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AN EMPIRICAL INVESTIGATION INTO APPELLATE STRUCTURE AND THE PERCEIVED QUALITY OF APPELLATE REVIEW

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Commentators have theorized that several factors may improve the process, and thus perhaps the accuracy, of appellate review: (1) review by a panel of judges, (2) subject-matter expertise in the area of the appeal, (3) other lawfinding ability, (4) adherence to traditional notions of appellate hierarchy, and (5) the judicial independence of appellate judges. The considerable discussion that has expounded upon these theories has occurred in a vacuum of abstract generalization. This Article adds a new dimension by presenting the results of an empirical study of bankruptcy appellate opinions issued over a three-year period. The federal bankruptcy appellate structure provides certain litigants the choice to appeal, in the first instance, to one of two distinct appellate tribunals—district courts and bankruptcy appellate panels (BAPs)—whose structural features relating to the theorized qualities of appellate review differ. As BAPs appear to have more of the features identified as improving the quality of appellate review, the study tests the theory through various hypotheses that focus on the perception held by other federal courts within the bankruptcy appellate structure of the quality of appellate review provided by these distinct appellate tribunals. The data show that, as measured by (1) the subsequent disposition rendered by courts of appeals and (2) the citation practices of other federal courts to the appellate opinions issued by BAPs and district courts, BAPs have been perceived to provide a better quality of appellate review. Having unearthed some evidence that supports the theoretical notions underlying the quality of appellate review, this Article concludes that commentators and policymakers ought to be encouraged to explore further, in a more detailed manner, the question of how appellate structure can be designed to produce better results.

INTRODUCTION

In this Article, we evaluate empirically the relative quality of appellate review. Federal bankruptcy appellate structure provides an excellent setting for such a study since it offers litigants two paths to appeal. First, after the bankruptcy judge issues a ruling, litigants may have the district court—in the person of a single district judge—review that ruling. Alternatively, the

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parties may agree (in circuits that have them) to have the ruling reviewed by a panel of bankruptcy judges—a "bankruptcy appellate panel" or "BAP." Further appeal in both cases lies with the proper federal circuit court of appeals.

We collected data on affirmance rates in and citation rates to appellate bankruptcy opinions. Our analyses generally support the notion that BAP decisions in our study are perceived to be of greater quality than are district court decisions. First, we find some support for the proposition that courts of appeals are more likely to uphold the conclusions of BAPs than district courts. Second, BAP decisions are, with statistical significance, cited more frequently than are district court decisions by bankruptcy courts, BAPs, federal courts of appeals, and courts in other circuits. Only district courts are not more likely to cite BAP decisions.

Part I provides an overview of the theoretical literature discussing the quality of appellate review. Part II discusses the means by which we undertook to evaluate the quality of appellate review in the context of federal bankruptcy appeals. Part III presents the results of our regression analyses.

I. EVALUATING THE QUALITY OF APPELLATE REVIEW

Assembling an exhaustive list of the ideal elements of appellate review would present no small task. However, the academic literature does suggest several attributes that will tend to contribute to better appellate review.

First, commentators laud the use of panels of judges, rather than single judges, to hear appeals. There are two justifications. First, to the extent that there is an objectively "correct" answer to a question of law posed on appeal, and to the extent that there is a greater than 50% chance that each appellate judge will reach that "correct" answer, the Condorcet Jury Theorem

instructs that a panel of judges will more likely reach the "correct" answer than will a single appellate judge.[1] Second, even if one might question the applicability of the Condorcet Jury Theorem in the context of appellate review,[2] there is an argument that the collegial nature of multimember appellate panels contributes to the quality of appellate review.[3]

A second factor is expertise of the appellate decisionmaking in the subject matter of the appeal.[4] For example, Congress created the Federal Circuit as an appellate body with expertise in patent law.[5]

Third, courts and commentators identify general "lawfinding ability"—as distinct from expertise in particular areas of law—as a virtue for appellate review.[6] While the Supreme Court has characterized the presence of multijudge panels as "[p]erhaps most important" in assessing lawfinding ability,[7] it has also indicated other factors tend to enhance lawfinding ability in the appellate setting. Specifically, lawfinding ability is greater when (i) the judges have schedules

[1] *See* Jonathan Remy Nash, *Resuscitating Deference to Lower Federal Court Judges' Interpretations of State Law*, 77 S. CAL. L. REV. 975, 1022-23 (2004) (describing Condorcet Jury Theorem).

[2] *See* Jonathan Remy Nash, *A Context-Sensitive Voting Protocol Paradigm for Multimember Courts*, 56 STAN. L. REV. 75, 112-13 & nn.130-31 (2003) (questioning the applicability of the Condorcet Jury Theorem in the context of appellate judicial decisionmaking).

[3] *See, e.g.*, Harry T. Edwards, *The Effects of Collegiality on Judicial Decisionmaking*, 151 U. PA. L. REV. 1639 (2003); Lewis A. Kornhauser & Lawrence G. Sager, *Unpacking the Court*, 96 YALE L.J. 82, 100-02 (1986). *But see* Richard L. Revesz, *Environmental Regulation, Ideology, and the D.C. Circuit*, 83 VA. L. REV. 1717 (1997) (finding empirical evidence that judges on an appellate panel of the same political party are more likely to vote ideologically); Cass R. Sunstein, David Schkade & Lisa Michelle Ellman, *Ideological Voting on Federal Courts of Appeals: A Preliminary Investigation*, 90 VA. L. REV. 301 (2004) (finding some evidence of ideological voting on federal courts of appeals).

[4] *See* Erwin Chemerinsky, *Decision-Makers: In Defense of Courts*, 71 AM. BANKR. L.J. 109, 115 (1997) ("Specialization offers two major advantages: expertise and uniformity."). For an argument that it might benefit the legal system to have some judges with expertise in areas other than law, see Adrian Vermeule, *Should We Have Lay Justices?* (Harvard Law School Public Law & Legal Theory Research Paper Series, Working Paper No. 134), *available at* http://ssrn.com/abstract=943369.

[5] *See, e.g.*, Rochelle Cooper Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1 (1989); R. Polk Wagner & Lee Petheridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. PA. L. REV. 1105, 1114-17 (2004).

[6] *See* Nash, *Resuscitating Deference*, *supra* note 1, at 1022.

[7] Salve Regina Coll. v. Russell, 499 U.S. 225, 232 (1991).

that allow time for reflection;[8] (ii) the judges resolve legal issues once the factual record is fully developed;[9] and (iii) the attorneys may focus on the legal issues in question without the distraction of trial advocacy.[10]

A fourth factor associated with the quality of appellate review is conformity to traditional appellate hierarchy.[11] Under the standard United States judicial hierarchy, trial courts initially decide cases, with two levels of appellate review.[12] Within that hierarchy are rules of precedent that, while not absolute, create barriers against courts overruling holdings of earlier cases. As a general matter, under horizontal stare decisis, high courts and intermediate appellate courts will follow their own earlier precedents.[13] Vertical stare decisis binds inferior courts generally to follow governing precedents issued by superior courts within the hierarchy.[14]

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[8] *Id.* at 231 (noting, with a negative connotation from the perspective of lawfinding ability, that district judges "preside alone over fast-paced trials").

[9] *Id.* at 232.

[10] *Id.* at 231-32.

[11] *See, e.g.*, Mortimer N. S. Sellers, *The Doctrine of Precedent in the United States of America*, 54 AM. J. COMP. L. 67, 68 (2006) ("The essence of the American system of precedent as experienced in practice resides in the great authority and hierarchical arrangement of the courts."); Robert B. Ahdieh, *Between Dialogue and Decree: International Review of National Courts*, 79 N.Y.U. L. REV. 2029, 2047 (2004) (suggesting that appellate review and appellate hierarchy are integrally related by noting that "the various characteristics and functions of appellate review . . . suggest that some gradation of judicial authority is central to the nature of appellate review," and that "[a]n appellate system of review is one defined by hierarchy"); John A. Ferejohn & Larry D. Kramer, 77 N.Y.U. L. REV. 962, 998 (2002) ("[T]he development of an appellate hierarchy with collegial courts at the higher levels and stringent rules of vertical stare decisis operates structurally to ensure that no individual judge can, by his or her actions alone, inflict too much damage on the judiciary by making aberrant or overly ambitious decisions."). *But cf.* Pauline T. Kim, *Lower Court Discretion*, N.Y.U. L. REV. (forthcoming) (arguing that the common principal-agent model for analyzing lower court efforts to fulfill appellate court mandates ignores the allocation of discretion to lower courts), *available at* http://ssrn.com/abstract=936769.

[12] *See, e.g.*, Lewis A. Kornhauser, *Adjudication by a Resource-Constrained Team: Hierarchy and Precedent in a Judicial System*, 68 S. CAL. L. REV. 1605, 1607-08 (1995) (elucidating the traditional appellate hierarchy).

[13] Absent en banc review, courts of appeals as bound by prior decisions issued by the court (independent of panel composition). *E.g.*, United States v. Myers, 200 F.3d 715, 720 (10th Cir. 2000).

In general, horizontal stare decisis does not extend beyond the court that issued an opinion to sibling courts of the same hierarchical level. While intermediate appellate courts will follow decisions issued by earlier panels of the same court—notwithstanding that the composition of the judges on the panels may vary—intermediate appellate courts generally are under no precedential obligation to follow decisions issued by sibling intermediate appellate courts of similar hierarchical rank. Thus, for example, a Ninth Circuit panel may find First Circuit precedent to be persuasive and choose to follow it, but stare decisis does not demand that the Ninth Circuit so act; rather, stare decisis leaves the Ninth Circuit free to disagree with and to disregard the First Circuit precedent. *See, e.g.*, Evan H. Caminker, *Why Must Inferior Courts Obey Superior Court Precedents?*, 46 STAN. L. REV. 817, 824-25 (1994). Also the rule of horizontal precedent does not extend to trial courts, as discussed below. *See id.* at 825 ("[A] district court judge may ignore the decisions of 'foreign' courts of appeals as well as other district court judges, even within the

A fifth ingredient of judicial quality is judicial independence.[15] Judges who enjoy greater independence, it is said, are less likely to be swayed by irrelevant, nonjudicial concerns. The American Founding Fathers subscribed to this view,[16] and accordingly vested Article III judges with presumptive life tenure and the guaranteed nonreduction of salary.[17]

II. INVESTIGATING APPELLATE STRUCTURE AND THE PERCEIVED QUALITY OF APPELLATE REVIEW

While plausible that some of the factors identified in Part I may contribute more than others to improving the quality of appellate review, it seems reasonable to conclude that, on balance, as between two different appellate tribunals, the one that has more of the features of quality appellate review will better perform the appellate function. This Part sets the backdrop for our empirical study. First, we describe the bankruptcy appellate structure. We then discuss our approach for empirically investigating the theoretical proposition that BAPs are the stronger of the two appellate courts in performing appellate function at the first appellate tier and develop a series of hypotheses to test the theory.

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same district." (footnote omitted)); Kornhauser, *supra* note 12, at 1609; Amy Coney Barrett, *Stare Decisis and Due Process*, 74 U. COLO. L. REV. 1011, 1015 (2003). *But see* Daniel J. Bussel, *Power, Authority, and Precedent in Interpreting the Bankruptcy Code*, 41 UCLA L. REV. 1063, 1095 (1994) (noting a "long tradition" of district judges deviating from prior precedent in the same district only in extraordinary circumstances); *infra* note 34 and accompanying text.

[14] *See, e.g.*, Kornhauser, *supra* note 12, at 1609; Susan B. Haire, Stefanie Lindquist, & Donald R. Songer, *Appellate Court Structure in the Federal Judiciary: A Hierarchical Perspective*, 37 LAW & SOC'Y REV. 143, 145 (2003) ("Appellate oversight in the lower tires of the federal judicial hierarchy . . . provides a process through which circuit judges are expected to promote legal rules that will guide decision making in subsequent cases"); Chemerinsky, *supra* note 4, at 111 ("[C]ourts generally issue written decisions that, when published, have precedential effect on future rulings involving different parties.").

[15] *See, e.g.*, Daniel Berkowitz & Karen Clay, *The Effect of Judicial Independence on Courts: Evidence from the American States*, 35 J. LEG. STUD. 399, 422-24 (2006) (finding a strong correlation between judicial independence and court quality); Jonathan Remy Nash, *Prejudging Judges*, 106 COLUM. L. REV. 2168, 2171 (2006). *But see* Daniel M. Klerman, *Legal Infrastructure, Judicial Independence, and Economic Development* 1 (USC Law Legal Studies Research Paper Series, Paper No. C06-1, 2006) ("There is some evidence that judicial independence is associated with economic growth, but the evidence is mixed and causation is unclear."), *available at* http://ssrn.com/abstract=877490.

[16] *See* THE FEDERALIST Nos. 78, 79, 81 (Alexander Hamilton), Nos. 47, 48, 51 (James Madison).

[17] U.S. CONST., art. III, § 1.

A. *The Bankruptcy Appellate Process*

The Judicial Code authorizes the judicial council of each federal regional circuit to establish a "bankruptcy appellate panel" ("BAP"), comprised of bankruptcy judges from that circuit.[18] For a BAP to hear appeals from bankruptcy courts in a given district, a majority of district judges must vote to authorize it.[19] Unless a party elects otherwise, appeals of bankruptcy judges' rulings in core proceedings will lie to the BAP (in those circuits that have created them and in districts that have authorized it).[20] Appeals from BAP rulings lie to the court of appeals.[21] Parties may seek, as usual, discretionary review by the Supreme Court of rulings by the court of appeals.

If either the appellant or the appellee so elects—or if the circuit has not created a BAP or, even if it has, if the district court in question has not voted to authorize BAP appeals—then the district court—in the person of a single district judge—initially hears appeals of bankruptcy court rulings in core proceedings.[22] The judgment of the district court may then be appealed to

[18] 28 U.S.C. § 158(b)(1). The statute also authorizes the creation of intercircuit BAPs, *see id.* § 158(b)(4), but none has yet been created.

Much as the bankruptcy court is unit of the district court, the bankruptcy appellate panels may be seen as "a unit of the federal courts of appeals." Admin. Office of the U.S. Courts, The Federal Judiciary—United States Courts of Appeals, http://www.uscourts.gov/courtsofappeals/bap.html (last visited Feb. 20, 2007); *see also* 28 U.S.C. § 158(b)(1) (requiring BAPs to be established, and BAP judges to be appointed, by the circuit judicial council); B.A.P. 8th Cir. R. 8016A(a)(1) ("The Clerk of the United States Court of Appeals for the Eighth Circuit shall serve as the Clerk of the United States Bankruptcy Appellate Panel for the Eighth Circuit."). *Compare* Coyne v. Westinghouse Credit Corp. (*In re* Globe Illumination Co.), 149 B.R. 614, 620-21 (Bankr. C.D. Cal. 1993) (describing BAP as unit of the court of appeals), *with* The Honorable Kathleen P. March & Rigoberto V. Obregon, *Are BAP Decisions Binding on Any Court?*, 18 CAL. BANKR. J. 189, 197 (1990) (describing BAP as unit of district court).

[19] 28 U.S.C. § 158(b)(6). In the mid-1990s, when a Second Circuit BAP was in existence, "only three districts participate[d]—and these together typically receive less than a third of all bankruptcy petitions filed in the Second Circuit." Bryan T. Camp, *Bound by the BAP: The Stare Decisis Effects of BAP Decisions*, 34 SAN DIEGO L. REV. 1643, 1660 (1997). These facts, presumably, played a large role in the ultimate decision to disband the Second Circuit BAP.

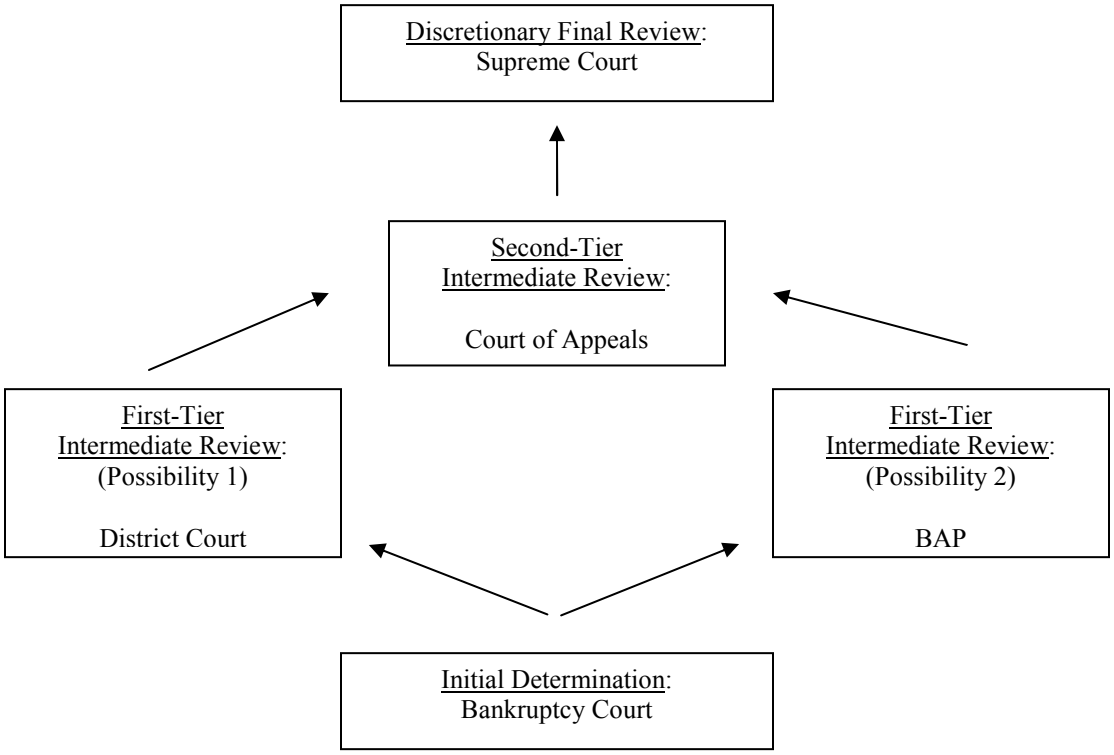
[20] 28 U.S.C. § 158(c). Core proceedings are those that, in effect, lie at the heart of a bankruptcy case and that bankruptcy judges are empowered to resolve definitively, in the first instance, with appellate review to follow. 28 U.S.C. § 157(b)(1). The Judicial Code refers to core proceedings as those "arising under title 11, or arising in a case under title 11." 28 U.S.C. § 157(b)(1). Examples of core proceedings include matters concerning (1) administration of the estate, (2) the allowance of claims, (3) objections to discharge, and (4) plan confirmation. *Id.* § 157(b)(2).

[21] 28 U.S.C. § 158(d).

[22] 28 U.S.C. § 158(a). *See* Ralph R. Mabey, *The Evolving Bankruptcy Bench: How Are the "Units" Faring?*, 47 B.C. L. REV. 105, 108 (2005) ("Appeals from bankruptcy courts to the district court . . . have steadily declined

the appropriate federal court of appeals,[23] with discretionary Supreme Court review thereafter. Thus, certain parties in some circuits have an option between two possible appellate paths, as illustrated in Figure 1.[24]

FIGURE 1
FEDERAL BANKRUPTCY APPELLATE STRUCTURE FOR CORE PROCEEDINGS



over sixteen years from 4300 in 1988 to 2800 in 2004, attributable, in part, to the establishment of bankruptcy appellate panels in four of the circuits.").

[23] 28 U.S.C. § 158(d).

[24] *See generally* Bernard Trujillo, *Self-Organizing Legal Systems: Precedent and Variation in Bankruptcy*, 2004 UTAH L. REV. 483, 490-500 (elucidating the differences between the standard federal judicial hierarchy and the bankruptcy appellate system); Camp, *supra* note 19, at 1644 ("BAPs . . . shake up the normal hierarchical structure dear to many attorneys' hearts.").

We should note that a third possible appellate path not yet discussed—that of direct appeal from the bankruptcy court to the court of appeals—exists for a limited set of circumstances. By virtue of amendment to the Judicial Code by the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, Pub. L. No. 109-8, 119 Stat. 23, appeal may proceed directly to the court of appeals pursuant to a certification procedure if one of the following circumstances exists: (1) the appeal involves a question of law unresolved by the court of appeals for the circuit or by the Supreme Court; (2) the appeal involves a matter of public importance; (3) the appeal involves a question of law requiring resolution of conflicting decisions, or (4) the appeal may materially advance the progress of the case or proceeding in which the appeal is taken. 28 U.S.C. § 158(d)(2)(A).

BAPs seem to have more of the features of quality appellate review in greater amounts than do the federal district courts. First, BAPs decide cases in three-judge panels,[25] while bankruptcy appeals to district courts are heard by a single district judge.

Second, the bankruptcy judges who comprise BAPs are presumably experts in bankruptcy law.[26] Thus, they are well suited to resolve legal issues that might arise in core bankruptcy proceedings.[27] District judges, by contrast, are not generally versed in bankruptcy law.[28]

The third factor—"other" lawfinding ability[29]—appears to favor neither district judges nor BAPs. Attorneys filing appellate briefs may focus on the legal issues without the distractions of trial advocacy, presumably whether the briefs will be filed with the district court or appellate panel. Similarly, both district judges and BAPs hear legal issues once a factual record has been established. Last, while district judges and bankruptcy judges both preside over trials, neither

[25] Indeed, bankruptcy judges who serve on BAPs themselves believe that decision by a panel of judges is beneficial. Mabey, *supra* note 22, at 123 ("Several [surveyed bankruptcy judges] acknowledged that they find the collaborative effort and consensus-building required for service on the BAP challenging and very different from what they are used to as single, independent bankruptcy judges but, at the same time, beneficial, because it makes them more patient and more effective in writing decisions.").

[26] *See, e.g.*, Mabey, *supra* note 22, at 107 ("Most of the bankruptcy judges were bankruptcy practitioners in their prior careers."); *see also id.* at 123 (noting that, of a random survey of bankruptcy judges in 2005, "[a]bout 83% . . . were bankruptcy practitioners before taking the bankruptcy bench" and that, "[o]f the 17% . . . who were not bankruptcy practitioners, almost all came from a business law background, as commercial litigators or corporate transactional lawyers," and further noting that the surveyed bankruptcy judges felt that their prior experience was very helpful on the bench); *cf. id.* at 113-16 (discussing the trend among bankruptcy judges to hire more permanent, as opposed to term, law clerks, and noting that those bankruptcy judges who preferred permanent clerks often hired clerks with legal experience, and in particular practice experience in bankruptcy law).

[27] *See* Chemerinsky, *supra* note 4, at 128 ("[T]he BAP is desirable because it allows specialist bankruptcy judges to replace nonspecialist federal judges.").

[28] One might argue that even district judges with no experience in bankruptcy experience before ascending to the bench gain some experience by virtue of hearing a steady stream of bankruptcy cases. A study by the Federal Judicial Center of the bankruptcy appellate structure, however, reached the opposite conclusion, observing that "[t]he number of first-level reviewers greatly exceeds the number of bankruptcy judges producing the judgments reviewed, and appellate caseloads are spread thinly among district judges, giving few judges much opportunity to develop bankruptcy expertise." Judith A. McKenna & Elizabeth C. Wiggins, *Alternative Structures for Bankruptcy Appeals*, 76 AM. BANKR. L.J. 625, 627 (2002).

[29] We employ the modifier "other" because, as noted above, the Court suggested that the use of multijudge panels is "[p]erhaps most important" in assessing lawfinding ability. *See supra* note 7 and accompanying text.

the district judge hearing a bankruptcy appeal, nor bankruptcy judges sitting on a bankruptcy appellate panel, are presiding over trials at that time.[30]

Fourth, BAPs conform to traditional notions of appellate review: Their rulings are generally seen to be binding on future BAPs drawn from the same circuit.[31] Further, at least one BAP has held that its decisions are binding on all bankruptcy courts within that circuit,[32] even if the bankruptcy courts themselves do not share this view.[33] In contrast, one district judge is

[30] It is this factor that, presumably, vests district judges with lawfinding ability when they sit by designation on court of appeals panels. *See* Nash, *Resuscitating Deference*, *supra* note 1, at 1031 (explaining that the better term is lawfinding "ability" and not lawfinding "expertise").

One might argue that lawfinding ability is enhanced to the extent that the judge (whether district or bankruptcy) enjoys relief from her other responsibilities while hearing appeals. This seems not to be the case, however, at least for bankruptcy judges:

When asked how BAP service affects their service as a bankruptcy judge, several of the [surveyed bankruptcy judges] indicated that it required adjustments to their bankruptcy court trial and hearing schedule and that it substantially added to their workload. Some of the Survey Participants suggested that those bankruptcy judges who serve full-time on the BAP should have the option of employing an additional law clerk. One Survey Participant indicated that service on the BAP was "like having a second job."

Mabey, *supra* note 22, at 122 (footnote omitted); *see also* Honorable Stephen A. Stripp, *An Analysis of the Role of the Bankruptcy Judge and the Use of Judicial Time*, 23 SETON HALL L. REV. 1329, 1330 (1993) ("The fundamental truth which is the basis for this article is that the bankruptcy caseload in many districts in this country is so overwhelming that the bankruptcy judges are sorely pressed in the struggle to cope with it.").

[31] BAPs in three circuits—the Eighth, Ninth, and Tenth—have reached this conclusion. *E.g.*, *In re* Luedtke, 215 B.R. 390, 391 (B.A.P. 8th Cir. 1997) (BAP bound by prior decisions, citing circuit court cases saying that circuit court panels bind subsequent circuit court panels); Ball v. Payco-Gen. Am. Credits, Inc. (In re Ball), 185 B.R. 595, 597 (B.A.P. 9th Cir. 1995) ("We will not overrule our prior rulings unless a Ninth Circuit Court of Appeals decision, Supreme Court decision or subsequent legislation has undermined those rulings."); Salomon N. Am. v. Knupfer (In re Wind N' Wave), 328 B.R. 176, 181 (B.A.P. 9th Cir. 2005) (reaffirming that the BAP will not overrule its prior rulings unless an intervening circuit court or Supreme Court decision, or subsequent legislation, undermines those rulings); Concannon v. Imperial Cap. Bank (In re Concannon), 338 B.R. 90, 95 (B.A.P. 9th Cir. 2006) (same); In re Blagg, 223 B.R. 795, 804 (B.A.P. 10th Cir. 1998) ("Our decision is dictated by the principle that we are bound by prior panel decisions. A panel cannot overrule the judgment of another panel of the court."), *appeal dismissed*, 198 F.3d 257 (10th Cir. 1999); Smolen v. Hatley (In re Hatley), 227 B.R. 757, 761 (B.A.P. 10th Cir. 1998) (same), *aff'd*, 194 F.3d 1320 (10th Cir. 1999).

[32] Philadelphia Life Ins. Co. v. Proudfoot (In re Proudfoot), 144 B.R. 876, 879 (B.A.P. 9th Cir. 1992) ("BAP decisions originating in any district in the Ninth Circuit are binding precedent on all bankruptcy courts within the Ninth Circuit in the absence of any contrary authority from the district court for the district in which the bankruptcy court sits."); In re Windmill Farms, Inc., 70 B.R. 618, 622 (B.A.P. 9th Cir. 1987) ("One of the reasons for establishing the BAP was to provide a uniform and consistent body of bankruptcy law throughout the entire Circuit. In order to achieve this desired uniformity, the decisions of the Bankruptcy Appellate Panel must be binding on all of the bankruptcy courts from which review may be sought, i.e. each district in the Ninth Circuit."), *rev'd on other grounds*, 841 F.2d 1467 (9th Cir. 1988).

[33] *Compare, e.g.*, Ore. Higher Educ. Assistance Found. v. Selden (In re Selden), 121 B.R. 59, 62 (D. Ore. 1990) (BAP decisions bind only those bankruptcy courts sitting in the district out of which the appeal arose), *with* Daly v. Deptula (In re Carrozzella & Richardson), 255 B.R. 267 (Bankr. D. Conn. 2000) (rejecting argument that substantial motivation of Congress in creating BAPs was to generate a uniform body of bankruptcy law within the circuits; concluding that there is no principled reason why decisions of a BAP should have more precedential authority than

generally seen to be under no obligation to follow the ruling of another district judge—even one in the same district—whether on matters of bankruptcy or otherwise.[34] And bankruptcy courts have held that they are not bound at least by the holding of a single district judge on a multijudge district court.[35] As such, BAPs comport more with the standard model of appellate hierarchy than do district courts sitting on appeal.[36]

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those of district courts; odd and unseemly, if not unconstitutional, for a BAP—comprised of three Article I judges—to be generating for bankruptcy judges, and perhaps also for district judges, the law of the circuit until the circuit court had spoken); *In re* Virden, 279 B.R. 401, 409 n.12 (Bankr. D. Mass. 2002) (same), *and* Life Ins. Co. of Va. v. Barakat (In re Barakat), 173 B.R. 672, 676-80 (Bankr. C.D. Cal. 1994), *aff'd on other grounds*, 99 F.3d 1520 (9th Cir. 1996) (concluding that BAPs bind bankruptcy courts on matters arising in core proceedings even though district courts do not). For further discussion regarding the precedential effect of BAP decisions, see *Salomon N. Am.*, 328 B.R. at 181 n.2 (noting the Ninth Circuit BAP's prior holding that its decisions bind our bankruptcy courts within the circuit, but also recognizing that some bankruptcy courts have rejected that holding); Bank of Maui v. Estate Analysis, Inc., 904 F.2d 470, 472 (9th Cir. 1989) ("BAP decisions cannot bind the district courts themselves. As article III courts, the district courts must always be free to decline to follow BAP decisions and to formulate their own rules within their jurisdiction."); *id.* at 472 (O'Scannlain, J., concurring) ("writ[ing] separately to propose that the Judicial Council of this Circuit consider adoption of an order requiring that Bankruptcy Appellate Panel . . . decisions shall bind all of the bankruptcy courts of the circuit, subject to the restrictions imposed by article III so well discussed in the [court's] opinion"); Zimmer v. PSB Lending Corp. (In re Zimmer), 313 F.3d 1220, 1225 n.3 (9th Cir. 2002) (describing "binding nature of Bankruptcy Appellate Panel decisions" as "an open question," and "join[ing] Judge O'Scannlain's call for the [Ninth Circuit] Judicial Council to consider an order clarifying whether the bankruptcy courts must follow the BAP"); Paul M. Baisier & David G. Epstein, *Resolving Still Unresolved Issues of Bankruptcy Law: A Fence or an Ambulance*, 69 AM. BANKR. L.J. 525, 529 (1995) ("Even stronger arguments can be made against any *stare decisis* effect at all for the opinion of a bankruptcy appellate panel."); Chemerinsky, *supra* note 4, at 129-30 ("I would argue that district courts should be bound by BAP decisions. The view that an Article I court can never bind an Article III court is an overstatement."); Trujillo, *supra* note 24, at 494 n.23 (arguing that BAPs function as district courts, and accordingly cannot issue binding opinions).

[34] *See* Baisier & Epstein, *supra* note 33, at 529 (noting that "[n]one of the district judges is bound by a bankruptcy appeals decision of a district judge from one of the other 93 district courts" and that "district judges in multi-judge districts are not even bound by the bankruptcy appeals decisions of other judges from that same district"). *But see* Bussel, *supra* note 13, at 1095-96 ("Even where review lies in a district court composed of more than one judge, rather than a BAP, uncertain and disuniform development of bankruptcy law is mitigated by a long tradition within district courts of deviating from a co-ordinate judge's prior decision only in "extraordinary circumstances." Given this bias, relatively few district judges—in comparison to the specialist bankruptcy courts—have enough interest and confidence in their views of bankruptcy law to be willing to create conflicts within the district. In any event, the problem of intra-district conflict could be eliminated if the federal district courts would adopt "law-of-the-district" rules for bankruptcy appeals analogous to the "law-of-the-circuit" rules currently in effect, in most regions, at the Court of Appeals level. All district courts might be bound by a published precedent within the district in subsequent bankruptcy appeals." (footnotes omitted)); *see also id.* at 1096 n.116 ("I am aware of only a handful of cases where district judges in the same district adopt differing views of the same question of bankruptcy law and in those cases one or both of the decisions is unpublished.").

[35] *See, e.g.*, *In re* Romano, 350 B.R. 276, 281 (Bankr. E.D. La. 2005) ("[A] single decision of a district court in this multi-judge district is not binding upon this court."); *id.* at 277-81 (summarizing authority both ways); Paul Steven Singerman & Paul A. Avron, *Of Precedents and Bankruptcy Court Independence*, 22 AM. BANKR. INST. J. 1 (2003) (noting conflict, gathering authorities, and finding that a majority of bankruptcy courts have held that they are not bound by the decision of a single district court judge in a multi-judge district); Trujillo, *supra* note 24, at 494 (arguing that bankruptcy decision by one bankruptcy judge cannot bind other bankruptcy judges in the same district, and that bankruptcy decision by one district judge cannot bind other district judges or any bankruptcy judges in the

It is only the final criterion—judicial independence—on which district courts have some advantage over BAPs. Judicial independence is considered to be a function of life tenure and the guarantee of nonreduction in salary. Both attributes have been enshrined in the Article III status conferred on district judges, whereas bankruptcy judges who sit on BAPs do not get the benefit of either attribute by virtue of their Article I status. However, if one considers the type of jurist produced by the judicial selection process for bankruptcy judges in conjunction with their term of appointment, the standard for their removal from office, and the treatment afforded to their compensation, it would appear that bankruptcy judges have achieved a considerable degree of judicial independence.[37] Accordingly, while the district court seems to enjoy some advantage

same district). *But see* Chemerinsky, *supra* note 4, at 129 ("While a district court exercising original jurisdiction cannot bind other district courts, its decisions should be binding on bankruptcy courts when the district court is serving as an appeals court.").

[36] Our point here is simply that BAPs seem to fit more cleanly into the standard hierarchical appellate model than do district courts sitting on appeal, not that that is necessarily mandated under the current statutory scheme or normatively desirable.

[37] First, although bankruptcy judges do not get life tenure, the term of their appointment lasts fourteen years. *See* 28 U.S.C. § 152(a)(1). The appointments, moreover, may be renewed, *see* Federal Courts Improvement Act of 1996, Pub. L. No. 104-317, § 303, 110 Stat. 3847, 3852, and indeed in most cases are renewed, Mabey, supra note 22, at 107 (noting that, of the 115 bankruptcy judges who left the bench in the decade prior to 2005, only 10 did so as a result of not being reappointed). While judicial independence may be fostered by life tenure, the renewable, fourteen-year term of bankruptcy judges places them in a position to serve as long as many of their Article III counterparts. *See* Judith Resnik, *Judicial Selection and Democratic Theory: Demand, Supply, and Life Tenure*, 26 CARDOZO L. REV. 579, 618 chart 4 (2005) (noting that Article III judges (other than Supreme Court Justices) whose service on the federal bench terminated between 1983 and 2003 served, on average, 24 years). Even if the absence of life tenure gives Congress leeway to reduce the term of bankruptcy judges—an option that it has never exercised since it created the bankruptcy courts—still the fourteen-year, renewable term certainly grants a fair amount of judicial independence to bankruptcy judges.

Second, the Judicial Code prescribes that a bankruptcy judge may be removed "only for incompetence, misconduct, neglect of duty, or physical or mental disability," 28 U.S.C. § 152(e), whereas the Constitution mandates that an Article III will hold his or her office only "during good Behaviour," U.S. CONST. art. III, § 1. The broad language of the good-behavior standard for removal arguably encompasses the grounds set forth by the Judicial Code for removal of bankruptcy judges. Moreover, while Article III judges may be removed only by impeachment and bankruptcy judges may be removed by a majority of all of the judges of the judicial council of the circuit within which the bankruptcy judge has been designated to serve, 28 U.S.C. § 152(e), the practical reality is that very few bankruptcy judges have been removed from office, *see* Mabey, supra note 22, at 107 (listing reasons for departure from the bench for the 115 bankruptcy judges who did so in the decade prior to 2005, but not mentioning removal as one of those reasons). If the specter of removal from office does not appear to be greater for bankruptcy judges than Article III judges, it follows that bankruptcy judges need not limit their behavior in such a way that would prevent them from acting as independently as an Article III judge.

Third, although the Supreme Court has identified the "fixed and irreducible" compensation provided to Article III judges by the Compensation Clause as a hallmark of an independent judiciary, *Northern Pipeline*, 458 U.S. 50 at 59

over BAPs with respect to this final attribute that has been identified as improving the quality of appellate review, the advantage is not likely to be a substantial one. We summarize the differences in the attributes of the BAPs and district courts in Table 1.

TABLE 1
STRUCTURE OF DISTRICT COURTS AND BAPS

First-Tier Appellate Court	Number of Judges	Bankruptcy Expertise	Other Lawfinding Ability	Traditional Appellate Hierarchy	Judicial Independence
District Court	Single judge	Unlikely	Some	Weak	Strong
Bankruptcy Appellate Panel	Panel of three judges	Yes	Some	Strong	Moderate

B. *Hypotheses*

Insofar as BAPs exhibit more of the features associated with quality appellate review than do federal district courts, the discussion in Part I suggests that BAPs will provide a greater quality of bankruptcy appellate review—assuming that the question of judicial independence does not outweigh other factors. Although we cannot empirically test the "correctness" of

(Brennan, J., plurality opinion), the lack of a similar guarantee in the salary of bankruptcy judges should not be overemphasized in assessing their judicial independence. Since Congress enacted the Bankruptcy Code in 1978 and created the current scheme for federal bankruptcy judgeships, the salary of bankruptcy judges has only increased. *See* Mabey, supra note 22, app. A. Moreover, as of 1987, bankruptcy judges have received a salary at an annual rate that equals 92 percent of the salary of a district court judge (as determined by section 135 of the Judicial Code). 28 U.S.C. § 153(a). Thus, for the past two decades, bankruptcy judges have had fixed compensation that nearly equals that of their district court counterparts.

Finally, if one does not ignore the substantive differences in the appointment processes of bankruptcy judges and district judges and the consequences that flow therefrom, it becomes clear that bankruptcy judges may be better situated than district judges to avoid and resist the political influence that would threaten to compromise an independent judiciary. While the judicial appointment process for Article III judges has become increasingly politicized, evidenced most recently by the tendency for close examination of the ideology of nominees, *see* Nash, supra note 15, at 2182-92, the appointment process for bankruptcy judges has seemingly remained apolitical. The Judicial Code charges the task of appointing a bankruptcy judge to the court of appeals for the circuit in which there exists a vacancy for a bankruptcy judgeship. *See* 28 U.S.C § 152(a)(1), (3). Thus, the appointment process for bankruptcy judges involves judges selecting judges—a presumably nonpolitical process. This nonpolitical process has produced a bankruptcy bench mostly populated by specialists with bankruptcy expertise,[37] who themselves could be characterized as nonpolitical. *See* Mabey, supra note 22, at 107 ("Most of the bankruptcy judges were bankruptcy practitioners in their prior careers."); *cf.* Judith Resnik, *"Uncle Sam Modernizes His Justice": Inventing the Federal District Courts of the Twentieth Century for the District of Columbia and the Nation*, 90 GEO. L.J. 607,

decisions, we can empirically test the ***perception*** held by other actors within the bankruptcy judicial system of the correctness of those decisions. For bankruptcy appeals that proceed to the second tier of review, we can consider whether the court of appeals deemed proper the disposition rendered by the first-tier appellate court. Accordingly, we offer the following hypothesis.

Hypothesis 1: Courts of appeals more likely will uphold the dispositions rendered by BAPs than those rendered by district courts.

Citation rates provide yet another basis on which to test empirically the ***perceived*** correctness of an appellate opinion.[38] To the extent that citation of one court by another reflects the view of the citing court that the other court was "correct" in some way, the notion of correctness is, in different ways, both narrower and broader than correctness in the context of affirmation on direct appeal: It is narrower in that the citing court well may be citing a case not based upon a broad holding but rather based upon some narrow holding, or even dicta; it is broader in that, unlike a court that affirms a lower court's disposition even though it disagrees with its reasoning, a court that cites to another court's decision positively at some level agrees with some aspect of the court's reasoning.[39] Of course, there may be situations where a court

670 (2002) ("Turn first to the advantages of judicial appointment of judges. As a few details of current practices illustrate, the judiciary has selected a high-quality and relatively nonpolitical corps of judges . . . .").

[38] *See, e.g.*, William M. Landes & Richard A. Posner, *Legal Precedent: A Theoretical and Empirical Analysis*, 19 J.L. & ECON. 249 (1976) (arguing that citation practices are not essentially a matter of taste but rather are systematic and susceptible to empirical study); John Henry Merryman, *Toward a Theory of Citations: An Empirical Study of the Citation Practice of the California Supreme Court in 1950, 1960, and 1970*, 50 S. CAL. L. REV. 381 (1977) [hereinafter Merryman, *Toward a Theory of Citations*]; John Henry Merryman, *The Authority of Authority: What the California Supreme Court Cited in 1950*, 6 STAN. L. REV. 613 (1954); *cf.* William M. Landes, Lawrence Lessig & Michael E. Solimine, *Judicial Influence: Analysis of Federal Courts of Appeals Judges*, 27 J. LEGAL STUD. 271, 271-76 (1998) (noting that "[c]itations are at best a crude and rough proxy for measuring influence," and identifying potential drawbacks and limitations to empirical analyses of judicial citations).

[39] *See* Landes & Posner, *supra* note 38, at 251 & n.3 (excluding from citation study "citations indicating rejection of the cited case as a precedent"). Our study, too, includes only positive citations. *But cf.* Landes *et al.*, *supra* note 38, at 273 (deciding "not [to] distinguish between favorable, critical, or distinguishing citations" insofar as "[c]ritical citations, in particular to opinions outside the citing circuit, are also a gauge of influence since it is easier to ignore an unimportant decision than to spell out reasons for not following it").

cites another court's opinion simply because it perceives the other court's opinion to be binding precedent.[40] For this reason, we consider the results of intercircuit citations and citations by courts of appeals to BAPs and district courts—settings where there is no issue of binding precedent such that citation is purely a matter of choice—to be especially informative.[41] Accordingly, we offer the following additional hypotheses.

Hypothesis 2A: Federal courts more likely will positively cite to BAP opinions than to district court opinions.

Hypothesis 2B: Federal courts will positively cite to BAP opinions more frequently than to district court opinions.

Hypothesis 3: Courts of appeals will cite more frequently to BAP opinions than to district court opinions.

Hypothesis 4: Bankruptcy courts will cite more frequently to BAP opinions than to district court opinions.

Hypothesis 5: BAPs will cite more frequently to BAP opinions than to district court opinions.

Hypothesis 6: District courts will cite more frequently to district court opinions than to BAP opinions.

Hypothesis 7: Federal courts in other circuits will cite more frequently to BAP opinions than to district court opinions.

Hypothesis 8: Positive federal citing references will afford a greater depth of treatment to BAP opinions than to district court opinions.

Hypothesis 9A: Positive federal citing references are more likely to directly quote BAP opinions than district court opinions.

Hypothesis 9B: Positive federal citing references will directly quote BAP opinions more frequently than district court opinions.

Hypothesis 10: The time within which a federal citing reference will be made to opinions issued on appeal by BAPs will more likely be faster than to those issued by district courts.

[40] *See* Landes & Posner, *supra* note 38, at 251 (excluding from citation study nonprecedential citations).

[41] *See* Landes & Posner, *supra* note 38, at 272-73; David J. Walsh, *On the Meaning and Pattern of Legal Citations: Evidence from State Wrongful Discharge Precedent Cases*, 31 L. & SOC'Y REV. 337, 341 (1997).

III. EMPIRICAL ANALYSIS OF THE PERCEIVED QUALITY OF APPELLATE REVIEW: EVIDENCE FROM APPELLATE BANKRUPTCY OPINIONS

We test the hypotheses discussed in Part II.B through the use of quantitative methodology and look for patterns that point to a relationship between the type of appellate court and the manner in which others perceive the quality of review provided by the court.

A. *Subsequent Disposition by Court of Appeals*

We compiled our data from appellate bankruptcy opinions issued by first-tier (i.e., district courts and BAPs) and second-tier (courts of appeals) appellate courts.[42] For the 77 observations from first-tier appellate opinions involving subsequent appeal to the court of appeals, we use an

[42] To constitute the sample of appellate bankruptcy opinions for this study, we formulated a search query in Westlaw's FBKR-CS database, which contains reported and unreported case law documents (i.e., decisions and orders) relating to bankruptcy that were issued by various courts—including the Supreme Court, courts of appeals, bankruptcy appellate panels, district courts, and bankruptcy courts. Since we sought to create two separate databases, one for first-tier appellate dispositions by BAPs and district courts (the "first-tier database") and one for second-tier appellate dispositions by courts of appeals (the "second-tier database"), we ran two, separate search queries. The first query consisted of the single term "11 U.S.C.," the standard citation to title 11 of the United States Code (commonly referred to as the "Bankruptcy Code"), coupled with (1) a date restriction that limited query retrieval to decisions and orders issued during the three-year period beginning on October 1, 1997 and ending on September 30, 2000, and (2) a field restriction that limited query retrieval to decisions and orders whose preliminary field contained either the term "district court" or "bankruptcy appellate panel," but not "court of appeals." The second query mirrored the first query with the exception that field restriction limited query retrieval to decisions and orders whose preliminary field only contained the term "court of appeals." The first query produced 1,487 documents, while the second query produced 871 documents. These large numbers clearly presented a challenge by virtue of the time it would take to review each document. We sought to reduce the time demand by randomly selecting for review approximately one-quarter of the documents produced by each search query—specifically, 372 documents from the first search query and 218 documents from the second search query. We then began our review of each of these documents according to the following procedures in order to identify those that would be selected for inclusion and analysis in the two databases.

We sought to include in the databases appeals that involved the resolution of dispositions rendered by bankruptcy courts in core proceedings. We included only those documents that disposed of the appeal on the merits. (As most of these documents were opinions rather than orders, for ease of reference we will collectively refer to the documents as opinions for the remainder of the Article.) Opinions that solely involved procedural dispositions (e.g., dismissal for lack of jurisdiction) were excluded. In most instances, each opinion generated one observation. However, some opinions generated multiple observations. For example, some opinions resolved multiple appeals in separate and unrelated bankruptcy cases. In other instances, an opinion would resolve an appeal of separate orders that were entered by the bankruptcy court in distinct proceedings within the same case. Finally, by virtue of the identical date restriction included in both search queries, each opinion was issued during one of three government fiscal years: either 1998, 1999, or 2000.

Pursuant to these selection procedures, our first-tier database consists of 268 observations drawn from 264 opinions, four of which produced a second observation. Our second-tier database consists of 170 observations drawn from 165 opinions, five of which produced a second observation. Not surprisingly, for both databases, the majority of appeals wended their way through the district courts rather than the BAPs—although more so for

ordinal logistic regression model to predict the disposition rendered by the court of appeals (with *negative* coded as 0, *hybrid* coded as 1, and *positive* coded as 2) based on the following independent variables:

- whether the first-tier appellate court was a district court (coded 0) or a BAP (coded 1) (Court);
- whether the appeal arose within the context of an adversary proceeding (coded 0) or contested matter (coded 1) (Dispute Type);
- the fiscal year in which the first-tier appellate court issued its opinion (for which we created three dichotomous variables with the response categories 0 for those opinions issued outside the fiscal year in question and 1 for those opinions issued during the fiscal year in question) (Fiscal Year);
- whether the first-tier appellate court had published its disposition (Published);
- whether the only party to appeal to the first-tier appellate court was the debtor (Appellant);
- whether the debtor was the only party appearing as an appellee at the first-tier level of review (Appellee);
- whether the appeal arose in the context of a Chapter 7 case (Chapter 7),
- whether the bankruptcy case in which the appeal arose was that of an individual (coded 0) or business entity (coded 1) (Debtor Type); and
- whether the subject of the appeal could be classified as falling into one of the four most frequently occurring subjects of appeal heard by first-tier appellate courts for which there was subsequent appeal to the court of appeals (Subject).[43]

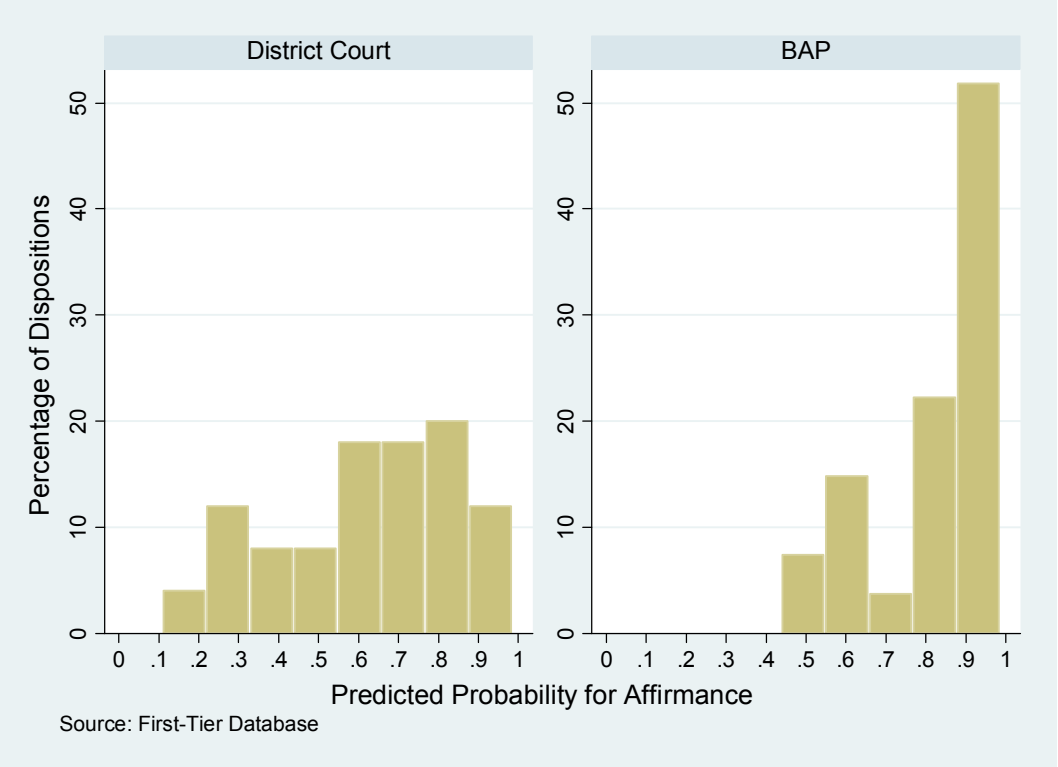
According to the model, even when controlling for other potential explanatory variables, the type of first-tier appellate court to have initially determined the appeal remains a statistically

appeals in the second-tier database (approximately 81%) than the first-tier database (approximately 60%). The distributions of opinions by circuit in each database roughly approximate one another.

[43] For the 77 observations in the first-tier database involving subsequent appeal to the court of appeals, the four most frequently occurring subjects were matters relating to discharge (23%), procedure/jurisdiction (14%), multiple subjects (14%), and avoiding powers (10%). For the variables Published, Appellant, Appellee, Chapter 7, and Subject, we coded negative responses as 0 and positive responses as 1.

significant predictor of the subsequent disposition rendered by the court of appeals.[44] To further elaborate, using the actual values for all the independent variables included in the model, we can calculate the predicted probability of affirmance by the court of appeals for each of the 77 first-tier appellate dispositions upon which the model is based. In Figure 4 below, we present the predicted probabilities for affirmance of the actual observations in our regression model. A comparison of the two distributions reveals some interesting figures.

FIGURE 4
PREDICTED PROBABILITIES FOR AFFIRMANCE OF
FIRST-TIER APPELLATE DISPOSITIONS BY COURTS OF APPEALS



First, we find for this limited subset of data that, on average, a BAP disposition had an 83% chance of being affirmed by the court of appeals in contrast to 61% for district court

[44] Both the Court and Chapter 7 variables are significant predictors of the disposition rendered on subsequent appeal from the first-tier appellate court to the court of appeals, while the other variables have no association with a

dispositions. Put another way, the likelihood of affirmance by the court of appeals increased by 34% when it reviewed BAP dispositions. Second, while approximately 52% of the BAP disposition had a 90% or greater predicted probability of affirmance, only 4% of the district court dispositions did so. Perhaps even more striking, *no* BAP disposition had less than a 50% predicted probability of affirmance whereas slightly more than one-quarter (28%) of district court dispositions did. These findings support our hypothesis that courts of appeals will more likely uphold the dispositions rendered by BAPs than those rendered by district courts. As this model is limited to a narrow subset of data, we are cautious about reading too much into it.

B. Positive Citing References by Other Federal Courts

To further explore (1) the decision of federal courts to cite positively to the opinions issued by first tier appellate courts, (2) the extent to which they do so, (3) the manner in which they do so, and (4) the immediacy with whey they do so, we construct a series of binary logistic regression models and multiple linear regression models. First, we examine whether the association between the identity of the first-tier appellate court and positive citation to its opinion persists when controlling for other factors. For all 286 observations involving first-tier appellate opinions, we use a binary logistic regression model to predict whether a federal court will have cited positively to the first tier appellate opinion (coding opinions with no positive citations as 0 and coding opinions with at least one positive citation as 1) based on the following independent variables: (1) Court; (2) whether the first-tier appellate court determined that error had occurred in the disposition rendered by the bankruptcy court, with "error" coded as 1 and "no error" coded

court of appeals' disposition. For detailed results from the regression model, see *infra* Appendix tbl.6.

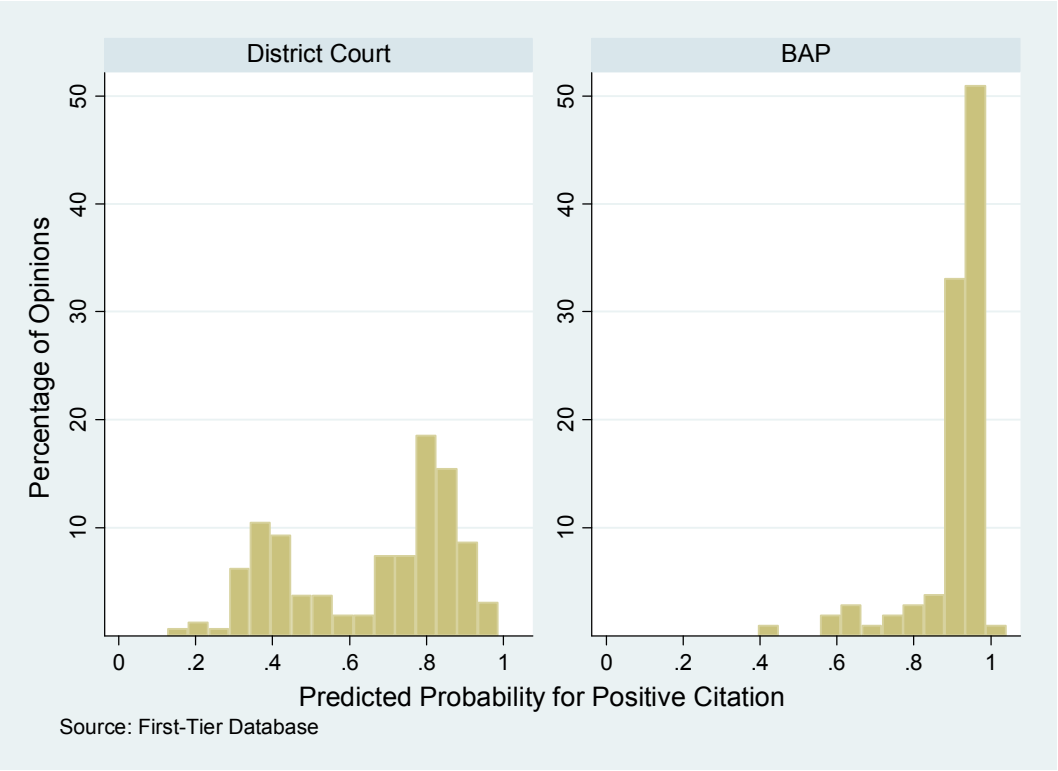
as 2 (Disposition—Narrowly Defined);[45] (3) Published; (4) Appellant; (5) Appellee; (6) Chapter 7; (7) Debtor Type; (8) Dispute Type, (9) Subject; (10) whether the first-tier court's disposition was subsequently appealed to the court of appeals (Subsequent Appeal); and (11) Fiscal Year.

The model identifies the type of first-tier appellate court to have initially determined the appeal as a statistically significant predictor of whether the court's opinion will have been positively cited by another federal court.[46] Figure 5 below illustrates the predicted probability of positive citation to the first-tier appellate opinion based on the actual values for all of the independent variables included in the model.

[45] By coding the disposition of the first-tier appellate court in this manner, this had the effect of collapsing the first two outcomes (i.e., "negative" and "hybrid") in our ordinally defined version of the variable into the category of "error" since a partial affirmance also entails a conclusion that some error occurred below.

[46] For detailed results from the regression model, see *infra* Appendix tbl.7.

FIGURE 5
PREDICTED PROBABILITIES FOR POSITIVE CITATION OF
FIRST-TIER APPELLATE OPINIONS BY FEDERAL COURTS



On average, a BAP opinion had approximately a 90.6% chance of being positively cited by another federal court whereas a district court had a 65.4% chance. Accordingly, the likelihood of positive citation to a first-tier appellate opinion by another federal court increased by approximately 38.5% for BAP opinions. Furthermore, approximately 80% of the BAP opinions, as opposed to only 7% of the district court opinions, had a 90% or greater predicted probability of being positively cited by another federal court. Finally, nearly a third (32%) of the district court opinions had less than a 50% predicted probability of being positively cited. In stark contrast, only 1% of BAP opinions did so. These data support our hypothesis that, if a BAP

issued the first-tier appellate opinion, it will increase the chances of the opinion being positively cited by other federal courts.[47]

The question arises whether this association persists when analyzing the extent to which other federal courts cite to first-tier appellate opinions, whether analyzing citations in the aggregate (i.e., total number of positive citations) or disaggregated according to the type of citing federal court. To answer the question, we implement a variety of regression models that analyze the 200 observations derived from first-tier appellate opinions that were positively cited by a federal court.[48] First, in order to predict the aggregate number of positive citations, we conduct a zero-truncated negative binomial regression analysis.[49] We then proceed to analyze the number of positive citations by citing court type pursuant to a negative binomial regression model.[50] For both of these models, we incorporate the same independent variables from the binary logistic regression analysis conducted to predict whether the first-tier appellate opinion would be cited.

The models indicate that a statistically significant relationship exists between the type of first-tier appellate court that issued the opinion and the total number of positive citing references as well as positive citing references by bankruptcy courts, BAPs, district courts, courts of appeals, and federal courts from other circuits. With all variables held constant at their mean, BAP opinions were predicted to receive over a five-year period approximately 3.7 more positive

[47] The model also identifies the Published, Dispute and Subject variables as significant predictors of whether the first-tier appellate opinion will have been cited by other federal courts.

[48] There were actually 202 such observations. For purposes of our regression analyses, however, we eliminated 2 extreme outliers, which left 200 observations to be analyzed. We define an extreme outlier to be any observation with a total number of positive citations that falls above the third quartile of the positive citing reference data (7 citations) by more than 3 times the interquartile range for such data (5 citations). *See infra* Appendix tbl.3 (describing distribution of positive citing references to first-tier opinions). Accordingly, we excluded any observations with more than 22 positive citing references.

[49] A negative binomial regression model is appropriate here since (1) the aggregate number of positive citations is a count variable that is overdispersed and (2) there are no zero values for this subset of observations (i.e., all opinions have at least one positive citing reference).

[50] We run the regression model five times to account for the five different types of citing federal courts (i.e., bankruptcy court, district court, BAP, court of appeals, and federal courts from other circuits). We do not use a zero-truncated model for these dependent variables since some of the observations do have zero values.

citations than district court opinions. Focusing on the type of citing federal court, BAP opinions were predicted to receive approximately (1) 2 more bankruptcy court citations, (2) 1.3 more BAP citations, (3) 0.2 more court of appeals citations, and (4) 0.64 more citations by federal courts from other circuits. These results support Hypotheses 2B, 3, 4, 5 and 7. We also found that district court opinions were predicted to receive approximately 0.34 more district court citations than BAP opinions, thus confirming the distinction we drew in Hypothesis 6.[51] Overall, the bulk of our evidence suggests that other actors within the bankruptcy judicial system perceived BAPs to provide a better quality of appellate review than district courts.[52]

Using the same negative binomial regression model we used to predict the extent to which federal courts would cite to the first-tier appellate opinions, we find limited results for whether the type of first-tier appellate opinion will be a statistically significant predictor of the depth of treatment provided to the opinion by the citing federal court when controlling for other factors.[53] Again, when holding all other variables constant at their mean, we find that BAP opinions had a statistically significant higher number of citing references by other federal courts that (1) provided discussion of less than a paragraph but more than a brief reference to the cited opinion—approximately 3 more citing references of this type—and (2) provided discussion of more than a paragraph but less than a printed page of the opinion—approximately 0.39 more

[51] To predict the total number of positive district court citations to first-tier appellate opinions, we initially fitted a negative binomial regression model that included all of the independent variables included in the negative binomial regression model used for the other types of citations (the full model). Although the Court variable was a statistically significant predictor in the full model, the model as a whole was not statistically significant (chi-squared = 19.21, df = 12, p = 0.0836). Accordingly, using a backward-selection stepwise regression, we fitted a partial model that only included the Court, Debtor, Subject, and Fiscal Year variables. This partial model was statistically significant (chi-squared = 16.70, df = 5, p = 0.0051), and the Court variable continued to be a statistically significant predictor (p = 0.032).

[52] For detailed results from these regression models, see *infra* Appendix tbl.8.

[53] For one exception, we do not use a negative binomial regression model: In order to predict the number of citing references that examined the first-tier appellate opinion (i.e., an opinion that contains an extended discussion of the cited opinion usually more than a printed page of text), we used a poisson regression analysis since the values for this variable were not overdispersed.

citing references of this type of this type.[54] On the other hand, we found no statistically significant relationship between the type of first-tier appellate court that issued the opinion and the number of citing references that either mentioned the opinion (i.e., contained a brief reference to the cited opinion, usually in a string citation) or examined the opinion (i.e., contained an extended discussion of the cited opinion usually more than a printed page of text).[55]

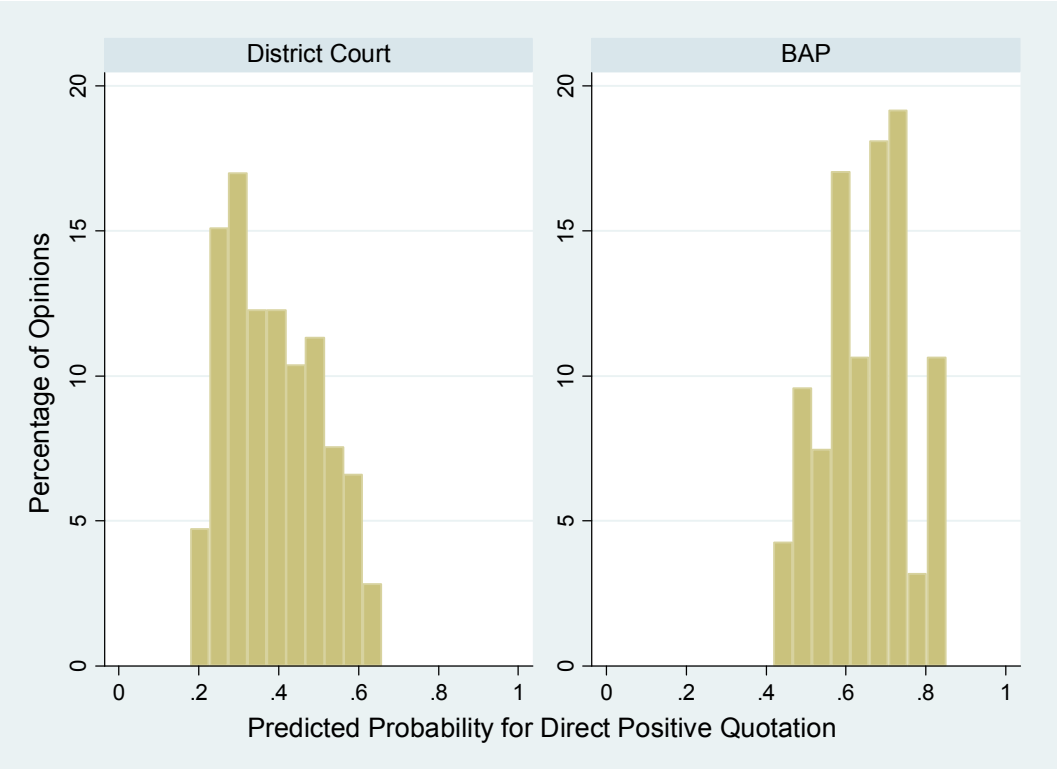
Including the same observations and independent variables from the regression models we used to predict the extent of citation and depth of treatment by citing references, we predict through binary logistic regression the tendency of first-tier appellate opinions to be directly quoted by federal courts that positively cite to those opinions. We find that, all other things being equal, BAP opinions had a statistically significant greater chance of being directly quoted than district court opinions.[56] Based on the predicted probabilities of direct quotation calculated from the actual values of the independent variables included in the model, BAP opinions, on average, had approximately a 65% chance of being directly quoted in contrast to 39% for district court opinions. While only 8.5% of the BAP opinions had less than a 50% chance of being directly quoted, four-fifths (80%) of the district court opinions had this predicted probability. We present the distribution of predicted probabilities for direct quotation in Figure 6 below.

[54] To predict the total number of positive citations that provided discussion of more than a paragraph but less than a printed page of the opinion, we initially fitted a negative binomial regression model that included all of the independent variables included in the negative binomial regression model used for the other types of citations (the full model). Although the Court variable was a statistically significant predictor in the full model, the model as a whole was not statistically significant (chi-squared = 15.41, df = 12, $p = 0.2200$). Accordingly, using a backward-selection stepwise regression, we fitted a partial model that only included the Court and Subject variables. This partial model was statistically significant (chi-squared = 9.67, df = 2, $p = 0.0080$), and the Court variable continued to be a statistically significant predictor ($p = 0.008$).

[55] For detailed results from this regression model, see *infra* Appendix tbl.9.

[56] None of the other independent variables was a statistically significant predictor of direct quotation of the first-tier appellate opinion by its citing reference. For detailed results from the regression model, see *infra* Appendix tbl.11.

FIGURE 6
PREDICTED PROBABILITIES FOR DIRECT QUOTATION OF
FIRST-TIER APPELLATE OPINIONS BY FEDERAL COURTS



Moreover, if we look to the extent of direct quotation of first-tier appellate opinions, a negative binomial regression model indicates that a statistically significant relationship existed between the type of first-tier appellate court to have issued the opinion and the extent to which other federal courts directly quoted the opinion.[57] Specifically, we find that, holding all other variables constant at their mean, a BAP opinion was predicted to have approximately 0.75 more

[57] The model incorporates the same independent variables and observations from the binary logistic regression model used to predict the tendency for direct quotation of first-tier appellate opinions.

citing references that directly quoted it than did a district court opinion.[58] These findings support Hypotheses 9A and 9B.

Finally, we find support for Hypothesis 10, even when controlling for other factors. A zero-truncated negative binomial regression model indicates that the type of first-tier appellate court to have issued the opinion influenced the immediacy with which it was cited. With all variables held at their mean for positively cited opinions, the shift from a district court opinion to a BAP opinion was predicted to decrease the amount of time within which the opinion was first cited by approximately 224 days. It would seem, therefore, that BAP opinions commanded the attention of other federal courts more quickly than did district court opinions.[59]

D. Interpretation of Results

Our inquiry into the perceived quality of appellate review has focused on two types of perception: (1) the manner in which courts of appeals, upon direct review, have perceived BAPs and district courts to perform their error-finding function; and (2) the manner in which other federal courts have signaled, through citation practices, their perception of the quality of appellate review provided by BAPs and district courts. We conducted our inquiry by testing a series of hypotheses predicting that BAPs, by virtue of their structural features, would be perceived to provide a quality of appellate review superior to that of their district court counterparts. In the end, our statistical analyses generated considerable evidence in support of our hypotheses. We repeatedly found a statistically significant, positive association between BAPs and various measures for the perception of the quality of appellate review. However, as

[58] No statistically significant relationship existed between any of the other independent variables and the number of citations that directly quoted the first-tier appellate opinion. For detailed results from the regression model, see *infra* Appendix tbl.9.

[59] For detailed results from the regression model, see *infra* Appendix tbl.10.

statistical significance does not necessarily translate into substantive significance, we seek to give a richer account of the different ways in which our results buttress our claims.

First, we found for a limited subset of data that, even when controlling for other factors, the likelihood of full affirmance by the court of appeals increased from 61% for district courts to 83% for BAPs. When one considers that a study conducted by the Federal Judicial Center found that courts of appeals fully affirmed the judgments of district courts in bankruptcy appeals approximately 73% of the time and that the study further estimated that the affirmance rates for BAP judgments would be similar,[60] we conclude that our evidence, and in particular our statistically significant evidence, contravenes the prior understanding of outcome in the bankruptcy appeals system. Put another way, the affirmance rates from our data favoring BAPs suggests that courts of appeals truly perceived BAPs to have performed their error-finding function better than their district court counterparts.

Second, we generally found statistically significant evidence that, all other things being equal, BAP opinions enjoyed higher numbers of positive citations by other federal courts; BAP opinions were cited in greater depth; and BAP opinions were cited with greater immediacy. We noted above that citations rates are most relevant and most informative in the absence of a stare decisis obligation.[61] Accordingly, we find that our results regarding the citation practices of courts of appeals and federal courts in other circuits merit particular attention.

At first blush, one might not consider our statistically significant finding that BAP opinions were predicted to receive approximately 0.2 more citations by courts of appeals to be substantively significant. Placed in its proper context, however, this finding takes on new light.

[60] *See* McKenna & Wiggins, *supra* note 28, at 630. The study estimated affirmance rates of BAP decisions due to limited data resulting from the limited opportunity, at the point in time, for courts of appeals to have reviewed such decisions. *See id.*

[61] *See supra* notes 40-41 and accompanying text.

As an initial matter, courts of appeals were incredibly parsimonious in their citing of first-tier appellate opinions. Specifically, 82% of the first-tier appellate opinions did not receive *any* circuit court citations, thus making any amount of citation by the courts of appeals impressive. Furthermore, we estimate pursuant to our regression analysis that the rate of citation over a five-year period to BAP opinions by courts of appeals was 2.33 times greater than that for district court opinions.[62] These findings confirm anecdotal evidence reported by the Federal Judicial Center that circuit judges perceive BAP opinions to be of a higher quality than district court opinions.[63] Thus, although the size of the statistically significant effect we witness with respect to circuit court citations appears small, we interpret it to have substantive significance. Finally, we uncovered statistically significant evidence to support our hypothesis that federal courts in other circuits would positively cite with greater frequency to BAP opinions—specifically, a rate predicted to be 1.45 times greater than that for district court opinions.[64] In light of "the dearth of binding precedent [on questions of substantive bankruptcy law] from the courts of appeals or the Supreme Court,"[65] one might interpret the intercircuit favoritism of BAP opinions over district court opinions as the next-best source of authority.

When we consider these findings in concert with the rest of our findings on citation practices, we conclude that there exists strong support for the notion that, in a variety of ways, other judicial actors in the bankruptcy appeals process perceive BAPs to provide a better quality of appellate review than district courts. These conclusions, then, provide strong validation to commentators who have theorized about the ideal attributes of appellate review. To the extent

[62] *See* infra Appendix tbl.8. We are 95% certain that this rate is in the range of 1.30 to 4.21. *See id.*

[63] *See* McKenna & Wiggins, *supra* note 28, at 678 ("There is anecdotal evidence that circuit judges find the BAP decisions they review better reasoned and the cases better prepared for review than decisions from the district courts, *and that this impression is independent of the likelihood of affirmance or reversal*." (emphasis added)).

[64] *See* infra Appendix tbl.8. We are 95% certain that this rate is in the range of 1.03 to 2.03. *See id.*

[65] *See* McKenna & Wiggins, *supra* note 28, at 628.

that courts in fact strive to resolve cases correctly, the findings suggest that BAPs in fact offer higher quality appellate review than do district courts. That conclusion, in turn, has important ramifications for policymakers. It would seem desirable for policymakers to introduce more multimember appellate tribunals staffed by judges with particular expertise in the subject matter of the appeals that the tribunals will hear.[66]

It is important to emphasize again that those conclusions clearly result only if courts in fact strive to reach correct resolution of cases and issues. And that is a question on which our data do not, and cannot shed light. It may be the case that, partly as a result of theoreticians' writings, courts favor BAPs over district courts not because they truly conclude that BAPs are correct more often, but rather because they simply *believe* (without truly examining) that BAPs are correct, which in turn inclines them simply to affirm the conclusions of BAPs. If so, the lesson for policymakers is murkier.

CONCLUSION

In this Article, we have shown, as a general matter, that federal courts have expressed a general preference for the quality of appellate review afforded by BAPs as opposed to district courts. On the hardly implausible assumption that courts in fact strive to resolve cases and issues

[66] *See, e.g., id.* at 634 ("[U]sers of the complex bankruptcy system probably want precedent not just settled, but settled right . . . . If early (and in the Ninth Circuit, not so early) impressions about the quality of work by the bankruptcy appellate panels hold up, the dual needs for binding authority and substantive correctness . . . argue for some sort of a dual or hybrid system involving bankruptcy appellate panels in some form.").

We emphasize that our findings do not speak to whether it is more desirable to have many such tribunals—as is the case with BAPs—or just one national tribunal—as is the case, for example, with the United States Court of Appeals for the Federal Circuit for patent appeals. That issue would seem to turn on how important it is to have an intermediate appellate tribunal announce legal rules with national uniformity. *See, e.g., id.* at 649 ("Structural nonuniformity may or may not detrimentally affect the functioning of the system and the practice of bankruptcy law. Although nonuniform interpretation of the bankruptcy laws is undesirable (at least beyond a certain healthy percolation), it is likely that intercircuit nonuniformity of structure affects few users of the system. Intracircuit nonuniformity, on the other hand, may raise costs somewhat for those litigants whose counsel must evaluate the likelihood of success under alternate routes by researching different lines of (nonbinding) authority.").

correctly, this finding tends to validate theoreticians' claims about the ideal attributes of appellate review, since BAPs, more so than district courts, tend to feature those attributes. Upon the same assumption, the finding also should prompt policymakers to introduce more appellate tribunals with these attributes—specifically multimember panels whose members enjoy an expertise in the types of matters likely to fill up the docket of the tribunals.

APPENDIX

Table 1: Sample of Appellate Bankruptcy Opinions

Panel A: District Court and Bankruptcy Appellate Panel (BAP) Opinions by Fiscal Year

Fiscal Year	*District Court Opinions*	*Column Percentage*	*BAP Opinions*	*Column Percentage*
1998	56	34.57	34	32.08
1999	53	32.72	44	41.51
2000	53	32.72	28	26.42
Total	162	100.00	106	100.00

Source: First-Tier Database

Panel B: District Court and Bankruptcy Appellate Opinions by Circuit

Circuit	*District Court*	*Column Percentage*	*BAP*	*Column Percentage*	*Total*	*Column Percentage*
First	7	4.32	10	9.43	17	6.34
Second	32	19.75	5	4.72	37	13.81
Third	26	16.05	0	0.00	26	9.70
Fourth	9	5.56	0	0.00	9	3.36
Fifth	14	8.64	0	0.00	14	5.22
Sixth	16	9.88	11	10.38	27	10.07
Seventh	23	14.20	0	0.00	23	8.58
Eighth	2	1.23	22	20.75	24	8.96
Ninth	14	8.64	31	29.25	45	16.79
Tenth	7	4.32	27	25.47	34	12.69
Eleventh	12	7.41	0	0.00	12	4.48
District of Columbia	0	0.00	0	0.00	0	0.00
Total	162	100.0	106	100.00	268	100.00

Source: First-Tier Database

Panel C: Court of Appeals Opinions by Fiscal Year and First-Tier Court Reviewed

Fiscal Year	*Reviewing District Court*	*Column Percentage*	*Reviewing BAP*	*Column Percentage*
1998	42	30.66	13	39.39
1999	44	32.12	9	27.27
2000	51	37.23	11	33.33
Total	137	100.00	33	100.00

Source: Second-Tier Database

Panel D: Court of Appeals Opinions by Circuit and First-Tier Appellate Court Reviewed

Circuit	*District Court*	*Column Percentage*	*BAP*	*Column Percentage*	*Total*	*Column Percentage*
First	3	2.19	3	9.09	6	3.53
Second	14	10.22	2	6.06	16	9.41
Third	7	5.11	0	0.00	7	4.12
Fourth	8	5.84	0	0.00	8	4.71
Fifth	23	16.79	0	0.00	23	13.53
Sixth	15	10.95	2	6.06	17	10.00
Seventh	16	11.68	0	0.00	16	9.41
Eighth	10	7.30	2	6.06	12	7.06
Ninth	26	18.98	23	69.70	49	28.82
Tenth	8	5.84	1	3.03	9	5.29
Eleventh	6	4.38	0	0.00	6	3.53
District of Columbia	0	0.00	0	0.00	0	0.00
Total	137	100.00	33	100.00	170	100.00

Source: Second-Tier Database

Table 2: Frequency of Dispositions Rendered on Appeal

Panel A: First-Tier Dispositions

Disposition	*Frequency*	*Percentage*
Negative	78	29.10
Hybrid	22	8.21
Positive	168	62.69
Total	268	100.00

Source: First-Tier Database

Panel B: Second-Tier Dispositions

Disposition	*Frequency*	*Percentage*
Negative	33	19.41
Hybrid	17	10.00
Positive	120	70.59
Total	170	100.00

Source: Second-Tier Database

Table 3: Data for First-Tier Appellate Bankruptcy Opinions with Positive Citing References

Panel A: Frequency of Positive Citation to First-Tier Appellate Opinions

Number of Citations	*Frequency*	*Percentage*
1	45	22.28
2	35	17.33
3	24	11.88
4	17	8.42
5	18	8.91
≥ 6	63	31.18
Total	202	100.00

Source: First-Tier Database

Panel B: Distribution of Positive Citations to First-Tier Appellate Opinions

N	*25%*	*Median*	*75%*	*Mean*
202	1	2	5	4

Source: First-Tier Database

Table 4: Court of Appeals Disposition by First-Tier Appellate Court

Panel A: Second-Tier Database

	Court of Appeals Disposition			
First-Tier Court	*Negative*	*Hybrid*	*Positive*	**Total**
BAP	2	4	27	33
	(6.06)	(12.12)	(81.82)	(100.00)
District Court	31	13	93	137
	(22.63)	(9.49)	(67.88)	(100.00)
Total	33	17	120	170
	(19.41)	(10.00)	(70.59)	(100.00)

Note: Row percentages are reported in parentheses. The p-value from a two-sided Fisher test is 0.092.

Panel B: First-Tier Database

	Court of Appeals Disposition			
First-Tier Court	*Negative*	*Hybrid*	*Positive*	**Total**
BAP	3	2	22	27
	(11.11)	(7.41)	(81.48)	(100.00)
District Court	18	1	31	50
	(36.00)	(2.00)	(62.00)	(100.00)
Total	21	3	53	77
	(27.27)	(3.90)	(68.83)	(100.00)

Note: Row percentages are reported in parentheses. The p-value from a two-sided Fisher test is 0.029.

Table 5: Citing Reference Data

Panel A: Federal Court Positive Citing Reference by Type of First-Tier Appellate Opinion

	Positive Citing Reference by Federal Court		
First-Tier Appellate Opinion Type	*No*	*Yes*	**Total**
BAP	10 (9.43)	96 (90.57)	106 (100.00)
District Court	56 (34.57)	106 (65.43)	162 (100.00)
Total	66 (24.63)	202 (75.37)	268 (100.00)

Source: First-Tier Database
Note: Row percentages are reported in parentheses. The p-value from a chi-square test with one degree of freedom is less than 0.0001.

Panel B: Citing Reference Data by Type of Citing Court for Positively Cited First-Tier Bankruptcy Appellate Opinions

	Citing References		
***Citing Court**: All Federal Courts*	*Median*	*Mean*	*N*
BAP Opinions	6.00	7.27	94
District Court Opinions	2.00	3.25	106
t-test of difference in means: t = 6.5107 (p < 0.0001)*** Wilcoxon rank-sum test: z = 6.257 (p < 0.0001)***			
***Citing Court**: Court of Appeals*	*Median*	*Mean*	*N*
BAP Opinions	0.00	0.45	94
District Court Opinions	0.00	0.19	106
t-test of difference in means: t = 2.7414 (p = 0.0067)** Wilcoxon rank-sum test: z = 2.560 (p = 0.0105)*			
***Citing Court**: Bankruptcy Appellate Panel*	*Median*	*Mean*	*N*
BAP Opinions	1.00	2.01	94
District Court Opinions	0.00	0.15	106
t-test of difference in means: t = 9.7270 (p < 0.0001)*** Wilcoxon rank-sum test: z = 9.368 (p < 0.0001)***			
***Citing Court**: District Court*	*Median*	*Mean*	*N*
BAP Opinions	0.00	0.57	94
District Court Opinions	1.00	0.99	106
t-test of difference in means: t = -2.0821 (p = 0.0386)* Wilcoxon rank-sum test: z = -3.194 (p = 0.0014)**			
***Citing Court**: Bankruptcy Court*	*Median*	*Mean*	*N*
BAP Opinions	3.00	4.23	94
District Court Opinions	1.00	1.92	106
t-test of difference in means: t = 5.2142 (p < 0.0001)*** Wilcoxon rank-sum test: z = 4.593 (p < 0.0001)***			
***Citing Court**: Federal Courts from Other Circuits*	*Median*	*Mean*	*N*
BAP Opinions	1.50	2.52	94
District Court Opinions	1.00	1.50	106
t-test of difference in means: t = 3.0581 (p = 0.0025)** Wilcoxon rank-sum test: z = 3.337 (p = 0.0008)***			

Source: First-Tier Database
Note: ***$p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$.

Panel C: Citing Reference Data by Depth of Treatment for Positively Cited First-Tier Bankruptcy Appellate Opinions

	Citing References		
***Depth of Treatment**: Mentioned*	*Median*	*Mean*	*N*
BAP Opinions	1.00	1.09	94
District Court Opinions	0.00	0.73	106
t-test of difference in means: t = 1.8837 (p = 0.0611) Wilcoxon rank-sum test: z = 2.288 (p = 0.0221)*			
***Depth of Treatment**: Cited*	*Median*	*Mean*	*N*
BAP Opinions	4.50	5.22	94
District Court Opinions	1.00	1.94	106
t-test of difference in means: t = 7.3435 (p < 0.0001)*** Wilcoxon rank-sum test: z = 6.941 (p < 0.0001)***			
***Depth of Treatment**: Discussed*	*Median*	*Mean*	*N*
BAP Opinions	0.00	0.89	94
District Court Opinions	0.00	0.48	106
t-test of difference in means: t = 2.8311 (p = 0.0051)** Wilcoxon rank-sum test: z = 2.349 (p = 0.0188)*			
***Depth of Treatment**: Examined*	*Median*	*Mean*	*N*
BAP Opinions	0.00	0.05	94
District Court Opinions	0.00	0.09	106
t-test of difference in means: t = -1.0285 (p = 0.3050) Wilcoxon rank-sum test: z = -0.889 (p = 0.3741)			

Source: First-Tier Database
Note: ***$p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$.

Panel D: Federal Court Positive Quoting References by Type of First-Tier Appellate Opinion

	Positive Quoting Reference by Federal Court		
First-Tier Appellate Opinion Type	*No*	*Yes*	**Total**
BAP	33 (35.11)	61 (64.89)	94 (100.00)
District Court	65 (61.32)	41 (38.68)	106 (100.00)
Total	98 (49.00)	102 (51.00)	200 (100.00)

Note: Row percentages are reported in parentheses. The p-value from a chi-square test with one degree of freedom is less than 0.0001.

Panel E: Citing Reference Data for Positively Quoted First-Tier Bankruptcy Appellate Opinions

	Citing References		
First-Tier Appellate Opinion Type	*Median*	*Mean*	*N*
BAP Opinions	1.00	1.43	94
District Court Opinions	0.00	0.58	106
t-test of difference in means: t = 4.4839 (p < 0.0001)*** Wilcoxon rank-sum test: z = 4.473 (p < 0.0001)***			

Source: First-Tier Database
Note: ***$p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$.

Panel F: Immediacy Data for Positively Quoted First-Tier Bankruptcy Appellate Opinions

	Number of Days		
First-Tier Appellate Opinion Type	*Median*	*Mean*	*N*
BAP Opinions	177	306	94
District Court Opinions	387	530	106
t-test of difference in means: t = -3.9754 (p = 0.0001)*** Wilcoxon rank-sum test: z = -4.089 (p < 0.0001)***			

Source: First-Tier Database
Note: ***$p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$.

Table 6: Ordinal Logistic Regression Model of Court of Appeals Disposition of Appeals from First-Tier Court

Variable	Odds Ratio	95% Confidence Interval
Court	5.465*	(1.266, 23.594)
Published	0.601	(0.142, 2.534)
Appellant	2.139	(0.379, 12.081)
Appellee	1.681	(0.377, 7.493)
Chapter 7	8.008**	(1.977, 32.440)
Debtor Type	2.545	(0.461, 14.055)
Dispute Type	1.074	(0.249, 4.633)
Subject	0.296	(0.071, 1.236)
FY 1998	1.050	(0.236, 4.675)
FY 1999	1.054	(0.240, 4.624)
N	77	
Log likelihood	-46.943	
Pseudo R^2	0.174	

Source: First-Tier Database
Note: ***$p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$. We conducted a likelihood-ratio test of proportionality of odds across response categories to verify that our model did not violate the proportional odds assumption. A likelihood-ratio chi-square value of 8.24 ($p = 0.6050$) indicated that no violation occurred.

Table 7: Binary Logistic Regression Model of Positive Citation by a Federal Court to First-Tier Appellate Opinion

Variable	Odds Ratio	95% Confidence Interval
Court	3.445**	(1.515, 7.836)
Disposition—Narrowly Defined	1.459	(0.724, 2.942)
Published	6.810***	(3.391, 13.673)
Appellant	0.868	(0.361, 2.086)
Appellee	1.278	(0.524, 3.118)
Chapter 7	1.335	(0.644, 2.765)
Debtor Type	1.278	(0.644, 2.765)
Dispute Type	2.881*	(1.148, 7.231)
Subject	3.392**	(1.379, 8.346)
Subsequent Appeal	0.937	(0.450, 1.951)
FY 1998	0.745	(0.336, 1.653)
FY 1999	1.072	(0.469, 2.452)
N	268	
Log likelihood	-116.625	
Pseudo R^2	0.220	

Source: First-Tier Database
Note: ***$p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$.

Table 8: Regression Analyses of Number of Positive Federal Court Citing References to Positively-Cited First-Tier Appellate Bankruptcy Opinions (by Type of Federal Court)

Variable	All Federal Court Citations[a]	Bankruptcy Court Citations[b]	District Court Citations[c]	BAP Citations[b]	Court of Appeals Citations[d]	Intercircuit Citations[b]
Court	2.538*** (1.836, 3.509)	2.072*** (1.509, 2.845)	0.628* (0.410, 0.962)	9.702*** (5.462, 17.231)	2.336** (1.297, 4.206)	1.447* (1.030, 2.031)
Disposition	0.995 (0.732, 1.352)	0.985 (0.726, 1.337)		1.088 (0.738, 1.605)	0.873 (0.517, 1.473)	1.000 (0.716, 1.397)
Published	1.838** (1.128, 2.994)	1.563 (0.968, 2.526)		4.276 (0.985, 18.560)	3.524 (0.820, 15.141)	1.552** (0.502)
Appellant	1.020 (0.685, 1.519)	1.023 (0.686, 1.527)		0.925 (0.573, 1.493)	1.381 (0.614, 3.104)	4.814*** (2.443, 9.488)
Appellee	1.005 (0.681, 1.519)	1.096 (0.740, 1.623)		0.470** (0.275, 0.802)	2.306* (1.101, 4.830)	1.055 (0.681, 1.633)
Chapter 7	1.395* (1.011, 1.924)	1.386* (1.010, 1.904)		1.330 (0.873, 2.026)	1.629 (0.901, 2.948)	1.112 (0.783, 1.581)
Debtor Type	1.349 (0.893, 2.040)	1.279 (0.845, 1.936)	1.485 (0.953, 2.316)	0.678 (0.369, 1.245)	2.498* (1.174, 5.312)	1.251 (0.801, 1.953)
Dispute Type	0.817 (0.550, 1.212)	0.796 (0.538, 1.178)		1.452 (0.871, 2.418)	0.678 (0.326, 1.413)	0.930 (0.614, 1.408)
Subject	1.435 (0.971, 2.121)	1.160 (0.783, 1.720)	1.492 (0.976, 2.280)	1.870* (1.125, 3.107)	1.341 (0.634, 2.838)	1.202 (0.797, 1.814)
Subsequent Appeal	1.092 (0.795, 1.501)	1.063 (0.777, 1.455)		1.169 (0.789, 1.731)	0.949 (0.536, 1.682)	1.127 (0.805, 1.579)
FY 1998	1.134 (0.778, 1.651)	0.845 (0.584, 1.223)	1.687* (0.999, 2.847)	1.657* (1.018, 2.687)	0.700 (0.376, 1.302)	0.194 (0.606, 1.378)
FY 1999	1.004 (0.711, 1.418)	0.926 (0.659, 1.301)	1.324 (0.789, 2.223)	1.237 (0.799, 1.915)	0.447* (0.240, 0.832)	0.867 (0.595, 1.263)
N	200	200	200	200	200	200
Pseudo R^2	0.063	0.050	0.034	0.242	0.124	0.053

Source: First-Tier Database

Note: Incidence rate ratios presented with 95% confidence intervals in parentheses; ***$p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$.

[a] Zero-truncated negative binomial regression model.

[b] Negative binomial regression model.

[c] We have fitted a negative binomial regression model that does not include all of the independent variables in the table for the reasons set forth in *supra* note 51.

[d] Poisson regression model.

Table 9: Regression Analyses of Number of Positive Federal Court Citing References to Positively-Cited First-Tier Appellate Bankruptcy Opinions (by Depth of Treatment)

Variable	Cited[a]	Discussed[b]	Quoted[a]
Court	2.525*** (1.922, 3.317)	1.798** (1.164, 2.779)	2.338*** (1.527, 3.580)
Disposition	1.023 (0.789, 1.325)		0.828 (0.561, 1.222)
Published	1.521 (0.997, 2.321)		1.535 (0.771, 3.056)
Appellant	1.127 (0.809, 1.569)		1.288 (0.761, 2.179)
Appellee	1.021 (0.735, 1.420)		1.373 (0.817, 2.307)
Chapter 7	1.352* (1.027, 1.779)		1.302 (0.853, 1.988)
Debtor Type	1.305 (0.922, 1.847)		1.508 (0.881, 2.580)
Dispute Type	0.853 (0.608, 1.197)		0.913 (0.549, 1.517)
Subject	1.174 (0.839, 1.643)	1.397 (0.882, 2.213)	1.059 (0.645, 1.741)
Subsequent Appeal	0.915 (0.699, 1.197)		0.676 (0.438, 1.043)
FY 1998	1.101 (0.804, 1.506)		1.450 (0.885, 2.374)
FY 1999	0.969 (0.725, 1.296)		1.366 (0.862, 2.163)
N	200	200	200
Pseudo R^2	0.076	0.021	0.060

Source: First-Tier Database

Note: Incidence rate ratios presented with 95% confidence intervals in parentheses; ***$p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$. We have only presented the results from those regression analyses in which the Court variable was a statistically significant predictor.

[a] Negative binomial regression model.

[b] We have fitted a negative binomial regression model that does not include all of the independent variables in the table for the reasons set forth in *supra* note 54.

Table 10: Zero-Truncated Negative Binomial Regression Model of Number of Days for First Positive Federal Court Citing Reference to Positively-Cited First-Tier Appellate Bankruptcy Opinions

Variable	Incidence Rate Ratio	95% Confidence Interval
Court	0.565***	(0.423, 0.753)
Disposition—Narrowly Defined	0.913	(0.698, 1.194)
Published	0.922	(0.631, 1.345)
Appellant	1.116	(0.781, 1.595)
Appellee	1.097	(0.761, 1.582)
Chapter 7	0.767	(0.579, 1.016)
Debtor Type	1.125	(0.784, 1.615)
Dispute Type	0.836	(0.596, 1.174)
Subject	0.670*	(0.480, 0.937)
Subsequent Appeal	0.681*	(0.507, 0.914)
FY 1998	0.860	(0.607, 1.220)
FY 1999	0.927	(0.676, 1.272)
N	200	
Pseudo R^2	0.013	

Source: First-Tier Database
Note: Incidence rate ratios presented with 95% confidence intervals in parentheses; ***$p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$.

Table 11: Binary Logistic Regression Model of Direct Quotation of Positively-Cited First-Tier Appellate Opinion by Positive Citing Federal Courts

Variable	Odds Ratio	95% Confidence Interval
Court	2.727**	(1.393, 5.339)
Disposition—Narrowly Defined	0.563	(0.297, 1.067)
Published	1.142	(0.455, 2.868)
Appellant	1.079	(0.473, 2.461)
Appellee	1.173	(0.514, 2.681)
Chapter 7	1.083	(0.555, 2.112)
Debtor Type	0.769	(0.339, 1.748)
Dispute Type	0.861	(0.381, 1.946)
Subject	1.050	(0.474, 2.328)
Subsequent Appeal	0.702	(0.360, 1.370)
FY 1998	1.079	(0.501, 2.323)
FY 1999	2.007	(0.964, 4.178)
N	200	
Log likelihood	-126.033	
Pseudo R^2	0.091	

Source: First-Tier Database
Note: ***$p \leq 0.001$, ** $p \leq 0.01$, * $p \leq 0.05$.