similar way to that used in Tables 4,7, and 9, Table 13 provides estimates of the magnitude of effects. As the table indicates, a switch from *RRR* to *DDD* is associated with (i) an increase of about 30% in the odds of *Reversal* for the set of all civil cases between two non-institutional parties; (ii) an increase of about 8% in the odds of *Reversal* for the set of civil cases between two institutional parties; and (iii) an increase of about 22% in the odds of *Reversal* for the set of all civil cases with equal parties.

Table 13: Magnitude of Effects – Percentage Increase in the Odds of Reversal

	(1)	(2)	(3)	(4)
	RRR	Switch to	Switch to	Switch to
	Baseline	RRD	RDD	DDD
Civil Equal	0.24	2%	9%	22%

VIII. Conclusion

Taking advantage of a new dataset of about 670,000 circuit court cases from 1985–2020, this study has investigated how the political affiliations of circuit court judges are associated with, and thus can help to predict, the outcomes of circuit court cases. I have found that such an association is pervasive throughout the universe of circuit court cases – indeed, it is present in over 90% of these cases. My analysis has shown that the impact of political appointments on judicial outcomes is broader and far more pervasive than prior research has identified, and it has highlighted some key channels through which such an association operates.

In particular, I have shown that in six categories of cases in which parties have characteristics that might lead them to be perceived by judges as having unequal power, panels with more Democratic judges are more likely to side with the seemingly weaker party. This introduces an association between political affiliation and outcomes in many areas of circuit court litigation – criminal appeals, prisoner litigation, immigrant litigation, civil cases between non-institutional private parties and institutional private parties, civil cases between private parties and the U.S. government, and *habeas corpus* and other petitions for which circuit courts have original jurisdiction. In addition, I have shown that in civil cases between private parties that do not involve litigation between a non-institutional party and an institutional party, panels with more Democratic judges are less deferential to, and more open to intervening in, the decisions of lower courts.

My analysis shows that political affiliation can help to predict outcomes in cases other than those involving ideologically salient subjects on which past work has focused. This pattern is best viewed not as implying that ideology influences outcomes in completely non-ideological cases, but as indicating that the great majority of cases have some dimensions to which judges with different ideological leanings react and respond differently.

My analysis has also fully addressed a well-known challenge to the view that ideologies influence outcomes that was put forward by a former chief judge of the D.C. Circuit Court of Appeals. I demonstrate that the very small incidence of non-unanimous decision does not imply, as Edwards argued, that such cases commonly involve questions on which all judges generally agree. To the contrary, the unanimous decisions reached by circuit court panels systematically depend on the panel composition in ways that are inconsistent with the view that the questions involved are ones on which circuit court judges generally agree. These systematic differences indicate that the decisions often are ones on which Democratic and Republican judges do not generally agree.

I have also identified evidence that political polarization in the circuit courts has grown over time. Consistent with such polarization, in the important subset of published circuit court cases, the systematic association between political affiliation and outcomes strengthened in the last two decades of the examined period.

As my analysis has shown, even using a simple and likely noisy measure of ideological leanings, as well as simple and likely noisy measures of case characteristics, ideological leanings

can help to predict outcomes in a vast majority of circuit court cases. Because of the simplicity and imperfections of the measures used here, it is likely that future empirical work will be able to further improve on the ability to use political affiliation to help predict outcomes that this study identified. This study, I hope, can provide a good starting point and a foundation for such future work.

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APPENDIX

Table A1: Random Assignment and Panel Political Composition

Selected Years	<u>Random Draw</u>				<u>Data</u>			
	(1) RRR	(2) RRD	(3) RDD	(4) DDD	(5) RRR	(6) RRD	(7) RDD	(8) DDD
1985	14.7	41.4	36.7	8.4	12.1	35.8	39.0	13.4
1990	27.5	47.6	22.1	3.1	21.9	44.8	28.4	4.9
1995	25.4	47.2	24.0	4.0	29.2	45.9	20.0	4.9
2000	13.5	41.6	35.0	9.9	13.9	44.1	33.7	8.3
2005	23.1	45.6	26.0	5.8	21.1	39.0	32.8	7.1
2010	20.4	42.8	29.9	7.4	21.2	41.1	29.9	7.7
2015	12.6	35.3	38.2	13.9	13.2	32.4	36.6	17.8
2020	21.5	34.4	34.3	9.8	21.7	33.8	35.6	9.0
Total	18.6	41.1	32.5	9.4	20.1	39.9	31.3	8.8

Table A2: Partitioning by Both Publication Status and Ideological Subject

Dependent Variable: *Pro-Weak*

	(1)	(2)	(3)	(4)
	Unpublished	Unpublished	Published	Published
Cases:	Non-Ideological	Ideological	Non-Ideological	Ideological
<i>RRD</i>	0.007* (0.004)	0.002 (0.007)	0.019** (0.008)	0.035*** (0.009)
<i>RDD</i>	0.028*** (0.005)	0.017** (0.008)	0.067*** (0.009)	0.083*** (0.011)
<i>DDD</i>	0.063*** (0.008)	0.041*** (0.013)	0.108*** (0.014)	0.153*** (0.017)
At least One Woman	-0.002 (0.003)	0.004 (0.005)	-0.002 (0.007)	-0.003 (0.008)
At least One Minority	0.001 (0.003)	0.005 (0.006)	-0.015** (0.007)	-0.006 (0.009)
Panel (Mean) Tenure	-0.000 (0.000)	-0.000 (0.000)	0.001* (0.001)	0.001* (0.001)
Constant	0.160*** (0.006)	0.149*** (0.010)	0.346*** (0.011)	0.342*** (0.013)
N	78,264	24,358	33,552	22,730
<i>Adj.R</i> ²	0.0412	0.0384	0.0209	0.0181
Mean	0.1749	0.1598	0.3918	0.4082
Fixed Effects:				
Circuit × Year	✓	✓	✓	✓
District	✓	✓	✓	✓
Appeal Type	✓	✓	✓	✓

Note: Standard errors are in parenthesis and are clustered by circuit X year. Stars denote the level of statistical significance [†] $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A3: Partitioning by Both Publication Status and Ideological Subject – Magnitude of Effects

Published Cases	Ideological Cases	(1) RRR Baseline	(2) Switch to RRD	(3) Switch to RDD	(4) Switch to DDD
No	No	0.16	5%	18%	40%
No	Yes	0.15	1%	11%	27%
Yes	No	0.35	6%	19%	31%
Yes	Yes	0.34	10%	24%	45%

Table A4: Panel Political Composition and *Pro-weak* Outcomes – by Circuit

Dependent Variable: *Pro-Weak*

Circuit	(1) First	(2) Second	(3) Third	(4) Fourth	(5) Fifth	(6) Sixth	(7) Seven	(8) Eight	(9) Ninth	(10) Ten	(11) Eleventh	(12) DC
RRD	0.042*** (0.011)	-0.004 (0.009)	-0.006 (0.007)	0.004 (0.005)	0.002 (0.006)	0.014*** (0.005)	0.012* (0.007)	0.042*** (0.008)	0.029*** (0.006)	0.018** (0.008)	0.016* (0.009)	0.028*** (0.010)
RDD	0.057*** (0.014)	0.014 (0.012)	0.001 (0.008)	0.013* (0.006)	0.008 (0.009)	0.043*** (0.006)	0.028** (0.012)	0.091*** (0.011)	0.075*** (0.007)	0.039*** (0.008)	0.028** (0.013)	0.082*** (0.014)
DDD	0.116*** (0.028)	0.038** (0.014)	0.026 (0.018)	0.050*** (0.008)	0.043*** (0.015)	0.094*** (0.010)	0.065* (0.042)	0.093*** (0.028)	0.117*** (0.010)	0.067*** (0.014)	0.033** (0.016)	0.109*** (0.025)
At least One Woman	-0.040*** (0.012)	0.008* (0.005)	-0.010* (0.005)	-0.005* (0.003)	-0.004 (0.004)	-0.002 (0.005)	0.034*** (0.008)	-0.047*** (0.011)	0.007 (0.005)	-0.016*** (0.006)	-0.013** (0.006)	-0.010 (0.011)
At least One Minority	-0.000 (0.010)	-0.006 (0.004)	0.007 (0.005)	-0.001 (0.004)	0.007 [†] (0.004)	0.009** (0.004)	-0.008 (0.011)	-0.014** (0.007)	-0.017*** (0.005)	0.007 [†] (0.005)	-0.010 (0.007)	0.002 (0.011)
Panel (Mean) Tenure	0.002** (0.001)	0.000 (0.000)	0.001** (0.001)	0.000 (0.000)	0.001** (0.000)	-0.001** (0.000)	-0.000 (0.001)	0.003*** (0.001)	0.000 (0.000)	0.002*** (0.001)	0.000 (0.000)	0.002 (0.002)
Constant	0.155*** (0.018)	0.182*** (0.009)	0.151*** (0.012)	0.086*** (0.010)	0.125*** (0.010)	0.161*** (0.006)	0.179*** (0.013)	0.094*** (0.011)	0.119*** (0.011)	0.120*** (0.010)	0.146*** (0.011)	0.143*** (0.025)
N	11,690	35,308	37,654	70,904	76,592	51,493	29,838	34,548	114,485	30,522	47,346	12,490
Adj. R ²	0.0485	0.0614	0.0548	0.0478	0.0753	0.0422	0.0362	0.0623	0.0450	0.0453	0.0636	0.0670
Mean	0.2083	0.1948	0.1668	0.0980	0.1509	0.1748	0.2003	0.1538	0.1843	0.1698	0.1565	0.1997
Fixed Effects:												
Circuit×Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
District	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Appeal Type	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Standard errors are in parenthesis and are robust in Column (1)-(4) and clustered by the Circuit × Year. Stars denote the level of statistical significance [†] $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A5: Panel Political Composition and *Pro-weak* Outcomes – by Presidential Term

Dependent Variable: *Pro-Weak*

	(1)	(2)	(3)	(4)	(5)
	Regan and G.H.W. Bush	Clinton	G.W. Bush	Obama	Trump
<i>RRD</i>	0.012** (0.006)	0.015*** (0.004)	0.014*** (0.005)	0.005 (0.004)	0.022*** (0.007)
<i>RDD</i>	0.041*** (0.008)	0.040*** (0.006)	0.038*** (0.008)	0.025*** (0.005)	0.040*** (0.009)
<i>DDD</i>	0.080*** (0.012)	0.083*** (0.011)	0.084*** (0.012)	0.057*** (0.009)	0.065*** (0.009)
At least One Woman	-0.009 [‡] (0.006)	-0.008** (0.004)	-0.001 (0.003)	0.002 (0.003)	-0.004 (0.005)
At least One Minority	-0.014*** (0.005)	-0.008** (0.004)	-0.005 (0.003)	-0.001 (0.004)	0.008 (0.007)
Panel (Mean) Tenure	0.002*** (0.000)	0.002*** (0.000)	0.001*** (0.000)	0.000 (0.000)	-0.001 (0.001)
Constant	0.188*** (0.007)	0.123*** (0.006)	0.122*** (0.007)	0.122*** (0.008)	0.127*** (0.012)
N	66,842	131,391	141,595	160,666	52,449
<i>Adj.R</i> ²	0.0737	0.0453	0.0435	0.0556	0.0521
Mean	0.2299	0.1627	0.1634	0.1442	0.1440
Fixed Effects:					
Circuit × Year	✓	✓	✓	✓	✓
District	✓	✓	✓	✓	✓
Appeal Type	✓	✓	✓	✓	✓

Standard errors are in parenthesis and are robust in Column (1)-(4) and clustered by the Circuit × Year. Stars denote the level of statistical significance [‡] $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A6: Panel Political Composition and *Pro-weak* Outcomes – by Offense Type

Dependent Variable: *Pro-Weak*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Violent	Property	Fraud	Sex-Family	Immigration	Drug	Firearm	Other
<i>RRD</i>	0.008 (0.008)	0.002 (0.015)	-0.005 (0.008)	0.006 (0.016)	0.015 (0.012)	0.009*** (0.003)	0.010* (0.006)	0.005 (0.006)
<i>RDD</i>	0.028*** (0.010)	0.027 [†] (0.017)	0.010 (0.009)	0.026 [†] (0.017)	0.020 [†] (0.012)	0.029*** (0.004)	0.031*** (0.007)	0.023*** (0.007)
<i>DDD</i>	0.035** (0.015)	0.048* (0.027)	0.045*** (0.013)	0.066** (0.027)	0.039*** (0.014)	0.054*** (0.007)	0.062*** (0.011)	0.043*** (0.010)
At least One Woman	-0.014* (0.007)	-0.011 (0.014)	-0.011* (0.006)	-0.031** (0.012)	0.005 (0.007)	-0.005* (0.003)	-0.008* (0.004)	-0.001 (0.006)
At least One Minority	-0.001 (0.008)	0.008 (0.013)	-0.012* (0.006)	0.002 (0.014)	0.001 (0.006)	-0.003 (0.003)	0.007 (0.005)	0.011** (0.005)
Panel (Mean) Tenure	-0.000 (0.001)	0.000 (0.001)	0.001 (0.001)	0.001 (0.001)	-0.000 (0.000)	0.001*** (0.000)	0.000 (0.000)	0.000 (0.000)
Constant	0.133*** (0.012)	0.131*** (0.021)	0.157*** (0.011)	0.135*** (0.021)	0.078*** (0.015)	0.078*** (0.005)	0.111*** (0.009)	0.112*** (0.009)
N	13,682	4,358	20,182	4,439	25,177	77,832	25,509	27,900
<i>Adj. R</i> ²	0.0425	0.0394	0.0379	0.0519	0.0651	0.0491	0.0493	0.0415
Mean	0.1385	0.1456	0.1611	0.1468	0.0939	0.1080	0.1316	0.1345

Fixed Effects:

Circuit × Year	✓	✓	✓	✓	✓	✓	✓	✓
District	✓	✓	✓	✓	✓	✓	✓	✓
Appeal Type	✓	✓	✓	✓	✓	✓	✓	✓

Standard errors are in parenthesis and are robust in Column (1)-(4) and clustered by the Circuit x Year. Stars denote the level of statistical significance [†] $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table A7: Polarization over Time – Published Cases

Dependent Variable: *Pro-Weak*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	1994	1996	1998	2000	2002	2004	2006
<i>RRD</i>	0.021*** (0.007)	0.019*** (0.006)	0.018*** (0.006)	0.020*** (0.005)	0.020*** (0.005)	0.022*** (0.005)	0.023*** (0.004)
<i>RDD</i>	0.058*** (0.009)	0.059*** (0.008)	0.058*** (0.008)	0.060*** (0.007)	0.058*** (0.007)	0.060*** (0.006)	0.062*** (0.006)
<i>DDD</i>	0.108*** (0.015)	0.106*** (0.014)	0.103*** (0.013)	0.105*** (0.012)	0.109*** (0.011)	0.114*** (0.011)	0.117*** (0.010)
<i>RRD</i> × <i>After</i>	0.005 (0.008)	0.009 (0.008)	0.012 [†] (0.008)	0.010 (0.008)	0.011 (0.008)	0.008 (0.008)	0.006 (0.009)
<i>RDD</i> × <i>After</i>	0.017 [†] (0.011)	0.018* (0.010)	0.021** (0.010)	0.020** (0.010)	0.028*** (0.010)	0.026** (0.010)	0.023** (0.011)
<i>DDD</i> × <i>After</i>	0.032* (0.018)	0.037** (0.017)	0.046*** (0.016)	0.047*** (0.016)	0.047*** (0.016)	0.041** (0.016)	0.038** (0.017)
At least One Woman	-0.008** (0.004)	-0.008** (0.004)	-0.008** (0.004)	-0.008** (0.004)	-0.008** (0.004)	-0.008** (0.004)	-0.008** (0.004)
At least One Minority	-0.005 (0.004)	-0.005 (0.004)	-0.005 (0.004)	-0.004 (0.004)	-0.004 (0.004)	-0.004 (0.004)	-0.004 (0.004)
Panel (Mean) Tenure	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
Constant	0.288*** (0.006)	0.288*** (0.006)	0.287*** (0.006)	0.287*** (0.006)	0.288*** (0.006)	0.288*** (0.006)	0.288*** (0.006)
N	123,714	123,714	123,714	123,714	123,714	123,714	123,714
<i>Adj.R</i> ²	0.0523	0.0523	0.0523	0.0523	0.0524	0.0523	0.0523
Mean	0.3368	0.3368	0.3368	0.3368	0.3368	0.3368	0.3368
Fixed Effects:							
Circuit × Year	✓	✓	✓	✓	✓	✓	✓
District	✓	✓	✓	✓	✓	✓	✓
Appeal Type	✓	✓	✓	✓	✓	✓	✓

Standard errors are in parenthesis and are clustered by Circuit by Year. Stars denote the level of statistical significance [†] $p < 0.15$ * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.