

Beyond Ideology: An Empirical Study of Partisanship and Independence in the Federal Courts

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ABSTRACT

This Article identifies and measures dimensions of judicial behavior separate from ideology to improve both the understanding of and vocabulary surrounding debates about judges. In particular, it recognizes both independence and partisanship as aspects of judicial behavior that are distinct from ideological activism. Using a new dataset of more than 10,000 cases from eleven U.S. courts of appeals in 2008, this Study computed and applied Partisanship and Independence Scores for 178 judges. Based upon regression analysis of those measures, the identified dimensions of judicial behavior offer superior predictive capabilities of decisions to dissent, to concur separately, and to reverse lower court judgments in a partisan manner than the dominant models used by researchers. There are also several notable findings of statistically significant relationships between the Independence and Partisanship Scores and background characteristics of the judges studied. Of particular note, judges appointed by Republican Presidents are on average twenty percent more partisan in reviewing district court judgments than those appointed by Democrats. Presidents George H.W. Bush and George W. Bush are on average responsible for appointing the most partisan judges studied. Further, if a judge had been a law professor, she is more likely to be independent. Legislative or executive experience is associated with lower independence. Work experience at the Department of Justice is correlated with higher partisanship.

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INTRODUCTION

Modern political debates about judicial nominations typically follow a very basic and predictable formula: the President nominates a

well-qualified lawyer; the opposition party immediately brands the nominee as a “liberal” or “conservative” judicial “activist”;¹ the President’s party leaders respond by calling the nominee “fair,” “impartial,” and, since Chief Justice John Roberts’s nomination, an “umpire.”² A jaded witness of too many of these choreographed battles might have been oddly encouraged when Curt Levey, the Executive Director of the Committee for Justice, departed from the script and made the “unique” claim that then-Judge Sonia Sotomayor was a “wild-eyed judicial activist.”³ In an era when the public, media, pundits, and politicians have fixated on the judicial confirmation battles, it has been pitiful that hurling the paltry labels “liberal” and “conservative” have essentially become the sine qua non of the nomination political theater.

Unfortunately, empirical scholarship has done little to move these discussions beyond a focus on perceived ideological activism by judges.⁴ Particularly for judges on the courts of appeals, where all but Justice Elena Kagan sat before being nominated to the Supreme Court,⁵ empirical research of individual judges has almost exclusively targeted ideology.⁶ This narrow empirical perspective persists despite strong evidence that ideology plays a very limited role in decisionmaking at the federal appellate level.⁷ This Article departs from the ideol-

1 Robert W. Bennett, *Styles of Judging*, 84 Nw. U. L. REV. 853, 853 (1990) (“It is commonplace to characterize judges and nominees as conservative or liberal, activist or restrained, strict or loose constructionists.”).

2 See, e.g., Howard Kurtz, *Sotomayor: Headline Snooze*, WASH. POST, July 20, 2009, at C1 (“Nominees from the left and right vow to be impartial umpires but then vote pretty much as everyone expected.”); Dana Milbank, *Bipartisan Agreement: Roberts Was Just Terrific*, WASH. POST, Jan. 10, 2006, at A7.

3 Robert Barnes, *Battle Lines Are Drawn on Sotomayor Nomination*, WASH. POST, May 28, 2009, at A1 (emphasis added). In a similar vein, one might have appreciated Wendy Long, of the Judicial Confirmation Network, when she attempted to add emphasis to her attack on Justice Sotomayor by calling her “a liberal activist of the first order.” Peter Baker & Jeff Zeleny, *Start of a Battle: New Yorker Would Be the Third Woman to Serve as a Justice*, N.Y. TIMES, May 27, 2009, at A1 (emphasis added) (internal quotation marks omitted).

4 See, e.g., Gregory C. Sisk & Michael Heise, *Judges and Ideology: Public and Academic Debates About Statistical Measures*, 99 Nw. U. L. REV. 743, 744 (2005) (“[T]he seclusion of the ivory tower has been breached, as public attention has become increasingly focused upon studies that suggest the influence of ideological or partisan variables on the outcomes of court cases.”).

5 Timothy P. O’Neill, “*The Stepford Justices*”: *The Need for Experiential Diversity on the Roberts Court*, 60 OKLA. L. REV. 701, 702 (2007) (“For the first time in history every justice had been a judge on the U.S. Court of Appeals at the time of appointment to the Supreme Court.”).

6 Sisk & Heise, *supra* note 4, at 744–45.

7 See, e.g., Frank B. Cross, *Decisionmaking in the U.S. Circuit Courts of Appeals*, 91 CALIF. L. REV. 1457, 1514 (2003) (“The results of this study shed considerable light on the nature of judicial decisionmaking. The traditional legal model clearly explains a significant part of this decisionmaking, even after controlling for ideology and other variables. The legal model obvi-

ogy-driven research and instead identifies and measures other dimensions of judicial behavior to improve both the understanding of and vocabulary surrounding debates about judges. In particular, it recognizes both “independence”⁸ and “partisanship”⁹ as aspects of judicial behavior that are distinct from ideological activism¹⁰ and worthy of further investigation.

Using a dataset of more than 10,000 cases from eleven U.S. courts of appeals in 2008, this Study computed and applied Partisanship and Independence Scores for 178 judges.¹¹ Utilizing the newly identified dimensions of judicial behavior, regression analysis reveals that this Study’s measures offer superior predictive capabilities than the dominant modes used by researchers.¹² Notably, the Partisanship and Independence Scores predict the three most fundamental choices a court of appeals judge could make: to dissent, to concur separately, or to reverse.¹³ Ideology measures demonstrate no such ability.¹⁴ The Independence Scores predict dissents and separate concurrences on panels, whereas traditional ideology measures demonstrate no statistically significant connection to dissents by judges.¹⁵ Further, the Partisanship Scores offer a better explanation for when judges would reverse a district court judge utilizing a neutral legal rule in a partisan manner than do ideology measures.¹⁶

The analysis also reveals six notable findings of statistically significant relationships between the Independence and Partisanship Scores

ously leaves room for other considerations, though, since judicial ideology is also consistently a significant determinant of some decisions. The strategic model appears to explain little, if any, circuit court decisionmaking.”).

⁸ See *infra* Part I.B (defining independence measure).

⁹ See *infra* Part I.C (defining partisanship measure).

¹⁰ In related studies, I have identified measures of activism and ideology and explained the differences between the concepts. Corey Rayburn Yung, *Flexing Judicial Muscle: An Empirical Study of Judicial Activism in the Federal Courts*, 105 NW. U. L. REV. 1, 2–5 (2011) [hereinafter Yung, *Activism*]; Corey Rayburn Yung, *Judged by the Company You Keep: An Empirical Study of the Ideologies of Judges on the United States Courts of Appeals*, 51 B.C. L. REV. 1133, 1140–43 (2010) [hereinafter Yung, *Ideology*]. However, insofar as activism and ideology appear in nomination battles, the words are essentially interchangeable. That is, commentators often use “activism” to refer to a person that is perceived to be ideological. Because the discussion here is about the public nomination debates, I use the terms in an indistinguishable manner to reflect the reality of the rhetoric being used.

¹¹ *Infra* Part II.B–C.

¹² See *infra* Part III.A (predicting case outcomes with independence and partisanship measures).

¹³ *Infra* Part III.A.

¹⁴ *Infra* Part III.A.

¹⁵ *Infra* Part III.A.

¹⁶ *Infra* Part III.A.

and judges' biographic and demographic characteristics. First, if a judge had prior work experience in a federal or state executive or legislative branch, he is likely to be less independent.¹⁷ Second, judges who were previously or presently¹⁸ law professors are more independent.¹⁹ Third, a judge's circuit is correlated with her Independence Score.²⁰ Fourth, lower Partisanship Scores are found in judges appointed by Democratic Presidents, and the specific appointing President is correlated with a judge's Partisanship Score.²¹ In particular, the two Bush presidencies were, on average, responsible for appointing more partisan judges than the other studied presidencies. Fifth, judges who had previously been state court judges are less partisan.²² Sixth, if a judge had worked in the Department of Justice, she is likely to be more partisan.²³

Also of note are this Study's results showing no statistically significant relationships. Most important, the data do not demonstrate a correlation between the Partisanship Scores and Activism or Ideology Scores measured in previous related studies.²⁴ This indicates that the measure of partisanship captures behavior that is distinct from the metrics created to gauge ideology and activism. Unlike partisanship, the data show that political factors (e.g., appointing President, appointing President's party, Senate composition) were related to a judge's independence.²⁵ Similarly, although—as noted above—Independence Scores appeared to be connected to a judge's circuit, the data did not show any statistically significant variation among the circuits for the Partisanship Scores.²⁶

Part I of this Article discusses the existing emphasis on ideology in empirical research of federal appellate judges, and by contrast, the independence and partisanship measures utilized in this Article. Part II describes the data, methodology, and basic results from the application of the outlined measures. Part III tests the two measures in both their relationship to background factors of individual judges and ability to predict future case outcomes. Part IV considers the reliability,

17 *Infra* Part III.B.3.

18 "Presently" refers to anytime in 2008, the time period from which the data were drawn.

19 *Infra* Part III.B.3.

20 *Infra* Part III.B.1.

21 *Infra* Part III.B.2.

22 *Infra* Part III.B.3.

23 *Infra* Part III.B.3.

24 *Infra* Part II.B–C; see also Yung, *Activism*, *supra* note 10; Yung, *Ideology*, *supra* note 10.

25 *Infra* Part II.B–C.

26 *Infra* Part III.B.1.

validity, and limitations of the Study. The Article concludes with some thoughts about future directions in research. Consistent with the mission of making empirical legal studies about law and courts more accessible to a broader audience,²⁷ this Article avoids empirical research jargon whenever possible, and utilizes graphical representation of key measures throughout. However, the statistical information traditionally found in empirical legal studies is located in the footnotes and appendices at the end of this Article.

I. STUDYING JUDICIAL BEHAVIOR

Scholarship has long focused on understanding how judges make decisions.²⁸ In particular, substantial attention has been paid to the Justices on the United States Supreme Court.²⁹ Unfortunately, judges on the courts of appeals, who play a more significant role in shaping federal law than Supreme Court Justices,³⁰ are rarely the subject of

²⁷ See Lee Epstein, Andrew D. Martin & Matthew M. Schneider, *On the Effective Communication of the Results of Empirical Studies* (pt. 1), 59 VAND. L. REV. 1811, 1814 (2006) (“Most crucially, it seems nearly incontrovertible that moving towards more appropriate and accessible presentations of data will heighten the impact of empirical legal scholarship on its intended audience—be that audience other academics, students, policy makers, lawyers, or judges—not to mention raise the level of intellectual discourse among scholars themselves.”); Joshua B. Fischman & David S. Law, *What Is Judicial Ideology, and How Should We Measure It?*, 29 WASH. U. J.L. & POL’Y 133, 135–36 (2009) (“The fact that much of the audience is not methodologically sophisticated makes it all the more crucial that we[,] . . . [a]s a research community, . . . cultivate and convey a better understanding of methods for measuring judicial ideology if we are to succeed in convincing others of the validity of our work.”).

²⁸ See, e.g., Jeffrey M. Chemerinsky & Jonathan L. Williams, Foreword, *Measuring Judges and Justice*, 58 DUKE L.J. 1173, 1174 (2009) (“Empirical scholars have begun to train these same tools on the judiciary. They have studied topics ranging from the economic effects of judicial systems to the influence of ideology on judicial decisionmaking.”); Jack Knight, *Are Empiricists Asking the Right Questions About Judicial Decisionmaking?*, 58 DUKE L.J. 1531, 1534 (2009) (“Social scientists who study the courts employ an impressive array of statistical and mathematical approaches. This array has grown in variety and sophistication in the last decade.”); Gregory C. Sisk, *The Quantitative Moment and the Qualitative Opportunity: Legal Studies of Judicial Decision Making*, 93 CORNELL L. REV. 873, 874 (2008) (reviewing FRANK B. CROSS, *DECISION MAKING IN THE U.S. COURTS OF APPEALS* (2007)) (“In the past decade, the pace of empirical legal study has quickened, and the publication of empirical studies in law journals has increased.”).

²⁹ Frederick Schauer, *Incentives, Reputation, and the Inglorious Determinants of Judicial Behavior*, 68 U. CIN. L. REV. 615, 621 (2000) (“Although there is not an enormous amount of empirical research on judicial behavior generally, traditionally the overwhelming bulk of what there is has been about the Supreme Court of the United States.”).

³⁰ Richard A. Posner, *Judicial Behavior and Performance: An Economic Approach*, 32 FLA. ST. U. L. REV. 1259, 1273 (2005) (“[T]he Supreme Court reviews only a minute percentage . . . of court of appeals decisions. Entire fields of law are left mainly to the courts of appeals to shape.”).

behavioral research.³¹ As a result, many of the findings about decisionmaking by the Supreme Court have been mechanically applied to other federal courts.³² Recent studies, however, show that because there are many factors that make the Supreme Court atypical, models of Supreme Court Justices are poor fits for other judges.³³ In particular, the following Section discusses ideology, a dimension that has been central in understanding and predicting Supreme Court decisionmaking, but is not as useful in the context of federal appellate decisionmaking.³⁴ Instead, this Article sets forth two new dimensions—namely, independence and partisanship—that are more appropriate for understanding and predicting appellate judicial decisionmaking.

A. *Misplaced Ideological Focus*

The roots of quantitative research on judicial behavior indicate why ideology has remained the predominant focus of recent empirical studies. The dominant models of judicial behavior originally came from studies of legislatures, which used ideological spatial models.³⁵ Because lawmaking bodies have long been understood to be ideological battlegrounds, the initial modeling of judicial behavior carried similar assumptions.³⁶ The resulting “attitudinal model,” which became the dominant empirical theory for judicial behavior, assumes that politics is the best explanation for judicial behavior.³⁷

Although the attitudinal model works well to describe and predict Supreme Court decisionmaking, it was never initially tested for its

31 “Behavioral research” is meant to refer to studies that quantitatively measure judicial behavior in some way. It should not be taken to encapsulate studies that test static proxy measures (such as the political party of the appointing President, or Common Space Scores) for statistical significance in predicting case outcomes. There is much research in the latter category.

32 Tracey E. George, *Developing a Positive Theory of Decisionmaking on U.S. Courts of Appeals*, 58 OHIO ST. L.J. 1635, 1665 (1998) (“The attitudinal and strategic theories of judicial behavior . . . have been developed almost entirely through a consideration of the behavior of U.S. Supreme Court justices.”).

33 Richard A. Posner, *The Role of the Judge in the Twenty-First Century*, 86 B.U. L. REV. 1049, 1054 (2006) (“The Supreme Court is of course not a typical American court. The federal courts of appeals . . . have a more diverse and less political docket and are constrained by threat of reversal”); Schauer, *supra* note 29, at 621 (“[W]hatever may be true of the Supreme Court regarding the primacy of sincerely held policy preferences over self-interest, it would be difficult to generalize to other courts.”).

34 Cross, *supra* note 7, at 1514.

35 Knight, *supra* note 28, at 1536 (“Formal theorists who study the courts initially borrowed their analytical models from the research on legislative bodies.”).

36 *Id.*

37 See, e.g., JEFFREY A. SEGAL & HAROLD J. SPAETH, *THE SUPREME COURT AND THE ATTITUDINAL MODEL REVISITED* 86–97 (2002).

applicability—if any—to the realm of lower federal courts. Indeed, once empirical research moved beyond a few discrete case areas, there was growing evidence that the theories applied to the Supreme Court did not fare as well in the courts of appeals.³⁸ Ideological measures do little to explain judicial decisions in seemingly politically charged religious liberty cases at the federal appellate level.³⁹ Similarly, other studies—covering a full range of case types over a long time period—reported a limited connection between ideology and case outcomes.⁴⁰ None of this research established that ideology was unrelated to federal appellate judges' decisions, but it indicated that these judges might be making decisions based upon other considerations.

Other theories have attempted to fill the substantial gap between ideologically motivated decisionmaking models and a comprehensive theory for federal appellate judges. The legal model, which explains judicial decisionmaking as a function of formal application of law by neutral judges,⁴¹ proved particularly promising in explaining votes by judges.⁴² Similarly, the strategic model, which explains judicial behavior as a function of institutional and personal incentive structures,⁴³

38 *E.g.*, Gregory C. Sisk, Michael Heise & Andrew P. Morriss, *Searching for the Soul of Judicial Decisionmaking: An Empirical Study of Religious Freedom Decisions*, 65 OHIO ST. L.J. 491, 602 (2004).

39 *Id.*

40 *See, e.g.*, Cross, *supra* note 7, at 1514.

41 *See* Harry T. Edwards & Michael A. Livermore, *Pitfalls of Empirical Studies that Attempt to Understand the Factors Affecting Appellate Decisionmaking*, 58 DUKE L.J. 1895, 1951–52 (2009) (“[M]y claim is that decisions are based on legal materials and are the product of fruitful judicial deliberations. In other words, the case record, applicable law, controlling precedent, and deliberations—not impermissible political or ideological considerations—are what appellate judges focus on in reaching a consensus in most cases”); *see also* Harry T. Edwards, *Collegiality and Decision Making on the D.C. Circuit*, 84 VA. L. REV. 1335, 1336 (1998); Harry T. Edwards, *The Effects of Collegiality on Judicial Decision Making*, 151 U. PA. L. REV. 1639, 1656–57 (2003); Harry T. Edwards, *Public Misperceptions Concerning the “Politics” of Judging: Dispelling Some Myths About the D.C. Circuit*, 56 U. COLO. L. REV. 619, 625 (1985).

42 *See* Cross, *supra* note 7, at 1514; *supra* note 7 and accompanying text.

43 Posner, *supra* note 33, at 1056. As Judge Richard Posner stated,

Judges have a utility function, as economists refer to a person's system of preferences, just like everybody else[. . . . Clearly one that remains is leisure, and in the age of the law clerk the opportunities for a leisured judicial career are abundant. Yet most judges work pretty hard, and many work very hard indeed What are they working hard *for*? Some for celebrity, but most are content to labor in obscurity. I think most judges (I have in mind particularly federal appellate judges, the slice of the judiciary that I know best) are guided in their judicial performance primarily by two objectives that are different from and more interesting than a desire for leisure or a thirst for celebrity. One is a desire to change the world for the better (which to the cynical is simply a desire to exercise power—and

helped supplement other models by predicting a discrete body of behavior.⁴⁴

Even combining the attitudinal, legal, and strategic models, however, has produced a very limited picture of judicial decisionmaking in the courts of appeals. None of the dominant theories—separately or in combination—has provided anything close to a complete model for predicting or explaining judicial votes in the federal courts. Further, they treat judges as a homogeneous group, the members of which render decisions in an identical manner.⁴⁵ Is it reasonable to assume that Judge Richard Posner, Judge Stephen Reinhardt, Judge J. Harvie Wilkinson III, and now-Justice Sonia Sotomayor all employ the same decisionmaking processes? Further, in contrast to ideology, only limited efforts have been made to quantify and gauge other measures, such as the strategic and legal actions, of judges.⁴⁶ As a result of these shortcomings in existing research, scholars remain largely in the dark about how and why judges on the courts of appeals make decisions. This Study confronted the limitations of existing scholarship and sought to identify and quantify two new dimensions of judicial behavior that might explain a substantial quantity of judicial decisions: independence and partisanship.

B. Independence

The idea of an independent-minded judge is not new, but only recently has empirical research begun to consider how to measure the independence of judges.⁴⁷ Although there has not been much controversy surrounding the meaning of “independence,” this Study used the following definition to ensure that the measure could be tested effectively:

the ability to exercise even modest power is indeed a perk of being a judge). The other is to play the judicial game.

Id.

⁴⁴ Cross, *supra* note 7, at 1514.

⁴⁵ See, e.g., Daniel Klerman, *Jurisdictional Competition and the Evolution of the Common Law*, 74 U. CHI. L. REV. 1179, 1203 (2007) (“The jurisdictional competition model assumes that judges are homogeneous. Of course, they were not. Introducing heterogeneity would complicate the model without substantially altering the conclusions.”).

⁴⁶ Cross, *supra* note 7, at 1514.

⁴⁷ This should be distinguished from the concept of “judicial independence,” which refers to the independent role of the judicial branch against other branches of government. Substantial empirical research has focused on measures of judicial independence in the United States and other countries around the world.

Independence has been exhibited when a judge has issued opinions that indicate disagreements (and agreements) with other judges from a range of political backgrounds.

Several key aspects of this definition are worth noting. Specifically, the definition does not merely treat independence as another measure of ideology or a version of being a political moderate. Instead, independence could occur anywhere along the ideological spectrum as long as the judge is willing to disagree with other judges of all political stripes. Also of significance is that the definition of independence makes no reference to which judge on any given panel was the source of disagreement.⁴⁸

1. Shortcomings of Existing Independence Measures

The very limited research in this area has focused on measuring independence as a positive quality of judges to determine their worthiness for elevation to the Supreme Court.⁴⁹ That is, judges who act independently of ideological goals are making decisions that are driven by a positive value (possibly a “correct” view of the law).⁵⁰ Partly because of this narrow conception of the measurement, this understanding paints a limited view of the independence of judges. Consider, for instance, the “tournament of judges” model, which was created by Professors Stephen Choi and G. Mitu Gulati, and which includes independence as one of the qualities that makes a judge worthy of becoming a Supreme Court Justice.⁵¹ Choi and Gulati measured independence as the frequency with which a judge reached a different conclusion than members of his or her party (as determined by party of the appointing President) on the same panel.⁵² The study used dissents and concurrences by the studied judge as a proxy for those disagreements.⁵³

There are some inherent problems in Choi and Gulati’s conception of and methodology for independence. For example, it does not provide a satisfactory explanation of potential anomalies, such as Jus-

⁴⁸ This characteristic is especially notable in the measure design described below. See *infra* Figure 1 and accompanying text.

⁴⁹ Stephen J. Choi & G. Mitu Gulati, *Choosing the Next Supreme Court Justice: An Empirical Ranking of Judge Performance*, 78 S. CAL. L. REV. 23, 61 (2004); Stephen J. Choi & G. Mitu Gulati, *Mr. Justice Posner? Unpacking the Statistics*, 61 N.Y.U. ANN. SURV. AM. L. 19, 38 (2005); Stephen Choi & Mitu Gulati, *A Tournament of Judges?*, 92 CALIF. L. REV. 299, 310 (2004) [hereinafter Choi & Gulati, *Tournament*].

⁵⁰ Choi & Gulati, *Tournament*, *supra* note 49, at 310.

⁵¹ *Id.*

⁵² *Id.* at 305–13.

⁵³ *Id.* at 310–13.

tice John Paul Stevens. At the end of Justice Stevens's career on the Supreme Court, he was considered to be one of the most liberal—if not the most liberal—Justice on the bench.⁵⁴ Yet he was appointed by a Republican President.⁵⁵ One could imagine several explanations for Justice Stevens's liberal voting patterns.⁵⁶ We could conclude that he was simply a liberal appointed by a Republican.⁵⁷ Or it is possible that Justice Stevens was a conservative, but that his ideology drifted to the left during his time on the Court.⁵⁸ Alternately, we might agree with Justice Stevens, who believed that he stayed the same while the Justices around him moved far to the right.⁵⁹ Finally, using Choi and Gulati's definition and measure of independence and applying it to the Supreme Court, we would simply conclude that Justice Stevens was an independent conservative. The range of possible conclusions, however, begs the question: was Justice Stevens "independent," or was he merely a closet liberal? By conflating ideology and independence, Choi and Gulati's concept of independence leaves this question unanswered. Their measure does not effectively account for ideological "mistakes" in appointments or ideological drifts over time.

Moreover, Choi and Gulati's measure of independence presumes that a judge who dissents from his or her own party is actually breaking political ranks in a moderate direction, thereby making it a positive quality for a judge.⁶⁰ To illustrate the shortcomings of this assumption, consider a hypothetical judicial panel made up of Judges Stephen Reinhardt (a strong liberal), Diarmuid F. O'Scannlain (a conservative), and M. Margaret McKeown (a moderate appointed by a Democrat). What should observers conclude from a split decision in which Judges O'Scannlain (the conservative) and McKeown (the moderate) make up the majority, and Judge Reinhardt dissents? If the basis for the dissent was ideological disagreement, one might conclude that Judge Reinhardt—in disagreeing with a moderate Democrat and a conservative Republican—is merely further to the left than the moderate McKeown. But Choi and Gulati's methods would have

⁵⁴ E.g., Lincoln Caplan, Editorial, *A Judge's Warning About the Legitimacy of the Supreme Court*, N.Y. TIMES, Sept. 27, 2010, at A22; Adam Liptak, *The Most Conservative Court in Decades*, N.Y. TIMES, July 25, 2010, at A1.

⁵⁵ Liptak, *supra* note 54.

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ Choi & Gulati, *Tournament*, *supra* note 49, at 310 ("Another part of the judicial mission is to decide cases impartially. One measure of impartiality is the willingness of a judge to decide cases independent of political ideology.").

applauded Reinhardt for disagreeing with his party in a presumptive moderate direction. Because Choi and Gulati treat independence as a quality of moderation, the measure misses alternate explanations of judicial decisionmaking.

2. *A New Independence Measure*

Given the shortcomings of Choi and Gulati's approach, this Study conceived of and measured independence in a similar, but importantly distinguishable, manner. Specifically, although this Study used concurrences and dissents to measure independence, this Study did not define independence as a positive quality for a judge. Instead, independence was simply viewed as another trait that describes tendencies in behavior. This means that the hypothetical appellate panel outlined above would not pose a problem for this Study. The methodology of this Study allows the recognition that Reinhardt is acting independently, but it does not merely assume that the action represents a movement in a more moderate direction. Further, the measure of independence is untangled from ideology such that Justice Stevens could be considered more liberal, while measuring his independence separately.⁶¹ Lastly, the methodology of this Study recognizes that when other judges dissent from or concur with a studied judge, that action is also an indicator of the studied judge's independence.

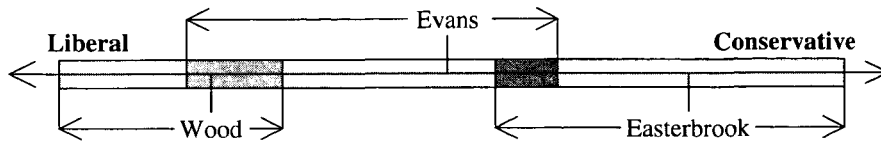
A classic ideology model illustrates why concurrences and dissents by other judges are worth retaining as measurements of independence. Given a hypothetical Seventh Circuit panel of Judges Diane Wood (a liberal), Frank Easterbrook (a conservative), and Terence Evans (a moderate conservative), the classic ideology model assumes that each judge's ideological position can be arranged in a continuum, as illustrated in Figure 1 below.⁶² The range of acceptable views for each judge—indicated by the shaded boxes surrounding each judge's ideal point—reflects the assumption that each judge will depart, somewhat, from her ideal point in furtherance of the norm of

⁶¹ However, ideological differences needed to be accounted for in order to avoid automatically considering all ideologically extreme judges as independent.

⁶² Although this example uses ideology as the linchpin for disagreement, a similar model could be constructed for strategic, legal, or any other basis for disagreement. Because independence is ultimately defined by the size of the shaded areas of each judge studied, Judge Wood's box—the smallest—indicates that, in the ideological realm, she is the most independent. In other areas, she might be more willing to make compromises further away from her ideal point. The willingness to compromise is ultimately antithetical to being independent.

consensus or collegiality.⁶³ Darker shading indicates overlap between judges.

Figure 1. Ideal Point Model of Hypothetical Seventh Circuit Panel



Thus, in the hypothetical case portrayed in Figure 1, Judge Wood's and Judge Easterbrook's areas of tolerable opinions overlap with that of Judge Evans, but not each other's. If Judge Wood authors a majority opinion, the model predicts that Judge Evans will join Judge Wood, and Judge Easterbrook will dissent. Although Choi and Gulati's approach would treat Judge Easterbrook, who dissented from a member of his own party (Judge Evans), as the only judge acting independently, this Study would attribute some level of independence to all three judges because each of them disagreed with at least one other judge. By measuring such disagreements in the aggregate, this Study collected a more nuanced body of independent behavior.

Combining the distinctions from the Choi and Gulati approach and establishing a baseline for comparison, this Study thus used the following basic measure of independence:

A more independent judge is one who is more apt to provoke minor and major disagreements with other judges beyond what ideological differences would predict.

Such differences of opinions manifested in four ways among federal appellate judges: when an individual judge (1) concurs separately, (2) dissents, (3) writes an opinion that causes another panelist to concur separately, or (4) writes an opinion that draws a dissenting opinion.⁶⁴

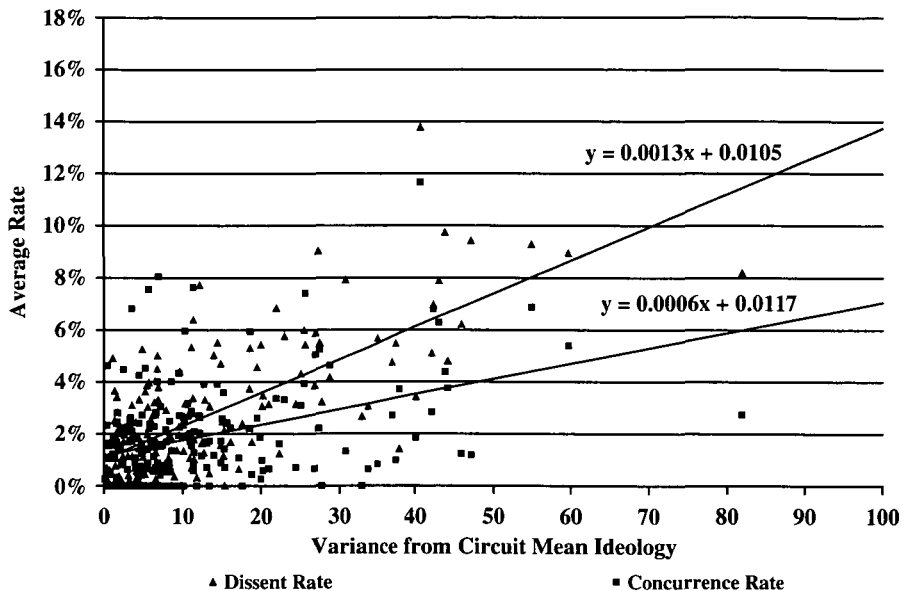
Finally, to ensure that Independence Scores were untangled from ideology, this Study used a baseline that removed disagreements based upon ideological differences. To establish this baseline, it was necessary to determine the rate at which ideological variance accounted for concurrences and dissents so that the Independence Score

⁶³ See Joshua B. Fischman, *Decision-Making Under a Norm of Consensus: A Structural Analysis of Three-Judge Panels* (Jan. 4, 2008) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=912299.

⁶⁴ In this Study, opinions that concurred in part and dissented in part were designated as dissents to avoid double counting.

could be properly untangled from ideology. Figure 2 below indicates the average rate at which all judges in the pool of analysis dissented and concurred, compared with each judge's variance from the circuit mean ideology (as measured by Ideology Scores).⁶⁵

Figure 2. Concurrence and Dissent Rates by Ideological Variance from Circuit Average



Utilizing the two equations in Figure 2 to compute expected dissent and concurrence rates, the following formula was used to determine the Raw Independence Score:

$$\text{Independence Score} = \text{Rate of Dissents} + \text{Rate of Concurrences} \\ - \text{Expected Rate of Dissents} - \text{Expected Rate of Concurrences}.^{66}$$

C. Partisanship

Partisanship is a trait of judges that has not been considered separate from ideology and activism in empirical research. This is due in

⁶⁵ See generally Yung, *Ideology*, *supra* note 10.

⁶⁶ For a detailed explanation of the calculations, see *infra* Appendix A. Each judge's expected rates of dissent and concurrence were derived from her specific Ideology Score based upon methodology described in related research. See generally Yung, *Ideology*, *supra* note 10. After computation of the raw values, three adjustments were made to yield the Independence Scores. The values were adjusted so that each judge's scores were based upon an average criminal and civil case mix, placed on a logarithmic scale (to create a normal distribution), and scaled to a common point system of 0 to 100. Each of those adjustments is described in greater detail in Appendix A.

part to the tendency of researchers to measure appellate judges' ideology solely on the basis of the political parties that supported a judge's nomination.⁶⁷ This Study sought to separate these traditionally linked dimensions by measuring party loyalty as something distinct from ideology.

Testing separately the roles of party loyalty and ideology on the bench indicates the importance of considering those two dimensions independent of one another. In research that used a version of this Article's dataset, I constructed a distinct behavioral measure of judicial ideology.⁶⁸ Although most judges were located on the same side of the ideological spectrum as their appointing President, there were many crossovers.⁶⁹ Therefore, this Study designed a measure—namely, partisanship—that captures a judge's allegiance to a political party separate from her ideological outlook on the world.

To measure partisanship, it was necessary to offer a basic definition with specific metrics. Unfortunately, scholarship in the area of partisanship paints a picture such that it was difficult to merely use the common empirical understanding of the concept. That is, partisanship has normally been treated as a negative attribute that indicates ideological decisionmaking.⁷⁰ As with independence,⁷¹ the goal of this Study was to treat partisanship (and its opposite, indifference) as morally neutral behavior exhibited by judges on a relative scale. Despite the fact that “partisanship” and “indifference” have carried negative connotations in past research, this Article uses these terms because they best reflect the behavior being studied.

This Study used the following basic definition of partisan behavior:

A judge is acting in a more partisan manner when he applies a neutral legal rule in a manner that demonstrates greater deference to members of a particular political party.

⁶⁷ Fischman & Law, *supra* note 27, at 167–68 (“The most popular proxy for a judge's ideology, however, has been the party of the official who appointed the judge. . . . The appointing-party measure has been especially dominant in studies of the federal courts.”); *see also* Daniel R. Pinello, *Linking Party to Judicial Ideology in American Courts: A Meta-analysis*, 20 JUST. SYS. J. 219, 220 (1999) (“[P]ublic-law scholars traditionally have used judges' political party affiliations as proxies for judicial ideology.”).

⁶⁸ Yung, *Ideology*, *supra* note 10, at 1137; *see also infra* note 84 and accompanying text.

⁶⁹ Yung, *Ideology*, *supra* note 10, at 1181–82. Further, the Ideology Scores included as possible values any number between -100 and 100 to allow the Study to capture the magnitude of each judge's ideological bend. *Id.*

⁷⁰ *See, e.g.,* Lee Epstein & Gary King, *The Rules of Inference*, 69 U. CHI. L. REV. 1, 83–84, 95–96 (2002).

⁷¹ *See supra* Part I.B.

As with related research focusing on judicial “activism,”⁷² the Partisanship Scores utilized standards of review as the baseline for identifying partisan behavior because there was reason to believe that the standard of review⁷³ constitutes a neutral legal rule applied along partisan lines.

Although standards of review do not dictate the outcome of a case directly, existing empirical scholarship supports the idea that the standard of review does affect appellate review of district court judgments on some level. For instance, one study reported that the standard of review employed in a given case was correlated with a change in reversal rates.⁷⁴ Similarly, the data in this Study reveal a strong correlation between the level of deference in a standard of review and the rate of reversal.⁷⁵ Figure 3 below illustrates the reversal rates with deferential and nondeferential standards of review in both criminal and civil cases. If standards of review were functioning as expected—and not acting as mere window dressing on opinions—reversal rates would be higher in the context of nondeferential standards than in the context of deferential standards.⁷⁶ The results outlined in Figure 3 support that hypothesis.⁷⁷

⁷² Yung, *Activism*, *supra* note 10, at 19–22.

⁷³ Standards of review are formal rules used by appellate courts to determine the degree of deference that they should give to lower court or executive agency judgments. Cross, *supra* note 7, at 1501–02. When reviewing another decisionmaker’s finding, judges use a particular standard of review, which they identify at the outset of their opinions. *See id.* at 1502–03. Standards of review do not directly dictate the outcomes in cases; rather, judges are free to reverse a district court judgment even when using a deferential standard and to affirm a district court judgment even when using nondeferential standard. *Id.*

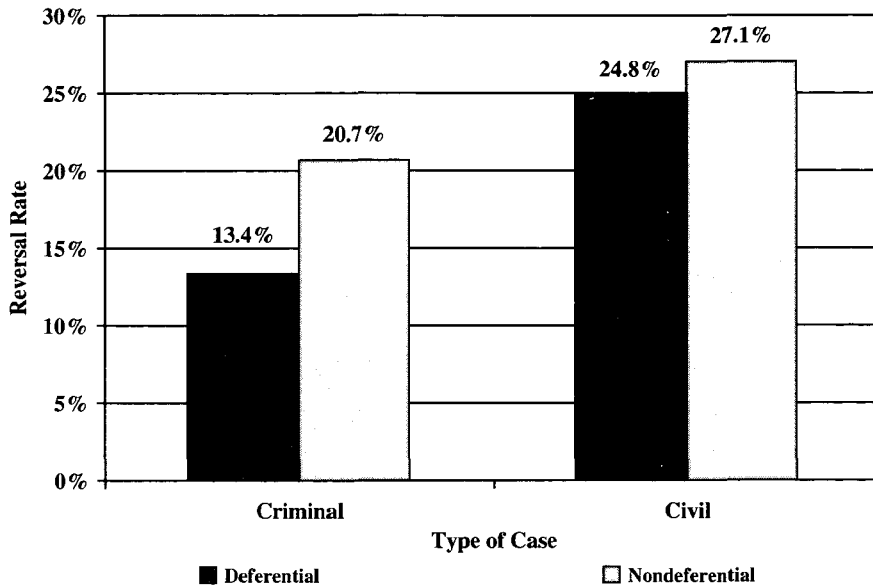
⁷⁴ *Id.* However, it is crucial to note an important limitation of Frank Cross’s study, which relied primarily on the U.S. Courts of Appeals Database (“Songer Database”). *See id.*; *see also* ASHLYN K. KUERSTEN & DONALD R. SONGER, DECISIONS ON THE U.S. COURTS OF APPEALS 241 (2001) (including more than 18,000 opinions from 1925 to 1996); Yung, *Activism*, *supra* note 10, at 1156 n.189. Because the Songer Database only codes standards of review in cases involving executive agency review (868 cases), it is not clear whether the results of Cross’s study would extend to the general application of standards of review.

⁷⁵ *See infra* notes 84–91 and accompanying text.

⁷⁶ However, if there were perfect knowledge and rational decisionmaking among litigants—at least in private actions—there should be no observable difference in reversal rates. Parties would appeal—rather than settle—only where there was a true fifty-fifty chance of affirmation or reversal. *See infra* Part IV.C.3.

⁷⁷ Of note, the seeming effect of deferential standards was larger in criminal cases (yielding a 7.3% difference in reversal rates) than in civil cases (yielding a 2.3% difference in reversal rates). In both instances, however, the results were statistically significant: $p < 0.0001$. Conventionally, the p -value, which in essence reflects the possibility that findings are the product of mere chance, indicates a statistically significant relationship if it is less than 0.050. *See, e.g.*, Edward K. Cheng & Albert H. Yoon, *Does Frye or Daubert Matter? A Study of Scientific Admissibility Standards*, 91 VA. L. REV. 471, 497 n.58 (2005).

Figure 3. Reversal Rate by Standard of Review in Criminal and Civil Cases ($p < 0.0001$)



Given the difference in reversal rates between the nondeferential and deferential standards, there was reason to believe that standard of review could serve as a neutral legal rule that might, in the aggregate, be applied along partisan lines.

This Study deemed judges who deferred more often to a district judge appointed by the same political party as more partisan than a judge who deferred at the same rate. Unlike the Independence Scores,⁷⁸ the partisanship measure was exclusively based upon appellate and district court interactions and not voting differences among appellate panelists. Thus, the following formula provided the raw Partisanship Score:

$$\text{Partisanship Score} = (\text{Deferential Reversal Rate of Democratic District Judges} - \text{Deferential Reversal Rate of Republican District Judges}) - (\text{Nondeferential Reversal Rate of Democratic District Judges} - \text{Nondeferential Reversal Rate of Republican District Judges}).^{79}$$

⁷⁸ See *supra* Part I.B (measuring independence by interactions between appellate court panelists).

⁷⁹ For a detailed explanation of the calculations, see *infra* Appendix A. Several adjustments were made to the raw Partisanship Score. The one unique alteration was related to the inclusion of the appointing party of the court of appeals judge so that a Democratic appellate judge who favored Republican district judges (not partisan) would be scored differently than a Democratic appellate judge who favored Democratic district judges (partisan). Additionally, the raw Partisanship Score was adjusted to reflect the particular circuit on which a judge sat, the mix

II. MEASURING INDEPENDENCE AND PARTISANSHIP

With basic definitions and measures of independence and partisanship in place, the Study needed a dataset and measurement adjustments to anticipate the effects of observed and unobserved variables. For independence, the primary concern was evaluating the interrelationships between panelists on the courts of appeals.⁸⁰ For partisanship, the applicable standard of review was the means identified for gauging the trait.⁸¹ Because of the need for a large dataset to allow individualized assessments of three courts of appeals judges together with a corresponding district court judge, there were limited options available. The publicly available databases of federal appellate decisions were simply incapable of measuring both independence and partisanship.⁸² Consequently, this Study used a new version of a dataset previously employed in related studies.⁸³ As detailed in the following Section, a series of adjustments were then made to the raw measures of independence and partisanship, yielding basic results for 178 federal appellate judges.

A. Study Design and Methodology

The underlying data described in this Study have been utilized in related research.⁸⁴ However, the data underwent several important changes before being applied to the present study. Data were gathered from published and unpublished 2008 opinions issued by the United States Courts of Appeals for the First, Second, Third, Fourth, Fifth, Sixth, Seventh, Eighth, Ninth, Tenth, and Eleventh Circuits. The analyzed dataset (“Case Database”) from those circuits included more than 10,000 panel decisions and, as a result, represented more than 30,000 votes by judges sitting on the courts of appeals.⁸⁵ The

of case issues each judge decided, any judicial interaction effects that might have been experienced by the judge, and scaled to a common point system of 0 to 100. Each of those adjustments is described in greater detail in Appendix A.

⁸⁰ *Supra* Part I.B.

⁸¹ *Supra* Part I.C.

⁸² See KUERSTEN & SONGER, *supra* note 74, at 241 (noting the database codes for standard of review in a limited number of instances).

⁸³ See generally Yung, *Activism*, *supra* note 10; Yung, *Ideology*, *supra* note 10. As a result of the prior usage of the dataset, the description of data gathering is very similar among all of the pieces in this series.

⁸⁴ See generally Yung, *Activism*, *supra* note 10; Yung, *Ideology*, *supra* note 10.

⁸⁵ The normal assumption that there would be three judicial votes for each panel in the dataset slightly overestimates the number of actual votes. There were a few instances in which only two judges issued an opinion due to a death or recusal of a third panel member. There were also instances when a single judge issued an order without sitting on a three-judge panel.

Case Database was created from searches of LexisNexis databases of the courts of appeals that included standard of review language.⁸⁶ The Case Database excluded immigration and habeas corpus cases, which involve unique standard of review issues.⁸⁷ Among other variables, the resulting cases were coded for: judges on the panel, whether individual judges were sitting by designation, appellate disposition, appellant, appellee, type of case (e.g., criminal or environmental), prevailing party, circuit, district court judge under review, district court, whether the case involved review of an executive agency decision, and applicable standard of review. In analyzing each case, the vote of each judge on the panel was coded separately, and thus, a dissent by a judge in a case was coded so that the dissenting judge had the opposite view and disposition as the judges on the panel majority. This allowed each judge's behavior to be studied independently and collectively.⁸⁸ The more recent version of the dataset was recoded using off-the-shelf computer software⁸⁹ and scripting in Visual Basic.⁹⁰

86 For each of the federal appellate databases in LexisNexis, the following search was executed and all of the results were downloaded and coded: "date aft 1/1/2008 and date bef 1/1/2009 and ('De Novo' or Clear! Error! or (Arbitrar! w/3 Capricious!) or (Abus! w/3 Discretion) or 'Substantial Evidence' or 'Standard of Review') and not immigration and not habeas."

87 See Hiroshi Motomura, *Immigration Law and Federal Court Jurisdiction Through the Lens of Habeas Corpus*, 91 CORNELL L. REV. 459, 474 (2006) (discussing how large portions of immigration case review—those by the Board of Immigration Appeals—are based upon a collateral review model, which affords a very high level of deference because "[t]he regulations . . . revise the standard of review to require greater deference to an immigration judge's findings of fact"); see also Brandon Scott, *When Child Abuse Becomes Child Homicide: The Case of Gilson v. Sirmons*, 34 OKLA. CITY U. L. REV. 281, 293–94, 305 (2009) (discussing the "unique" standard of review in federal habeas cases due to the Antiterrorism and Effective Death Penalty Act).

88 See also *supra* Figure 1 and accompanying text (discussing nuances captured by studying appellate judges' behavior, independently as well as collectively, against other panel members).

89 The computer software used was TextConverter 3. *TextConverter*, SIMX ADVANCED SOLUTIONS, <http://simx.com/simx/Products.stp?prm=tc> (last visited Dec. 15, 2011).

90 In the prior related studies, my law school research assistants and I performed the data coding without any automatic coding. Yung, *Activism*, *supra* note 10, at 1189–90; Yung, *Ideology*, *supra* note 10, at 39–40. Due to inconsistencies among and within the courts of appeals in formatting opinions, the automated coding employed in the present Study was not foolproof. Quality checking indicates, however, that the automated coding for every variable used in this Study was superior to the human coding performed in prior editions of the dataset.

Because the prior human coding had already been performed for more than ninety-six percent of the cases in the new dataset, the human and computer coding were integrated in the present Study. When there were discrepancies in coding between the two systems, I resolved the differences. In particular, because some circuits do not regularly, or ever, report the identity of the district court judge whose judgment was reviewed, human coding was essential in that area. Further, automated coding allowed for coding of many new fields, primarily in the area of case issues. This provided more detailed information that could be used in adjusting behavioral scores based upon different case issues. Other changes in the coding, which may account for some of the different scores used in this Study, included: separation of decisions to vacate, re-

The automated coding process searched for more than 100 relevant variables in the header fields and text of opinions. Human coding was used to supplement and quality check the automated coding.⁹¹

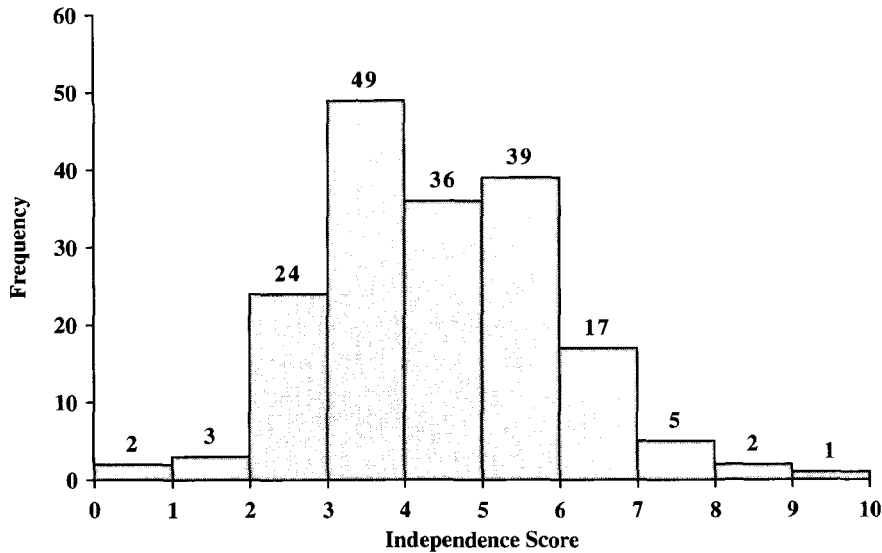
In addition to the Case Database, a separate database (“Judge Database”), which included biographical and other data about individual judges, was constructed. In the Judge Database, judges were coded for: appointing president, presidential party, age at the time of appointment, age in 2008, composition of the Senate at the time of appointment, gender, race, law school attended, prior work experience, whether the president and majority of the Senate were of the same party at the time of appointment, whether the judge took senior status during or before 2008, and other variables. The Judge Database included data for all federal appellate judges that served on panels in the Case Database, as well as district court judges whose opinions were reviewed by appellate judges in the Case Database. In all, background trait information was accumulated for more than 1500 federal judges. Data in the Judge Database were entirely human coded from publicly available information.

B. Independence Results and Discussion

Based upon the above methodology and data, Independence Scores were calculated for every judge in the dataset. Of the judges that had at least 200 total interactions with other judges, a wide range of independence was observed. Figure 4 below shows the distribution of Independence Scores from 0 to 100 (100 being the most independent) for the 178 judges who met the threshold of at least 200 interactions.

verse, remand, and reverse in part; coding of concurrences; which standard of review was actually applied when multiple standards were listed (to the extent it was possible to make this determination); corrections of errors in the source data downloaded from LexisNexis; further quality checking, coding of the actual opinion writer (as opposed to merely including them in the majority); and removal of votes recorded on the decision denying to hear a case en banc.

⁹¹ See *supra* note 90 and accompanying text.

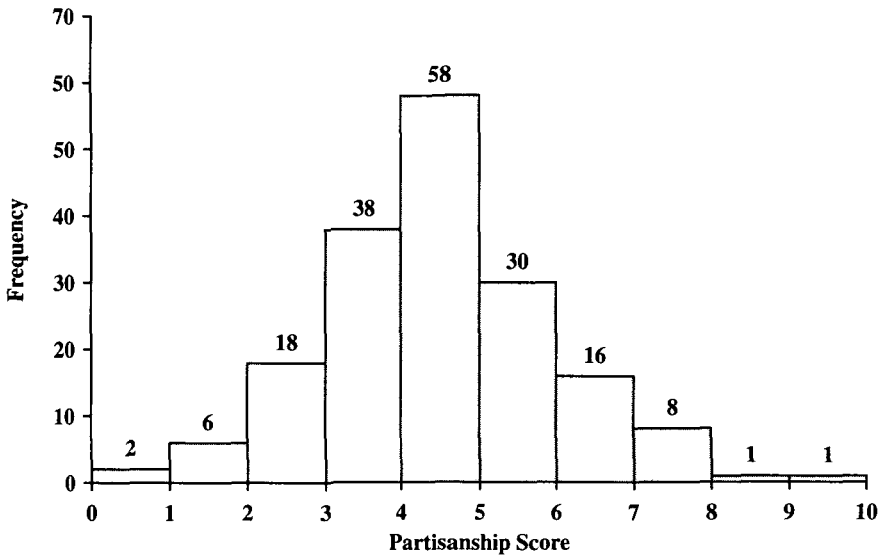
Figure 4. Histogram of Independence Scores

The mean Independence Score was 44.1 and the standard deviation was 15.3. The data was logarithmically scaled, but before scaling, a 0 corresponded with a -10.0% adjusted raw Independence Score and a 100 indicated a 24.9% adjusted raw Independence Score. Those percentage differentials referred to the degree to which a judge's concurrence and dissent rate (including dissents and concurrences against a judge) was different than the expected rates based upon that judge's ideological variance from the circuit average.⁹² Complete lists of Independence Scores for the 178 judges with adequate data are contained in Appendices B and C of this Article.

C. Partisanship Results and Discussion

A similar procedure was used for computing Partisanship Scores. Figure 5 below shows the distribution of Partisanship Scores from 0 to 100 (100 being the most partisan) for each of the 178 judges with adequate data.

⁹² See *supra* Part I.B (providing formula for Raw Independence Scores and discussing adjustments).

Figure 5. Histogram of Partisanship Scores

The mean Partisanship Score was 44.8 and the standard deviation was 15.3. The data were linearly scaled and a 0.0 corresponded with -73.7% adjusted Raw Partisanship Score such that a 100 indicated an 89.8% adjusted Raw Partisanship Score. Those percentages indicated the degree to which the differential between reversal rates using nondeferential and deferential standards of review deviated from the average level of party favoritism.⁹³ Complete lists of Partisanship Scores for the 178 judges with adequate data are contained in Appendices B and C of this Article.

Of concern at the outset of the Study was whether Partisanship Scores would describe behavior separate from measures of activism and ideology. Notably, the Study identified judges along all combinations of high and low levels of ideology, activism, and partisanship. Further, robust linear regression analysis indicated the Activism, Partisanship, and Ideology Scores were not correlated in a statistically significant manner.⁹⁴ Therefore, the data indicated that Partisanship Scores capture behavior separate from behavior captured by Ideology and Activism Scores.

⁹³ See *supra* Part I.C (providing formula for Raw Partisanship Scores and discussing adjustments).

⁹⁴ For Activism and Ideology Scores, $p = 0.6530$; Activism and Partisanship Scores, $p = 0.1754$; Ideology and Partisanship Scores, $p = 0.4057$. Robust regressions were also conducted to compare the absolute values of Ideological Scores with Partisanship Scores. For Activism and Ideological Scores, $p = 0.7443$; Partisanship and Ideological Scores, $p = 0.8418$.

III. TESTING THE MEASURES

The initial goals of the Study were merely proof of concepts. That is, the Study sought to determine if independence and partisanship were measurable behaviors for judges on the courts of appeals. After the scoring system was created,⁹⁵ further tests of the measures were performed. In assessing the measures quantitatively, the goal was to determine whether they were describing actual judicial behavior and not mere statistical noise created by the judicial decisionmaking process. Additionally, testing the measures would allow for comparisons to the dominant methods (e.g., ideology) used to describe and predict judicial actions. Finally, testing the measures against judicial background variables could yield interesting connections between observed behavior and judges' biographical traits. Each of these three analyses, as well as the corresponding findings, is discussed in detail below.

A. *Predicting Case Outcomes with Independence and Partisanship Measures*

Recently, scholars have called attention to the common failure of empirical research to implement comparative testing of judicial measures.⁹⁶ Instead of conducting comparative testing, researchers often complete studies simply with finding statistical significance.⁹⁷ Such limited conclusions cause confusion about what inferences should be drawn from a study and provide no clear indication of the magnitude of the effect observed.⁹⁸ As a result, this Study performed comparative analysis of the predictive abilities of Independence and Partisanship Scores against ideology, the most commonly used measure of judicial decisionmaking.

Performing comparative tests required a dataset wholly separate from the one that was used to create the Independence and Partisanship Scores.⁹⁹ Consequently, a separate dataset was constructed for courts of appeals cases in 2009 ("Testing Database"). The basic cod-

⁹⁵ *Supra* Part II.B–C.

⁹⁶ *See* Fischman & Law, *supra* note 27, at 203–04.

⁹⁷ For a general critique of the dangers associated with overreliance on statistical significance as the focal point of research, see STEPHEN T. ZILIAK & DEIRDRE N. MCCLOSKEY, *THE CULT OF STATISTICAL SIGNIFICANCE: HOW THE STANDARD ERROR COSTS US JOBS, JUSTICE, AND LIVES* (2008).

⁹⁸ *See* Fischman & Law, *supra* note 27, at 175.

⁹⁹ Otherwise, the test results would have been circular because the input cases would have been the same as those used to determine the efficacy of the output values. *See id.* at 179. As noted earlier, however, no such comparable dataset has been made publicly available. *See supra* note 82 and accompanying text.

ing process was similar to that for the 2008 Case and Judge Databases except the 2009 data were solely computer coded.¹⁰⁰ Further, no limitations for standard of review language were made in the Testing Database, which yielded a larger database overall.¹⁰¹ Because circuits varied in their reporting of district court judge information, the ability to test the Partisanship Scores was more limited by the available data than tests of the Independence Scores. After removal of en banc opinions and other extraneous and problematic cases, the Testing Database contained more than 25,000 cases (and about 75,000 votes by judges sitting on the courts of appeals).

1. Independence and Dissent and Concurrence Rates

The measure of independence by judges was intended to describe actions by judges to dissent, to concur, to draw a dissent, or to draw a concurrence.¹⁰² The disagreements on which this Study focused were among appellate panel judges and were determined separately from ideological disagreements.¹⁰³ Thus, if the Independence Scores were truly describing separate behavior, it was expected that they would predict judicial dissents and concurrences without any reference to the ideologies of the judges nor ideological direction of case outcomes. The following hypotheses were constructed to test the efficacy of the Independence Scores:

Hypothesis One: Panels of more independent judges would be more apt to have concurrences or dissents.

Hypothesis Two: Average panel Independence Scores would be a better predictor of judicial dissents than ideological differences as measured by the party of the appointing President.

For each panel in the Testing Database,¹⁰⁴ an average panel Independence Score was computed as the sum of the panelists' scores. Then, among those cases, the average panel Independence Score was determined for each of the following instances: (1) a judge dissented, (2) a judge concurred, and (3) no judge concurred or dissented. The results of those calculations are illustrated in Figure 6 below.

¹⁰⁰ See *supra* note 90 and accompanying text. I checked for human error, corrected variations of judge names, and excluded certain cases after the automated coding was complete.

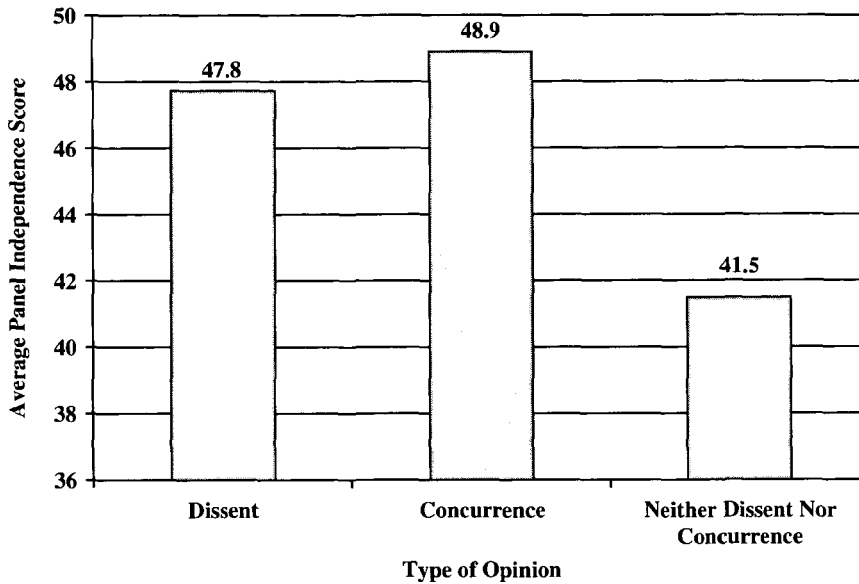
¹⁰¹ Cf. *supra* note 87 and accompanying text (describing removal of immigration and habeas cases from Case and Judge Databases).

¹⁰² *Supra* Part I.B.

¹⁰³ *Supra* Part I.B.

¹⁰⁴ Not every judge in the Testing Database had Independence Scores. Therefore, average Independence Scores were only calculated for panels made up of three judges with Independence Scores.

Figure 6. Average Panel Independence Score by Dissents and Concurrences on Panel ($p < 0.0001$)



Unanimous panels had the lowest average Independence Scores (41.5). The Independence Scores were much higher for panels with dissents (47.8) and concurrences (48.9). Interestingly, panels with only a dissent had a lower average Independence Score than panels with a concurrence. This might offer evidence in support of a norm of consensus in federal appellate courts, which inhibits dissents;¹⁰⁵ however, the norm appears to be less discouraging of concurrences. Finally, regression analysis showed that the average panel Independence Score was correlated with dissents¹⁰⁶ and concurrences¹⁰⁷ on those panels. Thus, the data corroborate the hypothesis that judicial independence is a trait separate from mere ideological disagreement.

To test the second hypothesis, it was necessary to consider whether the party of a judge's appointing President was correlated with dissents or concurrences. Unfortunately, research at the federal level regarding concurrences has been almost nonexistent. As a result, it was unclear whether the ideological model would predict concurrences to occur more frequently among judges appointed by the same political party or different ones. Therefore, regressions were

¹⁰⁵ See Fischman, *supra* note 63, at 2.

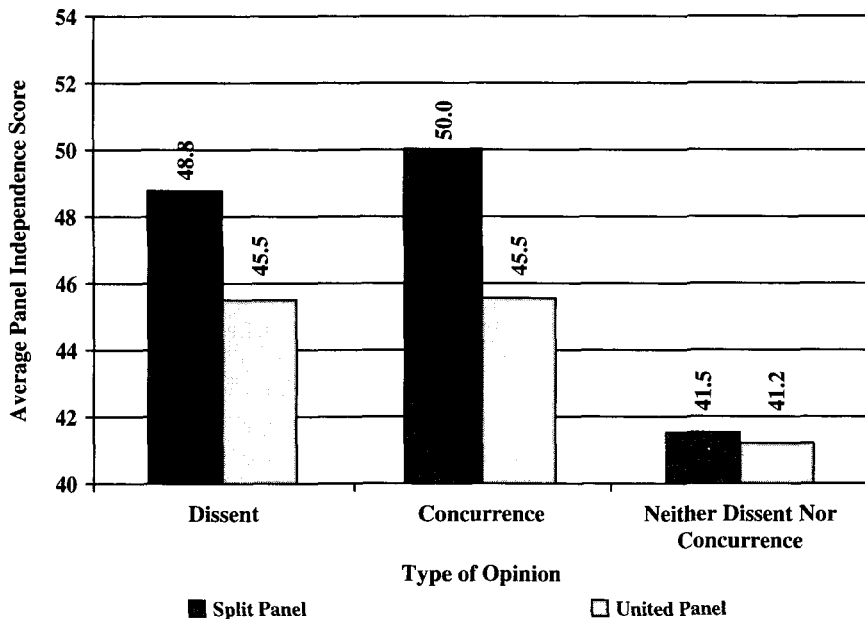
¹⁰⁶ $p < 0.0001$. Pseudo $R^2 = 0.0453$. Iteration 0: log likelihood = -1647.8737; Iteration 1: log likelihood = -1575.648; Iteration 2: log likelihood = -1573.2131; Iteration 3: log likelihood = -1573.2108.

¹⁰⁷ $p < 0.0001$. Pseudo $R^2 = 0.0456$. Iteration 1: log likelihood = -902.95926; Iteration 2: log likelihood = -900.82946; Iteration 3: log likelihood = -900.82519.

performed for concurrences and dissents as related to the ideological agreement on the panel to determine if there was any notable connection. The data did not support a statistically significant correlation between the ideological agreement of panelists (as defined by party of appointing President) and either dissents¹⁰⁸ or concurrences¹⁰⁹ on a panel. Therefore, the data supported the second hypothesis as well: ideology is not independently correlated with disagreements on the bench.

When the ideological makeup of the panel was combined with the average Independence Score, however, a correlation was identified with both dissents¹¹⁰ and concurrences.¹¹¹ Figure 7 below shows that the difference in average panel Independence Scores when there was a party split on the panel was higher than when the panel was unified.

Figure 7. Average Panel Independence Score by Dissent and Concurrence on Split and Unified Panels ($p < 0.0001$)



¹⁰⁸ $p = 0.2420$.

¹⁰⁹ $p = 0.7489$.

¹¹⁰ $p < 0.0001$. Pseudo $R^2 = 0.0455$. Iteration 0: log likelihood = -1647.8737; Iteration 1: log likelihood = -1575.279; Iteration 2: log likelihood = -1572.8316; Iteration 3: log likelihood = -1572.8292.

¹¹¹ $p < 0.0001$. Pseudo $R^2 = 0.0456$. Iteration 0: log likelihood = -943.88428; Iteration 1: log likelihood = -902.96871; Iteration 2: log likelihood = -900.82587; Iteration 3: log likelihood = -900.82144; Iteration 4: log likelihood = -900.82143.

The interaction between the party makeup of the panel and independence is especially notable because Independence Scores were computed to remove the effects of ideological variance.¹¹² Although ideology was not independently correlated with dissents and concurrences, it still had a magnifying effect on the correlation between independence and panel dissents and concurrences.

2. *Partisan Application of Standards of Review*

Because the Partisanship Scores were derived exclusively from interactions between appellate and trial court judges,¹¹³ comparative testing of Partisanship Scores focused on the decision to reverse the lower court judgment (and not intrapanel interactions, as with the Independence Scores). Partisanship Scores measured the rate at which judges favored district court judges appointed by a particular political party when applying a facially neutral legal rule (i.e., standard of review).¹¹⁴ The following hypotheses were constructed to test whether the Scores were able to forecast when a panel would vote to reverse the judgment of a district court judge with the opposite political party association as the majority of the appellate panel:

Hypothesis One: Panels with more partisan judges would be more apt to reverse judgments when applying a deferential standard of review to the decisions of district court judges appointed by a President of the opposite political party.

Hypothesis Two: Panel Partisanship Scores would be a better predictor of panel decisions to reverse than traditional ideology measures when applying a deferential standard of review to the decisions of district court judges appointed by the opposite political party.

For each panel tested, three different scores were computed to summarize the panel's Partisanship Scores: (1) the panel average, (2) the panel median, and (3) the panel high score. Results were broken down by the standard of review applied and the panel decision to affirm or reverse the lower court judgment. Among the three panel scores, the panel high value had the strongest relationship with the decision to reverse. Figure 8 shows the average panel high Partisanship Scores in instances where the panel voted to affirm or reverse using different standards of review. Notably, the data support the first

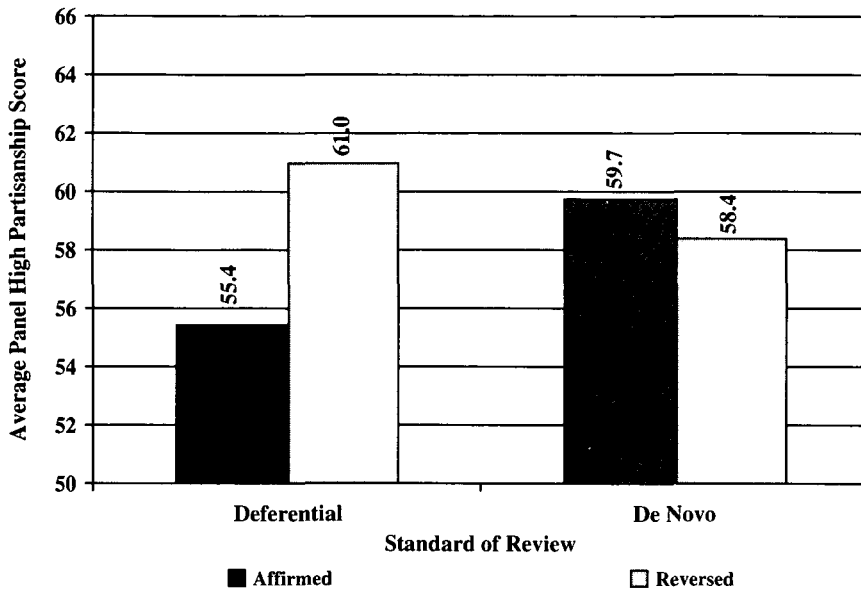
¹¹² *Supra* Part I.B.

¹¹³ *Supra* Part I.C.

¹¹⁴ *Supra* Part I.C.

hypothesis that Partisanship Scores would predict reversals with a deferential standard of review when there were ideological mismatches between the panel and the corresponding district court judge.¹¹⁵

Figure 8. Average Panel High Partisanship Score and Reversals with Different Standards of Review ($p = 0.0146$)



In cases where appellate panels applied a deferential standard of review, the average panel high Partisanship Score was approximately twelve percent higher when the panel voted to reverse than when the panel affirmed. Notably, however, the Partisanship Scores were unrelated to the decision to reverse when applying a nondeferential standard.¹¹⁶

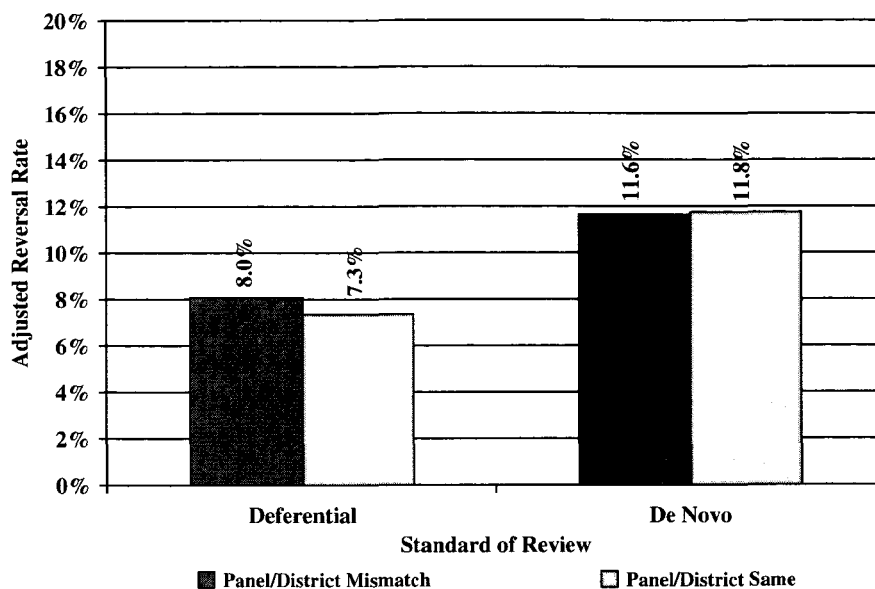
To test the second hypothesis, it was necessary to construct a testing platform for the party of the appointing President as a predictive variable. Regression analysis indicated no statistically significant relationship between the political makeup of the panel and the decision to reverse using a deferential standard of review.¹¹⁷ Figure 9 below illustrates that there were minimal differences in the reversal rates based upon whether the majority of the appellate panel was of a different political party than the district court judge.

¹¹⁵ $p = 0.0146$. Pseudo $R^2 = 0.0294$. Iteration 0: log likelihood = -101.34427; Iteration 1: log likelihood = -98.396383; Iteration 2: log likelihood = -98.365145; Iteration 3: log likelihood = -98.365142.

¹¹⁶ $p = 0.5217$.

¹¹⁷ $p = 0.2457$.

Figure 9. Adjusted Reversal Rates by Panel/District Ideological Mismatches and Standard of Review ($p = 0.2457$)



Therefore, the data do not support the notion that simple ideological proxies can predict appellate reversals in ideological-mismatch situations. By contrast, the data support both of this Study's hypotheses, as the Partisanship Scores predicted appellate reversals when the standard of review was deferential and there was a mismatch in ideology between the panel and the corresponding district court judge.

B. Predicting Independence and Partisanship

Presumably, judges' behavioral traits are not formed in a vacuum. It is reasonable to assume that some aspects of a particular judge's behavior were developed as a result of something in that judge's background.¹¹⁸ Whether the background factors could be identified, measured, and analyzed was the question to which the Study next turned. Utilizing the Judge Database, a variety of demographic and biographical information about each judge was tested for any relationship to independence and partisanship. In each instance, a hypothesis was created and tested using robust linear regressions. The hypothesis for each tested variable followed this general form:

¹¹⁸ See, e.g., Sylvia R. Lazos Vargas, *Only Skin Deep?: The Cost of Partisan Politics on Minority Diversity of the Federal Bench*, 83 *IND. L.J.* 1423, 1432–34 (2008).

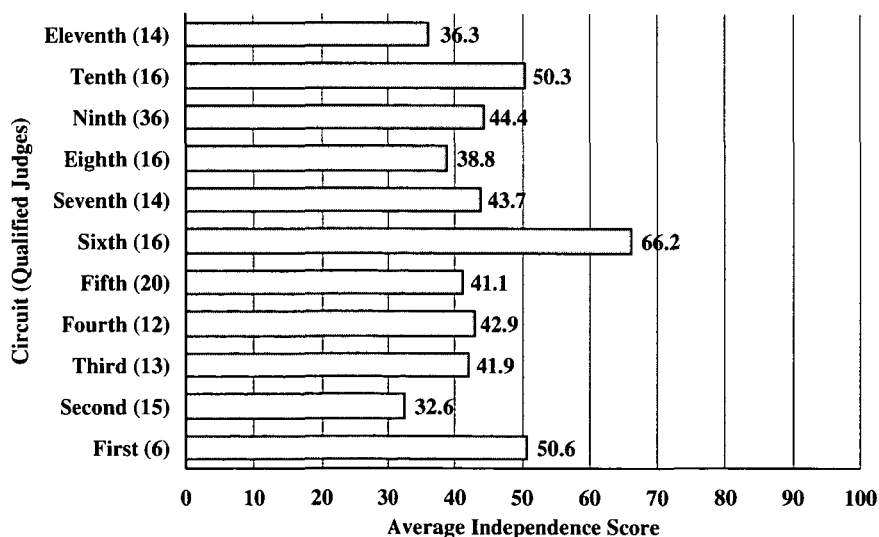
Hypothesis: [Background trait] would be expected to correlate [positively or negatively] with [partisanship or independence] of the studied judge.

The results discussed below are focused on analyses for which a correlation was found between a background trait and either the Independence or Partisanship Scores. However, regressions that yielded no finding of statistical significance are also described for instances in which a related background variable was also tested or where a lack of correlation was otherwise notable.

1. Circuit

Prior research indicates that the behavior of judges varies among circuits, even after adjustments are made to account for observable differences among circuits.¹¹⁹ Similarly, because of different norms and judges within each circuit, this Study also expected that statistically significant variations would appear among the eleven circuits of focus. Indeed, as Figure 10 indicates, the data revealed statistically significant differences among the circuits' Independence Scores.¹²⁰

Figure 10. Average Independence Score by Circuit ($p < 0.0001$)



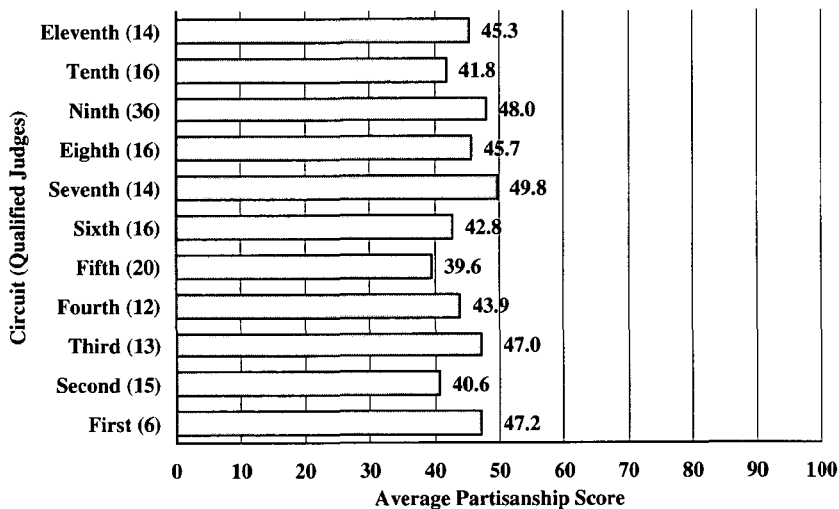
¹¹⁹ See Yung, *Activism*, *supra* note 10, at 25–26; Yung, *Ideology*, *supra* note 10, at 1153–76.

¹²⁰ $p < 0.0001$. Huber iteration 1: maximum difference in weights = 0.61794443; Huber iteration 2: maximum difference in weights = 0.09924322; Huber iteration 3: maximum difference in weights = 0.07254478; Huber iteration 4: maximum difference in weights = 0.02411583; Biweight iteration 5: maximum difference in weights = 0.26552434; Biweight iteration 6: maximum difference in weights = 0.08356774; Biweight iteration 7: maximum difference in weights = 0.03779031; Biweight iteration 8: maximum difference in weights = 0.035118; Biweight iteration 9: maximum difference in weights = 0.0025712.

The Sixth Circuit had by far the highest average Independence Score (66.2). Because of the sharp ideological divisions in that circuit, which have been observed anecdotally¹²¹ and empirically,¹²² the high rate of independence was expected. By contrast, the Second (32.6) and Eleventh (36.3) Circuits exhibited strong norms against concurrences and dissents among the judges. Although the Ninth Circuit has a reputation of ideological division and conflict,¹²³ the data did not show that the judges in that circuit were particularly independent.

Because the data indicated a relationship between judicial decisionmaking and the circuit on which a judge sits, a similar correlation was expected for partisanship. As illustrated in Figure 11, however, the data did not support a statistically significant connection between Partisanship Scores and circuit.¹²⁴

Figure 11. Average Partisanship Score by Circuit ($p = 0.6354$)



¹²¹ Dan Horn, *6th Circuit's Infighting Gets Personal*, CINCINNATI ENQUIRER, Oct. 16, 2008, at A1 (describing “political warfare” among judges in the Sixth Circuit as follows: “The tone of the judges’ written opinions was as notable as their stand on the issue: Some of them used politically-charged language, accused one another of ignoring the law and, in one case, questioned the integrity and motivations of fellow judges. . . . That kind of tough talk is unusual in most federal courts. But it’s just the latest example of the internal strife that has afflicted the 6th Circuit for years[.] . . . cast[ing] doubt on the role of the courts as an institution apart from politics. All circuit courts . . . are home to judges from different political and ideological backgrounds. At the 6th Circuit, however, those differences have led to several public disagreements, personal feuds and bitterly contested votes.” (internal quotation marks omitted)).

¹²² See Yung, *Ideology*, *supra* note 10, at 1183–85.

¹²³ E.g., John Schwartz, *Long Shot for Court Has Reputation for Compassion and Persuasion*, N.Y. TIMES, May 6, 2010, at A17 (“The Ninth Circuit is an ideologically divided court, with strong factions of liberals and conservatives . . .”).

¹²⁴ $p = 0.6354$.

Finally, although some variation of Partisanship Scores was observed among individual circuits, regression analysis indicated that these differences were not statistically significant. These results suggest that partisanship may be a constant trait among the circuits and that circuit norms and law have not affected the actions of judges in applying deferential standards in a partisan fashion.

2. *Nomination and Confirmation Politics*

The nomination and confirmation of judges on the courts of appeals were heavily politicized when most of the studied judges were appointed to the bench.¹²⁵ Studies have shown that the political environment at the time of a judge's confirmation is correlated with subsequent decisionmaking on the bench.¹²⁶ However, no empirical investigation has been conducted to determine if judicial independence or partisanship can be traced to confirmation politics as well.

Prior research related to the present study did not support a connection between confirmation politics and judicial activism¹²⁷ or ideology,¹²⁸ and thus the expectation in the present study was that, similarly, no such relationship would exist between confirmation politics and independence or partisanship. Indeed, as demonstrated in Figure 12, the expectation was met with regard to Independence Scores, and no statistically significant correlation was found.¹²⁹

¹²⁵ See Editorial, *The Missing Judges*, N.Y. TIMES, Jan. 4, 2011, at A20 (describing the increasing delay in judicial appointments due to partisan obstructionism).

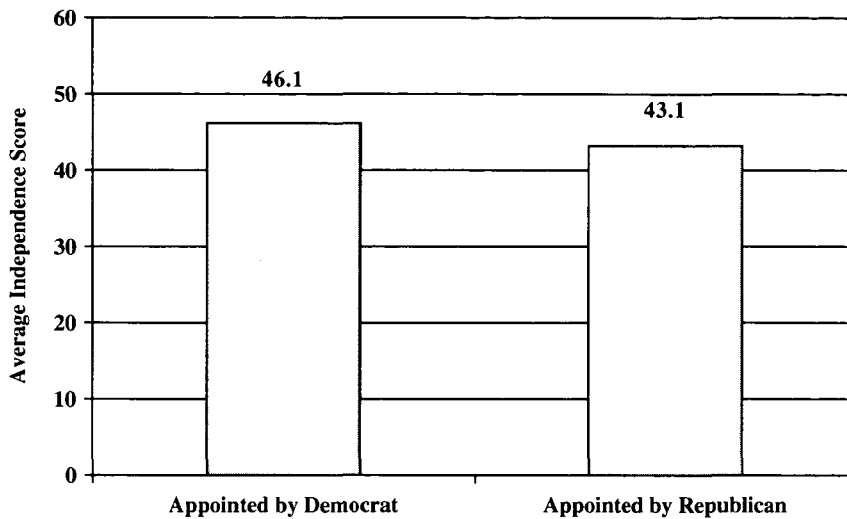
¹²⁶ See, e.g., William M. Landes & Richard A. Posner, *Rational Judicial Behavior: A Statistical Study*, 1 J. LEGAL ANALYSIS 775, 822 (2009) ("We also found, consistent with many other studies, that Justices appointed by Republican Presidents vote more conservatively than Justices appointed by Democratic Presidents, with the difference being most pronounced in civil-rights cases and least pronounced in privacy and judicial-power cases.").

¹²⁷ Yung, *Activism*, *supra* note 10, at 33–35.

¹²⁸ Yung, *Ideology*, *supra* note 10, at 1181–82.

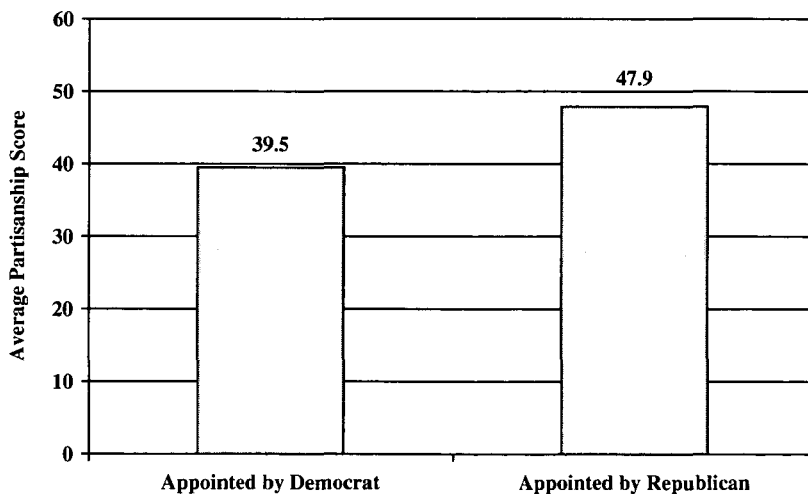
¹²⁹ $p = 0.2061$.

Figure 12. Average Independence Score by Party of Appointing President ($p = 0.4222$)



The data indicate that judges appointed by Republican Presidents, however, are more likely to exhibit judicial partisanship than those appointed by Democratic Presidents.¹³⁰ Figure 13 illustrates the differential in Partisanship Scores between Democratic and Republican judicial appointees.

Figure 13. Average Partisanship Score by Party of Appointing President ($p = 0.0017$)

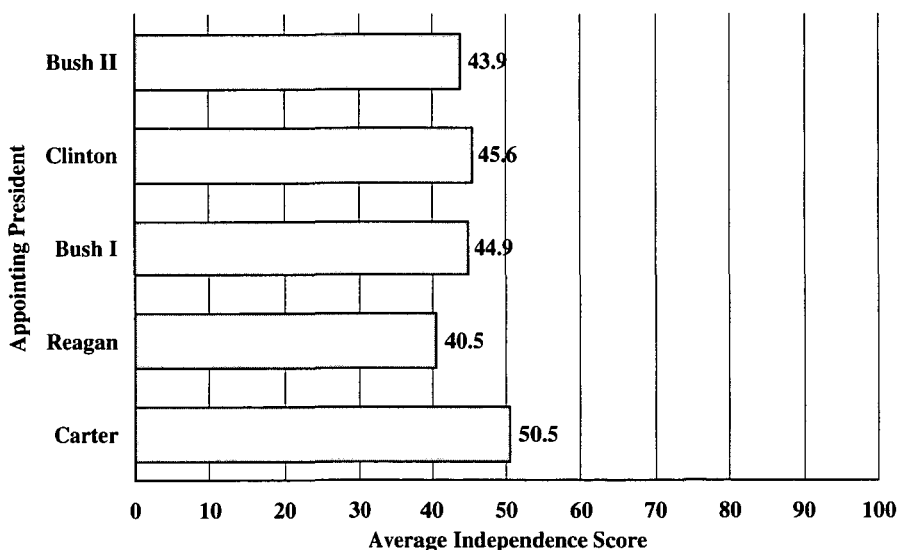


¹³⁰ $p = 0.0017$. Huber iteration 1: maximum difference in weights = 0.6318472; Huber iteration 2: maximum difference in weights = 0.03160029; Biweight iteration 3: maximum difference in weights = 0.22812864; Biweight iteration 4: maximum difference in weights = 0.01164982; Biweight iteration 5: maximum difference in weights = 0.00321255.

In fact, the magnitude of the difference in Partisanship Scores between Republican and Democratic appointees was quite large, with Republican appointees exhibiting Partisanship Scores over twenty percent higher than Democratic appointees. The data did not provide a clear explanation for this result.

Given the discrepancy between Partisanship Scores depending on the appointing party, Independence and Partisanship Scores were further tested against judges' background characteristics. Specifically, the Scores were regressed against the particular President that appointed each judge. As Figure 14 indicates, among the last five appointing Presidents in the data, no statistically significant relationship was found between the particular appointing President and Independence Scores.¹³¹

Figure 14. Independence Scores by Appointing President
($p = 0.3406$)



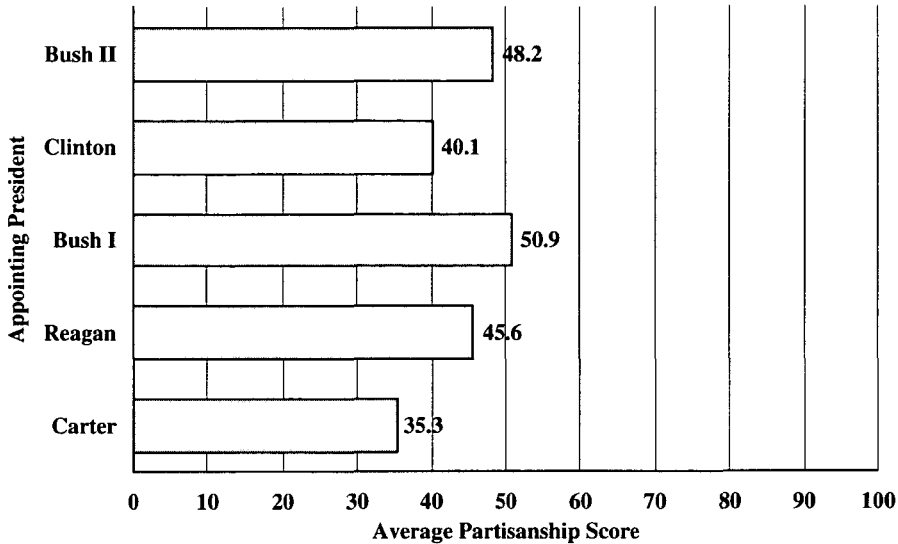
On the other hand, when a similar regression was performed for Partisanship Scores, a statistically significant relationship between partisanship and the particular appointing President was found.¹³² Figure 15

¹³¹ $p = 0.3406$. Regression was limited to the last five appointing Presidents, which covered 176 of the 178 judges studied.

¹³² $p = 0.0197$. Huber iteration 1: maximum difference in weights = 0.59643212; Huber iteration 2: maximum difference in weights = 0.06953998; Huber iteration 3: maximum difference in weights = 0.01464916; Biweight iteration 4: maximum difference in weights = 0.18380912; Biweight iteration 5: maximum difference in weights = 0.00645264. Regression was limited to the last five appointing Presidents which covered 176 of the 178 judges studied.

below illustrates the differences in average Partisanship Scores based upon the appointing President.

Figure 15. Partisanship Scores by Appointing President ($p = 0.0197$)



Given the difference in average Partisanship Scores between Republican and Democratic appointees,¹³³ it was not surprising that judicial appointees of Democratic Presidents Carter (35.3) and Clinton (40.1) were the least partisan. Presidents George H.W. Bush (50.9) and George W. Bush (48.2) appointed the most partisan judges, on average. Based upon the correlations observed between judicial confirmation politics and the partisanship of judges, further study is warranted in this area.

3. *Prior Professional Experience*

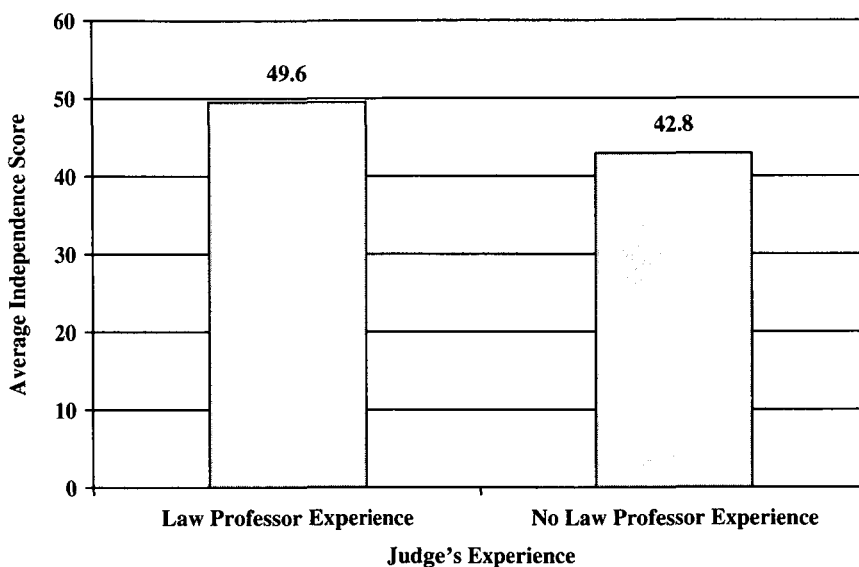
Next, the Study turned to the theory that prior experience—either as a lawyer or otherwise—might have a formative effect on the decisionmaking processes of judges on the courts of appeals. For example, it was expected that a judge who worked in a position that encouraged consensus would be, on average, less independent than other judges. Similarly, a judge who was a veteran of political battles would be more partisan on the bench. Of each of the prior work experiences studied,¹³⁴ several showed connections to Independence and Partisanship Scores.

¹³³ *Supra* Figure 13 and accompanying text.

¹³⁴ The following work experiences were studied: serving in the Solicitor General's office,

Two types of professions were correlated with a judge's Independence Score: law professorships¹³⁵ and experience in the state or federal executive or legislative branch. Judges with experience as law professors were expected to have more finely crafted views that might undermine their amenability to compromise. Indeed, as illustrated in Figure 16, law professor judges were more independent than those who did not have a similar experience.¹³⁶

Figure 16. Average Independence Score by Law Professor Experience ($p = 0.0194$)



Further, it was expected that judges who had worked in other branches of government would be more amenable to persons with whom they were not ideologically aligned. As indicated in Figure 17, the data supported that hypothesis.¹³⁷

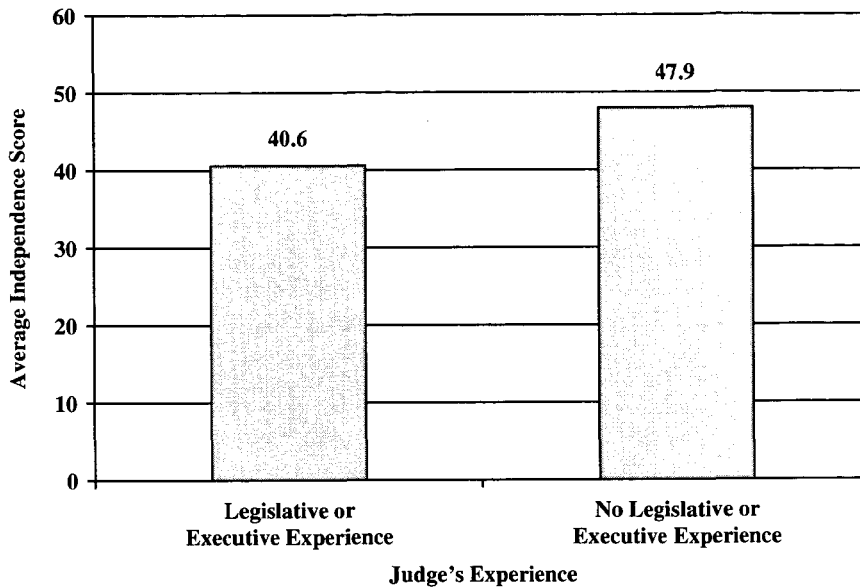
as a United States Attorney or Assistant United States Attorney, in the Justice Department, as a prosecutor at any level, as a public defender at any level, in any legislative or executive branch position, as a state court judge, in a private law firm, as a district court judge, and as a law professor.

¹³⁵ Judges who had or were currently serving in greater than an adjunct professor capacity at a law school were classified as "law professors."

¹³⁶ $p = 0.0194$. $R^2 = 0.0307$; Adjusted $R^2 = 0.0252$. In all, judges who had been law professors had Independence Scores, on average, over fifteen percent higher than other judges.

¹³⁷ $p = 0.0013$. Huber iteration 1: maximum difference in weights = 0.60706329; Huber iteration 2: maximum difference in weights = 0.01747071; Biweight iteration 3: maximum difference in weights = 0.18414055; Biweight iteration 4: maximum difference in weights = 0.00059402.

Figure 17. Average Independence Score by Legislative or Executive Experience ($p = 0.0013$)



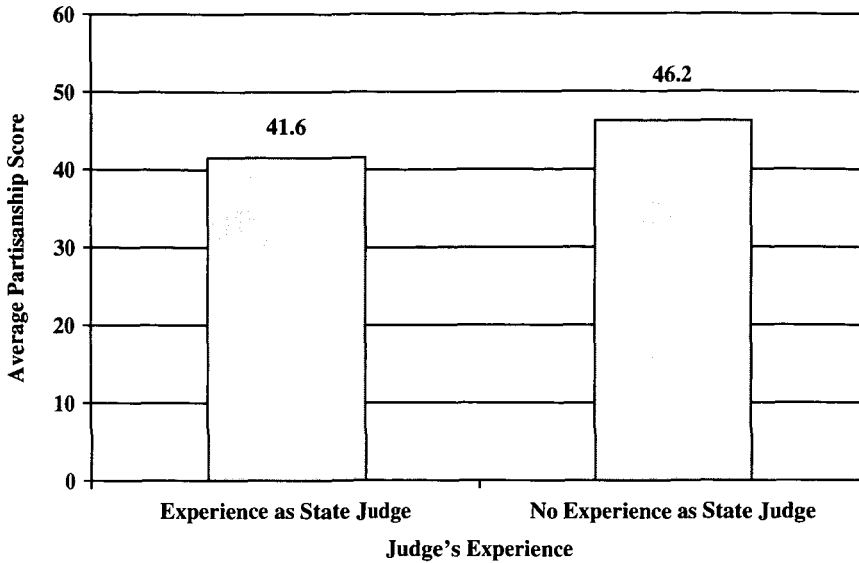
On average, judges who had not served in a legislative or executive position in federal or state legislatures were almost eighteen percent more independent than judges with such experience.

Next, the Study turned back to Partisanship Scores. Two types of experience were correlated with judicial partisanship: state court and Department of Justice¹³⁸ (“DOJ”) experience. It was expected that all judges who had extensive prior court experience would be less likely to be partisan because such partisanship might have diminished their chances of being appointed to a higher court. The data did support that hypothesis, as illustrated in Figure 18, for judges who had previously been state judges.¹³⁹

¹³⁸ For judges with experience in the DOJ, no distinction was drawn between those who were career and political employees.

¹³⁹ $p = 0.0069$. Huber iteration 1: maximum difference in weights = 0.7196086; Huber iteration 2: maximum difference in weights = 0.05316684; Huber iteration 3: maximum difference in weights = 0.0058383; Biweight iteration 4: maximum difference in weights = 0.28285063; Biweight iteration 5: maximum difference in weights = 0.02370749; Biweight iteration 6: maximum difference in weights = 0.0091099.

Figure 18. Average Partisanship Score by State Court Experience
($p = 0.0069$)

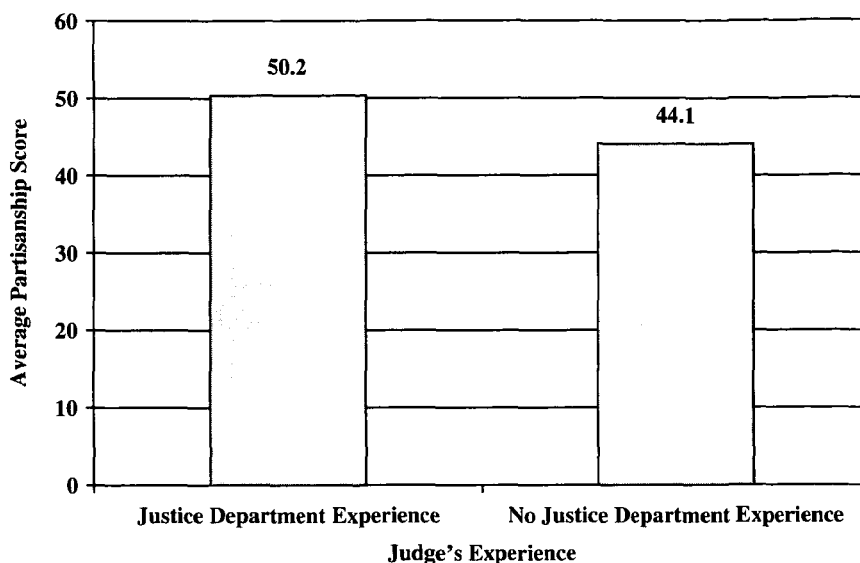


That is, a judge who had not previously sat on a state court exhibited over ten percent *more* partisanship than judges who had been state court judges.

With respect to judges who were former DOJ employees, the expectation was that a judge who had experience at the DOJ would be more partisan because her exhibited partisanship would be perceived as a positive value by an appointing President. The data supported the hypothesis and, as illustrated in Figure 19, judges who had experience at the DOJ were, on average, more partisan than other judges.¹⁴⁰

¹⁴⁰ $p = 0.0173$. Huber iteration 1: maximum difference in weights = 0.68446108; Huber iteration 2: maximum difference in weights = 0.04681227; Biweight iteration 3: maximum difference in weights = 0.29604731; Biweight iteration 4: maximum difference in weights = 0.01197645; Biweight iteration 5: maximum difference in weights = 0.00520744. If a judge had served in the DOJ, she had an over thirteen percent higher Partisanship Score on average than other judges.

Figure 19. Average Partisanship Score by Department of Justice Experience ($p = 0.0173$)



IV. DATA ANALYSIS

As described above, the data revealed several significant correlations. However, there are reasons to be cautious about drawing inferences from the findings in this Article. As with any empirical study, it is helpful to examine reliability, validity, and potential limitations of the data to properly contextualize the results described herein. Each of those areas of concern is discussed below.

A. Reliability

Reliability is the degree to which the measurement would yield the same results when applied by others.¹⁴¹ Because this Study is the first to systematically identify partisanship and independence for judges on the courts of appeals,¹⁴² it is impossible to compare the results directly with other research.¹⁴³ Instead, reliability can only be

¹⁴¹ Epstein & King, *supra* note 70, at 83 (“Reliability is the extent to which it is possible to replicate a measurement, reproducing the same value (regardless of whether it is the right one) on the same standard for the same subject at the same time.”).

¹⁴² Although the Tournament of Judges model described earlier, *see* Choi & Gulati, *Tournament*, *supra* note 49; *supra* note 49 and accompanying text, did attempt to measure independence, its methods were inclusive of those described in this Article. Thus, it does not provide a firm basis for a reliability comparison with this Study.

¹⁴³ *See supra* Part II.A (describing use of dataset from prior research in present study); *see also* Yung, *Activism*, *supra* note 10, at 1189–1201 (describing limitations of data); Yung, *Ideology*, *supra* note 10, at 39–45 (same).

evaluated by the quality of the coding and analysis. Because this is not the first study using some version of this dataset, some of the discussion here is abbreviated.

Case data was downloaded from LexisNexis for each of the circuits studied,¹⁴⁴ which provides a stable platform for replication by other researchers. Many of the variables were coded by computer software,¹⁴⁵ which should provide a high level of consistency among studies. The remaining data were coded by me, law students, and recent law school graduates.¹⁴⁶ For both the computer- and human-coded variables, I, as well as other student and graduate coders, performed quality checking. Accepted intercoder reliability was achieved for every variable used in this Study. In addition, a variety of checks were performed to ensure internal consistency of variables that were necessarily interconnected.¹⁴⁷

B. *Validity*

Validity is the degree to which the measurement used in an empirical study reflects the concept measured.¹⁴⁸ Assessing validity is more complex than gauging reliability.¹⁴⁹ Generally, validity can be understood along a variety of axes.¹⁵⁰ Specifically, this Section evaluates three different ways of viewing validity: facial validity, unbiasedness, and efficiency.¹⁵¹ Although it is unnecessary to establish each of these categories,¹⁵² it is helpful to consider each of them in reviewing this Study.

First, “[a] measure is facially valid if it is consistent with prior evidence, including all quantitative, qualitative, and even informal impressionistic evidence.”¹⁵³ Because there has been no systematic quantitative evidence to evaluate independence and partisanship of

¹⁴⁴ See *supra* Part II.A (describing methodology).

¹⁴⁵ *Supra* Part II.A.

¹⁴⁶ *Supra* Part II.A.

¹⁴⁷ For example, the party labels in the coding include “criminal defendant.” Such a party label precluded “civil plaintiff” or “civil defendant” from appearing in the outcome variable. Many other crosschecks were employed to ensure quality, and to correct errors within the dataset.

¹⁴⁸ Epstein & King, *supra* note 70, at 87.

¹⁴⁹ *Id.* at 89.

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² *Id.* (“[N]o one of these is always necessary, and together they are not always sufficient, even though together they are often helpful in understanding when a measure is more or less valid.”).

¹⁵³ *Id.* (emphasis omitted).

judges as understood in this Article, facial validity assessments were difficult. In the dataset, there were numerous judges who had either written extensively about judging or whose judging style had been written about by commentators. The Partisanship and Independence Scores for these notable courts of appeals judges are listed in Table 1 below.

Table 1. Partisanship and Independence Scores of Notable Judges

Judge (Total Interactions)	Circuit	Partisanship Score	Independence Score
Boggs, Danny J. (235)	6	34.7	64.1
Cook, Deborah L. (266)	6	65.2	60.7
Easterbrook, Frank H. (369)	7	57.8	43.8
Jones, Edith H. (437)	5	21.3	51.8
McConnell, Michael W. (442)	10	45.1	58.7
O'Scannlain, Diarmuid F. (393)	9	55.1	33.2
Posner, Richard A. (380)	7	44.9	36.6
Reinhardt, Stephen R. (239)	9	24.6	72.5
Sotomayor, Sonia (360)	2	57.2	48.3
Thomas, Sidney R. (536)	9	32.4	57.3
Wardlaw, Kim M. (378)	9	71.8	46.4
Wilkinson, J. Harvie, III (617)	4	37.5	39.3
Williams, Ann C. (384)	7	35.2	38.8
Wood, Diane P. (420)	7	53.5	26.6

Normally, qualitative assessment based upon how those judges scored in regards to independence and partisanship would allow for a proper assessment of facial validity. As noted at the outset of this Article, however, one of the great problems with modern debates about judges has been the nearly exclusive focus on ideology, which has created a deficient vocabulary in the area. As a result, it was difficult to determine if the quantitative assessments in Table 1 were consistent with qualitative assessments in judges' own writings or those of commentators.

For example, Judges Danny Boggs and Deborah Cook have been strong conservative voices in the ongoing battles on the Sixth Circuit.¹⁵⁴ To the popular press, and even to scholars, they have been considered as similar judges.¹⁵⁵ At least insofar as it relates to their

¹⁵⁴ See Dan Horn, *The Politics of Life and Death*, CINCINNATI ENQUIRER, Apr. 15, 2007, at 1A ("At one end of the spectrum are conservatives such as Alice Batchelder, Eugene Siler, Deborah Cook, Jeffrey Sutton, John Rogers and Danny Boggs. Together, they voted 92-9 against inmate appeals.")

¹⁵⁵ *Id.*

ability to encourage dissents and separate concurrences on panels, that profile is consistent with the data. However, Judge Boggs demonstrated far less partisanship (34.7) than Judge Cook (65.2). This indicates that Judge Boggs's ideology did not result in partisan treatment of district court judgments, whereas Judge Cook's ideology did result in partisan review of district court judgments. Because observers have rarely focused on interactions between courts of appeals and district court judges, it is unsurprising that the differences between Judges Boggs and Cook would be missed in this regard. Further, because ideology has been treated as synonymous with partisanship, the distinction outlined in this Study simply would not have been made.

Similarly, Judge Stephen Reinhardt is often identified as a liberal firebrand at the center of many of the Ninth Circuit's most well-known ideological battles.¹⁵⁶ Yet, his Partisanship Score (24.6) was more than one standard deviation below the mean. An observer might think that the Partisanship Score cannot possibly be right because Judge Reinhardt is a well-known partisan.¹⁵⁷ However, his Ideology Score (-20.4) was more than one standard deviation in the liberal direction and his Independence Score (75.5) was more than two standard deviations above the mean. Those Scores are consistent with a picture of a liberal who is not prone to compromise. The lower Partisanship Score might simply indicate that, although Judge Reinhardt has been heavily involved in fights with other Ninth Circuit judges, he has not demonstrated a partisan allegiance in reviewing district courts.

Despite the difficulties in evaluating facial validity, there are reasons to believe that the Independence and Partisanship Scores are facially valid. For instance, the two scores were tested in their abilities to predict dissents, concurrences, and partisan reversals in a wholly new dataset.¹⁵⁸ That both measures succeeded—and, in fact, surpassed the predictive ability of traditional ideology metrics—was a strong indicator of validity. The tests support the notion that as the concepts were defined in this Article, the measures applying those definitions effectively gauge judicial behavior in those areas.

Next, “[a] measurement procedure is unbiased if it produces measures that are right on average across repeated applications.”¹⁵⁹ Be-

¹⁵⁶ David G. Savage, *Did Victim's Photo Prejudice a Jury? Another Ruling by the Liberal-Leaning 9th Circuit Comes Under Supreme Court Review*, L.A. TIMES, Sept. 18, 2006, at A1.

¹⁵⁷ *Id.*

¹⁵⁸ *Supra* Part III.A.

¹⁵⁹ Epstein & King, *supra* note 70, at 92 (emphasis omitted).

cause this Study relied on revealed preferences (in the form of case outcomes), combined with a formal rule (standard of review), the risk of bias in measurement was low.¹⁶⁰ Moreover, the formal rule utilized for the Partisanship Scores (standard of review) was almost never in dispute. Standard of review is typically set forth in the briefs of both parties; in a random sample of the briefs in 100 cases from the Case Database, there were no instances in which the parties disputed the applicable standard(s) of review. Further, relying on computer coding, quantitative analysis, and excluding judges with insufficient population sizes provides a stable, unbiased measurement methodology.

The final test for validity is efficiency, which “helps us choose among several unbiased measures, with the basic idea being to choose the one with the minimum variance.”¹⁶¹ Treating the judges studied in 2008 as the population—instead of using a sample of a larger body of cases—diminished the level of variance in the Study. Further, the data were analyzed with frequentist statistics, which have no variance outside of a sampling structure.

C. *Limitations of the Data*

There were several limitations of the data utilized in this Study. As with any empirical study, it is important to articulate those limitations to ensure that only the proper inferences are drawn from the data. Because this Study used a relatively new dataset, the need to carefully analyze the confines of the data is even more important.

1. *Time Limitations*

All the data studied in this Article were collected from 2008 appellate decisions. This has several implications. First, the judges studied might not have had the same Independence and Partisanship Scores over time. Similarly, going forward, the judges may drift in their independence and partisanship levels.¹⁶² Second, the results regarding nomination and confirmation politics are especially vulnerable to time limitations. Particularly for the Presidents that held office decades ago, the remaining appointees who were still issuing opinions in 2008 may not have been representative of the overall population of

¹⁶⁰ See *id.* at 94 (“So, instead of (or sometimes in addition to) asking respondents to answer research questions directly, it is usually better to look for *revealed preferences*, which are consequences of theories of motive that are directly observable in real behavior.”).

¹⁶¹ *Id.* at 95.

¹⁶² See, e.g., Lee Epstein et al., *Ideological Drift Among Supreme Court Justices: Who, When, and How Important?*, 101 NW. U. L. REV. 1483, 1486 (2007) (finding in their study that an ideological drift among Supreme Court Justices occurred over time).

judges appointed by those Presidents. Because the large majority of judges in this dataset were appointed by Presidents Clinton and George W. Bush, the results are most reflective of those two presidencies.

2. *Data-Gathering Limitations*

The Case Database (but not the Testing Database) excluded opinions that did not use language relevant to a standard of review through LexisNexis searches.¹⁶³ That omission meant that portions of judges' opinions were not considered in this Study. It is possible that—to the extent that the excluded cases identified a standard of review—a broader selection of cases would yield different results, which in turn, would support different conclusions.

Another limitation of the data concerned the degree to which certain mixes of case types might have distorted the results. The logistic and linear regressions that were run controlled for the case mix between criminal and civil cases. However, it was possible that finer distinctions in the compositions of caseloads per circuit and per judge could have accounted for some of the variation observed in the behavior of judges. Without more data, it is impossible to assess the significance of this limitation.

3. *Selection Effects*

Because this was a study of federal appellate courts, there was an inevitable concern about selection effects.¹⁶⁴ A selection effect would have occurred when a party other than those being studied (e.g., a litigant) made a decision (e.g., to settle) that was not accounted for by the Study methods.¹⁶⁵ There were various points at which a selection effect could have occurred in the data for this Study, including prefiling, pretrial, during trial, preverdict, postverdict, preappeal, during appeal, and postappeal.

The significance of selection effects in this Study was more limited, however, than other analyses of the courts of appeals because of the scope of the project. The underlying measures used to create the

¹⁶³ See *supra* note 86 and accompanying text.

¹⁶⁴ For articles discussing selection effects, see Keith N. Hylton, *Asymmetric Information and the Selection of Disputes for Litigation*, 22 J. LEGAL STUD. 187 (1993); George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984); see also Cass R. Sunstein, *Judging National Security Post-9/11: An Empirical Investigation*, 2008 SUP. CT. REV. 269, 271 (noting the centrality of selection effects in any conclusions one might draw).

¹⁶⁵ Kate Stith, *The Risk of Legal Error in Criminal Cases: Some Consequences of the Asymmetry in the Right to Appeal*, 57 U. CHI. L. REV. 1, 19 n.55 (1990).

Independence and Partisanship Scores were all relative in nature. They did not attempt to state that a judge was, for example, “independent” or “partisan” by some external objective scale. Instead, the scores merely implied that, relative to the other judges studied, one judge was, for example, more independent in her approach than another judge.¹⁶⁶ Given this relativistic model, the key concern with selection effects was whether they were relatively equal across the judge population. As long as judges had comparable selection effects (or the Study accounted for uneven selection effects in some way), selection effects should not have limited the inferences drawn from the Study. Nonetheless, it is helpful to appreciate the ways that selection effects might complicate the Independence and Partisanship Scores.

The classic model of selection effects in the context of litigation relies on the incentives of litigants.¹⁶⁷ The Priest-Klein hypothesis predicted that, if parties had perfect information, case outcomes would split evenly (fifty percent) between affirmances and reversals because the parties would settle as needed to avoid other outcomes.¹⁶⁸ This Study, consistent with prior examinations, provides reason to doubt the simple Priest-Klein hypothesis because the rate of affirmance was far higher than fifty percent (regardless of standard of review used) in civil and criminal cases.¹⁶⁹ Notably, the Priest-Klein model was limited to civil cases because the settlement structure and plea bargaining in criminal cases creates different incentives such that the affirmance rate is far from fifty percent (even with the bar of appealability at the federal level).

Beyond the traditional Priest-Klein model, there are still other potential selection effects. At the federal appellate level, however, the marginal cost of an appeal is very low compared to that of a trial.¹⁷⁰ This means that the chance of settlement before an appeal is quite low. Uncertainty about appellate outcomes has created an environment where parties often reach agreement about the potential

¹⁶⁶ See *supra* Part II.B (independence); *supra* Part II.C (partisanship).

¹⁶⁷ Priest & Klein, *supra* note 164, at 4–5.

¹⁶⁸ *Id.* A variety of studies have examined whether empirical evidence supports the Priest & Klein hypothesis. See, e.g., Theodore Eisenberg, *Testing the Selection Effect: A New Theoretical Framework with Empirical Tests*, 19 J. LEGAL STUD. 337, 339–40 (1990); Randall S. Thomas & Kenneth J. Martin, *Litigating Challenges to Executive Pay: An Exercise in Futility?*, 79 WASH. U. L.Q. 569, 590–91 (2001); Robert E. Thomas, *The Trial Selection Hypothesis Without the 50 Percent Rule: Some Experimental Evidence*, 24 J. LEGAL STUD. 209, 222–26 (1995).

¹⁶⁹ *Supra* Part III.A.2.

¹⁷⁰ See Meehan Rasch, *Not Taking Frivolity Lightly: Circuit Variance in Determining Frivolous Appeals Under Federal Rule of Appellate Procedure 38*, 62 ARK. L. REV. 249, 264 (2009).

risks and costs. The legal issues are usually close in civil cases,¹⁷¹ and the parties do not know which judges will decide their case until right before oral argument.¹⁷² By that time, the briefing has been completed,¹⁷³ settlement has proven unrealistic, and the marginal cost of oral argument is low.

Ultimately, the Independence and Partisanship Scores account for the different selection effects in criminal and civil cases by adjusting individual judge scores to assume each judge had the average proportion of criminal and civil cases.¹⁷⁴ Beyond that, it is unclear whether there are any uneven selection effects within the judge population. To the extent that the parties knew the substantive and procedural law of a circuit and made the same basic risk assessments (which is what a selection effects model generally predicts), one might expect that, regardless of differences among the circuits and judges, the projected odds in individual cases would be similar. As a result, although selection effects might limit this Study, it is difficult to discern if they had a prominent role in shaping the data and results.

CONCLUSION

The exclusive focus on ideology as the means for explaining, describing, and understanding the behavior of judges on the courts of appeals has proven to be misguided. This Study shows that ideology has a limited role in decisionmaking at the federal appellate level. By expanding the scope of available metrics to include independence and partisanship, this Study demonstrates that a complete model of judicial behavior for federal appellate judges must be multidimensional. The most basic choices judges on the courts of appeals can make—to dissent, to concur separately, or to reverse the district court judgment—are better predicted and explained by utilizing the measures of partisanship and independence than by utilizing measures of ideology. By demonstrating that ideology is only a small piece of the puzzle,

¹⁷¹ Brian Z. Tamanaha, *The Distorting Slant in Quantitative Studies of Judging*, 50 B.C. L. REV. 685, 748 (2009) (“As the authors acknowledge, the subset of cases that are actually appealed following trial are more likely to have ‘a degree of indeterminacy in the law.’” (quoting CASS R. SUNSTEIN ET AL., *ARE JUDGES POLITICAL?: AN EMPIRICAL ANALYSIS OF THE FEDERAL JUDICIARY* 155 n.20 (2006))).

¹⁷² Richard L. Revesz, *Litigation and Settlement in the Federal Appellate Courts: Impact of Panel Selection Procedures on Ideologically Divided Courts*, 29 J. LEGAL STUD. 685, 688 (2000) (“With one exception, the United States Courts of Appeals announce the composition of their panels only shortly before the oral argument, typically after all the briefs have been filed.”).

¹⁷³ See *id.*

¹⁷⁴ See *infra* Appendix A (detailing raw score adjustments).

hopefully this Study has pushed the metaphorical ball forward, so that future studies can expand the scope and reach of quantitative analyses of judicial behavior beyond a myopic concern with judicial ideology.

APPENDIX A: ADJUSTMENT AND SCALING METHODOLOGY

There were several common adjustments made to the raw Independence and Partisanship Scores to incorporate specific factors that might have explained portions of the underlying variance measured by the scores. The four adjustments made were for: (A) a judge's circuit (applied to Partisanship Scores), (B) interaction effects (applied to Partisanship Scores), (C) case issue mix (applied to both measures), and (D) common scaling (applied to both measures).

A. Circuit Adjustment for Partisanship Scores

The circuit adjustment relied on two basic premises: (1) numerous differences between the circuits might explain variance in partisanship among judges, and (2) senior judges traveling between circuits provided a means to calculate the amount of variance that was due to circuit differences. The first premise is not likely to be controversial, but it should be noted that the adjustments made to the Partisanship Scores were very small because of limited differences in behavior observed by traveling judges. The second contention concerning senior status judges sitting on panels in different circuits warrants further explanation.

In 2008, there were twenty-six senior-status judges (who were on panels included in the Case Database) who issued opinions in more than one circuit. Combined, they accounted for votes on 2482 panels in the Case Database. Because each of those panels afforded up to three possible interactions with other judges (two for copanelists and one for the district judge), there are 7500 data points that were potentially derived from these judges. The assumption was made that a judge's partisanship would remain constant in any circuit that the judge sat. For example, Judge Arthur L. Alarcon heard cases in the Third, Sixth, Ninth, and Eleventh Circuits. It was assumed that he would exhibit the same partisanship trait regardless of the circuit in which he was hearing cases. Thus, any change in his behavior between the four circuits would be due to unidentified differences in the circuits.

Because the distribution of the traveling votes was not evenly spread among the circuits, the collective scores for the twenty-six judges were aggregated and weighted according to how many votes each one issued in a particular circuit. This adjustment allowed an "expected traveling judge" value to be determined for each circuit:

Expected Traveling Judge Partisanship Score = (Number of Times Judge A Voted in Circuit X × Judge A Partisanship Score + Number of Times Judge B Voted in Circuit X × Judge B Partisanship Score + Number of Times Judge C Voted in Circuit X × Judge C Partisanship Score) ÷ (Number of Times Judge A Voted in Circuit X + Number of Times Judge B Voted in Circuit X + Number of Times Judge C voted in Circuit X)

The actual Partisanship Scores of traveling judges were then computed collectively (as one hypothetical traveling judge) for all of the traveling judges within a circuit.¹⁷⁵ The difference between the expected and actual scores in each circuit was the basis for the circuit adjustment. The raw-adjustment number was then divided by the number of traveling votes in the circuit so that the circuit differential could be determined on a per-vote basis. Finally, the circuit adjustment was applied to each judge within the circuit, based upon the number of votes that that judge issued.¹⁷⁶

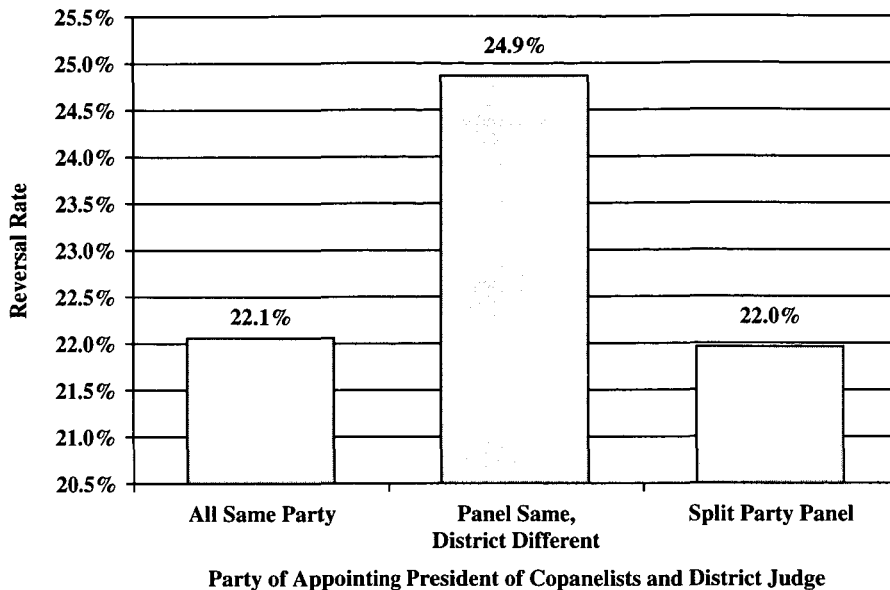
B. Interaction Effects Adjustment for Partisanship Scores

The effects of interactions between different judges were based upon the expected variance in voting caused by the political background of copanelists and the district court judge under review. Unlike the results in other panel-effects studies, the inclusion of district court judges created new values that warranted different adjustments. It was determined that the party of the appointing President on the “superpanel” (the three appellate judges and the district judge whose decision is being reviewed) affected an individual judge’s decisions to dissent and reverse. Figure 20 below indicates the magnitude of those differences based upon the results from the Case Database.

¹⁷⁵ The collective treatment of traveling judges was necessary because individual judges often had too few votes in particular circuits to analyze individually. As a result, combining the scores was the only means of ensuring that the majority of the traveling judge information was not discounted entirely. If more data had been available, a more complex adjustment system could have been utilized.

¹⁷⁶ In prior studies, Ideology and Activism Scores were computed using circuit adjustments that were made on a per-judge basis. Yung, *Activism*, *supra* note 10; Yung, *Ideology*, *supra* note 10. The switch to a per-vote basis was made for the Partisanship Scores described in this Study.

Figure 20. Reversal Rate by Appointing President's Party of Copanelists and District Judge



Therefore, totals were tallied for each judge based upon the six possible political configurations for a judge's two copanelists and the district court judge under review. Those six potential arrangements were: (1) two Republican copanelists, Republican district judge ("RR-R"); (2) two Republican copanelists, Democratic district judge ("RR-D"); (3) one Republican and one Democratic copanelist, Republican district judge ("RD-R"); (4) one Republican and one Democratic copanelist, Democrat district judge ("RD-D"); (5) two Democratic copanelists, Republican district judge ("DD-R"); and (6) two Democratic copanelists, Democratic district judge ("DD-D"). Based upon the data in Figure 20, the amount of variance in the Partisanship Scores that could be explained by the above six configurations was determined. For example, if a judge sat on thirty RR-R panels and ten DD-D panels, it was assumed that the ten DD-D panels would cancel out the effects of ten RR-R panels. The remaining twenty RR-R panels, however, would pull the studied judge in a conservative direction and lower his or her reversal rate. The judge's respective reversal rates underlying Partisanship Scores were adjusted based upon the expected magnitudes of those effects.

C. Case Mix Adjustment for Independence and Partisanship Scores

The courts of appeals studied here reviewed different sets of cases from different sets of district court judges based upon geogra-

phy.¹⁷⁷ Within each circuit, it was assumed that each judge was randomly assigned to hear cases, usually on panels of three judges. As a result, any given judge studied could have had a vastly different mix of issues to rule upon than the average judge. An adjustment was made for differences in judges' dockets to decrease the degree to which any unobserved variables would affect the results.¹⁷⁸ In the Case Database, one particular distinction in case types proved significant in both dissent and reversal rates. In criminal cases, judges on panels agreed 99.1% of the time and affirmed the judgment of the lower court in 83.2% of cases. By contrast, the panel *disagreement* rate in civil cases was 98.5% and the affirmance rate was 73.3%. There were also intersecting differences when deferential and nondeferential standards of review were applied in civil and criminal cases. As a result, each judge's criminal and civil cases were grouped, and scores were calculated separately for each category. When sample sizes for individual subcategories were too low (i.e., deferential standard criminal cases), then the scores were interpolated based upon expected and actual scores with that judge's case mix. The criminal and civil scores were then weighted according to the distribution of the average judge.

D. Common Scaling Adjustment for Independence and Partisanship Scores

The last common adjustment was much simpler. Each score was adjusted to a similar scale. There were 178 studied judges, each of whom had at least 200 interactions with other judges. Scaling was performed so that the scores of these 178 judges would define the size of the scales. Because the raw Independence Scores were not normally distributed (as was expected with probabilities as the basis for raw measurements), however, they were logarithmically scaled. The Partisanship and Independence Scores were scaled from 0.0 to 100. To do so, all scores were shifted by the value needed to make the lowest observed raw score 0.0, and then multiplied by a constant needed for the highest score to reach 100. By placing the measures on a 0.0 to 100 scale, the Independence and Partisanship Scores could be under-

¹⁷⁷ With the exception of the Federal Circuit, which was not included in this Study, the remaining circuits have geographic, and not subject matter-based jurisdiction. Paul R. Michel, Foreword, *Assuring Consistency and Uniformity of Precedent and Legal Doctrine in the Areas of Subject Matter Jurisdiction Entrusted Exclusively to the U.S. Court of Appeals for the Federal Circuit: A View from the Top*, 58 AM. U. L. REV. 699, 702 (2009).

¹⁷⁸ See David C. Vladeck, *Keeping Score: The Utility of Empirical Measurements in Judicial Selection*, 32 FLA. ST. U. L. REV. 1415, 1433–34 (2005) (discussing the need to account for differences among circuit caseloads in creating empirical measures).

stood by an audience that is unfamiliar with the underlying ideology. Particularly after adjustments were made to raw scores, the actual meaning of the adjusted raw values was not obvious.

APPENDIX B: INDEPENDENCE AND PARTISANSHIP SCORES

Independence and Partisanship Scores are listed in Table 2 for the 178 judges who had at least 200 interactions with other judges in the Case Database, in alphabetical order by judges' last name.

**Table 2. Independence and Partisanship Scores
(Alphabetical Order)**

Judge	Cir.	Party of Appointing President	Partisanship Score	Independence Score
Ambro, Thomas L.	3	Democrat	42.1	48.3
Anderson, Robert L., III	11	Democrat	43.1	35.7
Anderson, Stephen H.	10	Republican	67.5	20.0
Baldock, Bobby R.	10	Republican	45.0	54.1
Barkett, Rosemary	11	Democrat	45.4	42.0
Barksdale, Rhesa H.	5	Republican	58.1	31.9
Barry, Maryanne T.	3	Democrat	25.7	31.5
Batchelder, Alice M.	6	Republican	53.5	66.7
Bauer, William J.	7	Republican	47.5	47.3
Bea, Carlos T.	9	Republican	76.6	50.0
Beam, Clarence A.	8	Republican	50.6	56.3
Beezer, Robert R.	9	Republican	35.2	28.9
Benavides, Fortunato P.	5	Democrat	41.2	27.2
Benton, William D.	8	Republican	48.5	47.1
Berzon, Marsha S.	9	Democrat	24.1	21.0
Birch, Stanley F., Jr.	11	Republican	45.0	36.3
Black, Susan H.	11	Republican	37.4	34.0
Boggs, Danny J.	6	Republican	34.7	64.1
Boudin, Michael	1	Republican	61.7	54.0
Bowman, Pasco M., II	8	Republican	49.5	25.6
Bright, Myron H.	8	Democrat	69.1	-1.0
Briscoe, Mary B.	10	Democrat	40.2	67.8
Brorby, Wade	10	Republican	59.0	23.5
Bybee, Jay S.	9	Republican	74.7	56.1
Bye, Kermit E.	8	Democrat	43.2	46.4
Cabranes, Jose A.	2	Democrat	29.6	24.8
Calabresi, Guido	2	Democrat	51.7	27.2
Callahan, Consuelo M.	9	Republican	36.7	42.2
Canby, William C., Jr.	9	Democrat	0.0	50.6
Carnes, Edward E.	11	Republican	48.1	34.7
Chagares, Michael A.	3	Republican	66.7	37.0
Clay, Eric L.	6	Democrat	20.1	65.8
Clement, Edith B.	5	Republican	57.9	37.5
Clifton, Richard R.	9	Republican	65.3	47.3

Judge	Cir.	Party of Appointing President	Partisanship Score	Independence Score
Cole, Ransey G., Jr.	6	Democrat	46.8	75.8
Colloton, Steven M.	8	Republican	42.6	55.1
Cook, Deborah L.	6	Republican	65.2	60.7
Cudahy, Richard D.	7	Democrat	69.6	54.9
Daughtrey, Martha C.	6	Democrat	39.1	80.2
Davis, W. Eugene	5	Republican	51.0	38.0
Demoss, Harold R., Jr.	5	Republican	33.6	65.6
Dennis, James L.	5	Democrat	44.6	46.4
Dubina, Joel F.	11	Republican	55.8	33.4
Duncan, Allyson K.	4	Republican	26.4	51.7
Easterbrook, Frank H.	7	Republican	57.8	43.8
Ebel, David M.	10	Republican	30.3	77.5
Edmondson, James L.	11	Republican	53.7	53.6
Elrod, Jennifer W.	5	Republican	43.9	33.3
Evans, Terence T.	7	Democrat	43.8	53.3
Fay, Peter T.	11	Republican	49.1	38.3
Fernandez, Ferdinand F.	9	Republican	100.0	39.4
Fisher, D. Michael	3	Republican	81.1	42.7
Fisher, Raymond C.	9	Democrat	50.6	56.1
Flaum, Joel M.	7	Republican	70.7	31.8
Fletcher, Betty B.	9	Democrat	64.9	68.1
Fletcher, William A.	9	Democrat	30.9	29.8
Fuentes, Julio M.	3	Democrat	39.3	33.2
Garza, Emilio M.	5	Republican	34.2	39.3
Gibbons, Julia S.	6	Republican	33.9	62.5
Gibson, John R.	8	Republican	31.1	14.0
Gilman, Ronald L.	6	Democrat	45.0	80.0
Gorsuch, Neil M.	10	Republican	56.2	72.5
Gould, Ronald M.	9	Democrat	54.0	56.8
Graber, Susan	9	Democrat	35.0	35.1
Gregory, Roger L.	4	Democrat	49.8	65.8
Griffin, Richard A.	6	Republican	30.6	59.5
Gruender, Raymond W.	8	Republican	50.9	32.0
Hall, Cynthia H.	9	Republican	59.3	31.1
Hall, Peter W.	2	Republican	28.3	21.2
Hamilton, Clyde H.	4	Republican	46.2	47.0
Hansen, David R.	8	Republican	28.8	62.0
Hardiman, Thomas M.	3	Republican	65.2	33.3
Hartz, Harris L.	10	Republican	36.5	69.4
Hawkins, Michael D.	9	Democrat	49.7	31.5
Haynes, Catharina	5	Republican	17.6	35.7
Higginbotham, Patrick E.	5	Republican	36.6	32.4

Judge	Cir.	Party of Appointing President	Partisanship Score	Independence Score
Holmes, Jerome A.	10	Republican	35.4	32.5
Howard, Jeffrey R.	1	Republican	76.5	46.4
Hull, Frank M.	11	Democrat	38.3	30.7
Ikuta, Sandra S.	9	Republican	60.7	44.0
Jacobs, Dennis G.	2	Republican	39.5	43.8
Jolly, E. Grady	5	Republican	35.1	43.8
Jones, Edith H.	5	Republican	21.3	51.8
Jordan, Kent A.	3	Republican	60.1	52.4
Kanne, Michael S.	7	Republican	51.4	41.8
Katzmann, Robert A.	2	Democrat	28.0	37.3
Kelly, Paul J., Jr.	10	Republican	58.7	60.1
King, Carolyn D.	5	Democrat	45.7	47.3
King, Robert B.	4	Democrat	37.6	36.5
Kleinfeld, Andrew J.	9	Republican	69.6	15.5
Kravitch, Phyllis A.	11	Democrat	47.9	37.7
Leavy, Edward	9	Republican	41.3	32.6
Lipez, Kermit V.	1	Democrat	20.4	51.2
Livingston, Debra A.	2	Republican	46.2	34.4
Loken, James B.	8	Republican	45.8	58.8
Lucero, Carlos F.	10	Democrat	40.1	60.5
Lynch, Sandra L.	1	Democrat	18.2	52.0
Manion, Daniel A.	7	Republican	41.5	56.9
Marcus, Stanley	11	Republican	46.5	29.6
Martin, Boyce F., Jr.	6	Democrat	13.0	37.7
McConnell, Michael W.	10	Republican	45.1	58.7
McKay, Monroe G.	10	Democrat	1.8	36.8
McKeague, David W.	6	Republican	53.4	51.9
McKee, Theodore A.	3	Democrat	38.9	41.1
McKeown, M. Margaret	9	Democrat	40.4	45.4
Melloy, Michael J.	8	Republican	57.7	49.4
Merritt, Gilbert S., Jr.	6	Democrat	45.5	60.7
Michael, M. Blane	4	Democrat	44.6	24.9
Miner, Roger J.	2	Republican	45.4	28.9
Moore, Karen N.	6	Democrat	31.5	100.0
Motz, Diana G.	4	Democrat	48.2	43.1
Murphy, Diana E.	8	Democrat	49.1	42.8
Murphy, Michael R.	10	Democrat	14.2	57.2
Nelson, Thomas G.	9	Republican	70.6	54.4
Niemeyer, Paul V.	4	Republican	43.4	36.7
O'Brien, Terrence L.	10	Republican	40.0	20.8
O'Scannlain, Diarmuid F.	9	Republican	55.1	33.2
Owen, Priscilla R.	5	Republican	45.9	42.5

Judge	Cir.	Party of Appointing President	Partisanship Score	Independence Score
Paez, Richard A.	9	Democrat	46.8	51.4
Parker, Barrington D., Jr.	2	Republican	30.1	34.6
Pooler, Rosemary S.	2	Democrat	45.2	22.7
Posner, Richard A.	7	Republican	44.9	36.6
Prado, Edward C.	5	Republican	44.4	30.6
Pregerson, Harry	9	Democrat	11.6	49.6
Pryor, William H., Jr.	11	Republican	47.3	36.7
Raggi, Reena	2	Republican	46.4	31.2
Rawlinson, Johnnie B.	9	Democrat	77.6	84.6
Reavley, Thomas M.	5	Democrat	28.2	55.2
Reinhardt, Stephen R.	9	Democrat	24.6	72.5
Rendell, Marjorie O.	3	Democrat	42.0	61.2
Riley, William J.	8	Republican	28.9	5.1
Ripple, Kenneth F.	7	Republican	55.6	53.0
Rogers, John M.	6	Republican	47.1	65.0
Roth, Jane R.	3	Republican	52.8	37.3
Rovner, Ilana D.	7	Republican	46.2	52.2
Rymer, Pamela A.	9	Republican	35.3	56.0
Sack, Robert D.	2	Democrat	56.1	29.3
Schroeder, Mary M.	9	Democrat	61.1	51.2
Scirica, Anthony J.	3	Republican	31.6	46.5
Selya, Bruce M.	1	Republican	63.0	52.5
Shedd, Dennis W.	4	Republican	42.8	51.4
Shepherd, Bobby E.	8	Republican	36.5	55.8
Siler, Eugene E., Jr.	6	Republican	56.8	64.3
Silverman, Barry G.	9	Democrat	29.3	24.2
Sloviter, Dolores K.	3	Democrat	36.7	51.2
Smith, David B.	3	Republican	29.3	29.2
Smith, Jerry E.	5	Republican	26.5	51.1
Smith, Lavenski R.	8	Republican	60.2	27.9
Smith, Milan D., Jr.	9	Republican	45.5	26.6
Smith, Norman R.	9	Republican	55.5	42.6
Sotomayor, Sonia	2	Democrat	57.2	48.3
Southwick, Leslie	5	Republican	45.3	39.4
Stewart, Carl E.	5	Democrat	36.8	38.3
Straub, Chester J.	2	Democrat	32.3	32.5
Sutton, Jeffrey S.	6	Republican	67.8	65.2
Sykes, Diane S.	7	Republican	35.2	46.7
Tacha, Deanell R.	10	Republican	50.9	42.0
Tallman, Richard C.	9	Democrat	12.6	27.2
Tashima, Atsushi W.	9	Democrat	23.2	44.8
Thomas, Sidney R.	9	Democrat	32.4	57.3

Judge	Cir.	Party of Appointing President	Partisanship Score	Independence Score
Tinder, John D.	7	Republican	44.7	27.9
Tjoflat, Gerald B.	11	Republican	30.0	23.8
Torruella, Juan R.	1	Republican	43.2	47.6
Traxler, William B., Jr.	4	Democrat	46.1	36.6
Trott, Stephen S.	9	Republican	55.7	44.8
Tymkovich, Timothy M.	10	Republican	47.5	51.4
Walker, John M., Jr.	2	Republican	40.4	38.1
Wallace, J. Clifford	9	Republican	51.2	50.6
Wardlaw, Kim M.	9	Democrat	71.8	46.4
Wesley, Richard C.	2	Republican	33.1	34.1
Wiener, Jacques L., Jr.	5	Republican	43.5	35.3
Wilkins, William W.	4	Republican	25.0	22.1
Wilkinson, J. Harvie, III	4	Republican	37.5	39.3
Williams, Ann C.	7	Democrat	35.2	38.8
Williams, Karen J.	4	Republican	79.3	59.4
Wilson, Charles R.	11	Democrat	47.1	41.0
Wollman, Roger L.	8	Republican	38.2	43.1
Wood, Diane P.	7	Democrat	53.5	26.6

APPENDIX C: IDEOLOGY, ACTIVISM, PARTISANSHIP, AND
INDEPENDENCE SCORES

Independence and Partisanship Scores are listed in Table 3 along with newly computed Activism and Ideology Scores from related studies¹⁷⁹ for the 178 judges who had at least 200 interactions with other judges in the Case Database, by circuit order.

**Table 3. Ideology, Activism, Partisanship, and Independence Scores
(by Circuit)**

Judge	Cir.	Ideology Score ¹⁸⁰	Activism Score ¹⁸¹	Partisanship Score	Independence Score
Boudin, Michael	1	-2.9	61.7	32.4	57.0
Howard, Jeffrey R.	1	-3.2	29.4	45.1	58.5
Lipez, Kermit V.	1	-4.7	52.9	28.0	36.9
Lynch, Sandra L.	1	10.4	47.6	35.1	43.5
Selya, Bruce M.	1	7.0	53.4	39.1	80.0
Torruella, Juan R.	1	9.6	36.9	45.0	36.0
Judge	Cir.	Ideology Score	Activism Score	Partisanship Score	Independence Score
Cabranes, Jose A.	2	7.6	36.1	36.8	38.0
Calabresi, Guido	2	1.6	30.7	45.3	39.1
Hall, Peter W.	2	-28.1	66.0	31.5	100.0
Jacobs, Dennis G.	2	-4.4	46.4	41.5	56.6
Katzmann, Robert A.	2	-2.5	78.7	20.4	51.0
Livingston, Debra A.	2	-4.0	48.3	51.4	41.5
Miner, Roger J.	2	-0.3	70.5	46.2	46.7
Parker, Barrington D., Jr.	2	3.2	35.5	33.9	62.3
Pooler, Rosemary S.	2	16.9	43.1	34.2	39.1
Raggi, Reena	2	-12.5	31.1	50.6	55.9
Sack, Robert D.	2	-0.4	48.2	44.6	46.2
Sotomayor, Sonia	2	4.3	65.2	36.7	41.9
Straub, Chester J.	2	-3.8	56.2	43.2	46.2
Walker, John M., Jr.	2	6.3	46.2	35.2	28.5
Wesley, Richard C.	2	8.9	67.2	47.5	47.0

¹⁷⁹ See Yung, *Activism*, *supra* note 10; Yung, *Ideology*, *supra* note 10.

¹⁸⁰ The Ideology Scores were scaled from -100 to 100, where negative values indicate liberal judges and positive values indicate conservative judges. To avoid forced symmetry, there was no judge who actually received a 100 score because the most liberal judge was farther away from a zero value.

¹⁸¹ The Activism Scores were scaled from 0 to 100, with 100 representing the most activist judge.

Judge	Cir.	Ideology Score	Activism Score	Partisanship Score	Independence Score
Ambro, Thomas L.	3	-28.0	48.9	53.5	26.5
Barry, Maryanne T.	3	-8.3	85.8	25.0	21.8
Chagares, Michael A.	3	-1.1	74.4	60.2	27.6
Fisher, D. Michael	3	5.0	81.4	77.6	84.5
Fuentes, Julio M.	3	18.7	49.0	44.9	36.4
Hardiman, Thomas M.	3	-100.0	78.6	45.5	61.4
Jordan, Kent A.	3	0.4	48.3	45.8	58.6
McKee, Theodore A.	3	-2.8	46.2	17.6	35.4
Rendell, Marjorie O.	3	3.3	72.6	43.8	53.1
Roth, Jane R.	3	9.8	50.0	57.8	43.6
Scirica, Anthony J.	3	6.2	37.8	51.0	37.6
Sloviter, Dolores K.	3	10.3	66.9	65.3	47.1
Smith, David B.	3	0.0	52.5	57.9	37.2
Judge	Cir.	Ideology Score	Activism Score	Partisanship Score	Independence Score
Duncan, Allyson K.	4	-6.6	57.9	46.2	51.9
Gregory, Roger L.	4	-9.0	37.7	70.6	54.1
Hamilton, Clyde H.	4	-11.5	73.5	45.4	28.6
King, Robert B.	4	25.9	65.2	69.6	15.5
Michael, M. Blane	4	6.6	33.0	28.8	61.7
Motz, Diana G.	4	-5.9	58.5	59.3	30.7
Niemeyer, Paul V.	4	-44.0	48.7	35.0	35.2
Shedd, Dennis W.	4	-13.8	69.8	69.6	54.7
Traxler, William B., Jr.	4	-47.7	33.2	24.1	21.2
Wilkins, William W.	4	-0.5	73.2	25.7	31.1
Wilkinson, J. Harvie, III	4	20.4	54.1	58.1	31.7
Williams, Karen J.	4	5.1	44.8	45.0	53.9

Judge	Cir.	Ideology Score	Activism Score	Partisanship Score	Independence Score
Barksdale, Rhesa H.	5	7.0	49.8	37.5	39.0
Benavides, Fortunato P.	5	9.3	49.0	47.5	51.1
Clement, Edith B.	5	-19.8	52.4	29.3	29.1
Davis, W. Eugene	5	2.0	57.0	31.6	46.2
Demoss, Harold R., Jr.	5	-10.2	55.7	61.1	51.0
Dennis, James L.	5	2.9	32.1	56.1	29.0
Elrod, Jennifer W.	5	41.8	37.7	28.9	5.1
Garza, Emilio M.	5	-17.6	47.9	45.2	22.5
Haynes, Catharina	5	10.4	71.0	38.9	40.9
Higginbotham, Patrick E.	5	72.3	36.3	53.4	52.2
Jolly, E. Grady	5	-14.8	60.3	18.2	51.7
Jones, Edith H.	5	8.0	21.7	40.1	60.2
King, Carolyn D.	5	-6.3	36.5	47.9	37.5
Owen, Priscilla R.	5	23.9	77.1	45.0	79.9
Prado, Edward C.	5	-22.8	22.6	30.9	29.7
Reavley, Thomas M.	5	42.3	86.4	100.0	39.5
Smith, Jerry E.	5	-30.4	36.2	20.1	65.9
Southwick, Leslie	5	14.8	34.4	51.7	26.9
Stewart, Carl E.	5	6.6	62.2	29.6	24.4
Wiener, Jacques L., Jr.	5	54.9	63.7	53.5	66.7
Judge	Cir.	Ideology Score	Activism Score	Partisanship Score	Independence Score
Batchelder, Alice M.	6	13.5	36.5	43.5	35.0
Boggs, Danny J.	6	-8.2	14.1	44.7	27.5
Clay, Eric L.	6	6.6	45.8	26.5	50.8
Cole, Ransey G., Jr.	6	15.7	52.6	29.3	24.0
Cook, Deborah L.	6	5.5	49.0	36.5	55.5
Daughtrey, Martha C.	6	-9.5	71.7	63.0	52.2
Gibbons, Julia S.	6	-3.7	33.4	30.1	34.2
Gilman, Ronald L.	6	-3.1	35.8	45.9	42.3
Griffin, Richard A.	6	9.6	56.6	14.2	56.9
Martin, Boyce F., Jr.	6	0.5	45.5	38.3	30.3
McKeague, David W.	6	4.1	55.0	36.6	32.0
Merritt, Gilbert S., Jr.	6	22.6	61.6	65.2	33.2
Moore, Karen N.	6	9.5	36.1	28.3	20.9
Rogers, John M.	6	2.9	27.1	30.3	77.3
Siler, Eugene E., Jr.	6	2.6	63.3	42.6	54.9
Sutton, Jeffrey S.	6	2.9	61.8	74.7	55.8

Judge	Cir.	Ideology Score	Activism Score	Partisanship Score	Independence Score
Bauer, William J.	7	-6.8	42.4	33.1	33.8
Cudahy, Richard D.	7	2.9	49.6	42.8	51.1
Easterbrook, Frank H.	7	-4.9	39.0	52.8	37.0
Evans, Terence T.	7	13.6	88.8	42.0	61.0
Flaum, Joel M.	7	4.6	53.2	47.3	36.3
Kanne, Michael S.	7	-6.7	52.3	46.2	34.0
Manion, Daniel A.	7	-6.3	53.0	39.5	43.5
Posner, Richard A.	7	7.3	73.3	39.3	32.9
Ripple, Kenneth F.	7	9.6	40.8	53.7	53.4
Rovner, Ilana D.	7	-0.4	53.7	26.4	51.4
Sykes, Diane S.	7	-2.2	42.1	59.0	23.2
Tinder, John D.	7	40.1	20.7	34.7	64.0
Williams, Ann C.	7	2.5	56.5	45.4	41.7
Wood, Diane P.	7	4.4	70.4	42.1	48.0
Judge	Cir.	Ideology Score	Activism Score	Partisanship Score	Independence Score
Beam, Clarence A.	8	-8.7	39.1	51.2	50.4
Benton, William D.	8	-9.7	12.0	55.7	44.5
Bowman, Pasco M., II	8	-5.9	79.9	23.2	44.5
Bright, Myron H.	8	33.0	63.2	12.6	27.2
Bye, Kermit E.	8	-8.7	18.6	32.3	32.2
Colloton, Steven M.	8	39.6	59.3	56.8	64.2
Gibson, John R.	8	-21.3	70.0	46.8	51.2
Gruender, Raymond W.	8	19.9	55.4	49.1	42.5
Hansen, David R.	8	-36.0	49.9	44.6	25.0
Loken, James B.	8	2.2	47.4	60.1	52.1
Melloy, Michael J.	8	11.6	23.2	36.5	69.2
Murphy, Diana E.	8	46.9	41.4	50.9	32.1
Riley, William J.	8	-1.1	68.3	43.9	33.0
Shepherd, Bobby E.	8	34.5	60.2	65.2	60.7
Smith, Lavenski R.	8	8.4	55.5	66.7	36.7
Wollman, Roger L.	8	0.4	47.0	43.1	35.4

Judge	Cir.	Ideology Score	Activism Score	Partisanship Score	Independence Score
Bea, Carlos T.	9	-17.5	36.8	71.8	46.2
Beezer, Robert R.	9	13.0	0.0	40.4	37.9
Berzon, Marsha S.	9	9.3	57.9	46.1	36.3
Bybee, Jay S.	9	-1.8	60.4	67.8	65.1
Callahan, Consuelo M.	9	-17.3	39.3	57.2	48.1
Canby, William C., Jr.	9	-7.5	45.7	55.5	42.3
Clifton, Richard R.	9	-4.3	66.6	36.7	51.0
Fernandez, Ferdinand F.	9	3.5	42.9	28.2	54.9
Fisher, Raymond C.	9	2.1	34.9	46.4	30.8
Fletcher, Betty B.	9	-16.7	86.1	11.6	49.4
Fletcher, William A.	9	2.3	48.9	44.4	30.2
Gould, Ronald M.	9	46.5	28.5	40.0	20.9
Graber, Susan	9	21.4	44.9	43.4	36.6
Hall, Cynthia H.	9	3.0	60.0	48.2	42.8
Hawkins, Michael D.	9	11.6	21.6	40.4	45.2
Ikuta, Sandra S.	9	8.7	41.2	46.5	29.2
Kleinfeld, Andrew J.	9	2.5	54.9	37.6	36.2
Leavy, Edward	9	4.8	58.2	58.7	59.9
McKeown, M. Margaret	9	-22.1	42.9	49.7	31.4
Nelson, Thomas G.	9	-10.7	51.9	49.8	65.6
O'Scannlain, Diarmuid F.	9	-3.9	45.6	56.2	72.3
Paez, Richard A.	9	42.6	49.0	31.1	14.0
Pregerson, Harry	9	-8.6	46.3	64.9	67.9
Rawlinson, Johnnie B.	9	-9.0	61.0	81.1	42.5
Reinhardt, Stephen R.	9	11.0	38.7	49.1	38.0
Rymer, Pamela A.	9	5.2	54.2	55.8	33.0
Schroeder, Mary M.	9	5.1	44.5	33.6	65.3
Silverman, Barry G.	9	-13.0	62.4	46.8	75.7
Smith, Milan D., Jr.	9	-2.5	55.6	48.1	34.4
Smith, Norman R.	9	13.3	67.6	0.0	50.5
Tallman, Richard C.	9	-72.9	100.0	69.1	0.0
Tashima, Atsushi W.	9	15.8	86.8	49.5	25.2
Thomas, Sidney R.	9	-1.7	53.0	61.7	53.8
Trott, Stephen S.	9	5.5	33.7	48.5	46.8
Wallace, J. Clifford	9	36.3	47.4	50.6	56.2
Wardlaw, Kim M.	9	9.5	93.7	76.6	49.8

Judge	Cir.	Ideology Score	Activism Score	Partisanship Score	Independence Score
Anderson, Stephen H.	10	-0.7	49.0	47.1	40.7
Baldock, Bobby R.	10	26.9	46.4	79.3	59.3
Briscoe, Mary B.	10	22.4	24.8	50.9	41.8
Brorby, Wade	10	17.4	23.5	35.2	46.6
Ebel, David M.	10	67.6	35.5	47.1	65.1
Gorsuch, Neil M.	10	45.2	38.2	55.1	33.4
Hartz, Harris L.	10	-16.1	73.2	57.7	49.4
Holmes, Jerome A.	10	-6.0	39.1	1.8	36.6
Kelly, Paul J., Jr.	10	-3.7	64.0	41.3	32.2
Lucero, Carlos F.	10	15.6	51.0	21.3	51.5
McConnell, Michael W.	10	1.2	64.6	76.5	46.2
McKay, Monroe G.	10	-6.7	38.9	35.4	32.3
Murphy, Michael R.	10	56.5	36.8	30.6	59.6
O'Brien, Terrence L.	10	-24.8	57.7	54.0	56.7
Tacha, Deanell R.	10	10.8	26.4	40.2	67.6
Tymkovich, Timothy M.	10	-1.6	65.9	41.2	26.9
Judge	Cir.	Ideology Score	Activism Score	Partisanship Score	Independence Score
Anderson, Robert L., III	11	13.7	48.8	38.2	42.8
Barkett, Rosemary	11	-12.5	60.8	35.2	38.5
Birch, Stanley F., Jr.	11	-22.2	46.5	43.2	47.4
Black, Susan H.	11	23.5	54.8	30.0	23.6
Carnes, Edward E.	11	-26.3	53.9	45.5	26.5
Dubina, Joel F.	11	26.9	82.2	35.3	56.0
Edmondson, James L.	11	-3.6	55.3	55.6	52.8
Fay, Peter T.	11	-20.4	61.2	24.6	72.4
Hull, Frank M.	11	-24.3	75.2	13.0	37.7
Kravitch, Phyllis A.	11	4.8	43.3	45.7	47.0
Marcus, Stanley	11	28.9	53.7	60.7	44.0
Pryor, William H., Jr.	11	7.3	47.0	70.7	31.5
Tjoflat, Gerald B.	11	0.4	53.5	37.4	33.6
Wilson, Charles R.	11	-7.0	39.8	67.5	19.7