

A TYPOLOGY OF JUDGING STYLES

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ABSTRACT—This Article calls into question the fundamental premises of models of judicial decisionmaking utilized by legal and political science scholars. In the place of the predominant theories, I offer a new approach to understanding judicial behavior which recognizes judicial heterogeneity, multidimensional behavior, and interconnectedness among judges at different levels within the judiciary. The study utilizes a unique dataset of over 30,000 judicial votes from eleven courts of appeals in 2008, yielding statistically independent measures for judicial activism, ideology, independence, and partisanship. Based upon those four metrics, statistical cluster analysis is used to identify nine statistically distinct judging styles: Trailblazing, Consensus Building, Stalwart, Regulating, Steadfast, Collegial, Incrementalist, Minimalist, and Error Correcting. These judicial style types offer a fuller account of judicial behavior than any of the prior models utilized by scholars.

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NORTHWESTERN UNIVERSITY LAW REVIEW

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INTRODUCTION

On June 29, 2011, a Sixth Circuit Court of Appeals panel issued an eagerly awaited decision in a case concerning the constitutionality of the Patient Protection and Affordable Care Act (ACA).¹ In a split vote among the three jurists, Judges Boyce Martin and Jeffrey Sutton held that the ACA was constitutional under existing precedent related to the Commerce and Necessary and Proper Clauses.² Scholars, pundits, and other court watchers were shocked at Judge Sutton’s vote to uphold the “liberal” law because he was known as a prominent conservative judge appointed by a Republican President.³ As Professor Arthur Hellman stated after the panel’s decision:

¹ *Thomas More Law Ctr. v. Obama*, 651 F.3d 529 (6th Cir. 2011).

² *Id.* at 534, 541; *id.* at 554–55, 558 (Sutton, J., concurring in part).

³ *See, e.g.*, Joan Biskupic, *Appeals Court Upholds Insurance Mandate*, USA TODAY, June 30, 2011, at 7A (“Sutton’s stance was also important because he is one of the most high-profile conservative judges nationwide.”); Robyn Blumner, *A Vote for Upholding Health Reform*, ST. PETERSBURG TIMES, July 17, 2011, at 5P (“You may not have heard of Sutton, but he’s a fixture in conservative legal circles. Sutton clerked for U.S. Supreme Court Justice Antonin Scalia. As a lawyer,

“Of all the federal appeals judges, Sutton is one of the last I would have expected to uphold this.”⁴

Just as the qualitative impressions of Judge Sutton led commentators astray, the three dominant quantitative models of judicial decisionmaking failed to predict his vote.⁵ The attitudinal model, which contends that political ideology guides judicial votes, could not rationalize the “liberal” vote from a “conservative” judge, regardless of how ideology is measured.⁶ The strategic model, which holds that judges issue opinions based upon institutional and personal considerations, was similarly stifled, as Judge Sutton had seemingly sacrificed his chance of being nominated to the Supreme Court by a Republican President.⁷ And the formal model, which argues that neutral judges render decisions by determinate rules, could not easily explain why the three judges had not reached the same conclusion

he was an active member of the Federalist Society and a persistent advocate for states’ rights before the U.S. Supreme Court. After Sutton was nominated to the federal appellate bench by President George W. Bush, he won only two Democratic votes in his Senate confirmation. Yet Sutton, in a stroke of uncompromising objectivity, became the first judge appointed by a Republican President to rule in favor of the constitutionality of the Affordable Care Act.”); Linda Greenhouse, *A Supreme Court Scorecard*, N.Y. TIMES OPINIONATOR (July 13, 2011, 9:30 PM), <http://opinionator.blogs.nytimes.com/2011/07/13/a-supreme-court-scorecard/> (“It would be inaccurate to say that Judge Sutton is a rising star in the conservative legal firmament; the 50-year-old former law clerk to Justice Scalia and the late Justice Lewis F. Powell Jr. is fully risen, on anyone’s short list for the next time a Republican president gets the chance to make a Supreme Court nomination.”); Dan Horn, *Cincinnati Appeals Court Upholds Obama’s Health-Reform Plan*, CINCINNATI ENQUIRER (June 29, 2011), <http://news.cincinnati.com/article/20110629/NEWS0108/306290041/Cincinnati-appeals-court-upholds-Obama-s-health-reform-plan> (“Sutton’s decision to join Martin in the majority was to some observers the most surprising aspect of the ruling. Appointed by President George W. Bush, Sutton is among the most reliably conservative of the 6th Circuit’s 15 judges.”); Ilya Somin, *Regulating Inactivity: A Radical Constitutional Departure*, JURIST (July 1, 2011), <http://jurist.org/forum/2011/07/ilya-somin-sixth-circuit-ruling.php> (“Before this decision, judges in these cases had split along ideological and partisan lines. . . . Judge Jeffrey Sutton, however, a well-known conservative jurist, has now become the first exception to the trend.”).

⁴ Horn, *supra* note 3.

⁵ See Frank B. Cross, *Decisionmaking in the U.S. Circuit Courts of Appeals*, 91 CALIF. L. REV. 1457, 1461–90 (2003) [hereinafter Cross, *Decisionmaking*]. Cross also discussed a fourth model for judicial decisionmaking: the litigant-driven theory. *Id.* at 1490–97. However, the litigant-driven theory has not been widely studied, and as Cross noted, evidence that litigants drive decisionmaking in the courts of appeals has been very limited. *Id.* at 1514.

⁶ Using as a simple proxy measure the party of the appointing President, Cross, *Decisionmaking*, *supra* note 5, at 1479, Judge Sutton scored as a 1, the same as every other judge appointed by a Republican President. Using the more refined Common Space Scores, see Lee Epstein et al., *The Judicial Common Space*, 23 J.L. ECON. & ORG. 303 (2007), which incorporate Senatorial politics at the time of confirmation, Judge Sutton scored a 0.2260, which placed him as a moderate conservative. In neither instance did the traditional attitudinal model predict a liberal vote in a seemingly ideologically-charged case from Judge Sutton.

⁷ Greenhouse, *supra* note 3; Mark Walsh, *Youth Will Out: No Matter Who Wins, Nominees Will Get Younger*, 98 A.B.A. J. 19 (2012) (“The former Scalia clerk has been a darling of conservatives, but his concurring opinion last year upholding the Affordable Care Act has led some to cross Sutton off their [Supreme Court nominee] lists.”).

about the relevant precedent.⁸ Although ideology alone was successful in predicting the votes of all of the Supreme Court Justices except Chief Justice John Roberts in their review of the ACA,⁹ such a simple predictor has repeatedly failed to explain the overwhelming majority of votes by judges on lower federal courts.¹⁰ So, why were all of the empirical models “wrong” in predicting the Sixth Circuit’s decision?¹¹

The fault lies in the fact that the dominant models of judicial¹² decisionmaking rely on three basic dubious assumptions that have been neither empirically tested nor validated for lower court judges:

1. Homogeneity—judges should be understood as a monolithic group that utilizes similar, if not identical, approaches to judging.¹³
2. Unidimensionality—judges decide cases based upon [ideology, strategy, law] and [ideology, strategy, law] should be measured along a single continuum.¹⁴

⁸ Christopher H. Schroeder, *Deliberative Democracy’s Attempt to Turn Politics into Law*, 65 LAW & CONTEMP. PROBS. 95, 108 (2002) (“[T]he demands of public reasoning diverge from the legal model. In law, judges who have deliberated and yet continue to disagree form themselves into majorities, pluralities, concurrences, and dissents. In separate opinions, judges develop the divergent reasoning of their separate positions.”). This is not to say that the formal model predicts no dissents by judges. Rather, for judges below the Supreme Court, the formal model must necessarily integrate explanations from alternative theories to explain why judges disagree about the application of specific precedent.

⁹ Nat’l Fed’n of Indep. Bus. v. Sebelius, 132 S. Ct. 2566 (2012).

¹⁰ See, e.g., Cross, *Decisionmaking*, *supra* note 5, at 1479–82.

¹¹ “[W]rong” is used in the sense that Judge Sutton’s vote is not consistent with the expected results of the three dominant theories. Of course, no theory of judicial decisionmaking approaches 100% accuracy. The story of Judge Sutton’s vote is, thus, intended to illustrate the shortcomings of the dominant models, but not to provide a statistical proof of the failure of those theories.

¹² Although the introduction includes as examples the Justices of the Supreme Court, the words “judges” and “judicial” in this Article refer to judges other than the Justices. Although some of the criticisms of the dominant approaches in this Article apply to Supreme Court studies, far more research of the Court has been done that meets the challenges outlined in this Article. See Cross, *Decisionmaking*, *supra* note 5, at 1479–82. Indeed, in some cases, the excellent empirical research on the Justices has inspired some of the measures described and utilized in this Article. See, e.g., Andrew D. Martin & Kevin M. Quinn, *Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953–1999*, 10 POL. ANALYSIS 134, 139–40 (2002).

¹³ 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.”).

¹⁴ This assumption has been most often made in studies of judicial ideology. See Carolyn Shapiro, *Coding Complexity: Bringing Law to the Empirical Analysis of the Supreme Court*, 60 HASTINGS L.J. 477, 501 (2009) (“These scholars assume that in deciding a case, the Justices need only consider their preferences about a single question and that the Justices’ preferences can be arrayed along a single ideological dimension.” (internal quotation marks omitted)). Although some scholarship has tested and validated the unidimensionality assumption at the Supreme Court level, see Tonja Jacobi & Matthew Sag, *Taking the Measure of Ideology: Empirically Measuring Supreme Court Cases*, 98 GEO. L.J. 1, 19–20 (2009) (“[T]here is considerable evidence that a single dimension captures the vast majority of judicial behavior. The fact that one dimension captures most judicial behavior does not imply that legal

3. Isolation—each judge or level of judges should be gauged independently of other actors in the judicial system.¹⁵

Based upon those assumptions, existing research presumes that Judge Sutton would behave like every other judge based upon the single dimension of ideology, strategy, or law without any regard to the particulars of the district court judgment under review. These tenuous premises have been at the center of empirical research in large part because of the available data. There simply has not been a publicly accessible dataset that could be effectively used to study relationships between diverse judges while concurrently utilizing multiple behavioral metrics of individual judges.¹⁶

This study, based upon a unique dataset of over 30,000 judicial votes, seeks to rectify the shortcomings of the previous attempts to empirically explain and predict judicial behavior with a new dataset that integrates both federal trial and appellate decisionmaking. In order to do so, I apply statistical cluster analysis to construct a typology of judicial styles based upon my prior work that created behavioral metrics of judicial activism, independence, partisanship, and ideology.¹⁷ This method yields nine distinctive judicial decisionmaking styles exhibited in the data by judges on the United States Courts of Appeals:

analysis is simplistic, only that most judicial considerations are generally quite highly correlated.”), no similar studies have been done for the courts of appeals. See Joshua B. Fischman & David S. Law, *What Is Judicial Ideology, and How Should We Measure It?*, 29 WASH. U. J.L. & POL’Y 133, 152, 168–70 (2009) (“At the same time, the assumption of unidimensional ideology may not hold as well for other courts as it does for the United States Supreme Court. Very little is known about the dimensionality of ideology on other courts, and further investigation is surely warranted.”).

¹⁵ A notable exception to this general rule has been the work regarding panel effects. See, e.g., Frank B. Cross & Emerson H. Tiller, *Judicial Partisanship and Obedience to Legal Doctrine: Whistleblowing on the Federal Courts of Appeals*, 107 YALE L.J. 2155, 2168–75 (1998); Pauline T. Kim, *Deliberation and Strategy on the United States Courts of Appeals: An Empirical Exploration of Panel Effects*, 157 U. PA. L. REV. 1319 (2009); Richard L. Revesz, *Environmental Regulation, Ideology, and the D.C. Circuit*, 83 VA. L. REV. 1717, 1751–56 (1997). However, even within the very valuable scholarship regarding panel effects, research has been limited to judges operating on the same panels. Scholars have not explored the interrelations between judges working at different levels in the judicial system. This omission is particularly notable given the rigid hierarchal structure of the judicial systems in the United States wherein review of lower courts is the primary function of higher courts.

¹⁶ Previous empirical research concerning federal appellate judges has relied primarily upon the United States Courts of Appeals Database (Songer Database), which includes more than 18,000 opinions from 1925 to 1996. See ASHLYN K. KUERSTEN & DONALD R. SONGER, DECISIONS ON THE U.S. COURTS OF APPEALS 14, 241 (2001). For reasons discussed later in this Article, the Songer Database cannot be used to test the three basic assumptions targeted herein. See *infra* Part I.A.

¹⁷ Corey Rayburn Yung, *Flexing Judicial Muscle: An Empirical Study of Judicial Activism in the Federal Courts*, 105 NW. U. L. REV. 1 (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 (2010) [hereinafter Yung, *Ideology*]; Corey Rayburn Yung, *Beyond Ideology: An Empirical Study of Partisanship and Independence in the Federal Courts*, 80 GEO. WASH. L. REV. 505 (2012) [hereinafter Yung, *Partisanship*].

- Trailblazing: shaping circuit law along ideological lines while being relatively unconcerned with the particulars of district court review;
- Consensus Building: maintaining strong ideological commitments while effectively encouraging panel unanimity;
- Stalwart: exhibiting the strongest partisan and ideological leanings;
- Regulating: reversing and affirming district courts based upon ideological preferences at a higher rate while showing little ideological conflict on appellate panels;
- Steadfast: acting as polarizing lightning rods to judges of all ideologies;
- Collegial: strongly valuing norms of consensus with all other judges;
- Incrementalist: exhibiting some ideological leanings, but having few battles with copanelists;
- Minimalist: deciding in a manner highly deferential to district courts; and
- Error Correcting: not acting ideologically or as a partisan toward district courts, but still showing little deference to those courts.

This typological approach offers the most comprehensive explanation of judicial behavior based upon empirical data. The judicial style typology paints a fuller explanation of judicial behavior while not oversimplifying outcomes as being the sole products of ideology, strategy, or law.

Returning to the example of Judge Sutton's vote in the ACA case, the empirically based typology is entirely consistent with Judge Sutton's decision to uphold the law. Judge Sutton is a Regulating Moderate judge¹⁸: he is not particularly concerned with the ideological direction of circuit law and is more focused on the specific issues in the district court opinions under review. His Ideology Score (-1.8 on a scale from -100 to 100) places him almost at the ideological center point (supporting the label "Moderate"), in contrast to popular perception. Notably, his Independence Score (65.1 on a scale from 0 to 100) indicates he is well above average in dissenting and concurring from judges of all political backgrounds, which fits well with his decision to write separately from both Judges Martin and Graham.¹⁹ Although no single case either proves or disproves a larger theory, it is worth noting that among the competing qualitative and quantitative approaches, only the model described in this Article is consistent with one of the highest profile decisions of a court of appeals panel in recent memory. Further, as discussed in Part III.D, the typology as

¹⁸ See *infra* Part III.B and App. C.

¹⁹ See *infra* App. B.

applied to other high-profile judges is highly consistent with conventional wisdom.

After having identified the nine styles of judging and comparing those styles to qualitative assessments of those judges, this Article examines whether the judicial style types identified are correlated with background characteristics of the judges studied. A judge's decisionmaking style is correlated with, among other factors, ranking of law school attended, whether a judge had taken senior status, and the appointing President's political party. Of particular note, judges of the most contentious types (Steadfast, Stalwart, and Trailblazing) on average attended law schools ranked nearly thirty places higher than those judges associated with collaborative styles (Collegial and Consensus Building). Certain styles were also strongly associated with the party of the appointing President. Steadfast judges were much more likely to have been appointed by Democratic Presidents, whereas Incrementalist and Trailblazing judges were primarily appointed by Republicans.

This Article is not designed to complete the project of identifying different styles of judging. Instead, it represents proof of concept. The methods and results described herein are meant to demonstrate new possibilities and directions in academic research about judicial behavior. Indeed, with more data, dimensions of behavior, and/or judges studied, I hope that the typology described in this Article is improved upon, revised, and ultimately replaced.

Part I of this Article briefly discusses existing research and the dominant views pertaining to judicial decisionmaking, particularly for judges on the courts of appeals. Part II describes in detail the underlying study design, data, and four behavioral measures (activism, ideology, independence, and partisanship). Part III outlines the statistical process used to identify the differing judicial styles and discusses the salient traits of each type of judging style. Part IV analyzes background and demographic characteristics of individual judges to determine if they predict judge decisionmaking styles. Consistent with the goal of making empirical legal studies more accessible to a broader audience,²⁰ this Article avoids empirical research jargon whenever possible and utilizes graphical representations.²¹ However, the statistical information traditionally found in empirical legal studies is located in the footnotes and appendices at the end of this Article.

²⁰ Lee Epstein, Andrew D. Martin & Matthew M. Schneider, *On the Effective Communication of the Results of Empirical Studies, Part I*, 59 VAND. L. REV. 1811, 1814 (2006); Fischman & Law, *supra* note 14, at 135–36.

²¹ Lee Epstein, Andrew D. Martin & Christina L. Boyd, *On the Effective Communication of the Results of Empirical Studies, Part II*, 60 VAND. L. REV. 801, 804–05 (2007).

I. UNDERSTANDING JUDICIAL DECISIONMAKING

Judges have been objects of study for decades, but in recent years there has been an explosion of empirical research about how judges decide cases.²² In political science and law, scholars have placed a particular focus on the role of political ideology in shaping judicial decisions.²³ The Supreme Court has been the primary judicial body studied,²⁴ often to the neglect of courts that have a greater net impact on the development of American law.²⁵ As Judge Richard Posner noted, “[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.”²⁶

Notably, scholars tend to assume that the theories and models of Supreme Court decisionmaking describe the behavior of judges in general.²⁷ However, the modern Supreme Court has been atypical in many ways and studies have shown that what has held true for the Justices is largely inapplicable to lower courts like the federal courts of appeals.²⁸ With approximately seventy-five cases per year,²⁹ the amount of law reviewed by the Supreme Court is very limited.³⁰ Further, actions by Supreme Court Justices are essentially unconstrained,³¹ Justices are free to vote in any manner based on any rationale with limited repercussions for their career. When a person is appointed to the Court, she has life tenure with almost no possibility of impeachment based upon judicial

²² Jeffrey M. Chemerinsky & Jonathan L. Williams, Foreword, *Measuring Judges and Justice*, 58 DUKE L.J. 1173, 1174 (2009); Jack Knight, *Are Empiricists Asking the Right Questions About Judicial Decisionmaking?*, 58 DUKE L.J. 1531, 1535 (2009); Gregory C. Sisk, *The Quantitative Moment and the Qualitative Opportunity: Legal Studies of Judicial Decision Making*, 93 CORNELL L. REV. 873, 874 (2008).

²³ See Fischman & Law, *supra* note 14, at 168–70; Gregory C. Sisk & Michael Heise, *Judges and Ideology: Public and Academic Debates About Statistical Measures*, 99 NW. U. L. REV. 743, 744 (2005).

²⁴ Frederick Schauer, *Incentives, Reputation, and the Inglorious Determinants of Judicial Behavior*, 68 U. CIN. L. REV. 615, 621 (2000).

²⁵ See Richard A. Posner, *Judicial Behavior and Performance: An Economic Approach*, 32 FLA. ST. U. L. REV. 1259, 1273 (2005).

²⁶ *Id.*

²⁷ 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 described above have been developed almost entirely through a consideration of the behavior of U.S. Supreme Court justices.”).

²⁸ See Richard A. Posner, *The Role of the Judge in the Twenty-First Century*, 86 B.U. L. REV. 1049, 1054 (2006); Schauer, *supra* note 24.

²⁹ FRANK B. CROSS, DECISION MAKING IN THE U.S. COURTS OF APPEALS 2 (2007) [hereinafter CROSS, DECISION MAKING].

³⁰ *See id.*

³¹ *See* Posner, *supra* note 28.

performance³² and no realistic chance of promotion to incentivize, and therefore constrain, her behavior. In contrast, the court of appeals judges continue to review an enormous number of cases from varied areas of law;³³ are constrained by the Supreme Court, en banc review, and other panel decisions;³⁴ and can be evaluated based upon performance before potentially being elevated to the Supreme Court.³⁵ Nonetheless, the major decisionmaking models used to describe lower court behavior have been largely transplanted from empirical research of the Supreme Court.³⁶

A. Law, Strategy, and Politics

Three basic models define the debate regarding judicial decisionmaking among legal and political science scholars. The attitudinal model contends that judicial choices are best explained by ideology.³⁷ The strategic model identifies institutional and personal incentives as the explanation for judicial behavior.³⁸ The formal model views doctrine, precedent, and interpretation of codified law as central to decisions by judges.³⁹

The dominance of the attitudinal, strategic, and formal models of decisionmaking can best be understood through a brief history of their origins. Much of the modern empirical research about judges initially derived from political science models of legislatures.⁴⁰ Such conceptions of

³² See, e.g., Philip D. Oliver, *Systematic Justice: A Proposed Constitutional Amendment to Establish Fixed, Staggered Terms for Members of the United States Supreme Court*, 47 OHIO ST. L.J. 799, 800 (1986) (explaining that, under the Constitution, Justices enjoy life tenure and can only be removed by impeachment proceedings, and pointing out that no Justice has ever been successfully impeached).

³³ See CROSS, DECISION MAKING, *supra* note 29.

³⁴ See Posner, *supra* note 28; see also Charlie Savage, *Uncertain Evidence for 'Activist' Label on Sotomayor*, N.Y. TIMES, June 20, 2009, at A10 (“Supreme Court justices have a freer hand than appeals court judges.”).

³⁵ See Stephen Choi & Mitu Gulati, *A Tournament of Judges?*, 92 CALIF. L. REV. 299, 303 (2004).

³⁶ George, *supra* note 27.

³⁷ See generally JEFFREY A. SEGAL & HAROLD J. SPAETH, *THE SUPREME COURT AND THE ATTITUDINAL MODEL REVISITED* 6 (2002) (outlining the theory that judges make decisions based on policy preferences).

³⁸ Posner, *supra* note 28, at 1056 (suggesting that the desire to obtain celebrity, to wield power, or to “play the judicial game” drives judges to work hard).

³⁹ See generally Harry T. Edwards & Michael A. Livermore, *Pitfalls of Empirical Studies that Attempt to Understand the Factors Affecting Appellate Decisionmaking*, 58 DUKE L.J. 1895 (2009) (contending that the hidden deliberative process of judging belies a process with strong adherence to rules and laws); see also Harry T. Edwards, *The Effects of Collegiality on Judicial Decision Making*, 151 U. PA. L. REV. 1639, 1663–64 (2003) (“Institutional rules and norms motivate judges to behave in ways that further the institutional mission. They help to form judges’ motivations and influence how they do their job. . . . In my view, ‘institution’ broadly includes the rule of law, not just the court on which a judge sits, or local circuit precedent. . . . [M]ost fundamentally, we feel that we owe a duty to the law itself.”).

⁴⁰ Knight, *supra* note 22, at 1536.

decisionmaking relied on spatial models that sought to identify ideological distance among individual legislators.⁴¹ Early studies of the courts viewed judicial decisions as policy choices similar to those made by legislators.⁴² Modern judicial decisionmaking research's legislative roots helped spawn the attitudinal model.⁴³ Proponents contrasted the attitudinal model with the formal model of law, which attitudinalists often constructed more as a straw man than an actual position taken by scholars.⁴⁴ Modern adherents to the formal theory of decisionmaking do not argue that every case has been decided solely by mechanical application of the law, but contend that neutral judges resolve the large majority of legal disputes by determinate rules.⁴⁵ The formalists cite the differences between the Supreme Court and other courts to explain the varying centrality of ideology in decisionmaking.⁴⁶

The strategic model addresses the personal and institutional goals of judges, which is missing from both the formal and attitudinal models. As Judge Posner explained:

Judges have a utility function, as economists refer to a person's system of preferences, just like everybody else 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 the ability to exercise even modest power is indeed a perk of being a judge). The other is to play the judicial game.⁴⁷

Generally, advocates of the strategic model have not embraced a strong version of the theory that incentives have dictated all judicial decisions. Instead, like those who have supported the attitudinal and formal models, they have made concessions to incorporate the other theories.⁴⁸

With the three global theories of decisionmaking in place, much recent scholarship in the area focuses on determining the degree to which each

⁴¹ *Id.* (“The models were standard spatial models that sought to analyze legislative votes as a function of the ideological distance between a legislator’s ideal preference point and the utility point of the proposed piece of legislation under consideration.”).

⁴² *Id.* at 1536–37 (“In these early studies judicial choices were operationalized, not as dispositional votes, but rather as measures of the substantive policy consequences of the decisions.”).

⁴³ See LENDON SCHUBERT, *THE JUDICIAL MIND: THE ATTITUDES AND IDEOLOGIES OF SUPREME COURT JUSTICES 1946–1963*, at 6 (1965); Knight, *supra* note 22, at 1536.

⁴⁴ See H. Jefferson Powell, *A Response to Professor Knight, Are Empiricists Asking the Right Questions About Judicial Decisionmaking?*, 58 *DUKE L.J.* 1725, 1725 (2009).

⁴⁵ See Edwards & Livermore, *supra* note 39, at 1897–98.

⁴⁶ See *id.* at 1897, 1904.

⁴⁷ Posner, *supra* note 28, at 1056.

⁴⁸ See *id.* at 1054–56.

theory explains portions of decisionmaking in different court settings.⁴⁹ Regarding the United States Courts of Appeals, Professor Frank Cross comprehensively treated the three theories and found some evidence to support the attitudinal model, more to indicate formal constraints on decisionmaking, and almost none to corroborate the strategic theory.⁵⁰ Because Cross's study was the first to systematically assess the three models as applied to the courts of appeals,⁵¹ its value in this area has been substantial. In many ways, it was the pinnacle of what could be done with existing data and the three major models in studying federal appellate judges.

However, the Cross study also illustrated how data and model limitations have fundamentally constrained the study of decisionmaking in the courts of appeals. Cross, like most every other researcher engaged in the comprehensive study of those courts, used the United States Courts of Appeals Database (Songer Database),⁵² which included more than 18,000 opinions from 1925 to 1996.⁵³ Because the database sampled from the full range of circuits during such a long time frame, it included just a handful of opinions from each circuit in a given year. As a result, it was virtually impossible to use the Songer Database for individualized assessments of judges in any given time frame. Further, although the coding was very extensive in some areas (such as case issues), it was not able to be utilized at all for the ideology, activism, independence, and partisanship metrics described in this Article because the data neither included information about the district court judge being reviewed by an appellate panel nor had adequate data for individual judges.⁵⁴ While the Songer Database has been an extremely valuable resource, research based upon it epitomizes the homogeneity, unidimensionality, and isolation assumptions of judicial decisionmaking.

More recently, perspectives from other fields have emerged and pushed the discussion beyond the three reigning models in scholarly debates.⁵⁵ Judge Posner's attempt to give readers a peek into judicial

⁴⁹ See, e.g., George, *supra* note 27, at 1640–41 (testing a combination of the attitudinal and strategic models in Fourth Circuit en banc cases).

⁵⁰ Cross, *Decisionmaking*, *supra* note 5, at 1514–15.

⁵¹ *Id.* at 1461.

⁵² *Id.* at 1498.

⁵³ KUERSTEN & SONGER, *supra* note 16.

⁵⁴ It is theoretically possible that the Songer Database would have allowed for the independence measure because independence is solely determined by dissents and concurrences on three-judge panels, but the passing of time and small sample sizes for judges with limited times on the bench would create problems for the reliability of any results. Although the Songer Database included a field for standard of review, which was essential to the measures in this Article, coding was limited to instances of agency review and not lower court review.

⁵⁵ See, e.g., Dan Simon, *A Psychological Model of Judicial Decision Making*, 30 RUTGERS L.J. 1 (1998).

chambers in *How Judges Think*, which identified nine theories of decisionmaking from a range of academic disciplines, is particularly notable.⁵⁶ In addition to the three major models, Posner discussed sociological, organizational, psychological, economic, pragmatist, and phenomenological theories.⁵⁷ However, the additional theories investigated by Posner have not yet been subject to the rigor of empirical analysis at the level applied to the political science models.⁵⁸

B. Studies of Judicial Methods, Similarity, and Interrelations

While the three leading models described above have predominated empirical research by political science and legal scholars, a separate strain of inquiry over the last thirty years has targeted the diversity of types of judges. In 1981, Professor J. Woodford Howard published a study based upon surveys of judges sitting on three federal courts of appeals.⁵⁹ Howard identified three types of judges: (1) innovators who sought to inject new ideas into the law, (2) interpreters who believed that the role of the judge was limited to discerning meaning, and (3) realists who embraced portions of the other two theories.⁶⁰ More recently, Professor David Klein's survey of federal appellate judges acknowledged the diversity of approaches used, but did not construct a formal typology.⁶¹ By utilizing citations of circuit court opinions by the Supreme Court, Professors Jeffrey Berger and Tracey George found a particular type of "judicial entrepreneur" that seemingly sought greater notoriety from the Supreme Court at the federal appellate level.⁶²

Professors Frank Cross and Stefanie Lindquist recently summarized the prevailing research concerning diverse judging approaches, which has not been interwoven into most empirical research about how judges render decisions described in the previous section:

Judges are a diverse lot, like any group of humans. They value different things in the course of rendering their decisions. Some may be more ideological in their judgments. Some may be more traditionally legalistic in their decisionmaking. Others may be pragmatic. As the surveys show, different judges view their roles differently. Judges place different emphases

⁵⁶ RICHARD A. POSNER, *HOW JUDGES THINK* 19–56 (2008).

⁵⁷ *Id.*

⁵⁸ *See id.*

⁵⁹ J. WOODFORD HOWARD, JR., *COURTS OF APPEALS IN THE FEDERAL JUDICIAL SYSTEM: A STUDY OF THE SECOND, FIFTH, AND DISTRICT OF COLUMBIA CIRCUITS* (1981).

⁶⁰ *Id.* at 160–63.

⁶¹ DAVID E. KLEIN, *MAKING LAW IN THE UNITED STATES COURTS OF APPEALS* 21–27 (2002).

⁶² Jeffrey A. Berger & Tracey E. George, *Judicial Entrepreneurs on the U.S. Courts of Appeals: A Citation Analysis of Judicial Influence* 7–8, 19–20 (Vanderbilt Univ. Law Sch., Law & Econ. Working Paper No. 05-24, 2005), available at <http://ssrn.com/abstract=789544>.

on the tradeoff between their roles as “generators of precedents” and resolvers of disputes.⁶³

It is not at all revolutionary to recognize that judges from varied backgrounds, living in different geographic locations, nominated under distinct political conditions, and having a range of ideological and legal views, have different decisionmaking methodologies. However, empirical research of judicial decisionmaking has done little to build upon the recognized differences among individual judges.

Similar to work that questions the homogeneity assumption, some efforts have been made to test the unidimensionality premise for Supreme Court Justices.⁶⁴ Further, panel effects research has also been extremely valuable in breaking down the idea that judges are separate islands rendering independent decisions.⁶⁵ However, such research has yet to incorporate multiple levels of the judiciary and has only examined the interrelations between judges on three-judge panels.⁶⁶ The study described in this Article attempts to expand upon the work of scholars that have recognized judicial heterogeneity, multidimensionality, and interconnectedness. In order to do so, I created four separate measures of federal appellate judge behavior for judges on the courts of appeals.

II. BEHAVIORAL MEASURES

The primary method of measuring traits of the federal appellate judges has been the use of static proxy techniques. For example, studies of judicial ideology have most commonly used the appointing President’s political party as a proxy for the judge’s ideology.⁶⁷ Utilizing such a measure treats all Republican and all Democratic appointees as identical, does not incorporate any decisions by the judges, and assumes a President makes appointments solely upon ideological concerns.⁶⁸ There has been a growing call by some scholars to move from such static proxy measures of judges to metrics derived from the actual behavior of judges.⁶⁹ This study answers that call by utilizing multiple behavioral metrics to form a typology of judicial styles. In order to move beyond traditional proxies of judicial traits

⁶³ Frank B. Cross & Stefanie Lindquist, *Judging the Judges*, 58 DUKE L.J. 1383, 1416 (2009).

⁶⁴ See, e.g., Paul H. Edelman & Jim Chen, *The Most Dangerous Justice Rides into the Sunset*, 24 CONST. COMMENT. 199, 200 (2007) (“To account for and accommodate these alternative dimensions, our earlier research constructed a method for identifying the most powerful Justice without relying on the assumption of unidimensional policy preferences. Instead, earlier efforts focused on the unique policy coalitions formed by the Justices in non-unanimous cases.” (footnote omitted)).

⁶⁵ See, e.g., Cross & Tiller, *supra* note 15; Kim, *supra* note 15, at 1322; Revesz, *supra* note 15.

⁶⁶ See, e.g., Cross & Tiller, *supra* note 15; Kim, *supra* note 15, at 1322; Revesz, *supra* note 15.

⁶⁷ Fischman & Law, *supra* note 14, at 167–70.

⁶⁸ See *id.* at 170–71.

⁶⁹ *Id.* at 176–83.

and provide sufficient information about individual judges throughout the federal court system, a new dataset was essential.

A. *Data Gathering and Database Construction*

The underlying data outlined in this study have been used in related research,⁷⁰ but several important changes have been made that are noted below. Data were gathered from published and unpublished 2008 opinions issued by the First, Second, Third, Fourth, Fifth, Sixth, Seventh, Eighth, Ninth, Tenth, and Eleventh Circuit Courts of Appeals. The analyzed dataset (Case Database) from those circuits included over 10,000 panel decisions and, as a result, over 30,000 votes by judges sitting on the courts of appeals.⁷¹ The Case Database was created from searches of LexisNexis databases of the courts of appeals that included standard of review language⁷² and excluded immigration⁷³ and habeas corpus⁷⁴ cases, which contained unique standard of review issues. Among other variables, 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, district court, whether the case involved review of an executive agency decision, and standard of review used. 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 panel majority. This allowed for each judge's behavior to be studied independently and collectively. The more recent version of the dataset was recoded using off-the-shelf computer software⁷⁵ and scripting

⁷⁰ See generally Yung, *Activism*, *supra* note 17 (using the earliest version of the data in this study to measure judicial activism); Yung, *Ideology*, *supra* note 17 (using the data to measure judicial ideology); Yung, *Partisanship*, *supra* note 17 (using the data to measure judicial partisanship and judicial independence).

⁷¹ 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 where only two judges issued an opinion due to a death or recusal of a panel member. There were also instances when a single judge would issue an order without sitting on a three-judge panel.

⁷² For each of the courts of appeals 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! Erro! or (Arbitrar! w/3 Capricious!) or (Abus! w/3 Discretion) or "Substantial Evidence" or "Standard of Review") and not immigration and not habeas."

⁷³ 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 "revise[s] the standard of review to require greater deference to an immigration judge's findings of fact").

⁷⁴ See 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).

⁷⁵ The software used was TextConverter 3, which is available at <http://simx.com/>.

in Visual Basic.⁷⁶ The automated coding process searched for over 100 relevant variables in the header fields and text of opinions. Human coding was used to supplement, quality check, and ensure reliability of the automated coding.⁷⁷

B. Decisionmaking Metrics

Instead of merely focusing on ideology as the determining factor in judicial decisionmaking, I sought to understand and measure how judges vote along multiple dimensions. Because the decisionmaking measures described below have been expounded upon in prior scholarship,⁷⁸ the discussion is limited to the necessary elements of each and the basic methodologies used for their computation. In some instances, notes about modifications to previously used methodologies have been included as

⁷⁶ In the prior studies, data coding was performed exclusively by law student research assistants and the Author. Due to inconsistencies among and within the courts of appeals in formatting opinions, automated coding was not foolproof. However, quality checking indicates that the automated coding for every variable in this study is superior to the human coding done in prior editions of the dataset. See Yung, *Activism*, *supra* note 17; Yung, *Ideology*, *supra* note 17; Yung, *Partisanship*, *supra* note 17.

Because the prior human coding had already been performed for over 96% of the cases in the new dataset, the human and computer coding were integrated. In particular, because some circuits have not regularly or ever reported the identity of the district court judge whose judgment was reviewed, human coding was essential in that area. When there were discrepancies in coding between the two systems, I resolved the differences by using my judgment as to how the variable should be coded. Some changes in the coding, which may have accounted for some of the different scores used in this study, included: separating decisions to vacate, reverse, remand, and reverse in part; coding of concurrences; to the degree possible, determining which standard of review was actually applied when multiple standards were listed; correcting 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 removing votes recorded on the decision to not hear a case en banc.

⁷⁷ Reliability is the degree to which the measurement would yield the same results when applied by others. Lee Epstein & Gary King, *The Rules of Inference*, 69 U. CHI. L. REV. 1, 83 (2002). Because this study is the first to systematically identify judicial styles for judges on the courts of appeals, it is impossible to compare the results directly with other research. Instead, reliability can only be evaluated by the quality of the coding and analysis. Since this is not the first study using some version of this dataset, see Yung, *Activism*, *supra* note 17, at 25–26; Yung, *Ideology*, *supra* note 17, at 1155–57; Yung, *Partisanship*, *supra* note 17, at 522–24, some of the discussion here is abbreviated.

Case data were downloaded from LexisNexis for each of the circuits studied, which provides a stable platform for replication by other researchers. Many of the variables were coded by computer software, which should provide a high level of consistency among studies. The remaining data were coded by law students and recent law school graduates. On both the computer and human coded variables, quality checking was performed by other student and graduate coders as well as the Author. A variety of checks were performed to ensure internal consistency of variables that were necessarily interconnected. 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 cross-checks were employed to ensure quality and correct errors within the dataset.

⁷⁸ See generally Yung, *Activism*, *supra* note 17 (measuring judicial activism of judges); Yung, *Ideology*, *supra* note 17 (measuring ideology of judges); Yung, *Partisanship*, *supra* note 17 (measuring independence and partisanship of judges).

well. This research isolated and measured four dimensions: activism, ideology, independence, and partisanship.

1. Activism.—One of the most commonly used words to describe judicial behavior in public discourse is “activism.”⁷⁹ A judge has been thought to exhibit activist traits if he fails to defer when expected.⁸⁰ In the aggregate, a more activist judge will more often place his views above legislatures, executive branches, and other judges.⁸¹ When viewed in this way, activism can be thought of as a morally neutral concept.⁸² Activism is something in which all judges engage—it is just a question of degree. The measurement of activism described below is designed as a relative assessment of how likely a judge is to defer compared to other judges studied.

The precise definition used for this empirical study was:

*Activism occurs when judges do not defer to constitutionally significant actors when a formal model of legal decisionmaking would predict otherwise.*⁸³

Although it has been generally difficult to reach anything approaching consensus on what a formal model of law would predict, analysis of standards of review in the courts of appeals provides an effective baseline.⁸⁴ Standards of review have been used by federal appellate courts to indicate when they should defer to lower court judgments and when no deference is required.⁸⁵ A judge who has regularly discounted deferential standards of review by reversing lower court judgments can be said to be more activist in the aggregate than a judge who has reversed less often in such situations.

To remove ideological differences and other strategic motivations from the concept of activism, it was necessary to compare a judge’s behavior when using deferential and nondeferential standards of review. When applying a *de novo* (nondeferential) standard, judges were expected to reveal their true preferences. In contrast, it was expected that those preferences would be suspended from time to time when applying a deferential standard. Based upon those premises, the basic measurement for activism used in this study was:

⁷⁹ Keenan D. Kmiec, Comment, *The Origin and Current Meanings of “Judicial Activism,”* 92 CALIF. L. REV. 1441, 1442–44 (2004).

⁸⁰ See Yung, *Activism*, *supra* note 17, at 9.

⁸¹ *Id.*

⁸² See Robert Justin Lipkin, *We Are All Judicial Activists Now*, 77 U. CIN. L. REV. 181, 203 (2008); Ernest A. Young, *Judicial Activism and Conservative Politics*, 73 U. COLO. L. REV. 1139, 1144 (2002).

⁸³ See Yung, *Activism*, *supra* note 17, at 19.

⁸⁴ For a discussion of the general neglect of baselines in empirical legal research and the problems it has created, see generally Brian Z. Tamanaha, *Devising Rule of Law Baselines: The Next Step in Quantitative Studies of Judging* (Wash. Univ. in St. Louis Sch. of Law, Faculty Research Paper Series, Paper No. 10-02-02, 2010), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1547981.

⁸⁵ See Cross, *Decisionmaking*, *supra* note 5, at 1502–03.

*Raw Activism Differential = Reversal rate using deferential standard – Reversal rate using de novo standard*⁸⁶

Thus, judges with a higher Raw Activism Differential exhibited greater activism because they reversed lower court decisions using a deferential standard more often relative to unconstrained situations. The Raw Activism Differential was adjusted to reflect the particular circuit on which a judge sat, the mix of case issues each judge had, any “super-panel” effects⁸⁷ that might have been experienced by the judge, and scaling to a common system. Greater detail about these adjustments can be found in Appendix A.⁸⁸

2. *Ideology*.—Scholars seeking to measure, explain, and predict judicial behavior primarily target judicial ideology.⁸⁹ Although there has been some variation in definitions of ideology,⁹⁰ substantially less controversy surrounds the concept of ideology than activism. The very basic definition used in this study was:

*Judicial ideology is the set of political beliefs that guide judicial decisions in some cases.*⁹¹

This study utilized what has become known as an agnostic measure.⁹² Such measures rely on the idea that those who have similar ideologies will vote together more often and those who have dissimilar ideologies will disagree more often. With enough data, a researcher could identify groups with similar ideologies. And with some prior assessments about who is more likely to be conservative and liberal, researchers can apply agnostic scoring systems. Agnostic measures have the advantage over other behavioral techniques because they can be applied to large populations of data far more easily. A researcher could merely identify the disposition of an appellate panel’s judgment (e.g., affirmed, reversed, etc.) and any voting blocs among the panelists. However, almost 98% of panels in the courts of appeals in recent years have voted unanimously, which, because of the lack of observable differences, has prevented the use of agnostic measures entirely for those courts.

Including the district court judge in the super-panel of judges produced greater information and resolved the unanimity problem. Reversals of

⁸⁶ See generally Yung, *Activism*, *supra* note 17, at 22.

⁸⁷ A super-panel is comprised of “the three appellate judges and the district judge whose decision is being reviewed.” See Yung, *Partisanship*, *supra* note 17, at 553–54.

⁸⁸ The mean Activism Score was 51.3, and the standard deviation was 16.7. The data were scaled linearly where a 0 score corresponded with a -32.4% adjusted Raw Activism Differential and a 100 score indicated a +23.2% adjusted Raw Activism Differential.

⁸⁹ See Fischman & Law, *supra* note 14, at 135.

⁹⁰ *Id.* at 135, 137.

⁹¹ See Yung, *Ideology*, *supra* note 17, at 1140.

⁹² Fischman & Law, *supra* note 14, at 162–65.

district court judgments have been far more common than dissents on appellate panels. As a result, integrating disagreements between appellate judges and district court judges gave the study more points of comparison for the creation of an accurate ideology scoring system. When a judge on a federal appellate court reviewed the judgment of a district court judge, the appellate judge had three interactions that could yield information about the appellate judge's ideology (two interactions with copanelists and one with the district judge). Using this agnostic coding system, the basic measurement of a judge's ideology was:

$$\text{Raw Ideology Score} = \text{Rate of Agreement with Judges Appointed by Republican Presidents} - \text{Rate of Agreement with Judges Appointed by Democratic Presidents}^{93}$$

A judge with a lower Raw Ideology Score was more liberal than a judge with a higher Raw Ideology Score (matching the traditional left-to-right spectrum). Numerous adjustments were made to the Raw Ideology Score to provide a valid measure. Most significantly, because the district judge occupied a different role than copanelists, the rate of agreement with the district judge was measured separately. As a result, agreements with the district judge in the form of affirmances were adjusted by standard of review used and type of case (criminal or civil). A Raw Ideology Score was then computed for both the panel and district judge interactions. Those scores were combined based upon the rate of disagreement at each level and further adjusted to include specific circuit adjustments, further case-issue-mix adjustments, any super-panel effects experienced by the judge, and scaling to a common system. These later adjustments are described in greater detail in Appendix A.⁹⁴

3. *Independence.*—Independent judges are thought to be more likely to “stick to their guns” and less likely to reach compromises with other judges.⁹⁵ Notably, like activism and ideology, independence was not a positive or negative quality for a judge—it was simply another trait that

⁹³ See Yung, *Ideology*, *supra* note 17, at 1169–70.

⁹⁴ The mean Ideology Score was 2.9, and the standard deviation was 20.9. The data were linearly scaled where a -100 corresponded with a -21.4% adjusted Raw Ideology Score and a 100 indicated a 15.5% adjusted Raw Ideology Score.

⁹⁵ Recent studies have identified independence as a characteristic of judicial behavior worthy of empirical investigation. See, e.g., Stephen Choi & Mitu Gulati, Essay, *A Tournament of Judges?*, 92 CALIF. L. REV. 299, 310 (2004) [hereinafter Choi & Gulati Essay]; 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). The study described in this Article conceived of and measured independence in a similar, but distinguishable manner from prior attempts. Unlike prior research, this study recognized that when other judges dissented from or concurred with a studied judge, that action was also an indicator of the studied judge's independence. After all, the difference between dissenting and being dissented against is simply how the third judge on the panel voted.

described tendencies in behavior. This basic definition of judicial independence was used:

*A more independent judge is one that is more apt to provoke minor and major disagreements with other judges beyond what ideological differences would predict.*⁹⁶

Two types of disagreements were incorporated in the measurement: concurrences and dissents. In both situations, a judge presumably writes separately because she cannot find common ground with other written opinions.

The following formula was used to determine the Raw Independence Score:

*Raw Independence Score = Rate of Dissents (including copanelist dissents) + Rate of Concurrences (including copanelist concurrences) – Expected Rate of Dissents (including copanelist dissents) – Expected Rate of Concurrences (including copanelist concurrences)*⁹⁷

To remove disagreements based upon ideological differences, it was necessary to determine the rate at which ideological variance accounted for concurrences and dissents so that the Raw Independence Score could be untangled from the Raw Ideology Score (yielding expected rates of dissent and concurrence). The projected dissent and concurrence rates for each judge were computed based upon the degree to which a judge's Raw Ideology Score differed from the mean of the circuit on which the judge was appointed. The projected disagreement rates were subtracted from the observed rates. Three additional adjustments were made to the Raw Independence Scores. The values were adjusted so that each judge's scores were based upon average criminal and civil case mixes, placed on a logarithmic scale (to create a normal distribution), and scaled to a common system.⁹⁸ The case mix and common scaling adjustments are further explained in Appendix A.⁹⁹

4. *Partisanship.*—In the few instances where scholars have referred to partisanship in empirical research, they have not considered it separately from ideology and activism.¹⁰⁰ Normally, researchers have considered partisanship a negative attribute indicating ideological decisionmaking.¹⁰¹

⁹⁶ Yung, *Partisanship*, *supra* note 17, at 517.

⁹⁷ *See id.* at 518.

⁹⁸ Because of limited instances of judges issuing concurrences or dissents when traveling to other circuits, a separate circuit adjustment was not performed for the Independence Scores.

⁹⁹ The mean Independence Score was 44.1, and the standard deviation was 15.3. The data were 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.

¹⁰⁰ *See, e.g.,* Cross & Tiller, *supra* note 15.

¹⁰¹ *See, e.g.,* Daniel E. Ho & Kevin M. Quinn, *How Not to Lie with Judicial Votes: Misconceptions, Measurement, and Models*, 98 CALIF. L. REV. 813, 817 (2010).

Despite that shortcoming, “partisanship” and its opposite “indifference” were chosen because they best reflected the behavior being studied. Partisanship, unlike ideology, focuses more on party loyalty than ideological outcomes of cases. As with the other measures, the goal of this study was to treat partisanship as morally neutral behavior exhibited by judges on a relative scale.

The basic definition of partisan behavior used in the study was:

*A judge is acting in a more partisan manner when he or she applies a neutral legal rule in a manner that demonstrates greater deference to members of a particular political party.*¹⁰²

Notably, partisanship does not require conscious thought by a judge. It is simply a measure of whether a judge is more apt to defer to those of the same appointing party, whether the judge is aware of it or not. Like the Raw Activism Score, the Raw Partisanship Score focused on the standard of review as the baseline for identifying partisan behavior. If a judge deferred more often to a district judge appointed by the same political party, she was more partisan than a judge who deferred at the same rate to judges appointed by either party. And similar to the Raw Activism Score, the partisanship measure was focused exclusively on appellate and district court interactions. The following formula provided the Raw Partisanship Score:

*Raw Partisanship Score = (Deferential Reversal Rate of Democratic District Judges – Deferential Reversal Rate of Republican District Judges) – (Nondeferential Reversal Rate of Democratic District Judges – Nondeferential Reversal Rate of Republican District Judges)*¹⁰³

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). The Raw Partisanship Score was adjusted to reflect the particular circuit on which a judge sat, the mix of case issues each judge had, any super-panel effects that might have been experienced by the judge, and then scaled to a common system. Greater detail about these adjustments can be found in Appendix A.¹⁰⁴

5. *Differences Among Scores.*—There was some concern that there would be overlap between the Ideology, Activism, and Partisanship Scores

¹⁰² Yung, *Partisanship*, *supra* note 17, at 519.

¹⁰³ *Id.* at 521.

¹⁰⁴ The mean Partisanship Score was 44.8, and the standard deviation was 15.3. The data were linearly scaled—a 0 corresponded with a -73.7% adjusted Raw Partisanship Score, and a 100 indicated an 89.8% adjusted Raw Partisanship Score.

if they measured similar, related behavior, especially because the terms are sometimes used interchangeably. As a result, I tested the three Scores, which some might believe to be too intertwined to provide separate dimensions of study, to determine statistical relationships. Notably, there were identified judges of all combinations of high and low Partisanship, Activism, and Ideology Scores. For example, then-Judge Sonia Sotomayor had a moderate Ideology Score (17.3), a low Activism Score (39.3), and a Partisanship Score nearly one standard deviation above the mean (57.2). Further, based upon robust linear regression, the Activism, Partisanship, and Ideology Scores were not correlated in a statistically significant manner.¹⁰⁵ The data indicates that the Partisanship, Ideology, and Activism Scores describe separate behavior.

6. *Selection Effects.*—There is an inherent concern in studying federal courts that the measures used might be the product of selection effects and, thus, not really indicative of the concept measured.¹⁰⁶ A

¹⁰⁵ 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 done to compare the Ideological Scores (absolute value of the Ideology Scores) with the Partisanship Scores. For Activism and Ideological Scores, $p = 0.7443$; Partisanship and Ideological Scores, $p = 0.8418$.

¹⁰⁶ See Keith N. Hylton, *Asymmetric Information and the Selection of Disputes for Litigation*, 22 J. LEGAL STUD. 187, 204 (1993); George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1, 55 (1984); Cass R. Sunstein, *Judging National Security Post-9/11: An Empirical Investigation*, 2008 SUP. CT. REV. 269, 271. The classic model of selection effects relies on the incentives of litigants. The Priest–Klein hypothesis predicts that if parties have perfect information, case outcomes should split evenly between affirmances and reversals, since the parties would settle as needed to avoid other outcomes. See Priest & Klein, *supra*, at 4–5. Numerous 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, 337–40 (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). The study described in this Article, consistent with prior examinations, provides ample reason to doubt the simple Priest–Klein hypothesis because the rate of affirmances is far higher than 50%, regardless of the standard of review used, in civil and criminal cases. Notably, the Priest–Klein model was limited to civil cases because the plea bargaining settlement structure in criminal cases creates radically different incentives, such that nothing close to a 50% affirmance rate results. See Priest & Klein, *supra*, at 46.

However, at the federal appellate level, the cost of an appeal is very little compared to that of a trial. 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). This means that the chance of settlement before the appeal is considered to be quite low. Uncertainty about appellate outcomes also creates an environment where parties cannot reach agreement about the potential risks and costs. The legal issues are usually close in civil cases, 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 16 n.20 (2006))), and the parties do not know which judges will decide the appellate case until right before oral argument, Richard L. Revesz, *Litigation and Settlement in the Federal Appellate Courts: Impact of Panel Selection Procedures on Ideologically*

selection effect occurs when a party other than the one being studied (e.g., a litigant) makes a decision (e.g., settlement) that is not accounted for by the study methods but should be.¹⁰⁷ There were various moments when a selection effect could have occurred in the data that would create problems for the four behavior scores, including: pre-filing, pre-trial, during trial, pre-verdict, post-verdict, pre-appeal, during appeal, and post-appeal. These selection effects could distort the four behavioral measures if they intersect with a factor important to the party triggering the effect.

However, the significance of selection effects in this study is more limited than other analyses of the courts of appeals because the underlying measures used to create the judicial typology are all relative in nature. They do not attempt to state that a judge is, for example, “liberal” by some external objective scale. Instead, the judicial type model merely states that relative to the other judges studied, one is, for example, more steadfast in her approach. Therefore, as long as judges have similar selection effects or the study accounts for uneven selection effects in some way, the selection effects should not limit the inferences drawn from the study.

Further, the typology ultimately accounted for the differing 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. Beyond that, it is unclear if there are any uneven selection effects among the judge population. To the degree that the parties know the substantive and procedural law of a circuit and make the same basic risk assessments, which is what a selection effects model would generally predict, one would expect that regardless of differences among the circuits and judges the projected odds in individual cases would be similar. As a result, selection effects should be largely the same across the body of cases reviewed by judges in this study. And the behavioral measures should, thus, not be distorted by such effects. Nonetheless, because selection effects inherently limit such studies, it is worth noting that it is difficult to discern if such effects had a prominent role in shaping the data and results of this study.

III. JUDICIAL STYLE TYPOLOGY

Richard Eberhart once stated that “[s]tyle is the perfection of a point of view.”¹⁰⁸ That is, the manner in which someone acts or presents herself reveals her perspective on the world. “Style” might seem an odd word to apply to what judges do because it lacks the grandiosity of “philosophy” and seriousness of “methodology.” However, because this study focuses on

Divided Courts, 29 J. LEGAL STUD. 685, 688 (2000). By that time, the briefing has been completed, *id.*, settlement is unrealistic, and the marginal cost of oral argument is low.

¹⁰⁷ See 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) (“A selection effect may be defined as a causal relationship between the distribution of disputes and other variables of litigation.”).

¹⁰⁸ RICHARD EBERHART, *THE QUARRY* 111 (1964).

measuring the behavior of judges as manifested in outputs (judicial opinions and votes), it is the appropriate label to use. Judges might have had elaborate decisionmaking methods and/or committed judicial philosophies, but that does not mean they consistently exhibit such perspectives in opinions and votes. This could occur for several reasons. Judges may not practice what they preach. Their decisionmaking technique might only be applicable in some cases. Or, the methods or philosophy might point in conflicting directions. Further, there have been just a handful of judges with public records about their philosophies or methodologies from which any information could reliably and validly be inferred.

In contrast, the concept of a judicial style focuses exclusively on the outward appearances of judicial decisionmaking. No references to or inferences about the decisionmaking process are made by the label “style.” Instead, the term stays true to the study methodology, which only considers the end result of the decisionmaking process and does not attempt to determine how such decisions were reached beyond the opinions published. As a result, individual judges may be wholly unaware of their style and disagree with the label applied in this study. Nonetheless, the data ultimately support the application of the particular style type to those judges.

A. Multidimensional Clusters of Judges

To construct a viable typology of judges, the 178 studied judges with adequate data needed to be sorted into groups based upon common traits.¹⁰⁹ This grouping was done with cluster analysis, a data analysis tool that categorizes data from one variable based upon similarities and differences across a set of other variables.¹¹⁰ I used Ward cluster analysis,¹¹¹ which focuses on minimizing the variance of placing a judge in one group as opposed to another.¹¹² In this case, judges were grouped according to their Activism, Ideological, Independence, and Partisanship Scores. Judges were grouped based on the absolute values of the Ideology Scores, such that a judge with a -60 score would be treated the same as one with a 60 score, to find commonalities in judicial style among persons on opposite ends of the

¹⁰⁹ Judges had to have at least 200 total interactions with other judges to be included in the study.

¹¹⁰ See generally BRIAN S. EVERITT, SABINE LANDAU, MORVEN LEESE & DANIEL STAHL, CLUSTER ANALYSIS 13 (5th ed. 2011); Cross & Lindquist, *supra* note 63, at 1425 (“Cluster analysis is a statistical tool that enables like items to be grouped based on similarities and dissimilarities across a set of variables. . . . The procedure identifies the cases (individual judges) who share similarities with respect to certain variables . . . and groups them into categories, creating a sort of taxonomy of judges.”).

¹¹¹ For a prior example of the use of Ward cluster analysis in a judicial decisionmaking study, see Cross & Lindquist, *supra* note 63, at 1425–29. Ward cluster analysis in this Article was performed using the software Stata.

¹¹² See generally H. CHARLES ROMESBURG, CLUSTER ANALYSIS FOR RESEARCHERS 129–35 (2004).

ideological spectrum. All four scores were on a scale of 0 to 100, with 100 indicating the highest level of that trait within the 178 judges.

Because the clusters are formed along four separate dimensions, it is impossible to include a visual depiction of the shapes that enveloped the various clusters in a two-dimensional medium such as this Article. However, the commonalities among judges within each group can be seen in Appendix B where all of the judge scores are listed.

To decide if a particular cluster was indeed a distinctive group and not merely statistically insignificant fluctuation in data values, I applied a basic standard deviation test: each identified cluster's average scores had to deviate from every other cluster in at least one of the four behavioral scores by a standard deviation. Ultimately, using this technique, the data revealed nine separate judging style clusters. Figure 1 below indicates the number of average scores (Activism, Ideology, Independence, and Partisanship) that each cluster differed by at least one standard deviation from every other cluster. For example, Cluster 3 differed from Cluster 5 by a standard deviation in all 4 categories as can be seen looking at where the two clusters meet in Figure 1.

FIGURE 1: DIFFERENCES BETWEEN CLUSTERS
(NUMBER OF SCORES DIFFERENT BY AT LEAST ONE STANDARD DEVIATION)

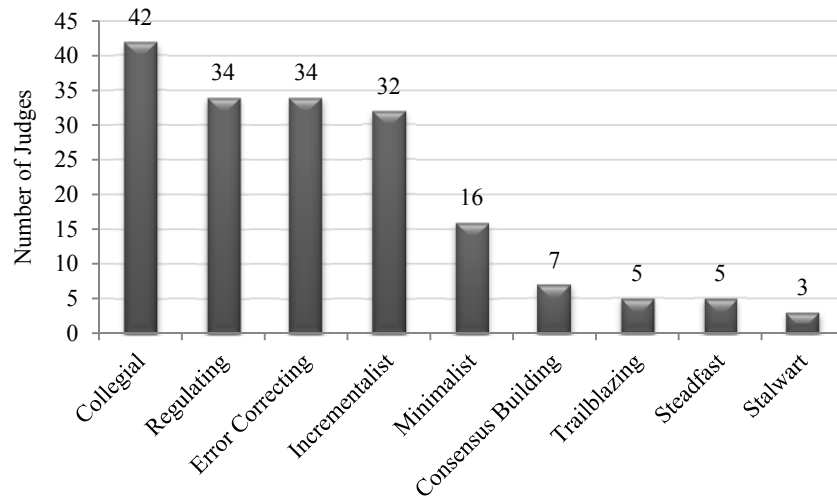
Cluster	1	2	3	4	5	6	7	8	9
1	—	1	4	3	3	3	3	1	3
2	1	—	3	4	3	2	1	3	3
3	4	3	—	3	4	3	3	4	3
4	3	4	3	—	2	2	1	2	3
5	3	3	4	2	—	2	3	2	1
6	3	2	3	2	2	—	1	1	1
7	3	1	3	1	3	1	—	2	1
8	1	3	4	2	2	1	2	—	1
9	3	3	3	3	1	1	1	1	—

These groups were then labeled according to the traits exhibited by their mean average scores. The nine identified judicial types are: Trailblazing, Consensus Building, Stalwart, Regulating, Steadfast, Collegial, Incrementalist, Minimalist, and Error Correcting.¹¹³ Individual judges in each group might have scores that deviate by a reasonable margin from the category mean scores, but the cluster analysis technique placed them in the appropriate group to minimize variation as compared to placing

¹¹³ These names were chosen to embody the characteristics of the four measures of each type. Further, my goal was not to make value judgments about particular types of judges. As a result, I tried to use positive-sounding words for each type even when the labels used are not typically applied to judges.

that judge in an alternate group. Notably, as illustrated in Figure 2 below, the distribution among the judge style types was far from even.

FIGURE 2: DISTRIBUTION OF JUDGES AMONG STYLE CATEGORIES

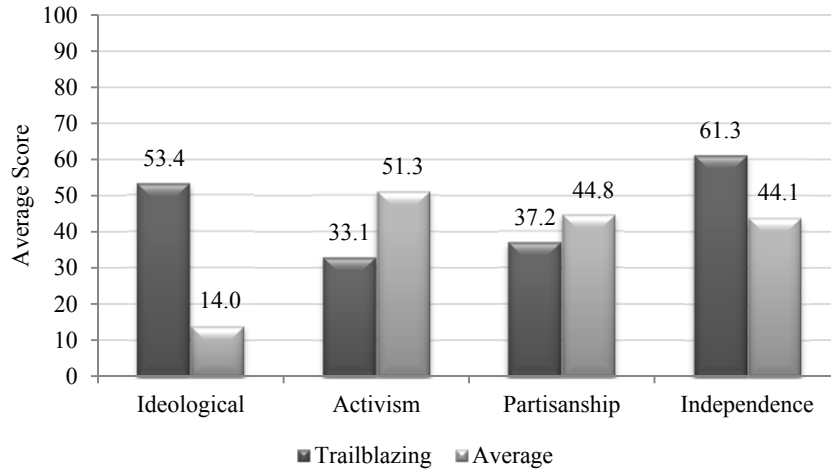


Each of the nine judging styles and the quantitative aspects that define each type are discussed in more detail below.

B. Judicial Styles

Among the nine judicial style types, some groups have greater similarities than others. When possible, the critical differences among relatively similar groups are explained below. Further, the order of the styles discussed below was the one created by the statistical cluster analysis. Thus, to a degree the consecutive categories often, but not always, have commonalities. The descriptions are at times intentionally sparse in order to prevent making inferences beyond what is supported by the data.

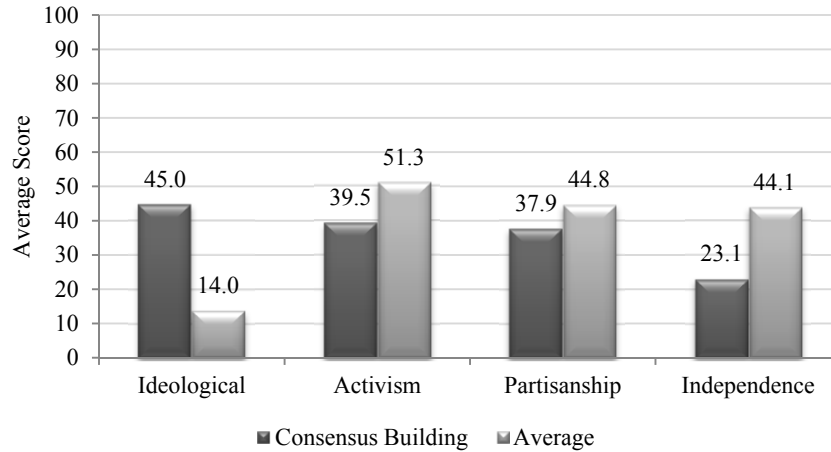
FIGURE 3: AVERAGE TRAILBLAZING JUDGE SCORES



Trailblazers are primarily in the business of carving out ideological decisions that shape circuit law and invite opposition by copanelists. Yet, review of district courts is less significant to these judges. As exhibited in Figure 3, Trailblazers exhibit high Ideological Scores (usually over two standard deviations from zero), high Independence Scores, low Activism Scores, and low Partisanship Scores. They have the second highest Ideological Scores of any group, but, contrary to the attitudinal model,¹¹⁴ their behavior is less partisan and activist toward the district courts than the average judge.

¹¹⁴ See *supra* note 37 and accompanying text.

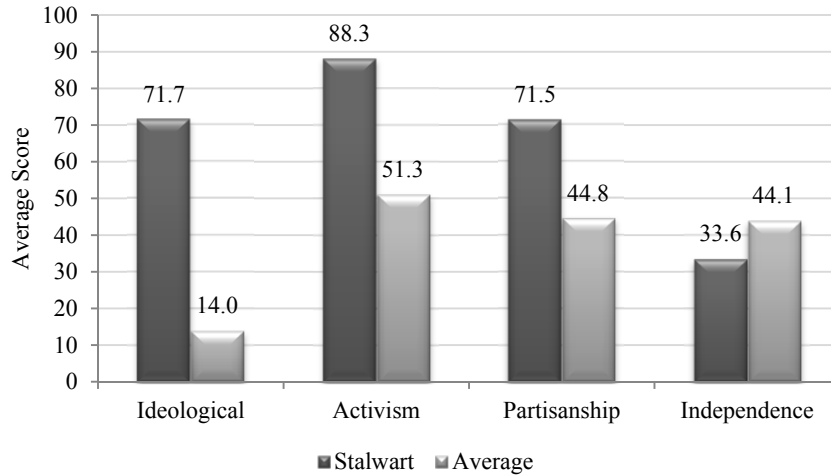
FIGURE 4: AVERAGE CONSENSUS BUILDING JUDGE SCORES



Consensus Builders are judges with strong ideological commitments who manage to encourage unanimity among appellate panelists with little partisan or activist review of the district courts. Figure 4 indicates that Consensus Builders, like Trailblazers, have very high Ideological Scores. Yet, again contrasting with the attitudinal model, which predicts ideological differences will cause voting differences,¹¹⁵ they have the lowest Independence Scores and typically below-average Activism and Partisanship Scores. That this group maintains strong ideology while inviting the least disagreement among the appellate judges indicates that they might be better at building voting blocs among ideologically diverse judges.

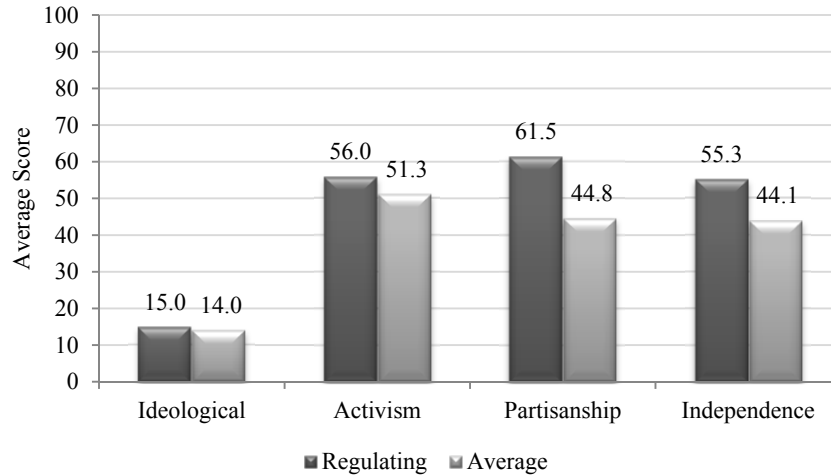
¹¹⁵ See *supra* note 37 and accompanying text.

FIGURE 5: AVERAGE STALWART JUDGE SCORES



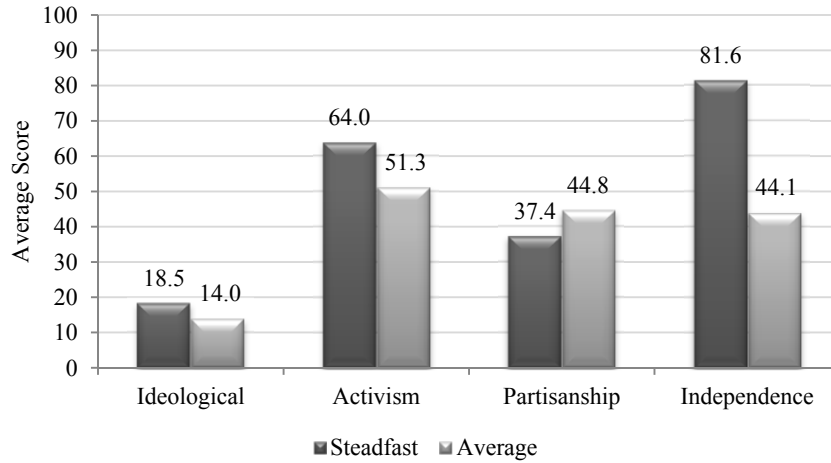
Stalwart judges are the ideological and partisan leaders who take an active role in shaping circuit law and reviewing district court judgments. Stalwart judges had the highest Ideological, Activism, and Partisanship Scores of any judge type, as demonstrated in Figure 5. Interestingly, though, their Independence Scores were usually below the mean. Stalwarts were heavily involved in the review of district court judgments in a manner indicating a partisan bent. Yet, despite the clearest ideological decisionmaking of any judge type, they did not draw dissents and concurrences at rates expected by such strong ideological views. Stalwarts appeared to be the judges most consistent with the classic attitudinal model.

FIGURE 6: AVERAGE REGULATING JUDGE SCORES



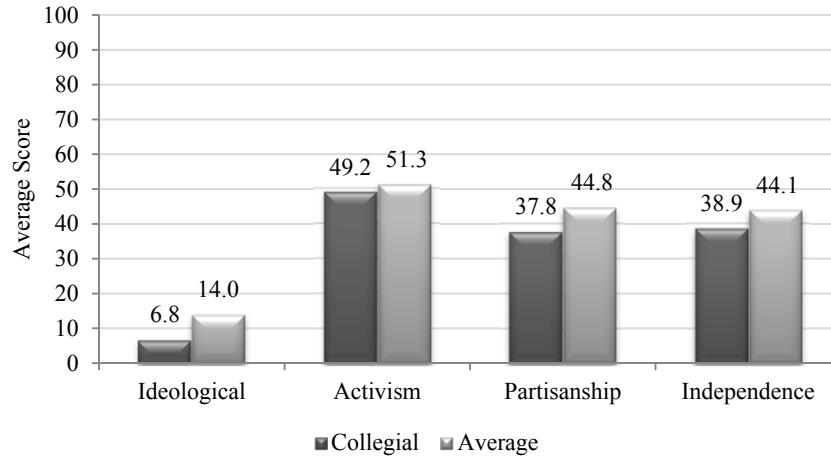
Regulating judges are focused on reviewing district court judges in a more partisan manner than the average judge. Regulating judges, as illustrated in Figure 6, typically have Activism, Partisanship, and Independence Scores above the mean, and average Ideological Scores. The Partisanship Scores are usually the highest rating for such judges. This means that Regulating judges are typically more likely to use partisan criteria to reverse the judgments of district court judges in situations where deference might be expected.

FIGURE 7: AVERAGE STEADFAST JUDGE SCORES



Steadfast judges might be thought of as the lightning rods of the federal appellate courts because they are more likely to disagree with or invite disagreement by other judges (including district judges). Yet, surprisingly, there is no indication that such judges did so in a particularly ideological manner or that ideology is the source of disagreement with other judges. The judges are Steadfast because their numerous disagreements apparently stem from other sources or are derived from limited willingness to compromise their points of view. As Figure 7 indicates, Steadfast judges have the highest Independence Scores of any type, elevated Activism Scores, and Ideological and Partisanship Scores that are close to the average.

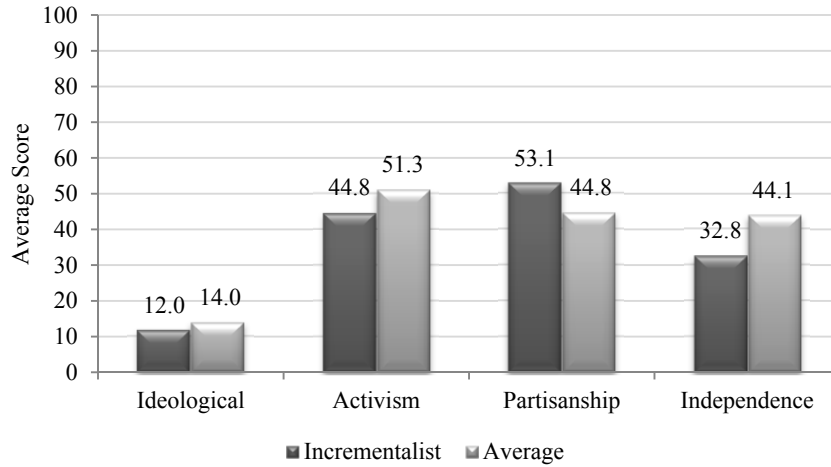
FIGURE 8: AVERAGE COLLEGIAL JUDGE SCORES



Collegial judges are those that exhibit the strongest adherence to the norm of consensus in the appellate courts.¹¹⁶ These judges, on average, exhibit scores below the mean in every category, as seen in Figure 8. And their regulation of the district courts is relatively modest. Because their overall profile might indicate a preference for less disagreement and conflict among federal judges, they represent ideal colleagues. This group includes the highest number of judges of any of the nine types.

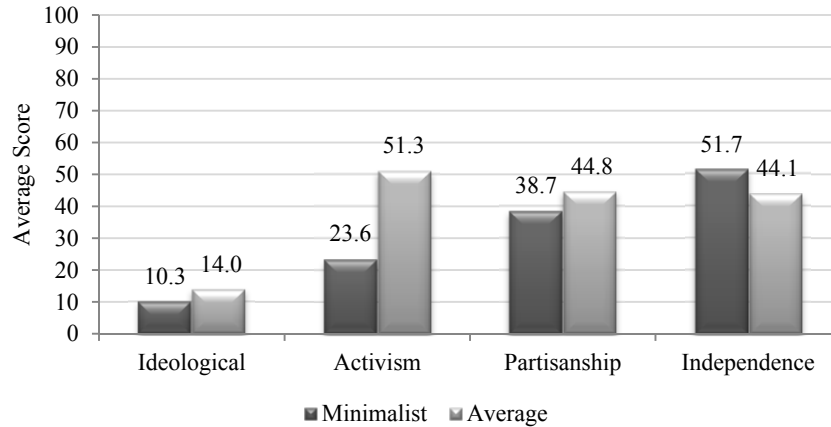
¹¹⁶ See generally Joshua B. Fischman, Decision-Making Under a Norm of Consensus: A Structural Analysis of Three-Judge Panels (Jan. 4, 2008) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=912299 (contending that the high rate of unanimity at the federal appellate level is indicative of a strong norm of consensus).

FIGURE 9: AVERAGE INCREMENTALIST JUDGE SCORES



Incrementalist judges are those that do not often fight ideological conflicts at the appellate level, but do push the district courts in a slightly partisan direction. These judges, whose scores are in Figure 9, typically have elevated Partisanship Scores and Activism, Ideological, and Independence Scores that are slightly lower than or at the mean. Incrementalists are not true ideological or partisan moderates, but their overall profile indicates a relatively restrained stance in ideological disputes. Their lower Independence Scores indicate that they do not pursue conflict. Unlike Regulating judges, Incrementalist judges are not typically as partisan and are far less activist. Whatever goals (strategic, legal, or otherwise) these judges have, they apparently approach them from the perspective of an Incrementalist, seeking evolution and not revolution.

FIGURE 10: AVERAGE MINIMALIST JUDGE SCORES

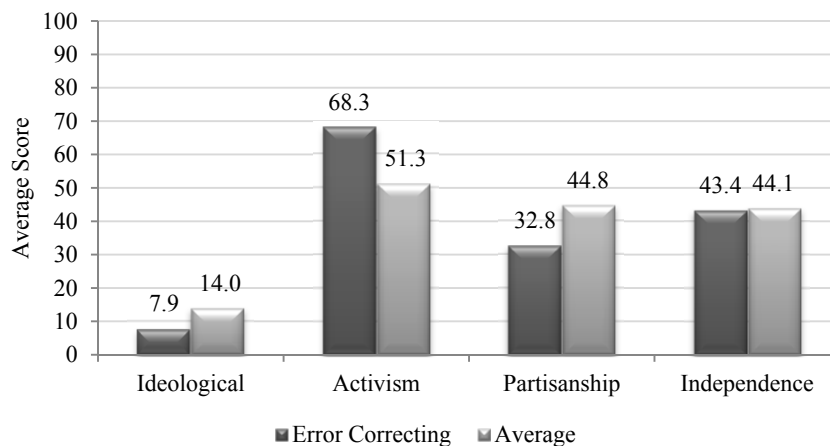


Judicial Minimalists are most deferential to the judgments of the district courts. Judicial minimalism is the one style discussed in this Article that has received significant theoretical attention by scholars.¹¹⁷ Although it has been taken to mean different things in varied contexts, the essential idea of minimalism is that judges act in a restrained manner.¹¹⁸ In this study, as demonstrated in Figure 10, such judges have the lowest Activism Scores, slightly higher Independence Scores, and close-to-average Ideological and Partisanship Scores. The behavior of Minimalists shows the strongest adherence to norms of deference in place of partisanship and ideology. Because most judges are far more aggressive in exercising judicial power, the Minimalists have higher Independence Scores, indicating a higher rate of disagreements in judicial perspectives with other judges at the appellate level.

¹¹⁷ See, e.g., CASS R. SUNSTEIN, ONE CASE AT A TIME: JUDICIAL MINIMALISM ON THE SUPREME COURT 5–6 (1999).

¹¹⁸ *Id.*

FIGURE 11: AVERAGE ERROR CORRECTING JUDGE SCORES



Error Correctors are judges who seem to be primarily concerned with fixing “wrong” decisions by the district court judges without a partisan or ideological bent. Figure 11 outlines the scores of Error Correctors, who exhibit higher levels of Activism than average, slightly lower Partisanship and Ideology levels, and Independence measures close to the mean. As a group, they are less likely to defer to district judges but generally more likely to apply deferential rules in a party-neutral manner. They are similar to Regulating judges, but are significantly less partisan in reviewing district court judges.

The judicial types for each judge are listed in Appendix C at the conclusion of this Article. Discussions of the style types of high-profile judges are reviewed in Part III.B. However, before reviewing the application of the typology to individual judges, it is helpful to consider possible limitations to the judicial style typology and underlying data.

C. Limitations

There are several limitations to the inferences drawn in this Article. Notably, all of the data studied in this Article were from 2008 opinions. As a result, the labels given to judges in this Article are only representative of that one year. Studies in other areas have shown the potential for drift in judicial behavior over time, which is not accounted for by the limited time frame used here.¹¹⁹ Further, the population of 178 judges examined here may not be representative of judges from other time periods. The studied group was largely composed of nominees of Presidents Bill Clinton and

¹¹⁹ See generally Lee Epstein et al., *Ideological Drift Among Supreme Court Justices: Who, When, and How Important?*, 101 NW. U. L. REV. 1483 (2007) (finding ideological drifts among some Supreme Court Justices over time).

George W. Bush. And the nominees from older Presidents were not necessarily a representative sample of all nominees by those Presidents because retirements are not random events. Particularly in this era of enormous political fights about nominations to the courts of appeals, it is unclear if any results here can be generalized into eras when the nomination process was different. Lastly, even assuming that the nine identified styles account for the extent of modern judge types, there is no reason to believe that those styles encapsulate the possible approaches of judges used throughout time.

D. Comparison to Public Accounts of Judges

To determine if a measure is statistically valid, it needs to be evaluated against some other assessment.¹²⁰ Because there is neither another judicial style typology nor a quantitative behavioral assessment of all of the 178 judges studied, qualitative comparison was the only available means of evaluating the validity of the typology in assessing judicial behavior. However, there is limited public information about the large majority of the 178 judges studied. As a result, only a high-profile subset of judges could be used to determine model validity. In the dataset, there are at least nine judges that might be deemed to have sufficient notoriety based upon media attention. The judges listed in Figure 12 either have “celebrity” status as public intellectuals or judicial lightning rods, have been mentioned as possible Supreme Court Justices, or, in the case of Justice Sonia Sotomayor, have actually been appointed to the Supreme Court. Figure 12 includes a list of those judges, their four component behavioral scores, and

¹²⁰ “A measure is facially valid if it is consistent with prior evidence, including all quantitative, qualitative, and even informal impressionistic evidence.” Epstein & King, *supra* note 77, at 89. Validity is determined by whether the measurements used in an empirical study reflect the concept(s) measured. *Id.* at 87. Lee Epstein and Gary King considered three possible ways to view validity: facial validity, unbiasedness, and efficiency. *Id.* at 89. Although establishing validity in each of those categories is not strictly required, *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.”), this Article considers each type in turn. Because the validity of the four underlying judicial traits has been considered in prior scholarship, the validity discussion in this Article focuses solely on the nine judicial types. If there were validity problems with the underlying measures, however, those would certainly affect the validity of the results of this further study.

The metric method is unbiased if it produces results that are consistent through repetitive analysis. *Id.* at 92. This is an area where the methodology of this study excels. Reliance on computer coding and quantitative analysis and the exclusion of judges with insufficient population sizes provides a stable, unbiased measurement methodology. There is some potential for bias in the decision as to the appropriate number of judicial types, but that is inevitable in the use of cluster analysis. The last validity concern is “to choose the [study design] with the minimum variance.” *Id.* at 95. Treating the judges studied in 2008 as the population instead of a sample of a larger body of cases diminishes the level of variance in the study. Further, the data were analyzed with frequentist statistics, which have no variance outside of a sampling structure.

their resultant judicial style type (including appointing President’s political party and ideological assessment based upon the Ideology Score):

FIGURE 12: NOTABLE JUDGES

Judge	Ideo.	Act.	Part.	Ind.	Overall Type
Danny J. Boggs	40.1	20.7	34.7	64.0	Trailblazing Conservative Republican
Frank H. Easterbrook	9.8	50.0	57.8	43.6	Incrementalist Moderate Republican
Michael W. McConnell	-3.2	29.4	45.1	58.5	Minimalist Moderate Republican
Richard A. Posner	18.7	49.0	44.9	36.4	Incrementalist Moderate Republican
Stephen R. Reinhardt	-20.4	61.2	24.6	72.4	Steadfast Liberal Democrat
Sonia Sotomayor	-17.3	39.3	57.2	48.1	Regulating Moderate Democrat
Sidney R. Thomas	-2.9	61.7	32.4	57.0	Error Correcting Moderate Democrat
J. Harvie Wilkinson III	7.0	49.8	37.5	39.0	Collegial Moderate Republican
Diane P. Wood	-28.0	48.9	53.5	26.5	Incrementalist Liberal Democrat

Among these judges, many have a good impressionistic fit with their typology categorization. For example, Judge Danny Boggs, embodying the traits of a Trailblazing conservative, has been at the forefront of many of the judicial battles on the Sixth Circuit.¹²¹ As would be expected from a Trailblazing judge, he has had many contentious battles with his

¹²¹ See David Hawpe, *Clearing the Air on Sixth Circuit Judges’ Junkets and Jousts*, COURIER-JOURNAL, Oct. 1, 2006, at H2; Adam Liptak, *Order Lacking on a Court: U.S. Appellate Judges in Cincinnati Spar in Public*, N.Y. TIMES, Aug. 12, 2003, at A10.

ideological opponents.¹²² Dissenting in a case concerning whether a stay of execution should be granted, Judge Boggs went so far as to write: “[A] majority of the active members of *this* court would grant a stay based on a hot dog menu.”¹²³

Judge Frank Easterbrook, an Incrementalist moderate Republican according to the typology, has long been recognized as a strong conservative voice on the Seventh Circuit.¹²⁴ However, Judge Easterbrook has also been an open opponent of judicial activism, and the designation as an Incrementalist seems appropriate.¹²⁵ Further, Judge Easterbrook’s reputation as a thoughtful intellectual is more consistent with a pragmatic, incremental approach than it is with a political warrior.¹²⁶

Judge Easterbrook’s conservative colleague, Judge Richard Posner, is certainly the most well-known court of appeals judge in America. The judicial typology categorizes Judge Posner in the same grouping as Judge Easterbrook, an Incrementalist moderate Republican. Despite their occasional publicized disagreements,¹²⁷ both Judges Posner and Easterbrook are known as prominent conservative judges.¹²⁸ The Incrementalist label might not fully capture Judge Posner’s idiosyncratic approach to judging, but it does seem similar to his self-described pragmatism, which rejects grand theories in favor of real-world reasonableness.¹²⁹

Judge Diane Wood is the third of the notable nine judges who is on the Seventh Circuit and is categorized as an Incrementalist liberal. That label coincides well with the media coverage at the time President Obama considered her for the Supreme Court.¹³⁰ There is little dispute that Judge Wood is liberal.¹³¹ Judge Wood has embodied Incrementalist traits in regularly bridging the gap with conservative judges on the Seventh Circuit and gaining respect as a thoughtful, careful jurist.¹³²

Judge Michael McConnell was a law professor, served as a federal judge on the Tenth Circuit during the study period, and is now a law school professor once again. The typology categorizes Judge McConnell as a

¹²² Hawpe, *supra* note 121; Liptak, *supra* note 121.

¹²³ *In re* John W. Byrd, Jr., 269 F.3d 578, 582 (6th Cir. 2001) (Boggs, J., dissenting).

¹²⁴ See James B. Stewart, *In Obama’s Victory, a Loss for Congress*, N.Y. TIMES, June 30, 2012, at B1.

¹²⁵ See Frank H. Easterbrook, *Do Liberals and Conservatives Differ in Judicial Activism?*, 73 U. COLO. L. REV. 1401, 1401, 1405, 1409–10 (2002).

¹²⁶ See *A Good Decision on Motor Voter*, WASH. POST, June 7, 1995, at A20.

¹²⁷ See, e.g., Ameet Sachdev, *Blagojevich Jury Names Create Rift Among Judges*, CHI. TRIB., July 16, 2010, at C26.

¹²⁸ See Peter Slevin, *Wood’s Critics Focus on Abortion*, WASH. POST, Apr. 19, 2010, at A5.

¹²⁹ RICHARD A. POSNER, LAW, PRAGMATISM, AND DEMOCRACY 59–60, 73 (2003).

¹³⁰ See, e.g., *Cross-Court Shot*, INVESTOR’S BUS. DAILY, Apr. 29, 2010, at A10.

¹³¹ See Dana Milbank, *Obama Picks a Nominee, Not a Fight*, WASH. POST, May 11, 2010, at A2.

¹³² See *Cross-Court Shot*, *supra* note 130.

Minimalist moderate. Judge McConnell has been a vocal supporter of a philosophy of judicial restraint, which is consistent with a Minimalist approach that more often defers to the judgments of district courts.¹³³ Although Judge McConnell has strong conservative credentials,¹³⁴ he has found himself criticized and praised by both the right and left, belying a moderate ideology.¹³⁵ It is unclear if his clerkship for Justice William Brennan is indicative of any liberal leanings,¹³⁶ but his criticism of the Supreme Court's decision in *Bush v. Gore*¹³⁷ is certainly notable in indicating a more moderate ideology.¹³⁸ Further, his nomination to the bench was strongly supported by liberal academics and liberal politicians such as Chuck Schumer who felt his intellectual honesty would make him less ideological on the bench.¹³⁹

Judge J. Harvie Wilkinson III of the Fourth Circuit is designated as a Collegial moderate. Judge Wilkinson has long championed collegiality among judges and perhaps best embodies the label Collegial.¹⁴⁰ Although some might be surprised at the "moderate" categorization, his rebuke of what he saw as conservative judicial activism in the Supreme Court's *District of Columbia v. Heller*¹⁴¹ opinion gives strong credence to the designation.¹⁴² Indeed, Judge Wilkinson published a law review article criticizing the Supreme Court's conservatives that illustrated the ideological distance in judging between Judge Wilkinson and the Supreme Court's conservatives.¹⁴³

Justice (then Judge) Sotomayor is categorized as a Regulating moderate. Because she was a Supreme Court nominee, the public record concerning her judging qualities is filled with hyperbolic vitriol¹⁴⁴ and

¹³³ David Newman & Emily Bazelon, *The Supreme Court Shortlist*, SLATE (July 1, 2005, 11:34 AM), http://www.slate.com/articles/news_and_politics/assessment/2005/06/the_supreme_court_shortlist.html.

¹³⁴ Alicia Caldwell & John Aloysius Farrell, *Appeals Judge Has Appeal—to Some*, DENVER POST, June 26, 2005, at 1A; Robert Gehrke, *High Court U. Scholar's Next Stop?*, SALT LAKE TRIB., Feb. 28, 2005, at A1.

¹³⁵ *Vacancy on the Supreme Court*, L.A. TIMES, July 2, 2005, at A27.

¹³⁶ Brian Mitchell, *Supreme Court Seat Back Up for Grabs as Miers Bows Out*, INVESTOR'S BUS. DAILY, Oct. 28, 2005, at A1.

¹³⁷ 531 U.S. 98 (2000).

¹³⁸ *Replacement: Who's Next?*, NAT'L J. (Oct. 28, 2005), <http://www.nationaljournal.com/member/hotline/replacement-who-39-s-next--20051028>.

¹³⁹ See *supra* note 134.

¹⁴⁰ J. Harvie Wilkinson III, *The Drawbacks of Growth in the Federal Judiciary*, 43 EMORY L.J. 1147, 1173–74 (1994).

¹⁴¹ 554 U.S. 570 (2008).

¹⁴² J. Harvie Wilkinson III, *Of Guns, Abortions, and the Unraveling Rule of Law*, 95 VA. L. REV. 253, 274–75, 322 (2009).

¹⁴³ See *id.*

¹⁴⁴ See, e.g., Tom LoBianco, *Lawyers Tag Sotomayor as "Terror on the Bench,"* WASH. TIMES, May 29–30, 2009, at A1.

praise.¹⁴⁵ Nonetheless, her background (having originally been nominated to the district court by President George H.W. Bush) and nonpartisan assessments of her record on the bench indicate moderation.¹⁴⁶ Her designation as a Regulating judge befits a judge who has at least some reasonable partisan applications of the law that might have provided the basis for nominating her to the Supreme Court.

Judge Stephen R. Reinhardt is categorized as a Steadfast liberal. Judge Reinhardt's classification fits perfectly with his public reputation as an iconoclast liberal voice on the Ninth Circuit.¹⁴⁷ His reputation as a liberal is not in doubt as notable commentators have speculated that he is the most liberal judge on the Ninth Circuit, which has a reputation for liberal decisions.¹⁴⁸ Judge Reinhardt is regularly described as a liberal activist by conservative critics, which aligns with both his categorization as Steadfast and as a liberal.¹⁴⁹ Indeed, the conservative Family Research Council awarded Judge Reinhardt its mocking Lifetime Achievement Court Jester Award due to his alleged liberal judicial activism.¹⁵⁰ Judge Reinhardt also finds himself at the center of Ninth Circuit controversies befitting the lightning rod nature of a Steadfast judge.¹⁵¹

Judge Sidney R. Thomas, another Ninth Circuit judge, was a relative unknown until some progressive groups championed him as a potential nominee to the Supreme Court.¹⁵² This recognition seems to be an odd fit with his type, Error Correcting moderate. However, many commentators noted that there was nothing particularly ideologically liberal in Judge Thomas's record other than a couple of timely high-profile decisions that caught the attention of progressive advocacy groups.¹⁵³ Overall, his reputation was of a moderate decisionmaker who built bridges between conservatives and liberals, which is consistent with his designation as a moderate.¹⁵⁴ What little information has been published regarding his treatment of district court decisions indicates that he is not afraid to be blunt and harsh in his rulings based upon his views of the specific facts in

¹⁴⁵ Robert Barnes, *Battle Lines Are Drawn on Sotomayor Nomination*, WASH. POST, May 28, 2009, at A1.

¹⁴⁶ See Savage, *supra* note 34.

¹⁴⁷ 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.

¹⁴⁸ See Adam Liptak, *A Slow Stroll to the Supreme Court*, N.Y. TIMES, Feb. 21, 2012, at A14.

¹⁴⁹ See Joyce Howard Price, *9th Circuit's Rulings Frequently Overturned*, WASH. TIMES, June 28, 2002, at A16.

¹⁵⁰ Greg Pierce, *Inside Politics: Court Jester Awards*, WASH. TIMES, June 24, 1998, at A8.

¹⁵¹ See Howard Mintz, *Prop. 8 Appeal Panel Has Mix of Ideologies*, SAN JOSE MERCURY NEWS, Nov. 30, 2010, at 1.

¹⁵² John Schwartz, *Long Shot for Court Has Reputation for Compassion and Persuasion*, N.Y. TIMES, May 6, 2010, at A17.

¹⁵³ *Id.*

¹⁵⁴ *Id.*

the case.¹⁵⁵ That assessment fits well with his categorization as an Error Corrector.

Overall, the categorizations represent fairly reasonable assessments of the notable judges based upon qualitative public impressions of them. There are certain designations with which some will surely disagree. Nonetheless, that is, in part, the value of the typology system. If the categories merely confirmed what was already known, it would not add as much to our collective understanding of decisionmaking. That the categorizations provide an acceptable level of agreement with qualitative evidence for the highest profile judges provides facial validity for the study.

IV. PREDICTING JUDICIAL STYLES

A logical question that follows from the identification of separate judging styles is whether any background or demographic characteristics of judges correlate with their styles. For example, a judge who attended a particular law school, served first as a district judge, or was from a certain circuit might exhibit different decisionmaking behavior in a statistically significant manner. Because the 178 judges spread across nine judicial styles (an average of approximately 19.9 judges per style) generated small population sizes, regression analyses were expected to find little or no evidence to reject the null hypothesis. And because the distribution among the categories was highly uneven, future research based upon larger populations of judges might identify more correlations. Nonetheless, multinomial logistic regressions demonstrated that some background traits are correlated with judicial styles.¹⁵⁶

A. Data for Background Factor Testing

In addition to the Case Database, I constructed a separate database (Judge Database) that included biographical and other data about individual judges. In the Judge Database, judges were coded for, among other variables: 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, and whether the judge took senior status during or before 2008. The Judge Database included data for all federal appellate judges that served on panels as well as district judges who had opinions

¹⁵⁵ *Id.*

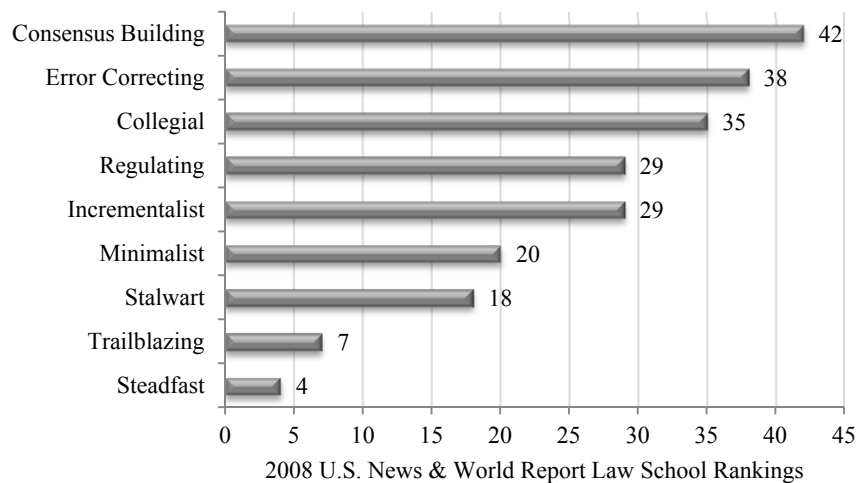
¹⁵⁶ Multinomial regression is used when an analyzed dependent variable contains multiple categories that are not ordered in any particular fashion (in this case, the judging styles). Logistic regression is used when an analyzed independent variable is categorical (e.g., circuit on which the judge sat). VANI K. BOROOAH, LOGIT AND PROBIT: ORDERED AND MULTINOMIAL MODELS (2002).

reviewed in the Case Database. In all, background trait information was accumulated for over 1500 federal judges. Data in the Judge Database were entirely human coded from publicly available information about the judges studied.

B. Law School Attended

There has been little or no empirical study of whether a judge's or lawyer's professional decisions are correlated with the law school that she attended. However, the data in this study show two significant correlations between a judge's law school and her judicial type. First, the ranking of the law school attended (based upon the 2008 U.S. News and World Report law school rankings) is correlated with which judicial type a judge belongs to. Figure 13 below indicates the average law school rank for judges in each category.

FIGURE 13: AVERAGE LAW SCHOOL RANKING BY JUDGE TYPE ($p = 0.0369$)

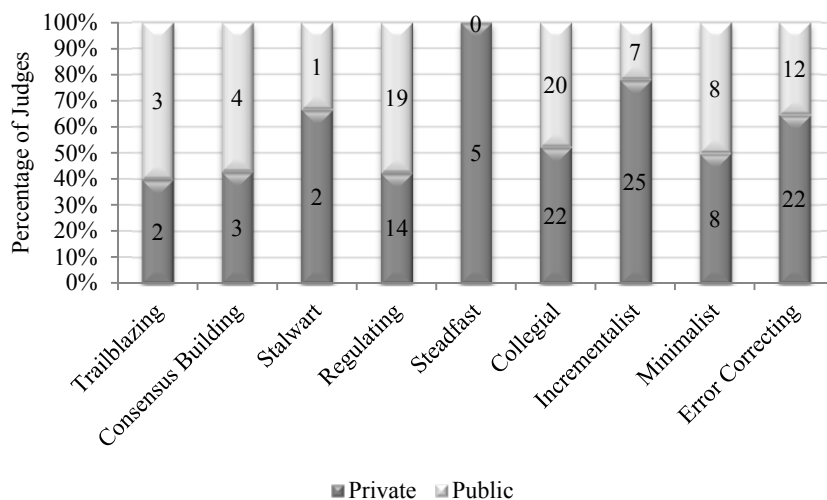


Perhaps most interesting is that the judicial styles most strongly associated with contentiousness (Steadfast, Trailblazing, and Stalwart), on average, attended law schools that were much higher ranked (meaning they had a lower numerical ranking). In contrast, the types that epitomized collegiality (Consensus Building and Collegial) attended law schools with the lowest average rankings. In total, judges of the most contentious types (Steadfast, Stalwart, and Trailblazing) attended law schools ranked nearly thirty places higher than those judges associated with collaborative styles (Collegial and Consensus Building). Although these results do not mean that a law graduate from Yale or Harvard is destined to be a Trailblazer or

Steadfast judge, the data support some connection between judicial style and law school attended.¹⁵⁷

Judicial types also correlate to whether the law school attended was public or private.¹⁵⁸ Figure 14 shows the breakdown of public and private law school graduates among the different judicial types.

FIGURE 14: PRIVATE VERSUS PUBLIC LAW SCHOOL ATTENDANCE AND JUDICIAL STYLE
($p = 0.0319$)



A few categories stand out as having unusual distributions of private and public law school graduates. All five Steadfast judges attended private schools. Over 78% of Incrementalist judges also graduated from private law schools. However, Trailblazing, Regulating, and Consensus Building judges more often graduated from public law schools.

Certainly, there is overlap between the correlations identified with law school ranking and the type of law school. For example, the average law school ranking for Steadfast judges was approximately fourth overall. Because private law schools dominate the top of the rankings, it is unsurprising that Steadfast judges all attended private schools. The basis for these correlations is unclear without further exploration, but the results support the proposition that where a judge attended law school is not just an insignificant biographical note in understanding their decisionmaking.

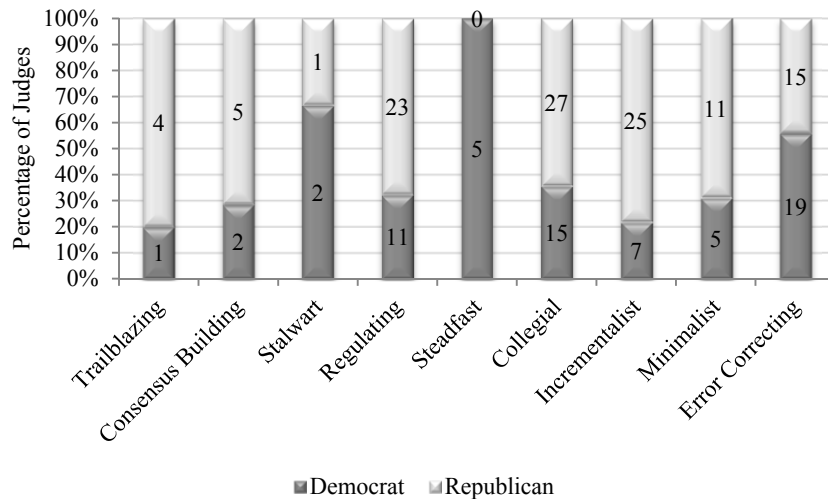
¹⁵⁷ $p = 0.0369$; pseudo $R^2 = 0.0243$.

¹⁵⁸ $p = 0.0319$; pseudo $R^2 = 0.0249$.

C. Appointing President's Political Party

Although ideology is an important component of the judicial types, only the absolute value of the Ideology Score was used (yielding the Ideological Score) to create the judicial style typology. This means that strong conservatives and liberals are often sorted into the same category. As a result, it does not necessarily follow that the party of the appointing President would correlate with the judicial type of the judge. Nonetheless, multinomial regression analysis of the data demonstrates such a correlation.¹⁵⁹ Figure 15 below shows the breakdown of which appointing President's party nominated the judges in each of the styles.

FIGURE 15: JUDGE TYPE BY APPOINTING PRESIDENT'S PARTY ($p = 0.0075$)



Certain groups, such as Steadfast judges, demonstrate an ideological makeup outside of the normal distribution. Steadfast judges' ranks are drawn exclusively from those appointed by Democratic Presidents. In contrast, over 78% of Incrementalist and 80% of Trailblazing judges were appointed by Republican Presidents. It is difficult to know if some of these trends would hold with a larger population of judges, but regression does show a statistically significant relationship between the types and judges' appointing party. Notably, perhaps due to population sizes in some subgroups, the specific appointing President is not correlated with the type of judge.¹⁶⁰

The domination of the Steadfast category might follow from the fact that appointees of Democratic Presidents are the minority in the courts of

¹⁵⁹ $p = 0.0075$; pseudo $R^2 = 0.0309$.

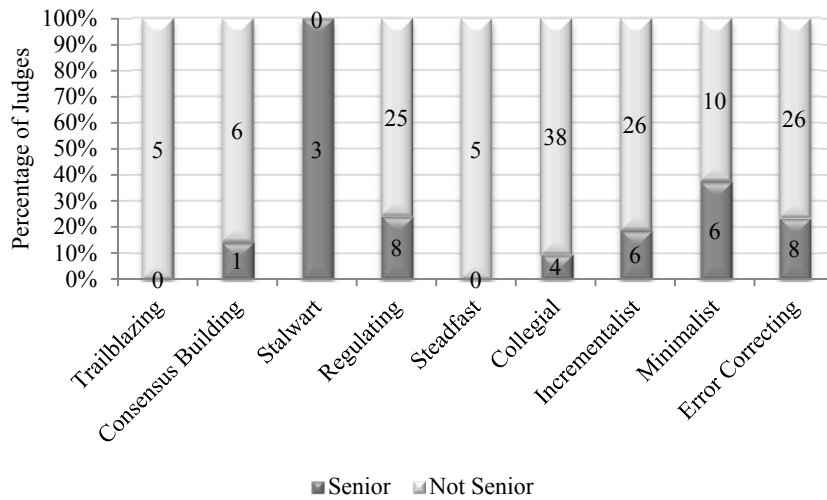
¹⁶⁰ $p = 0.6084$.

appeals.¹⁶¹ Such judges might find themselves outside the mainstream perspectives embodied in existing law shaped by a Republican-dominated judiciary and become Steadfast against such political worldviews. Similarly, a majority party would necessarily contain more Incrementalists and Trailblazers. Because the majority party could have shaped the law in a worldview largely consistent with that party, many judges would not meddle with reshaping appellate law and instead keep the district courts from straying too far outside of the dominant political perspective in the appellate world. However, the majority party will always have some members who want to push the law even further in a particular ideological direction. These judges naturally fall within the Trailblazing category.

D. Senior Status

A third background trait that was correlated with the judicial categorization system was whether the judge had taken senior status at any time in or prior to 2008.¹⁶² Figure 16 below shows the distribution of judges who had taken senior status among the nine judicial styles.

FIGURE 16: SENIOR STATUS AND JUDGING STYLE ($p = 0.0076$)



Self-selection offered one possible explanation for why certain judicial styles were overrepresented among judges who had taken senior status. In order for a senior judge to appear in this study, he must have decided not to retire and to hear enough cases to qualify. Because senior judges can

¹⁶¹ See *infra* App. C.

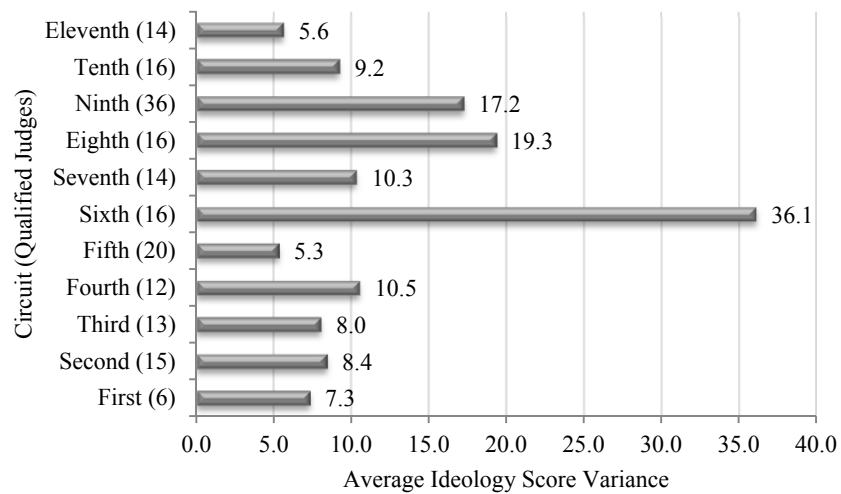
¹⁶² $p = 0.0076$; pseudo $R^2 = 0.0309$.

normally retire and receive the same pay as they would by continuing to work, many of those that stayed on the bench were clearly not motivated by financial gain.¹⁶³ Further, to hear a docket equivalent in size to active status judges was a decision made by the individual judge. It might follow, then, that the three Stalwart judges were understandably all senior status judges who were firmly committed to strong ideological and partisan positions.¹⁶⁴ However, any theoretically grounded explanation for the correlation in this area warrants further investigation.

E. Circuit

The last background trait associated with judge type was the circuit on which the judge was appointed.¹⁶⁵ Appendix C includes charts illustrating the distribution of judge types among each studied circuit. However, it is worth noting one prime example here. The Sixth Circuit, as illustrated in Figure 17 below, has been marked by a much higher level of ideological division than the other courts of appeals.¹⁶⁶

FIGURE 17: AVERAGE IDEOLOGICAL VARIANCE BY CIRCUIT ($p < 0.0001$)



As measured by the Ideology Scores of the 178 judges in the sample, an average Sixth Circuit judge had an Ideology Score that was 36.1 points

¹⁶³ Stephen J. Choi, G. Mitu Gulati & Eric A. Posner, *Are Judges Overpaid? A Skeptical Response to the Judicial Salary Debate*, 1 J. LEGAL ANALYSIS 47, 57–58 (2009).

¹⁶⁴ Among senior status judges, the date at which they took senior status was uncorrelated with judge type ($p = 0.0722$).

¹⁶⁵ $p < 0.0001$; pseudo $R^2 = 0.2338$.

¹⁶⁶ This chart was created using the 2008 Case Database, not the 2009 Testing Database.

from the mean for that circuit. The next most divided circuit was the Eighth, with an average variation of 19.3 points. Eight of the eleven circuits studied had average variations less than 11 points. Needless to say, the Sixth Circuit was an outlier among the circuits in terms of ideological divide. Such statistical findings were further supported by media and scholarly coverage of the opinions issued from that court.¹⁶⁷

Based upon such sharp ideological differences, it was expected that the Sixth Circuit would have a disproportionate amount of the judging types associated with high ideology and independence. Figure 18 below includes a list of all of the Sixth Circuit judges in the 178-judge sample and their identified type (in order of judge type).

FIGURE 18: SIXTH CIRCUIT JUDGING TYPES

Judge	Overall Type
Eric L. Clay	Trailblazing Liberal Democrat
Danny J. Boggs	Trailblazing Conservative Republican
Richard A. Griffin	Trailblazing Conservative Republican
John M. Rogers	Trailblazing Conservative Republican
David W. McKeague	Trailblazing Conservative Republican
Gilbert S. Merritt, Jr.	Stalwart Liberal Democrat
Jeffrey S. Sutton	Regulating Moderate Republican
Deborah L. Cook	Regulating Conservative Republican
Eugene E. Siler, Jr.	Regulating Conservative Republican
Alice M. Batchelder	Regulating Conservative Republican
Karen N. Moore	Steadfast Liberal Democrat
Ransey G. Cole, Jr.	Steadfast Moderate Democrat
Martha C. Daughtrey	Steadfast Moderate Democrat
Ronald L. Gilman	Steadfast Conservative Democrat
Julia S. Gibbons	Minimalist Moderate Republican
Boyce F. Martin, Jr.	Error Correcting Liberal Democrat

The Sixth Circuit had sixteen total judges with sufficient population sizes. Among those, there were five Trailblazing, one Stalwart, and four Steadfast judges. Thus, ten of the judges were of the types most prone to conflict. In the other ten circuits, there were only nineteen more judges of those three types. It is unclear if the judicial types in the Sixth Circuit are a partial product or cause of the ongoing situation there, but there is evidently a strong correlation exhibited within that Circuit.

¹⁶⁷ See, e.g., Dan Horn, *6th Circuit's Infighting Gets Personal*, CINCINNATI ENQUIRER, Oct. 16, 2008, at A1.

CONCLUSION

Judges are like any other group of people—they differ in their approaches at work, can be assessed in a multitude of ways, and do not perform in isolation. This study highlights the shortcomings of existing studies and models of judicial behavior that reject those basic ideas. The nine judge categories identified in this Article illustrate that our vocabulary and empirical understanding of judicial decisionmaking has grown stagnant. Instead of merely referring to and studying judges as “activist” or “conservative,” there is a need to recognize that such simple categorizations are woefully inadequate. There is strong empirical evidence that a complete account of judicial decisionmaking cannot rely on such simplistic assumptions. By limiting the scope of our inquiry and methods, we have missed tremendous opportunities to provide valuable quantitative information about some of the most important actors in our constitutional system.

This Article is not intended to provide final answers to any of the basic questions inherent in understanding and describing judicial decisionmaking. Indeed, perhaps the most prominent question that follows from this work has not been addressed at all: how does this (or any) typological approach compare to other theories that have been proffered? Because of the enormity of and difficulty with quantitatively answering that query, I decided to address that issue in future work.

Nonetheless, the proof of the concept of judicial typologies present in this work points to entirely new avenues for research. For example, does the presence of a Consensus Builder on a panel offset ideological and stylistic differences among copanelists to increase unanimity? Does changing the stylistic makeup of a circuit have a significant effect on how often that circuit reverses district court judgments or registers a dissent? Are certain judicial styles related to higher rates of a particular substantive outcome, such as a Steadfast judge being more apt to find for a criminal defendant? The typological approach described in this Article warrants a reimagining of empirical scholarship regarding judicial decisionmaking and opens lines of inquiry that were previously impossible.

Further, the typological approach provides a data-based outsider perspective on the differing ways judicial decisions are reached so that, as Judge Richard Posner commented, we do not rely on the metaphorical cats (judges) to tell us about feline psychology (judicial decisionmaking of individual judges).¹⁶⁸ Ultimately, the typology described herein provides valuable data-based information to scholars examining judicial behavior, politicians engaged in judicial nomination debates, and a public increasingly concerned about the role of judges in American society.

¹⁶⁸ POSNER, *supra* note 56, at 2 (“Biographies are more reliable than autobiographies, and cats are not consulted on the principles of feline psychology.”).

APPENDIX A

Common Adjustment Methodology

As noted in Part II.B, there were several common adjustments made to the raw scores to incorporate specific factors that might explain portions of the underlying variance measured by the scores. Four common adjustments were for a judge's circuit (applied to Ideology, Activism, and Partisanship Scores), super-panel effects (applied to Ideology, Activism, and Partisanship Scores), case issue mix (applied to all four measures), and common scaling (applied to all four measures).

The circuit adjustment relied on two basic premises: (1) a variety of differences between the circuits might explain variance in behavior and (2) the behavior of judges traveling between circuits would provide a means to calculate the amount of variance that was due to circuit differences. The first premise is likely noncontroversial. The adjustments made to the Activism and Partisanship Scores were minor because of limited differences in behavior observed by traveling judges. However, the second contention concerning senior status judges sitting on panels in different circuits warrants further explanation.

There were 26 senior status judges on panels that issued opinions in 2008. 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 were nearly 7500 data points derived from these judges. The study assumed that senior judges' traits would remain constant in any circuit where they sat. So, when Judge Pasco Bowman heard cases in the Eighth and Eleventh Circuits, the study assumed he would have the same activism, ideology, and partisanship traits. Thus, any change in his behavior between the two 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 of the 26 judges were aggregated and weighted according to how many votes each judge issued in a particular circuit. Doing that allowed an expected traveling judge value to be computed for each circuit using this formula¹⁶⁹:

$$\text{Expected Ideology Score} = (\text{Judge A votes in Circuit X} * \text{Judge A Ideology Score} + \text{Judge B votes in Circuit X} * \text{Judge B Ideology Score} + \text{Judge C votes in Circuit X} * \text{Judge C Ideology Score}) / (\text{Judge A votes in Circuit X} + \text{Judge B votes in Circuit X} + \text{Judge C votes in Circuit X})$$

The actual scores were then computed collectively (as one hypothetical traveling judge) for all of the traveling judges within a circuit.¹⁷⁰ The

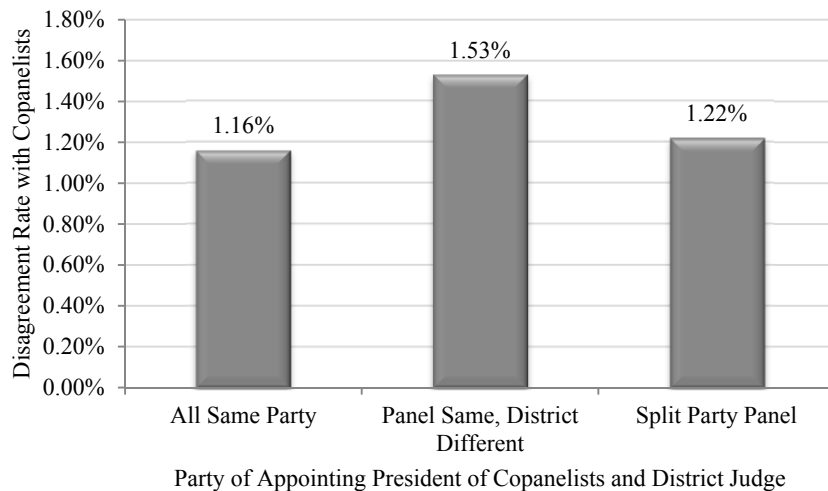
¹⁶⁹ Ideology is used in the example, but the principle is the same for each score.

¹⁷⁰ The collective treatment of traveling judges was necessary because individual judges often had too few votes in particular circuits. As a result, combining the scores was the only means to ensure that

difference between the expected and actual scores formed 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. Then each judge within the circuit would have the circuit adjustment applied based upon the number of votes he or she issued.¹⁷¹

Super-panel effects were the expected variance in voting caused by the political background of copanelists and district judges. Unlike the results in other panel effects studies, the integration of the district judge created new values that warranted different adjustments. The data suggested that the party of the appointing President on the super-panel affected individual judges' decisions to dissent and reverse. Figures 19 and 20 below indicate the magnitude of those differences based upon the results from the Case Database.

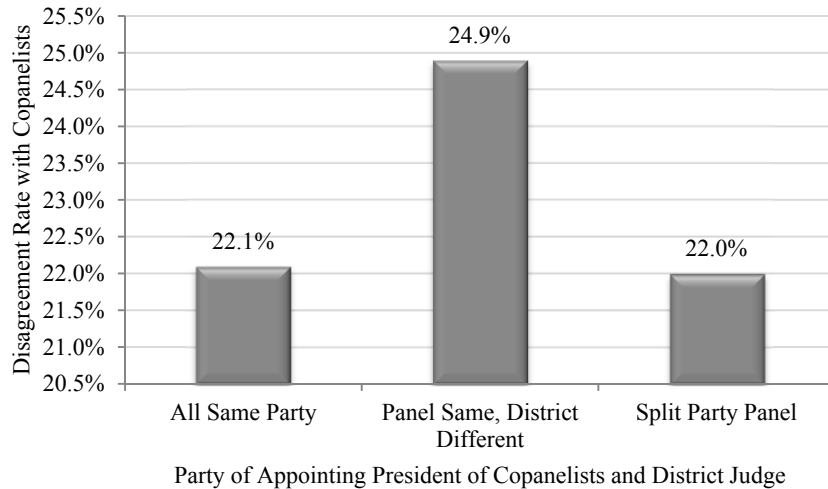
FIGURE 19: PANEL DISAGREEMENT RATE BY APPOINTING PRESIDENT'S PARTY OF COPANELISTS AND DISTRICT JUDGE



the majority of the traveling judge information was not discounted entirely. If more data were available, a more complex adjustment system could be utilized.

¹⁷¹ Prior versions of the Ideology and Activism Scores were computed using circuit adjustments that were made on a per-judge basis. See Yung, *Activism*, *supra* note 17; Yung, *Ideology*, *supra* note 17. The switch to a per-vote basis explains a substantial portion of the changes in the scores used in this study.

FIGURE 20: REVERSAL RATE BY APPOINTING PRESIDENT’S PARTY OF COPANELISTS AND DISTRICT JUDGE



Consequently, totals were tallied for each judge based upon the six possible political configurations of a judge’s two copanelists and the district court judge being reviewed. Those 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 Figures 19 and 20, it was determined how much variance in the judge scores could be explained by sitting on panels with the above six configurations. 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. However, the remaining twenty RR-R panels would pull the studied judge in a conservative direction and lower his reversal rate. As a result, the judge’s respective scores were adjusted based upon the expected magnitudes of those effects.

The courts of appeals studied here reviewed different sets of cases from different sets of district judges based upon geography.¹⁷² Within each

¹⁷² With the exception of the Federal Circuit and the Court of Appeals for the District of Columbia, which were not included in this study, the remaining circuits exclusively have geographic and not subject-matter based jurisdiction. See 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).

circuit, 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. Consequently, an adjustment was made based on differences in judges' dockets in order to decrease the degree to which any unobserved variables would affect the results.¹⁷³ 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. In contrast, the panel disagreement rate in civil cases was 98.5% and the reversal 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 had scores calculated separately. 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.

The last common adjustment was much simpler. Each score was adjusted to a similar scale. There were 178 studied judges who had at least 200 interactions with other judges. Scaling was done so that those 178 judges would define the extent of the scales. The Activism, Partisanship, and Independence Scores were scaled from 0 to 100 and the Ideology Score was scaled from -100 to 100. In the former case, this was done by moving the lowest observed raw score to the 0 and then multiplying all of the values by a constant needed for the highest score to reach 100. In the latter case (Ideology), the multiplier chosen was the value that would either move the highest score to 100 or lowest score to -100. There was no reason to force symmetry by making one judge have a score of -100 and another 100.

¹⁷³ 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, in the context of the Choi and Gulati study, the need to account for differences among circuit caseloads in creating empirical measures).

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APPENDIX B

Component Scores of Judges

The following table includes Ideological, Activism, Partisanship, and Independence Scores for judges with at least 200 interactions with other judges.

Judge	Cir.	N¹⁷⁴	Id.	Act.	Part.	Ind.
Ambro, Thomas L.	3	398	4.4	70.4	42.1	48.0
Anderson, Robert L., III	11	1007	0.4	47.0	43.1	35.4
Anderson, Stephen H.	10	332	7.0	39.8	67.5	19.7
Baldock, Bobby R.	10	352	5.1	44.8	45.0	53.9
Barkett, Rosemary	11	949	2.5	56.5	45.4	41.7
Barksdale, Rhesa H.	5	678	20.4	54.1	58.1	31.7
Barry, Maryanne T.	3	387	0.5	73.2	25.7	31.1
Batchelder, Alice M.	6	305	54.9	63.7	53.5	66.7
Bauer, William J.	7	389	8.9	67.2	47.5	47.0
Bea, Carlos T.	9	393	9.5	93.7	76.6	49.8
Beam, Clarence A.	8	276	36.3	47.4	50.6	56.2
Beezer, Robert R.	9	219	6.3	46.2	35.2	28.5
Benavides, Fortunato P.	5	717	1.6	65.9	41.2	26.9
Benton, William D.	8	659	5.5	33.7	48.5	46.8
Berzon, Marsha S.	9	370	47.7	33.2	24.1	21.2
Birch, Stanley F., Jr.	11	1005	9.6	36.9	45.0	36.0
Black, Susan H.	11	1044	0.4	53.5	37.4	33.6
Boggs, Danny J.	6	235	40.1	20.7	34.7	64.0
Boudin, Michael	1	233	1.7	53.0	61.7	53.8
Bowman, Pasco M., II	8	201	15.8	86.8	49.5	25.2
Bright, Myron H.	8	217	72.9	100.0	69.1	0.0
Briscoe, Mary B.	10	501	10.8	26.4	40.2	67.6
Brorby, Wade	10	230	2.2	42.1	59.0	23.2
Bybee, Jay S.	9	357	2.9	61.8	74.7	55.8

¹⁷⁴ N refers to the number of interactions the listed judge had in 2008 with other judges (district and appellate) in the dataset.

Bye, Kermit E.	8	559	3.8	56.2	43.2	46.2
Cabranes, Jose A.	2	474	6.6	62.2	29.6	24.4
Calabresi, Guido	2	267	14.8	34.4	51.7	26.9
Callahan, Consuelo M.	9	372	4.3	65.2	36.7	41.9
Canby, William C., Jr.	9	324	13.3	67.6	0.0	50.5
Carnes, Edward E.	11	1028	2.5	55.6	48.1	34.4
Chagares, Michael A.	3	363	8.4	55.5	66.7	36.7
Clay, Eric L.	6	379	30.4	36.2	20.1	65.9
Clement, Edith B.	5	693	0.0	52.5	57.9	37.2
Clifton, Richard R.	9	306	10.3	66.9	65.3	47.1
Cole, Ransey G., Jr.	6	419	13.0	62.4	46.8	75.7
Colloton, Steven M.	8	591	2.6	63.3	42.6	54.9
Cook, Deborah L.	6	266	34.5	60.2	65.2	60.7
Cudahy, Richard D.	7	221	13.8	69.8	69.6	54.7
Daughtrey, Martha C.	6	313	7.0	53.4	39.1	80.0
Davis, W. Eugene	5	672	6.2	37.8	51.0	37.6
DeMoss, Harold R., Jr.	5	267	5.1	44.5	33.6	65.3
Dennis, James L.	5	702	0.4	48.2	44.6	46.2
Dubina, Joel F.	11	1020	5.2	54.2	55.8	33.0
Duncan, Allyson K.	4	633	0.4	53.7	26.4	51.4
Easterbrook, Frank H.	7	369	9.8	50.0	57.8	43.6
Ebel, David M.	10	381	2.9	27.1	30.3	77.3
Edmondson, James L.	11	384	9.6	40.8	53.7	53.4
Elrod, Jennifer W.	5	534	1.1	68.3	43.9	33.0
Evans, Terence T.	7	483	3.3	72.6	43.8	53.1
Fay, Peter T.	11	408	11.0	38.7	49.1	38.0
Fernandez, Ferdinand F.	9	246	42.3	86.4	100.0	39.5
Fisher, D. Michael	3	448	9.0	61.0	81.1	42.5
Fisher, Raymond C.	9	426	12.5	31.1	50.6	55.9
Flaum, Joel M.	7	480	7.3	47.0	70.7	31.5
Fletcher, Betty B.	9	416	8.6	46.3	64.9	67.9
Fletcher, William A.	9	323	22.8	22.6	30.9	29.7

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Fuentes, Julio M.	3	350	7.3	73.3	39.3	32.9
Garza, Emilio M.	5	672	16.9	43.1	34.2	39.1
Gibbons, Julia S.	6	363	3.2	35.5	33.9	62.3
Gibson, John R.	8	344	42.6	49.0	31.1	14.0
Gilman, Ronald L.	6	411	23.9	77.1	45.0	79.9
Gorsuch, Neil M.	10	430	3.9	45.6	56.2	72.3
Gould, Ronald M.	9	395	24.8	57.7	54.0	56.7
Graber, Susan	9	438	44.0	48.7	35.0	35.2
Gregory, Roger L.	4	663	10.7	51.9	49.8	65.6
Griffin, Richard A.	6	425	56.5	36.8	30.6	59.6
Gruender, Raymond W.	8	598	46.9	41.4	50.9	32.1
Hall, Cynthia H.	9	225	5.9	58.5	59.3	30.7
Hall, Peter W.	2	451	9.5	36.1	28.3	20.9
Hamilton, Clyde H.	4	495	0.3	70.5	46.2	46.7
Hansen, David R.	8	213	6.6	33.0	28.8	61.7
Hardiman, Thomas M.	3	359	22.6	61.6	65.2	33.2
Hartz, Harris L.	10	454	11.6	23.2	36.5	69.2
Hawkins, Michael D.	9	369	22.1	42.9	49.7	31.4
Haynes, Catharina	5	339	2.8	46.2	17.6	35.4
Higginbotham, Patrick E.	5	615	4.1	55.0	36.6	32.0
Holmes, Jerome A.	10	453	6.7	38.9	35.4	32.3
Howard, Jeffrey R.	1	340	1.2	64.6	76.5	46.2
Hull, Frank M.	11	1053	0.5	45.5	38.3	30.3
Ikuta, Sandra S.	9	350	28.9	53.7	60.7	44.0
Jacobs, Dennis G.	2	336	6.3	53.0	39.5	43.5
Jolly, E. Grady	5	689	10.4	47.6	35.1	43.5
Jones, Edith H.	5	437	15.6	51.0	21.3	51.5
Jordan, Kent A.	3	432	2.2	47.4	60.1	52.1
Kanne, Michael S.	7	420	4.0	48.3	51.4	41.5
Katzmann, Robert A.	2	354	4.7	52.9	28.0	36.9
Kelly, Paul J., Jr.	10	492	4.8	58.2	58.7	59.9
King, Carolyn D.	5	737	4.8	43.3	45.7	47.0

King, Robert B.	4	699	2.5	54.9	37.6	36.2
Kleinfeld, Andrew J.	9	285	25.9	65.2	69.6	15.5
Kravitch, Phyllis A.	11	384	6.3	36.5	47.9	37.5
Leavy, Edward	9	264	3.7	64.0	41.3	32.2
Lipez, Kermit V.	1	300	2.5	78.7	20.4	51.0
Livingston, Debra A.	2	419	6.7	52.3	46.2	34.0
Loken, James B.	8	360	0.4	48.3	45.8	58.6
Lucero, Carlos F.	10	444	8.0	21.7	40.1	60.2
Lynch, Sandra L.	1	353	14.8	60.3	18.2	51.7
Manion, Daniel A.	7	444	4.4	46.4	41.5	56.6
Marcus, Stanley	11	1026	8.7	41.2	46.5	29.2
Martin, Boyce F., Jr.	6	334	24.3	75.2	13.0	37.7
McConnell, Michael W.	10	442	3.2	29.4	45.1	58.5
McKay, Monroe G.	10	322	6.0	39.1	1.8	36.6
McKeague, David W.	6	383	72.3	36.3	53.4	52.2
McKee, Theodore A.	3	331	10.4	71.0	38.9	40.9
McKeown, M. Margaret	9	359	11.6	21.6	40.4	45.2
Melloy, Michael J.	8	445	16.1	73.2	57.7	49.4
Merritt, Gilbert S., Jr.	6	212	100.0	78.6	45.5	61.4
Michael, M. Blane	4	650	36.0	49.9	44.6	25.0
Miner, Roger J.	2	219	11.5	73.5	45.4	28.6
Moore, Karen N.	6	433	28.1	66.0	31.5	100.0
Motz, Diana G.	4	570	3.0	60.0	48.2	42.8
Murphy, Diana E.	8	653	19.9	55.4	49.1	42.5
Murphy, Michael R.	10	467	9.6	56.6	14.2	56.9
Nelson, Thomas G.	9	249	9.0	37.7	70.6	54.1
Niemeyer, Paul V.	4	675	21.4	44.9	43.4	36.6
O'Brien, Terrence L.	10	338	46.5	28.5	40.0	20.9
O'Scannlain, Diarmuid F.	9	393	45.2	38.2	55.1	33.4
Owen, Priscilla R.	5	668	3.1	35.8	45.9	42.3
Paez, Richard A.	9	392	21.3	70.0	46.8	51.2
Parker, Barrington D., Jr.	2	382	3.7	33.4	30.1	34.2

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Pooler, Rosemary S.	2	363	17.6	47.9	45.2	22.5
Posner, Richard A.	7	380	18.7	49.0	44.9	36.4
Prado, Edward C.	5	738	2.3	48.9	44.4	30.2
Pregerson, Harry	9	260	16.7	86.1	11.6	49.4
Pryor, William H., Jr.	11	992	4.6	53.2	47.3	36.3
Raggi, Reena	2	444	2.1	34.9	46.4	30.8
Rawlinson, Johnnie B.	9	281	5.0	81.4	77.6	84.5
Reavley, Thomas M.	5	512	3.5	42.9	28.2	54.9
Reinhardt, Stephen R.	9	239	20.4	61.2	24.6	72.4
Rendell, Marjorie O.	3	324	13.6	88.8	42.0	61.0
Riley, William J.	8	579	41.8	37.7	28.9	5.1
Ripple, Kenneth F.	7	416	3.6	55.3	55.6	52.8
Rogers, John M.	6	370	67.6	35.5	47.1	65.1
Roth, Jane R.	3	393	4.9	39.0	52.8	37.0
Rovner, Ilana D.	7	429	6.6	57.9	46.2	51.9
Rymer, Pamela A.	9	312	26.9	82.2	35.3	56.0
Sack, Robert D.	2	377	2.9	32.1	56.1	29.0
Schroeder, Mary M.	9	315	10.2	55.7	61.1	51.0
Scirica, Anthony J.	3	293	2.0	57.0	31.6	46.2
Selya, Bruce M.	1	254	9.5	71.7	63.0	52.2
Shedd, Dennis W.	4	633	2.9	49.6	42.8	51.1
Shepherd, Bobby E.	8	605	5.5	49.0	36.5	55.5
Siler, Eugene E., Jr.	6	358	39.6	59.3	56.8	64.2
Silverman, Barry G.	9	354	15.7	52.6	29.3	24.0
Sloviter, Dolores K.	3	354	4.3	66.6	36.7	51.0
Smith, David B.	3	358	19.8	52.4	29.3	29.1
Smith, Jerry E.	5	684	6.6	45.8	26.5	50.8
Smith, Lavenski R.	8	618	1.1	74.4	60.2	27.6
Smith, Milan D., Jr.	9	345	26.3	53.9	45.5	26.5
Smith, Norman R.	9	330	7.5	45.7	55.5	42.3
Sotomayor, Sonia	2	360	17.3	39.3	57.2	48.1
Southwick, Leslie	5	660	1.6	30.7	45.3	39.1

Stewart, Carl E.	5	764	7.6	36.1	36.8	38.0
Straub, Chester J.	2	296	8.7	18.6	32.3	32.2
Sutton, Jeffrey S.	6	305	1.8	60.4	67.8	65.1
Sykes, Diane S.	7	389	17.4	23.5	35.2	46.6
Tacha, Deane R.	10	388	22.4	24.8	50.9	41.8
Tallman, Richard C.	9	279	33.0	63.2	12.6	27.2
Tashima, A. Wallace	9	435	5.9	79.9	23.2	44.5
Thomas, Sidney R.	9	536	2.9	61.7	32.4	57.0
Tinder, John D.	7	263	8.2	14.1	44.7	27.5
Tjoflat, Gerald B.	11	885	23.5	54.8	30.0	23.6
Torruella, Juan R.	1	345	22.2	46.5	43.2	47.4
Traxler, William B., Jr.	4	714	9.3	57.9	46.1	36.3
Trott, Stephen S.	9	204	9.7	12.0	55.7	44.5
Tymkovich, Timothy M.	10	531	9.3	49.0	47.5	51.1
Walker, John M., Jr.	2	211	13.0	0.0	40.4	37.9
Wallace, J. Clifford	9	291	8.7	39.1	51.2	50.4
Wardlaw, Kim M.	9	378	17.5	36.8	71.8	46.2
Wesley, Richard C.	2	427	6.8	42.4	33.1	33.8
Wiener, Jacques L., Jr.	5	738	13.5	36.5	43.5	35.0
Wilkins, William W.	4	279	8.3	85.8	25.0	21.8
Wilkinson, J. Harvie, III	4	617	7.0	49.8	37.5	39.0
Williams, Ann C.	7	384	12.5	60.8	35.2	38.5
Williams, Karen J.	4	221	26.9	46.4	79.3	59.3
Wilson, Charles R.	11	1111	0.7	49.0	47.1	40.7
Wollman, Roger L.	8	692	13.7	48.8	38.2	42.8
Wood, Diane P.	7	420	28.0	48.9	53.5	26.5

APPENDIX C

Types for All Studied Judges

The following table includes judicial types exhibited in the period and cases studied for judges with at least 200 interactions with other judges. For the type, the political party listed is based upon the political party of the nominating President.

Judge	Cir.	N ¹⁷⁵	Judging Style Type
Ambro, Thomas L.	3	398	Error Correcting Moderate Democrat
Anderson, Robert L., III	11	1007	Collegial Moderate Democrat
Anderson, Stephen H.	10	332	Incrementalist Moderate Republican
Baldock, Bobby R.	10	352	Collegial Moderate Republican
Barkett, Rosemary	11	949	Collegial Moderate Democrat
Barksdale, Rhesa H.	5	678	Incrementalist Conservative Republican
Barry, Maryanne T.	3	387	Error Correcting Moderate Democrat
Batchelder, Alice M.	6	305	Regulating Conservative Republican
Bauer, William J.	7	389	Error Correcting Moderate Republican
Bea, Carlos T.	9	393	Regulating Moderate Republican
Beam, Clarence A.	8	276	Regulating Conservative Republican
Beezer, Robert R.	9	219	Collegial Moderate Republican
Benavides, Fortunato P.	5	717	Error Correcting Moderate Democrat
Benton, William D.	8	659	Incrementalist Moderate Republican
Berzon, Marsha S.	9	370	Consensus Building Liberal Democrat
Birch, Stanley F., Jr.	11	1005	Incrementalist Moderate Republican
Black, Susan H.	11	1044	Collegial Moderate Republican
Boggs, Danny J.	6	235	Trailblazing Conservative Republican
Boudin, Michael	1	233	Regulating Moderate Republican
Bowman, Pasco M., II	8	201	Error Correcting Moderate Republican
Bright, Myron H.	8	217	Stalwart Liberal Democrat
Briscoe, Mary B.	10	501	Minimalist Moderate Democrat
Brorby, Wade	10	230	Incrementalist Moderate Republican
Bybee, Jay S.	9	357	Regulating Moderate Republican

¹⁷⁵ N refers to the number of interactions the listed judge had with other judges (district and appellate) in the dataset.

Bye, Kermit E.	8	559	Collegial Moderate Democrat
Cabranes, Jose A.	2	474	Error Correcting Moderate Democrat
Calabresi, Guido	2	267	Incrementalist Moderate Democrat
Callahan, Consuelo M.	9	372	Error Correcting Moderate Republican
Canby, William C., Jr.	9	324	Error Correcting Moderate Democrat
Carnes, Edward E.	11	1028	Collegial Moderate Republican
Chagares, Michael A.	3	363	Incrementalist Moderate Republican
Clay, Eric L.	6	379	Trailblazing Liberal Democrat
Clement, Edith B.	5	693	Incrementalist Moderate Republican
Clifton, Richard R.	9	306	Regulating Moderate Republican
Cole, Ransey G., Jr.	6	419	Steadfast Moderate Democrat
Colloton, Steven M.	8	591	Error Correcting Moderate Republican
Cook, Deborah L.	6	266	Regulating Conservative Republican
Cudahy, Richard D.	7	221	Regulating Moderate Democrat
Daughtrey, Martha C.	6	313	Steadfast Moderate Democrat
Davis, W. Eugene	5	672	Incrementalist Moderate Republican
DeMoss, Harold R., Jr.	5	267	Minimalist Moderate Republican
Dennis, James L.	5	702	Collegial Moderate Democrat
Dubina, Joel F.	11	1020	Incrementalist Moderate Republican
Duncan, Allyson K.	4	633	Error Correcting Moderate Republican
Easterbrook, Frank H.	7	369	Incrementalist Moderate Republican
Ebel, David M.	10	381	Minimalist Moderate Republican
Edmondson, James L.	11	384	Regulating Moderate Republican
Elrod, Jennifer W.	5	534	Error Correcting Moderate Republican
Evans, Terence T.	7	483	Error Correcting Moderate Democrat
Fay, Peter T.	11	408	Incrementalist Moderate Republican
Fernandez, Ferdinand F.	9	246	Stalwart Conservative Republican
Fisher, D. Michael	3	448	Regulating Moderate Republican
Fisher, Raymond C.	9	426	Regulating Moderate Democrat
Flaum, Joel M.	7	480	Incrementalist Moderate Republican
Fletcher, Betty B.	9	416	Regulating Moderate Democrat
Fletcher, William A.	9	323	Minimalist Liberal Democrat

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Fuentes, Julio M.	3	350	Error Correcting Moderate Democrat
Garza, Emilio M.	5	672	Collegial Moderate Republican
Gibbons, Julia S.	6	363	Minimalist Moderate Republican
Gibson, John R.	8	344	Consensus Building Conservative Republican
Gilman, Ronald L.	6	411	Steadfast Conservative Democrat
Gorsuch, Neil M.	10	430	Regulating Moderate Republican
Gould, Ronald M.	9	395	Regulating Liberal Democrat
Graber, Susan	9	438	Consensus Building Liberal Democrat
Gregory, Roger L.	4	663	Regulating Moderate Democrat
Griffin, Richard A.	6	425	Trailblazing Conservative Republican
Gruender, Raymond W.	8	598	Consensus Building Conservative Republican
Hall, Cynthia H.	9	225	Incrementalist Moderate Republican
Hall, Peter W.	2	451	Collegial Moderate Republican
Hamilton, Clyde H.	4	495	Error Correcting Moderate Republican
Hansen, David R.	8	213	Minimalist Moderate Republican
Hardiman, Thomas M.	3	359	Incrementalist Conservative Republican
Hartz, Harris L.	10	454	Minimalist Moderate Republican
Hawkins, Michael D.	9	369	Incrementalist Liberal Democrat
Haynes, Catharina	5	339	Collegial Moderate Republican
Higginbotham, Patrick E.	5	615	Collegial Moderate Republican
Holmes, Jerome A.	10	453	Collegial Moderate Republican
Howard, Jeffrey R.	1	340	Regulating Moderate Republican
Hull, Frank M.	11	1053	Collegial Moderate Democrat
Ikuta, Sandra S.	9	350	Regulating Conservative Republican
Jacobs, Dennis G.	2	336	Collegial Moderate Republican
Jolly, E. Grady	5	689	Collegial Moderate Republican
Jones, Edith H.	5	437	Error Correcting Moderate Republican
Jordan, Kent A.	3	432	Regulating Moderate Republican
Kanne, Michael S.	7	420	Collegial Moderate Republican
Katzmann, Robert A.	2	354	Collegial Moderate Democrat
Kelly, Paul J., Jr.	10	492	Regulating Moderate Republican

King, Carolyn D.	5	737	Collegial Moderate Democrat
King, Robert B.	4	699	Collegial Moderate Democrat
Kleinfeld, Andrew J.	9	285	Incrementalist Conservative Republican
Kravitch, Phyllis A.	11	384	Incrementalist Moderate Democrat
Leavy, Edward	9	264	Error Correcting Moderate Republican
Lipez, Kermit V.	1	300	Error Correcting Moderate Democrat
Livingston, Debra A.	2	419	Collegial Moderate Republican
Loken, James B.	8	360	Collegial Moderate Republican
Lucero, Carlos F.	10	444	Minimalist Moderate Democrat
Lynch, Sandra L.	1	353	Error Correcting Moderate Democrat
Manion, Daniel A.	7	444	Collegial Moderate Republican
Marcus, Stanley	11	1026	Incrementalist Moderate Republican
Martin, Boyce F., Jr.	6	334	Error Correcting Liberal Democrat
McConnell, Michael W.	10	442	Minimalist Moderate Republican
McKay, Monroe G.	10	322	Collegial Moderate Democrat
McKeague, David W.	6	383	Trailblazing Conservative Republican
McKee, Theodore A.	3	331	Error Correcting Moderate Democrat
McKeown, M. Margaret	9	359	Minimalist Moderate Democrat
Melloy, Michael J.	8	445	Regulating Moderate Republican
Merritt, Gilbert S., Jr.	6	212	Stalwart Liberal Democrat
Michael, M. Blane	4	650	Incrementalist Liberal Democrat
Miner, Roger J.	2	219	Error Correcting Moderate Republican
Moore, Karen N.	6	433	Steadfast Liberal Democrat
Motz, Diana G.	4	570	Collegial Moderate Democrat
Murphy, Diana E.	8	653	Regulating Moderate Democrat
Murphy, Michael R.	10	467	Error Correcting Moderate Democrat
Nelson, Thomas G.	9	249	Regulating Moderate Republican
Niemeyer, Paul V.	4	675	Incrementalist Conservative Republican
O'Brien, Terrence L.	10	338	Consensus Building Conservative Republican
O'Scannlain, Diarmuid F.	9	393	Consensus Building Conservative Republican
Owen, Priscilla R.	5	668	Incrementalist Moderate Republican

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Paez, Richard A.	9	392	Regulating Liberal Democrat
Parker, Barrington D., Jr.	2	382	Collegial Moderate Republican
Pooler, Rosemary S.	2	363	Incrementalist Moderate Democrat
Posner, Richard A.	7	380	Incrementalist Moderate Republican
Prado, Edward C.	5	738	Collegial Moderate Republican
Pregerson, Harry	9	260	Error Correcting Moderate Democrat
Pryor, William H., Jr.	11	992	Collegial Moderate Republican
Raggi, Reena	2	444	Incrementalist Moderate Republican
Rawlinson, Johnnie B.	9	281	Regulating Moderate Democrat
Reavley, Thomas M.	5	512	Error Correcting Moderate Democrat
Reinhardt, Stephen R.	9	239	Steadfast Liberal Democrat
Rendell, Marjorie O.	3	324	Error Correcting Moderate Democrat
Riley, William J.	8	579	Consensus Building Conservative Republican
Ripple, Kenneth F.	7	416	Regulating Moderate Republican
Rogers, John M.	6	370	Trailblazing Conservative Republican
Roth, Jane R.	3	393	Incrementalist Moderate Republican
Rovner, Ilana D.	7	429	Collegial Moderate Republican
Rymer, Pamela A.	9	312	Error Correcting Conservative Republican
Sack, Robert D.	2	377	Incrementalist Moderate Democrat
Schroeder, Mary M.	9	315	Regulating Moderate Democrat
Scirica, Anthony J.	3	293	Error Correcting Moderate Republican
Selya, Bruce M.	1	254	Regulating Moderate Republican
Shedd, Dennis W.	4	633	Collegial Moderate Republican
Shepherd, Bobby E.	8	605	Collegial Moderate Republican
Siler, Eugene E., Jr.	6	358	Regulating Conservative Republican
Silverman, Barry G.	9	354	Collegial Moderate Democrat
Sloviter, Dolores K.	3	354	Error Correcting Moderate Democrat
Smith, David B.	3	358	Collegial Moderate Republican
Smith, Jerry E.	5	684	Error Correcting Moderate Republican
Smith, Lavenski R.	8	618	Error Correcting Moderate Republican
Smith, Milan D., Jr.	9	345	Incrementalist Liberal Republican

Smith, Norman R.	9	330	Incrementalist Moderate Republican
Sotomayor, Sonia	2	360	Regulating Moderate Democrat
Southwick, Leslie	5	660	Incrementalist Moderate Republican
Stewart, Carl E.	5	764	Collegial Moderate Democrat
Straub, Chester J.	2	296	Minimalist Moderate Democrat
Sutton, Jeffrey S.	6	305	Regulating Moderate Republican
Sykes, Diane S.	7	389	Minimalist Moderate Republican
Tacha, Deanell R.	10	388	Minimalist Conservative Republican
Tallman, Richard C.	9	279	Collegial Conservative Democrat ¹⁷⁶
Tashima, A. Wallace	9	435	Error Correcting Moderate Democrat
Thomas, Sidney R.	9	536	Error Correcting Moderate Democrat
Tinder, John D.	7	263	Minimalist Moderate Republican
Tjoflat, Gerald B.	11	885	Collegial Conservative Republican
Torruella, Juan R.	1	345	Regulating Liberal Republican
Traxler, William B., Jr.	4	714	Collegial Moderate Democrat
Trott, Stephen S.	9	204	Minimalist Moderate Republican
Tymkovich, Timothy M.	10	531	Collegial Moderate Republican
Walker, John M., Jr.	2	211	Minimalist Moderate Republican
Wallace, J. Clifford	9	291	Regulating Moderate Republican
Wardlaw, Kim M.	9	378	Regulating Moderate Democrat
Wesley, Richard C.	2	427	Collegial Moderate Republican
Wiener, Jacques L., Jr.	5	738	Incrementalist Moderate Republican
Wilkins, William W.	4	279	Error Correcting Moderate Republican
Wilkinson, J. Harvie, III	4	617	Collegial Moderate Republican
Williams, Ann C.	7	384	Error Correcting Moderate Democrat
Williams, Karen J.	4	221	Regulating Conservative Republican
Wilson, Charles R.	11	1111	Collegial Moderate Democrat
Wollman, Roger L.	8	692	Collegial Moderate Republican

¹⁷⁶ Judge Tallman was actually known as a Republican when appointed by President Clinton. Henry Weinstein, *The Recall Campaign; Court to Reconsider Delay of Recall Vote*, L.A. TIMES, Sept. 20, 2003, at A1. His nomination was part of a package of judges brokered between key Senators in order to get several Democratic judges confirmed. Nonetheless, for consistency in application of the terminology, he is referred to as a “Democrat” in the table.

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Wood, Diane P.	7	420	Incrementalist Liberal Democrat
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