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The Conservative Paradox and the Formation of 5–4 Coalitions

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Cover Page Footnote

I wish to thank Lee Epstein, Josh Fischman, John Hill, William Hubbard, Max Huffman, Richard Hynes, Kate Litvak, Florence Roisman, Frank Sullivan, Steve Utz, Don Verrilli, and R. George Wright. Lee Little's librarianship help was invaluable and Placido Zambrano, Fred Sprunger, and Azza Ben Moussa provided excellent research assistance.

Nicholas L. Georgakopoulos*

THE CONSERVATIVE PARADOX AND THE FORMATION OF 5–4 COALITIONS

Abstract

This analysis springs from the need to resolve a paradox. The paradox is that 5–4 decisions from the post-World War II United States Supreme Court lean conservative—they are about 58% conservative. The explanation is that the median justice has tended to be ideologically closer to the next conservative justice than the next liberal justice. A coalition with the conservative wing has tended to be easier to form than with the liberal wing. The contribution is the comparison of three models of how 5–4 vote splits may occur.

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* Harold R. Woodard Professor of Law, Indiana University School of Law - Indianapolis. I wish to thank Lee Epstein, Josh Fischman, John Hill, William Hubbard, Max Huffman, Richard Hynes, Kate Litvak, Florence Roisman, Frank Sullivan, Steve Utz, Don Verrilli, and R. George Wright. Lee Little's librarianship help was invaluable and Placido Zambrano, Fred Springer, and Azza Ben Moussa provided excellent research assistance.

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I. INTRODUCTION

Five-to-four splits are the fulcrum of the Supreme Court’s docket. Yet, our understanding of how 5–4 decisions form is scant. This Article demonstrates a paradox, that the 5–4 post-World War II decisions of the United States Supreme Court persistently deviate from an even split and lean conservative.¹ Of three potential explanations for coalition formation, one has much greater explanatory power. However, the conclusion is not that justices are political. Rather, justices are principled but selected according to their principles’ agreement with the issues that the political branches consider salient.²

Part II describes the databases that this Article uses. Part III shows that the 5–4 decisions of the United States Supreme Court lean conservative, 58% of them are conservative. This phenomenon has persisted since the 1946 term, cannot be due to chance, is confirmed by two audits of slant assignment, and appears consistently in every composition of the Court, in every period of 15-terms and in the vast majority of 3-term periods.³ This conservative paradox is not explained by the Court’s structure, the control of the Presidency or the Senate.

Part IV uses the estimates of judicial political leanings by Andrew Martin and Kevin Quinn (“Martin & Quinn”), the validity of which in this setting is confirmed from a different perspective by Appendix C, and

¹ See *infra* tbls.1, 2, and 3 and accompanying text.

² See *infra* pt. V.

³ See *infra* pt. III. A composition is defined by the Court’s junior justice and lasts until the next appointment. Accordingly, compositions are akin, but not identical, to the term “natural court” that the Supreme Court Database uses and tracks as one of its fields. Harold J. Spaeth, Lee Epstein, et al., *The Supreme Court Database Code Book* (Sept. 30, 2021). Any composition, even of eight or fewer justices, is a natural court, named in sequence by its chief justice (e.g., Roberts 1, Roberts 2, etc.), despite that the vacancy may be the chief justice. Compositions that issue 5–4 decisions correspond to natural courts during which the Court had nine members. Recusals and absences can still lead to decisions with fewer justices. Compositions take the name of their most junior member, the name of the justice whose appointment defines the composition.

compares three hypotheses of forming 5–4 vote splits.⁴ One, called here vying for the median, performs noticeably better. It explains the political leaning of decisions by the distances from the justices next to the median on each side to the median.⁵ This explanation’s power increases as the sample narrows to first-year decisions and to decisions with the justices aligned by ideology.⁶ That power is lost in non-party-line decisions, in which the location of the median justice has no explanatory power, and the conservative paradox disappears.⁷ The contribution of the analysis is the comparison of three models of formation of 5–4 vote splits and the identification of one as explanatory.

Part V proposes the inference that justices vote according to their principles—their legal philosophy—on all matters or dimensions of the legal system. However, justices are selected by the political branches for the agreement of their principles with those dimensions of the legal system that the political branches consider salient. The appearance of politicization in the politically charged dimensions of adjudication and of its absence in the dimensions that are not politically salient is a natural result of this setting.

II. THE SUPREME COURT DATABASE AND IDEOLOGICAL SCORES

The analysis rests on two databases, the Supreme Court Database (“Database”) and the database of Ideological Ideal Point Estimates of the justices (their “Ideology”). The analysis uses the former for the justices’ votes, the cases’ outcomes, and their ideological slant, liberal or conservative. The latter provides estimates of the relative ideological positions of the justices.

The Supreme Court Database holds the data surrounding each decision of the United States Supreme Court and divides into the modern database, from the 1946 term onwards and the legacy dataset, up to the 1945 term.⁸ The Database tracks numerous aspects of each decision.⁹ The relevant ones for the analysis are the justices’ votes and an ideological coding of the decision and the votes.

The ideological coding by the Database is mildly contested. Legal scholars instinctively recognize that some fraction of decisions occupy a gray area, where reasonable jurists may disagree whether an outcome is liberal or conservative. Indeed, one set of scholars who used the Database’s ideological

⁴ See *infra* pt. IV and Appendix C; see also Andrew D. Martin & Kevin M. Quinn, *Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953–1999*, 10 POL. ANALYSIS 134, 146–48 (2002). Their data, updated, is available online at <https://mqscores.lsa.umich.edu/measures.php>.

⁵ See discussion *infra*, Sections IV.B.2-2..

⁶ See discussion *id.*

⁷ See discussion *id.*

⁸ Spaeth et al., *supra* note 4, at 6–7.

⁹ *Id.* at 2–4.

slants dropped some legal topics that seemed too far into that gray area.¹⁰ The Article offers two measures that should provide comfort to readers about the Database's assignment of ideological slant and validate it. Appendix A performs an audit of the Database's ideological assignments against the manual assignment of slants to 800 decisions in a prior project that I engaged in with retired Indiana Supreme Court Justice Frank Sullivan, Jr.¹¹ Whereas we disagree with about 5% of the Database's assignments of slant, our overall count does not differ.¹² In other words, we disagree in an almost equal number of cases that the Database considered liberal and that the Database considered conservative. Accordingly, we find no bias in the Database. By extension, despite that jurists will disagree with a small fraction of its assignments of slants, we have no reason to expect that they will disagree with the overall counts. This also contradicts the suggestion that the Database should assign slants to fewer cases, avoiding the gray area.¹³

The second validation of the Database's assignment of slants comes in the right panel of Table 2 and Appendix B. Lee Epstein, William Landes, and Richard Posner subject the Database's ideological assignment of slants to a review of a hundred decisions read by Judge Posner and drop the decisions about a set of legal topics due to concerns over the accuracy of the Database's assignment of slants there.¹⁴ The right panel of Table 2 compares that approach to using the Database's count of slants. Table 2 has the compositions that have more than fifty 5–4 decisions; they all display the conservative paradox, a ratio of conservative decisions greater than 50% according to the Database's slants. The Table's right panel compares that to the conservative ratio calculated after the ELP filtering, after the dropping of that set of topics. The two compositions that change the most in the direction of a reduced conservative ratio are those defined by the appointments of Justices Stevens and O'Connor. Appendix B discusses the thirteen dropped decisions, determines their ideological slant, and compares the conservative ratio of the Database to that of the Epstein, Landes, & Posner ("ELP") method of dropping those topics. In both compositions, the conservative ratio as it springs from the aggregate count from the Database is more accurate than the conservative ratio according to the ELP method. Despite that the dropping removes some decisions with clearly false slant, it removes many more decisions with accurate slant and that is the reason for the Database's

¹⁰ See *infra*, note 14 and accompanying text (explaining the filtering used by Epstein, Landes, and Posner).

¹¹ See Nicholas L. Georgakopoulos & Frank Sullivan, Jr., *Illustrating Swing Votes II: United States Supreme Court*, 53 *IND. L. REV.* 135 app. B (2020).

¹² See *infra* tbl. A1.

¹³ Professor Carolyn Shapiro has suggested that the decisions in the gray area should not receive an assignment of political slant. Carolyn Shapiro, *The Context of Ideology: Law, Politics, and Empirical Legal Scholarship*, 75 *MO. L. REV.* 79, 91–92 (2010).

¹⁴ Lee Epstein, William M. Landes, and Richard A. Posner, *THE BEHAVIOR OF FEDERAL JUDGES* 149–151 (2013) (Hereinafter "JUDGES").

accuracy. First, this confirms the notion that the Database is not biased. Second, this shows that the large number of assignments by the Database produces accuracy and renders irrelevant disagreements about few cases. Moreover, this audit confirms the existence of the conservative paradox.

The Ideology database springs from the work of Martin and Quinn, two political science professors.¹⁵ The input to their analysis is all decisions on argued cases that are not unanimous and not tied, i.e., they drop the shadow docket, unanimous, and evenly split decisions.¹⁶ The output, the ideological scores, come from the times that each justice has sided with others, without regard to whether the result is liberal or conservative, but the scale is interpreted as aligning the justices from liberal to conservative.¹⁷ Thus, the justice who is most likely to dissent even alone from conservative decisions will tend to have the most liberal ideal point, and vice versa. The issue of quantifying the ideology of justices has a long bibliography.¹⁸ Several simpler assignments of ideology to justices exist, but they have little accuracy.¹⁹ Some criticize the Martin & Quinn method and offer more sophisticated or more multidimensional estimates.²⁰ The multidimensional scorings agree with this analysis that the reductionism of the one dimensional view of judges as liberal or conservative is simplistic.²¹ However, the additional sophistication of other one-dimensional scorings does not benefit this analysis. Bailey's calculation of ideological ideal points, for example, has the advantage of greater consistency across time.²² That is irrelevant for this analysis because all the comparisons made here regard the difference between justices who make decisions at the same time, the same term. Therefore, no advantage is lost by using the Martin & Quinn estimates of Ideology rather than the Bailey ones.

A potent critique of using estimates of Ideology that arise from how justices decide is circularity.²³ Using the Martin & Quinn Ideologies to find a general theory of how justices vote has the circularity that the Ideologies

¹⁵ Martin & Quinn, *supra* note 4.

¹⁶ *Id.* at 137.

¹⁷ *See generally id.*

¹⁸ *See, e.g., id.*; Shapiro, *supra* note 13.

¹⁹ Joshua B. Fischman & David S. Law, *What Is Judicial Ideology, and How Should We Measure It?*, 29 WASH. U. J. L. & POL'Y 169, *passim* (2009) [hereinafter *Ideology?*] (reviewing literature).

²⁰ *Ideology?*, *supra* note 19, at 185–187; Ward Farnsworth, *The Use and Limits of Martin-Quinn Scores to Assess Supreme Court Justices, with Special Attention to the Problem of Ideological Drift*, 101 NW. UNIV. L. REV. COLLOQUY 143, 149–152 (2007); Michael A. Bailey, *Measuring Court Preferences, 1950–2011: Agendas, Polarity and Heterogeneity 1–2* (Oct. 2012) (unpublished paper) (available at https://blogs.commonwealth.georgetown.edu/american-government-seminar/files/2012/11/CourtPref_Oct2012.pdf).

²¹ *Ideology?*, *supra* note 19, at 185–187; Farnsworth, *supra* note 20, at 148; Bailey, *supra* note 20, at 12–13.

²² *See* Bailey, *supra* note 20.

²³ Andrew D. Martin & Kevin M. Quinn, *Can Ideal Point Estimates Be Used as Explanatory Variables?* 2, 5 (Oct. 8, 2005) (unpublished paper) (available at <https://mqscores.lsa.umich.edu/media/resnote.pdf>).

were calculated from the justices' voting. The problem does not arise here because the analysis only deals with 5–4 decisions, which are less than a quarter of all non-unanimous decisions coded with a political slant, which generate the Martin & Quinn Ideologies.²⁴ Critics of Martin & Quinn concede the point that partial overlaps are unlikely to create a problem, which is stressed by Martin and Quinn.²⁵

Both datasets include the 2021 term, i.e., they stop at the summer recess of 2022. The overall number of liberal decisions is 4,578 and of conservative ones 4,381. This produces an overall conservative ratio of 48.9%, a liberal leaning overall. The analysis uses the modern database, which starts with the 1946 term. The ideal points of Martin & Quinn reach a few terms farther back.

To validate the use of the Martin & Quinn Ideologies in the setting of 5–4 decisions, Appendix C tackles a different question about 5–4 decisions. Appendix C explores whether the ideological distance between the justices adjacent to the median justice explains the fraction of 5–4 decisions where the justices align by ideology. This ideological distance very strongly explains the fraction of decisions in which the justices align by ideology. Therefore, readers should take comfort that Martin & Quinn ideology relates to 5–4 decisions fairly accurately.

III. THE PHENOMENON

The conservative paradox is that 5–4 decisions should be expected to be about 50% conservative, yet, they lean consistently conservative, being 58% conservative.²⁶ From a statistical perspective, the phenomenon is confirmed by the calculation of the probability that this may appear by chance while the true underlying forces would produce an even division of decisions.²⁷ That probability is infinitesimal, less than zero followed by a decimal point and eight zeros before a non-zero digit.²⁸

²⁴ Five-to-four decisions coded with a political slant number 1,383. The remaining non-unanimous decisions with a slant number 3,024. This makes the 5–4 decisions 31 percent of the total. However, the Martin & Quinn algorithm excludes the shadow docket. Excluding the shadow docket leaves 1,220 five-to-four decisions. However, this analysis only uses those to which the Database assigns a slant, which leave 1,216 decisions that overlap in this analysis and that of Martin & Quinn. The overlapping decisions are under 28 percent of the total number of decisions and under 26 percent of the decisions entering the Martin & Quinn algorithm from the modern database, which according to my calculation is 4,695.

²⁵ Granted, the ideal solution would be to compute the ideologies from the set of decisions that do not include 5–4 decisions, which would remove the circularity entirely. No easy way to do so exists. Moreover, when the analysis compares three hypotheses of coalition formation, the one that assumes strategic action has the greatest explanatory power. By contrast, the computation of ideologies assumes non-strategic voting. This difference argues that the analysis is not replicating or springing from the computation of ideologies. See generally Andrew D. Martin, *Can Ideal Point Estimates Be Used as Explanatory Variables?*, (October 8, 2005), UNIV. OF MI. LSA. <https://mqscores.lsa.umich.edu/media/resnote.pdf>.

²⁶ See *infra* tbl.1.

²⁷ See *id.*

²⁸ See *id.*

Table 1. Overall Conservative Ratios, 5–4 and Not

	<i>5-4 Votes</i>	<i>Even Hypothesis</i>
<i>Conservative</i>	805	691.5
<i>Liberal</i>	578	691.5
<i>Conservative Ratio</i>	58%	50%
<i>P-Value</i>		0.00000001%

Table 1 shows the liberal and conservative counts of 5–4 splits and all other vote splits, the percentage of conservative decisions, the “conservative ratio,” and the probability that such a deviation from 50–50 can appear by chance, what the statisticians call p-value, calculated according to the chi-squared test. We see that non-5–4 votes lean slightly liberal with a conservative ratio of 47%. That departure from even, however, does not reach 99% confidence that it is not due to chance. By contrast, 5–4 decisions lean more pronouncedly conservative, 58%, with confidence greater than 99.99% that this is not due to chance.

The conservative paradox exists not merely in the overall data but in every sizable portion of the data. The next Subparts examine partitions by Court composition and by aggregations of terms.

A. Long-Lived Compositions

When seeking to assess specific compositions, the problem arises that some compositions are brief and produce few tightly split decisions. How many tightly split decisions should a composition produce for us to have some confidence that its result comes from the forces that shape tight splits and is not a random divergence? A subsample size limit resolves the issue. No composition produces a number of tight splits between forty-five and sixty-five, leaving that range as a natural place for the break. Setting the limit at forty-five to sixty-five produces Table 2.

Table 2. The Conservative Ratio of Long-Lived Compositions' Tight Splits.

<i>Composition</i>	<i>5-4 w slant</i>	<i>Cons've Ratio</i>	<i>With ELP Filtering</i>		<i>Diff.</i>
			<i>5-4 w slant</i>	<i>Cons've Ratio</i>	
Vinson ('46 to '48)	79	61%	77	61%	0.3%
Stewart ('58 to '61)	81	59%	80	60%	0.7%
Powell & Rehnquist ('71 to '75)	98	70%	92	72%	1.3%
Stevens ('75 to '80)	129	61%	121	60%	-1.7%
O'Connor ('81 to '85)	147	56%	142	54%	-1.6%
Kennedy ('87 to '89)	87	67%	86	67%	0.8%
Breyer ('94 to '04)	191	60%	186	60%	0.5%
Alito ('05 to '08)	69	67%	67	67%	0.5%
Kagan ('09 to '15)	79	51%	73	51%	0.1%

Each row corresponds to a composition that produced a sufficient number of decisions, named for its junior justice, the last justice to be appointed who defines the composition. The second and third columns have the count of tightly split decisions and the percentage conservative. The remaining columns, four to six, compare the results under the ELP filtering, showing the (reduced) count of tightly split decisions, their percentage conservative, and the difference of that percentage from the unfiltered result of column three. For example, the Vinson composition produces seventy-nine tightly split decisions, 61% of which are conservative; after the ELP filtering, seventy-seven tightly split decisions survive, and they again are 61% conservative. Before rounding to that same 61%, the filtered conservative ratio was 0.3% greater than the unfiltered one.

All compositions of Table 2 produce a mix of tightly split decisions that lean conservative. Only the Kagan composition has as low a conservative ratio as 51%. The rest are over 56%, and three compositions are at 67% and above, Powell & Rehnquist, Kennedy, and Alito.

The comparison with the ELP filtering shows that the filtering makes little difference but reduces accuracy. The last column's differences are small and go in both directions, reinforcing the audit's conclusion that differences will tend to be unbiased. The maximum change is the drop of the ratio of the Stevens composition by 1.7% after a filtering of 8 out of its 129 decisions.

After the loss of eight decisions that the Stevens composition experiences, the next two compositions that lose the greatest number of decisions are those of (i) Powell & Rehnquist, and (ii) Kagan. Each loses six decisions from the filtering but their resulting conservative ratio increases. The compositions of O'Connor and Breyer are next, losing five decisions each to the filtering. Breyer's change is small and upward. O'Connor's conservative ratio drops by 1.6% to 54%.

Appendix B performs a mini-audit of the ELP filtering by reviewing the eight decisions of the Stevens composition and the five decisions of the O'Connor composition that the filtering removes. The mini-audit concludes that the unfiltered conservative ratios are more accurate. What drives the greater accuracy of the unfiltered data is not their precision. Again, precision is meaningless because reasonable jurists will differ on their interpretation of decisions and their slant. Indeed, the filtering correctly removes from the count a falsely coded decision in each composition, but the filtered results are still less accurate. The source of the precision is the larger number of decisions and the absence of bias. The filtering only correctly removes few decisions (two from the Stevens composition and one or none from the O'Connor composition) that have a false or ambiguous slant but falsely removes many more that have correct and clear slants. The unfiltered results are more accurate despite that the filtering removes ambiguous and falsely coded decisions.

Underlying Table 2 are vast differences of the composition of the Court. The Vinson composition was entirely appointed by Democratic presidents, Franklin Roosevelt ("FDR") and Truman, and contained one Republican, Burton, appointed in a bipartisanship gesture by Truman.²⁹ The compositions defined by Stevens and O'Connor had the opposite mix, having a supermajority of seven Republican appointees.³⁰ Observing the conservative ratio not vary in the face of opposite party control is striking.

B. Periodic Aggregations

Moving from the focus on specific compositions and turning to aggregating periods of terms produces the same result. Aggregating periods

²⁹ *The Vinson Court*, Ballotpedia, https://ballotpedia.org/The_Vinson_Court (last visited Oct. 31, 2022).

³⁰ *Justices 1789 to Present*, The Sup. Ct. of the U.S., https://www.supremecourt.gov/about/members_text.aspx (last visited Oct. 31, 2022).

of fifteen terms produces little variation in tightly split decisions, as the first column of Table 3 shows.

Table 3 presents the conservative ratio by fifteen-term periods in the first column and by three-term periods in the remaining columns. Taking, as an example, the exceptional second row, it shows that in the fifteen-term period from the 1961 to the 1975 term, the conservative ratio was 53%, while the 1961 to 1963 terms had a conservative ratio of 33%, again 33% from 1964 to 1966, 36% from 1967 to 1969, 66% from 1970 to 1972, and 68% from 1973 to 1975. This row is exceptional in that it holds the only three-term periods with conservative ratios that lean strongly liberal, those from 1961 to 1969.³¹ All fifteen-term periods, and virtually all other three-term periods display the conservative paradox.

Table 3. Conservative Ratio, 15-Term and 3-Term Periods

	<i>Entire Period</i>	<i>Terms to +2</i>	<i>Terms +3 to +5</i>	<i>Terms +6 to +8</i>	<i>Terms +9 to +11</i>	<i>Terms +12 to +14</i>
'46-'60	0.58	0.61	0.70	0.53	0.52	0.58
'61-'75	0.53	0.33	0.33	0.36	0.66	0.68
'76-'90	0.61	0.59	0.51	0.60	0.65	0.65
'91-'05	0.60	0.61	0.67	0.63	0.56	0.56
'06-'20	0.57	0.66	0.51	0.54	0.70	0.49
'21	0.36	0.36	N/A	N/A	N/A	N/A

The conservative paradox consists of the observation that since the 1946 term, the overall data and every long-lived composition of the Court, every fifteen-term period, and most three-term periods, have a conservative ratio that leans conservative. One would expect 5–4 decisions to be about even, as is the overall data.³² However, they display the conservative paradox.

C. Failed Explanations

In pursuing explanations for the conservative paradox, the three likely suspects are a structural issue in the selection of cases, a bias of appointments by Presidents of one party (namely, whether Democrat presidents have tended to appoint more centrist justices than Republican presidents have), and the effect of Senate confirmation. The structure of hearing cases reveals no bias.

³¹ The last entry, which corresponds to the 2021 term, also leans strongly liberal but it only consists of one term.

³² The overall data has 4,339 conservative decisions and 4,578 liberal ones, for a conservative ratio of 49 percent. The entire database holds 9,16 decisions, with 201 not coded as liberal or conservative.

The Supreme Court has discretionary jurisdiction, meaning it summarily affirms most petitions and only reviews through briefing and oral argument those disputes that garner four votes for review.³³ The review grant is called *certiorari*. No party bias is visible in this process.

The phenomenon also defies the explanation that the conservative paradox may be related to the party of the President appointing the justices. The conservative paradox was present in the terms from 1946 to 1955, when initially all and subsequently a majority of the members of the Court were appointed by Democrat Presidents, FDR and Truman.³⁴ The conservative paradox has not increased since 1971 when the majority of the members of the Court have become Republican-appointed.³⁵

A slightly more nuanced version of the political explanation would also look at the composition of the Senates that confirm presidential nominations. The suspicion is that one party's nominations are constrained to be more centrist due to opposite party Senate control.³⁶ Thus, if Democrat Presidents were more often constrained by Senates with Republican majorities than the opposite, then Democratic appointees would tend to be more centrist. Plausibly this may have produced the conservative paradox because the centrist Democratic appointees might have leaned conservative more often than the Republican appointees, who would be presumed to be more extreme due to their unconstrained appointment. However, the opposite is true. In all the appointments by Democrat Presidents, never has the President faced a Senate with a Republican majority.³⁷ By contrast, several

³³ Curiously, perhaps, this norm, known as the “rule of four,” is an informal one. Justice Brennan explains the rule of four as a desirable anti-majoritarian feature:

A minority of the Justices has the power to grant a petition for certiorari over the objection of five Justices. The reason for this “antimajoritarianism” is evident: in the context of a preliminary 5-to-4 vote to deny, 5 give the 4 an opportunity to change at least one mind. Accordingly, when four vote to grant certiorari in a capital case, but there is not a fifth vote to stay the scheduled execution, one of the five Justices who does not believe the case worthy of granting certiorari will nonetheless vote to stay; this is so that the ‘Rule of Four’ will not be rendered meaningless by an execution that occurs before the Court considers the case on the merits.

See *Straight v. Wainright*, 476 U.S. 1132, 1134–35 (1986) (Brennan, J., dissenting). See also *Hamilton v. Texas*, 498 U.S. 908, 909 (1990) (Marshall, J., concurring).

³⁴ See *supra* tbl.3; see also *Judgeship Appointments by President*, U.S. Cts. <https://www.uscourts.gov/judges-judgeships/authorized-judgeships/judgeship-appointments-president> (last visited Oct. 30, 2022).

³⁵ See *supra* tbl.3; see also *Judgeship Appointments by President*, *supra* note 34.

³⁶ See, e.g., Byron J. Moraski & Charles R. Shipan, *The Politics of Supreme Court Nominations: A Theory of Institutional Constraints and Choices*, 43 Am. J. Pol. Sci. 1069, 1071 (1999) (modeling the confirmation process and, as an example, contrasting the Republican President Reagan’s nominations of Rehnquist for Chief and Scalia while the Senate was under Republican control to Reagan’s nomination of more centrist Kennedy after the Senate became Democrat controlled).

³⁷ See, e.g., *List of Nominations to the Supreme Court of the United States*, Wikipedia, https://en.wikipedia.org/wiki/List_of_nominations_to_the_Supreme_Court_of_the_United_States; see also *Party Government Since 1857*, HIST., ART & ARCHIVES, U.S. H.R. <https://history.house.gov/Institution/Presidents-Coinciding/Party-Government/> (last visited Oct. 30,

of the appointments by Republican Presidents had to overcome Democratic Senate control.³⁸ Thus, Republican appointments have been constrained by Democratic Senates, but Democratic appointments have not been constrained by Republican Senates. If the conservative paradox were about liberal judges tending to lean conservative more often because they were appointed under a Senate constraint to be moderate, the opposite should be true and a liberal paradox would appear. Only conservative justices have been appointed under a Senate constraint to be centrist and, if they acted according to this claim, then they would occasionally lean liberal.

Also important is to note that we have no theory on why 5–4 decisions might deviate from an even 50–50 split. In the process of determining its own docket through the *certiorari* process, the primary grounds for selecting cases is that they present important legal issues, i.e., nonobvious issues likely to split jurists and the Court.³⁹ While a secondary reason for hearing a case can be disciplining lower courts that stray from precedent, that would not influence the leaning of split decisions because disciplining decisions by definition do not involve a difficult issue and would tend to be unanimous.⁴⁰ The legal issue is not in dispute, but the lower court breached the Supreme Court’s precedent.

Granted, the Priest-Klein hypothesis offers the prediction that private litigation will tend to be even.⁴¹ The incentives of private litigants would be to settle clear cases, mostly leaving the close cases for adjudication. However, that does not apply to the docket of the Supreme Court because the docket is not shaped by the litigants but by the *certiorari* process. Disputes between private litigants are only a fraction of the *certiorari* petitions. Petitions include criminal appeals and disputes between governmental units, where the incentives are different than those behind the Priest-Klein hypothesis. Even in the fraction of petitions having private litigants on both sides, when the justices consider whether to hear them, they make that

2022); *Supreme Court Nominations (1789-Present)*, U.S. SENATE, <https://www.senate.gov/legislative/nominations/SupremeCourtNominations1789present.htm> (last visited Oct. 30, 2022).

³⁸ *Id.*

³⁹ Rule 10 establishes the Court’s discretionary jurisdiction and that it grants certiorari to resolve conflicts between lower courts and “important question[s] of federal law that ha[ve] not been, but should be, settled by” the Supreme Court. SUP. CT. R.10.

⁴⁰ See Ryan C. Black & Ryan J. Owens, *Consider the Source (and the Message): Supreme Court Justices and Strategic Audits of Lower Court Decisions*, 65 POL. RSCH. Q. 385, 385–86 (2012) (exploring disciplining decisions). *But see* Thomas J. Long, *Deciding Whether Conflicts with Supreme Court Precedent Warrant Certiorari*, 59 N.Y.U. L. REV. 1104 passim (1984) (arguing that simple errors of lower courts should produce mere summary reversals, without full argument; however, since the shadow docket is included in the present analysis, summary affirmances or reversals are included in the conservative ratio).

⁴¹ George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1, 19 (1984); *see generally* Joshua B. Fischman, *Politics and Authority in the U.S. Supreme Court*, 104 CORNELL L. REV. 1513 (2019) (providing a thorough review of the related literature).

decision without regard to the litigants' incentives.⁴²

In sum, political expectations are refuted by the conservative paradox and no theoretical reason exists to expect a deviation from an even split. The analysis of the next Part shows that the explanation lies in the way that coalitions form. Professors Jacobi and Sag have addressed the way coalitions form connected to ideology by comparing them to nuanced scoring of case outcomes in one dimension.⁴³ However, by virtue of restricting the analysis here to 5–4 decisions, this analysis can explore alternative ways that 5–4 decisions form that could not be explored in that context. The setting here also allows a more detailed look at how 5–4 coalitions form. Moreover, the analysis here shows the multidimensionality of decisions, which suggests that analyses that rest on one dimension, such as Jacobi and Sag's, could benefit by including more dimensions.

IV. COALITION FORMATION

The cause of the conservative paradox must lie in the mechanism of coalition formation in 5–4 decisions. Combining the Supreme Court Database with the Martin & Quinn Ideologies allows the test of three theories of 5–4 coalition formation.

A. Forming Coalitions According to Ideology

Three explanations of coalition formation that can be tested may be called cohesion, choice of sides, and vying for the median. They correspond to three different explanations of how the ideologically median justice takes sides in 5–4 decisions.

1. Cohesion

The idea that the median justice joins the side that is more ideologically cohesive means that the side with the justices whose views are more dispersed would find it more difficult to coalesce behind a single interpretive approach. If cohesion of views drives outcomes, then similarity of views would lead to easier formation of coalitions.

The Martin & Quinn quantification of ideologies allows the calculation of this view of cohesion. Cohesion is the opposite of ideological dispersion. Of the various metrics of dispersion, the most frequently used is

⁴² See SUP. CT. R.10 (“A petition for a writ of certiorari will be granted only for compelling reasons. The following, . . . indicate the character of the reasons the Court considers . . .” with no mention of litigants' concerns).

⁴³ Tonja Jacobi & Matthew Sag, *Taking the Measure of Ideology: Empirically Measuring Supreme Court Cases*, 98 GEO. L.J. 1 *passim* (2009); see also Tonja Jacobi, *Competing Models of Judicial Coalition Formation and Case Outcome Determination*, 1 J. LEGAL ANALYSIS 411, 413 (2009).

standard deviation.⁴⁴ If coalitions are driven by cohesion, then coalitions would become more likely as standard deviation is smaller when measured on the ideologies of the five justices on one side compared to the standard deviation of the five justices on the other side. An adequate metric is a fraction with the liberal standard deviation in the nominator and the sum of the standard deviations in the denominator. This fraction can range, in theory, from near zero to near one. It is near zero when the liberal dispersion is very small compared to the conservative dispersion. It is near one when the liberal dispersion is very large compared to the conservative dispersion. The conflation of the two standard deviations into a single metric means that the operative dimension is their relative rather than absolute size. The intuition is that the side that has half the standard deviation of the other will be equally more likely to form a coalition when the standard deviations are small as when they are large. This corresponds to the idea that the greater cohesion depends on a comparison to the cohesion of the other side. While that is intuitive here, the subsequent metrics, which are based on distances, are not conflated into a single fraction, because absolute ideological distances likely retain importance.

If coalitions were formed on the basis of cohesion, then one should expect more liberal decisions when this fraction is small and fewer when it is large. *Vice versa* for conservative decisions.

2. Choice of Sides

The second hypothesis posits that the four more extreme justices on each side shape their view first. The result is that the two sides present to the median justice a choice of two alternative interpretations for the median to join one. If one side's consensus is ideologically distant from the median justice, while the other side's consensus is not, then the median justice would tend to side with the latter, the side to which the median is ideologically closer. This hypothesis contains a fundamental implausibility. Its starting point is a pre-existing fracture between the two sides. While such a polarization may exist in some issues for some specific compositions, the notion that it would be the baseline for adjudication is unlikely.

The analysis translates this view of choice of sides to, first, a calculation of the average ideology of the four justices on each side, and second, the measurement of the distance of the median to each average. If the median's choice of sides drives the forming of coalitions, then when one side has an average ideology that is far from the median's ideology, but the other

⁴⁴ See, e.g., Measure of Dispersion; and Standard Deviation, THE CONCISE ENCYCLOPEDIA OF STATISTICS 341 and 505-06 (2008) https://doi-org.proxy.ulib.uts.iu.edu/10.1007/978-0-387-32833-1_330; S. Manikandan, *Measures of Dispersion*, 2 J. Pharmacology & Pharmacotherapeutics 315, 315 (2011); Statistical Dispersion, and Standard Deviation, Wikipedia, https://en.wikipedia.org/wiki/Statistical_dispersion and https://en.wikipedia.org/wiki/Standard_deviation.

side has an average ideology that is close to the median's, then the median will tend to side with the latter. The median will tend to choose the side that has the average ideology that is closer to that of the median. The metrics are the two distances.

If coalitions were formed on the basis of the median's choice between the sides' consensus, then one should expect a greater distance to one side to reduce the tendency for the median to choose that side.

3. Vying for the Median

The idea behind forming coalitions by vying for the median is that each side competes to attract the vote of the median justice so as to advance that side's interpretive preferences. Effectively, justices recognize that if they insist on extreme interpretive positions, then the median will side with the opposite group, and the resulting precedent will be more disagreeable than if the median sided with a more moderate proposal from their own side. The extreme justices on each side abandon their more extreme views and are, in effect, represented by the justice who is closest to the median on their side. The two justices next to the median effectively bear the responsibility of proposing interpretations that will appeal more to the median than the interpretations proposed by the other side. Thus, unlike the prior two hypotheses where ideological positions are passive, the hypothesis that coalitions are formed by vying for the median has the justices act strategically. The potential for strategic action is the appeal of this hypothesis.

The analytical weakness of this hypothesis is that, at the limit, both sides will meet at the median's position, and the decision would become unanimous. Two features of the reality of judging intervene to often prevent this. First, interpretive positions are finite and do not change in a continuum. Second, ideological distance continues to be important in the decision of the losing faction to register its opposition in the form of a dissent.

The finite nature of interpretive positions means that if the three justices in the middle of the Court propose three different interpretations, an infinite number of interpretations ideologically between those does not exist. Therefore, the two sides cannot keep successively proposing interpretations that are slightly more appealing to the median justice. Take, as an example, the propriety of a search that produces evidence of criminal guilt. The position of the median justice may be that the search was improper, but it was harmless error. The position of the next liberal justice may be that the search was improper, triggered the exclusionary principle, and, therefore, should exclude all subsequently acquired evidence. The position of the next conservative justice is that the search was proper. The liberals can try to obtain the median justice's vote by proposing an interpretation that the search was improper without triggering the exclusionary principle, but still

remanding for a new trial. But no additional interpretive positions may exist between this and the median justice's position (of harmless error). The conservative side could propose an interpretation that such searches are generally proper but specific aspects of this one made it improper while still constituting harmless error. Again, no additional interpretations closer to that of the median justice may arise. Short of accepting the median justice's interpretation, neither side may be able to offer an interpretation that is any closer to the median's than those to attract the vote of the median.

Distance is also important for the mere existence of a dissent. This importance of distance relates to the alternative where both sides adopt the interpretation of the median justice, and the decision becomes unanimous. In principle, a divided decision has negative consequences, small as they may be, for the Court and the dissenting justices.⁴⁵ At the very least, a dissenting decision involves writing that decision. More importantly, a divided decision reveals that the Court is not united, and that legal reasoning does not necessarily produce the majority's result.⁴⁶ Greater ideological distance from the next justice on one side means that the negative consequences of revealing dissention, whatever they may be, may more easily become justified for the dissenters. Some level of triviality exists so that when the difference between the dissenter's last position and that of the majority is that small or smaller, then the dissenters choose not to dissent and the Court's decision becomes unanimous. Additional concerns and caveats may be numerous but are not important in the interpretation of the results. Greater ideological distance makes dissenting more likely.

The view that coalitions depend on the distance from the median to the next justice on each side corresponds to those two ideological metrics. A small distance would mean that the median justice tends to join that side more often, whereas a large distance would be more likely to lead the four justices of that side to dissent.

B. Comparing the Hypotheses

The comparison of the power of the hypotheses from a statistical perspective lies in the strength with which they explain whether decisions are liberal or conservative. In other words, if a relation appears that one of the sets of distances tends to correlate with a result of more or fewer conservative decisions, how confident can the reader be that this relation is not attributable to chance, and how strong is that relation? Statistical tests report the probability that the observed relation between an input variable and an

⁴⁵ See, e.g., supra n. 14, JUDGES 255 *et seq.* (chapter titled Dissents and Dissent Aversion exploring the costs of dissenting and empirically confirming them).

⁴⁶ *Id.*

outcome is due to chance, calling it the p-value.⁴⁷ The strength of the relation lies in the amount of change that the variables bring. However, to comprehend a pattern we need to see it in a graph. Anscombe's quartet demonstrates this through four sets of data which produce the same regression coefficients, but a glance at their graphs reveals four very different patterns.⁴⁸ Accordingly, a graphical display of the relation must show how these metrics influence the production of conservative decisions.

1. Two Refinements

While the phenomena are apparent in the raw data, two refinements increase their intensity. Moreover, the refinements are revealing about the Court's operation. The first refinement consists of separating the decisions made during the first year after the appointment of a justice from the subsequent year decisions. The second considers separately the decisions in which the justices align by ideology, that is, where the four conservative justices cast conservative votes and the four liberal justices cast liberal votes. The other category holds the cases where the voting is mixed.

a. First or Subsequent Year?

If the justices act strategically in granting *certiorari*, then first year decisions may be different. The very first few cases may have the new justice help decide disputes to which the Court granted *certiorari* under its old composition, with the new justice's predecessor. In other disputes, *certiorari* may have been granted without the knowledge of who the new justice may be. Even in disputes that received *certiorari* after the appointment of the new justice, that decision was made while the other justices only had a limited knowledge of the attitudes and the thinking of the new justice.

Subsequent-year decisions would follow more delicate decisions about *certiorari*. The new justice is no longer new. The justice's colleagues and the bar have a greater understanding of the thinking process of the new justice. The bar may make different decisions about seeking *certiorari* for some disputes; fellow justices would vote for *certiorari* with a slightly clearer understanding of the new justice's thinking, and in the justices' deliberations arguments can be cast that address more accurately the new justice's concerns.

In other words, first-year decisions are made without deep knowledge of how one-ninth of the Court thinks, sometimes with even no knowledge of

⁴⁷ See, e.g., P-Value, THE CONCISE ENCYCLOPEDIA OF STATISTICS 434 (2008) https://doi-org.proxy.ulib.uits.iu.edu/10.1007/978-0-387-32833-1_330; P-Value, Wikipedia, <https://en.wikipedia.org/wiki/P-value> (last visited Oct. 29, 2022).

⁴⁸ See generally Francis J. Anscombe, Graphs in Statistical Analysis, 27 AM. STATISTICIAN 17 (1973); see also *Anscombe's Quartet*, Wikipedia, https://en.wikipedia.org/wiki/Anscombe%27s_quartet (last visited Oct. 25, 2021).

how one-ninth of the Court may think. To the extent that decisions are the result of the confluence of several strategies of litigants and fellow justices, the first-year decisions would reflect a weaker reaction to those strategies.

In a quantitative expedition like this, the question then arises how precisely to define first-year decisions. The study considers as first-year decisions those issued within the calendar year that follows the first 5–4 decision that includes the new justice. In part, the new justice’s attitudes in 5–4 decisions may only be displayed in 5–4 decisions. This means that the learning processes of the bar and fellow justices only begin after 5–4 decisions start appearing. Also, the data revealed that some justices have a remarkably large number of recusals in their first few months, such as Justices Clark, Whittaker, and Kagan.⁴⁹ This choice increases the number of 5–4 decisions that are considered first-year decisions and may dilute the effects of the selection process on the conclusions because it includes relatively more decisions pursuant to grants of *certiorari* that were made while the new justice was known.

b. Aligned or Non-Party-line?

Whether a decision has the justices aligned by ideology or mixed goes to the heart of the multidimensionality of judging that the one-dimensionality of seeing justices as liberal or conservative hides.

The deceptive interpretation of multidimensionality through one-dimensional signals is apparent in a light-and-shadow example. Consider that the one-dimensional signal is the shadow that a person casts on the south wall of a room. The room is lit by a lamp at the northwest corner. As long as the person stays near the wall and moves parallel to the south wall, the shadow moves in the same direction as the person. When the person moves east, so does the shadow. However, the shadow also moves east when the person moves north. Even more deceptively, the person may move north-northwest and the shadow can move east. The shadow misrepresents movements in the other dimension (north-south), obscures movements toward the light, and reverses movements in a direction only slightly more northward than toward the light.

The multidimensionality of the legal system is extreme (and obvious to whomever spent a few years learning the law). Each subject matter opens an array of dimensions along which jurists can hold different interpretations. As an example, with my now colleague retired Justice of the Indiana Supreme Court Frank Sullivan, Jr., we studied the tightly split, criminal procedure

⁴⁹ Clark and Kagan were, respectively, Attorney General and Solicitor General before their appointments, producing many recusals, in all cases involving the United States as a litigant that they had overseen.

decisions of a particularly long-lived composition of that court.⁵⁰ We found six dimensions.⁵¹ In other words, the justices aligned consistently differently on six different aspects of deciding cases on criminal procedure matters. Some of these dimensions agreed with the justices' liberal-to-conservative alignment, as did attitudes about retroactivity of defenses or the need for the police to obtain a warrant.⁵² Others produced coalitions that were equally consistent but transcended the liberal-to-conservative alignment, as did the dimensions depending on trust of juries or exactitude about governmental process.⁵³

The extreme of the multidimensionality of the legal system is apparent in the attempt to systematize it in the West key-number system. Each decision receives dozens of assignments in this system. The assignments (key numbers) increase with time, as new decisions produce more distinctions on the older precedent as well as statutes and regulations increase in number and other reasons.⁵⁴

The point is that adjudicated cases would depend on the attitudes of the justices along numerous dimensions. Some may agree with political alignments, akin to running parallel to them. In 5–4 decisions that turn on those attitudes, the liberal justices would tend to vote the opposite way from the conservative justices. Other attitudes would bear little relation to political alignments, such as trust in juries. In 5–4 decisions that turn on such issues, we should not be surprised to see justices mixing their voting coalitions. The justices' politics, their Martin & Quinn ideological scores, should have greater explanatory power in the former.

However, the shorthand “party-line” is not strictly accurate. In most compositions of the Supreme Court through this era, one party had appointed more than five justices, initially the Democratic party and later the Republican party.⁵⁵ When one party has appointed more than five justices, then 5–4 votes cannot be party-line in the sense of four members of the Court voting according to one party's preferences and five according to the other's. Justices appointed by the same party are on both sides of the 5–4 split. Rather, aligned voting signifies ideological alignment in the sense that the four justices on

⁵⁰ Nicholas L. Georgakopoulos & Frank Sullivan, Jr., *Six Dimensions of Criminal Procedure*, 28 S. CT. ECON. REV. 181, *passim* (2020).

⁵¹ *Id.* at 192.

⁵² *Id.* at 192 fig.4.

⁵³ *Id.*

⁵⁴ For example, the 1912 guide to the West key-number system the guide summarizes the all the top levels of the key number system in four pages; “Torts” has 15 entries, from Assault and Battery to Trover and Conversion and Waste, whereas in 2006 the West key-number system was reported to have over 90,000 of which were “postable”. Cf. WEST PUBL'G CO., DESCRIPTIVE-WORD INDEX TO DECENNIAL AND ALL KEY-NUMBER DIGESTS, xxx-xxxvii (1912) at xxx-xxxvii; Daniel Dabney, *The Universe of Thinkable Thoughts: Literary Warrant and West's Key Number System*, 99 L. LIBR. J. 229, 236 (2007) (reporting counts of West's proprietary database).

⁵⁵ See, e.g., *supra*, notes 29-30 and accompanying text.

each side of the court vote together, with the conservative four voting for the conservative outcome and vice versa. To side-step the issue, this Article only uses the negative form, non-party-line, to signify that the justices are not in ideological alignment.

Applying these two refinements to the data turns out to be revealing. First-year decisions have some differences from subsequent ones. Decisions where the justices align by ideology are different from those in which they do not. The patterns appear in the numbers the statistics produce, and in the graphs that reveal them.

2. Numbers

Turning to the statistics, to capture the relation between binary outcomes, such as liberal versus conservative, and input variables, such as the metrics of coalition formation, the appropriate regressions fit a cumulative probability function to the data. The transition from one state to the other of the outcome corresponds to the transition of the cumulative probability function from zero to one.⁵⁶ The objective is to estimate how the input variables influence the transition from the region of one outcome to the region with the other outcome. For example, if some values of the input variables correlate with few conservative decisions and other values correlate with many conservative decisions, where must the probability density function be placed to best describe this transition? The logit regression does so with the logistic distribution and the probit regression does so with the normal distribution.⁵⁷ The analysis uses the probit regression.

However, neither the logit nor the probit regression offers a measurement of the fraction of the variation in the outcome that the inputs explain. Linear regressions offer such a measure with the “r-squared” statistic.⁵⁸ Because this metric is useful in assessing the power of each regression, the analysis also conducts linear regressions that clone the probit ones. Linear regressions capture the relation between the amount of change that an outcome variable tends to have for a change of an input variable.⁵⁹ By

⁵⁶ See also *Related Distributions*, in *Engineering Statistics Handbook*, Nat. Inst. Of Standards and Tech., <https://www.itl.nist.gov/div898/handbook/eda/section3/eda362.htm> (last visited Oct. 29, 2022).

⁵⁷ See, e.g., VANI KANT BOROOAH, *LOGIT AND PROBIT: ORDERED AND MULTINOMIAL MODELS PASSIM* (2001); *Probit*, WIKIPEDIA, <https://en.wikipedia.org/wiki/Probit>; *Logit*, WIKIPEDIA, <https://en.wikipedia.org/wiki/Logit>; Ajitesh Kumar, *Logit vs Probit Models: Differences, Examples*, DATA ANALYTICS, (Apr. 1, 2022), <https://vitalflux.com/logit-vs-probit-models-differences-examples/>.

⁵⁸ See, e.g., *Coefficient of Determination*, THE CONCISE ENCYCLOPEDIA OF STATISTICS 88 (2008) https://doi-org.proxy.ulib.uits.iu.edu/10.1007/978-0-387-32833-1_330; *Coefficient of Determination*, WIKIPEDIA, https://en.wikipedia.org/wiki/Coefficient_of_determination; Jim Frost, *How To Interpret R-squared in Regression Analysis*, Stat. By Jim, <https://statisticsbyjim.com/regression/interpret-r-squared-regression/> (last visited Oct. 29, 2022).

⁵⁹ See, e.g., *Simple Linear Regression*, THE CONCISE ENCYCLOPEDIA OF STATISTICS 491 (2008) https://doi-org.proxy.ulib.uits.iu.edu/10.1007/978-0-387-32833-1_330; *Linear Regression*, WIKIPEDIA, https://en.wikipedia.org/wiki/Linear_regression; Jim Frost, *Choosing the Correct Type of Regression*

considering that the outcome variable is the fraction of decisions that are conservative for each term of compositions of the Court, the analysis produces linear regressions that match the corresponding probit regressions (and the graphs will also demonstrate their equivalence despite that a linear regression in a binary setting has the possibility to be deceptive).⁶⁰ Through the linear clones of the probit regressions, metrics become available for the fraction of the variation of the conservative ratio that each hypothesis explains.

Table 4 presents the resulting metrics for the three hypotheses. The table offers three panels of two columns each under the three headings that correspond to the three hypotheses: cohesion, choice of sides, and vying for the median. The left column of each pair of columns has the estimates for the statistics described by the row headings. The right column of each pair of columns has the p-values, the probability that the effect of the corresponding estimate is truly zero and can have this value by chance. The first row, the constant of each regression, has no importance for the interpretation of the numbers.

The metric used for the cohesion hypothesis has a positive coefficient of 0.1.⁶¹ This has the expected sign in the sense that as the dispersion of the liberal five justices' ideology increases, the conservative ratio also increases. However, one cannot be confident that this 0.1 value is not different than zero due to chance. Its p-value is 68%, which means that its true value may be zero or smaller with 32% probability. Moreover, the cohesion model explains none of the variation in the conservative ratio because it has an r-squared of zero.

The choice of sides model also produces coefficients of the expected sign. When the distance from the liberal average increases, the conservative ratio increases with a coefficient of 0.2. When the distance from the conservative average increases, the conservative ratio decreases but with a very small coefficient of 0.04. Of the two, only the former can be said to be different than zero with confidence that this is not due to chance; the distance from the conservative average may be due to chance with an about 50% probability (with a p-value of 55%). The choice of sides model explains about

Analysis, Stat. By Jim, <https://statisticsbyjim.com/regression/choosing-regression-analysis/> (last visited Oct. 29, 2022).

⁶⁰ The deceptiveness comes from trying to fit a sloping straight line to two sets of points that only take two values in their vertical coordinate. For example, suppose that values of the input variable, the horizontal coordinate, that are above two almost always result in successes and under minus two almost always in failures. Two data sets, one with values of the input variable between minus three and three, and the other with values between minus ten and ten, would produce different linear regressions, both deceptive. The linear regressions in the present analysis are accurate because the range of the input variables are akin to having a smaller range than between minus two and two. The result is that the data reside in the middle and sloping part of the cumulative distribution function of the normal distribution. The linear regression superimposes to it its straight line. The differences between the two in the range of the sample are not material. The inputs into the probits are the individual decisions. The inputs into the linear clones are the conservative ratio of each term of each composition, weighted by the number of decisions in each.

⁶¹ See *infra* tbl.4.

12% of the variation in the conservative ratio through the r-squared of the linear regression that clones the probit.

The metrics that correspond to vying for the median explain 15% of the variation of the conservative ratio and the influences of both distances are unlikely to be due to chance, with their p-values being 2% and well under 1%.

Table 4. Hypotheses on Forming Coalitions

<i>Specification</i>	<i>Cohesion</i>		<i>Choice of Sides</i>		<i>Vying for Median</i>	
	<i>Estimates</i>	<i>P-Values</i>	<i>Estimates</i>	<i>P-Values</i>	<i>Estimates</i>	<i>P-Values</i>
<i>Constant</i>	0.15	0.33	-0.21	0.28	0.23	0.00
<i>StDevRatio</i>	0.08	0.74				
<i>DistcLibAvg</i>			0.20	0.00		
<i>DistcConsAvg</i>			-0.04	0.55		
<i>DistcLibNext</i>					0.13	0.002
<i>DistcConsNext</i>					-0.40	0.00
<i>R Squared</i>	0.00		0.12		0.15	
<i>R Sq. 1st yr</i>	0.01		0.12		0.28	
<i>R Sq'd Aligned only</i>					0.34	
<i>R Sq'd 1st Yr. Aligned only</i>					0.51	
<i>R Sq'd Non-Aligned</i>					0.12	
<i>R Sq's 1st Yr. Non-Aligned</i>					0.09	

Note: The estimates and p-values of the three probit regressions discussed in the text. The Adjusted-R-Squared result from linear regressions that clone the probit ones.

The row “R Sq’d 1st Yr.” displays the percentage of the variation in the conservative ratio that each model explains when only first-year decisions are considered. The first two models do not change significantly. The last model acts differently. The model of vying for the median sees its impact nearly double, to 28%.

The subsequent rows show the variation of the conservative ratio that different combinations of alignment and first-year status produce. The strongest reaction comes from first-year decisions where the justices are aligned, where vying for the median explains 51% of the variation in the conservative ratio. By contrast, the non-party-line decisions have the model perform about equally poorly whether considering only first-year decisions or all decisions.

The point is that the statistical regressions rank the three hypotheses. The cohesion hypothesis receives no validation, the choice of sides hypothesis seems to receive a little support, but the vying for the median hypothesis receives the most support, more than double that of the next contender when confined to first-year decisions. Since the distances of the choice-of-sides hypothesis are to a degree correlated with those of vying for the median, it is reasonable to conclude that its weak positive evaluation is a spillover from that of the hypothesis of vying for the median. The numbers say a pattern exists insofar as these effects are extremely unlikely to arise by chance (because they have low p-values) and have some effect (because they explain some fraction of the observed variation). To assess the pattern, however, one needs to see it.

3. Figures

To produce a graphical representation of the setting, a figure needs to convey the relation between the conservative ratio and the distance of the median justice from the next justice on each side. The figure does so by presenting the conservative ratio of each composition on the vertical axis, using as horizontal coordinates the distances of the median from the next justice on each side.

This approach aggregates the terms of each composition. If the conservative ratio of each term were presented separately, then the figure would become chaotic. By aggregating each composition into a single entry that takes the shape of a stake or a slat of a picket fence, the graph gains clarity. That single entry captures the conservative ratio produced over the life of each composition. However, since ideological scores change each term, each entry uses as the distance coordinates the weighted average distances of each term of the life of the composition. The average is weighted by the number of decisions issued each term.

To see a simplified version of a graph that will fast become complex, consider only two compositions, first, that defined by the appointment of Justice Gorsuch and, second, that defined by the appointment of Justice Barrett. Both lasted two terms.⁶² The ideology estimates differ by term. For the graph, the ideology coordinates are averaged by the weight of the decisions issued each term and the conservative ratio is that produced over all

⁶² The Gorsuch composition began with the appointment of Justice Gorsuch on April 8, 2017, and ended with the retirement of Justice Kennedy on July 31, 2018, and the appointment of Justice Kavanaugh on October 6, 2018. The Barret composition began with the appointment of Justice Barrett on October 27, 2020, and ended with the retirement of Justice Breyer on June 30, 2022, and the appointment of Justice Ketanji Brown Jackson on the same day. *See, e.g., Justices 1789 to Present*, supra note 30; for the definition of compositions see *supra* note 3.

terms of the composition.⁶³

The composition defined by the appointment of Gorsuch lasted from the appointment of Gorsuch on April 8, 2017, during the 2016 term, until the appointment of Kavanaugh before the start of 2018 term.⁶⁴ The ideological scores of the justices according to Martin & Quinn range from about -3.5 for Sotomayor on the extreme liberal side to about 3.5 for Thomas on the conservative extreme.⁶⁵ The ideologically median justice was Kennedy.⁶⁶ The next justice on the conservative side was Roberts, at a very small distance, 0.4 in the 2016 term when this composition issued three 5-4 decisions and 0.01 in the 2017 term when it issued seventeen 5-4 decisions.⁶⁷ The latter term weighs more heavily in calculating the weighted average distance, which becomes 0.07.⁶⁸ The next justice on the liberal side was Breyer in the 2016 term and Kagan in the 2017 term.⁶⁹ Their weight leans on the latter because eighteen 5-4 decisions were issued in the 2017 term but only three during the 2016 term.⁷⁰ That weighted average distance is 1.92. According to the regression, the probability of a 5-4 decision being conservative during the Gorsuch composition is 67% in the 2016 term and 71% in the next. The actual conservative fraction of tight splits over both terms is 64%.

Compare that to the example of the composition defined by the appointment of Barrett before the start of the 2020 term, using a less detailed description. The median justice is Kavanaugh. The next conservative justice is Gorsuch, at a small distance. The next liberal justice is Roberts at an even smaller distance. The intuition from the analysis suggests that liberal 5-4 decisions are more likely than conservative ones. The probability of a tightly split decision being conservative during the Barrett composition is about 55% according to the regression.⁷¹ The actual conservative ratio is 35%.

The mathematical inner workings of the regression correspond to the relative ease of forming a coalition of five. Consider the ease with which the four conservatives with Gorsuch as the closest one to Kennedy, the median, could obtain Kennedy's vote in the 2017 term as opposed to the four liberals

⁶³ Again, this aggregation only simplifies the graph. The probit regression considers each decision separately. Its linear clone takes as inputs the conservative ratios produced each term of each composition, weighed by the number of 5-4 decisions.

⁶⁴ *Supreme Court Nominations (1789-Present)*, U.S. Senate, <https://www.senate.gov/legislative/nominations/SupremeCourtNominations1789present.htm> (last visited Oct. 29, 2022).

⁶⁵ Martin & Quinn, *supra* note 4.

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ THE SUPREME COURT DATABASE, <http://supremecourtdatabase.org/analysis.php> (last visited Nov. 26, 2022).

⁷¹ The regression likely overestimates this probability as can be seen by the location of the 50% iso-height line in the figure. Analytically, one should expect that line to match the diagonal on the floor of the graph and have the Barrett composition produce a liberal-leaning conservative ratio. This likely error diminishes in the next figure, resting on only first-year decisions in which the justices align ideologically.

with Kagan as the closest to Kennedy (but not nearly as close as Gorsuch). Compare that to the ease of four liberals with Roberts as the closest one to Kavanaugh, the median, obtaining Kavanaugh's vote in the 2020 term as opposed to the four conservatives with Gorsuch as the closest to Kavanaugh (but not nearly as close as Roberts). The intuition behind the regression is that the conservatives would tend to get the median justice's vote more often after the appointment of Gorsuch and that the liberals would get the median vote more often after the appointment of Barrett. Granted, the true interactions between the justices are vastly more complex than the metric of the ideological distance of the median to the next. The regression, nevertheless, produces statistical confidence that these distances matter, and explains more than an eighth of the variation of the conservative ratio. When the data are only first-year decisions, the power of the regression doubles to explain about a quarter of the variation in the conservative ratio, and it doubles again to over half, when only considering first-year decisions in which the justices align by ideology.

The simplified graph only has the two compositions of the above example, those defined by the appointments of Gorsuch and Barrett. Figure 1 has the two posts corresponding to those two compositions marked "Gr" and "Ba," respectively. The post corresponding to Gorsuch captures the notion that the median justice during that composition, Kennedy, was fairly far in ideological terms from the next liberal justice, Kagan, but quite close to the next conservative justice, Chief Justice Roberts. The height of the post corresponds to the conservative ratio of the Gorsuch composition, 70%. The composition defined by the appointment of Barrett has the opposite characteristics. Its median justice, Kavanaugh, was close to the next liberal justice, Roberts, but not as close to the next conservative justice, Gorsuch, and its conservative ratio leaned liberal at 35%.

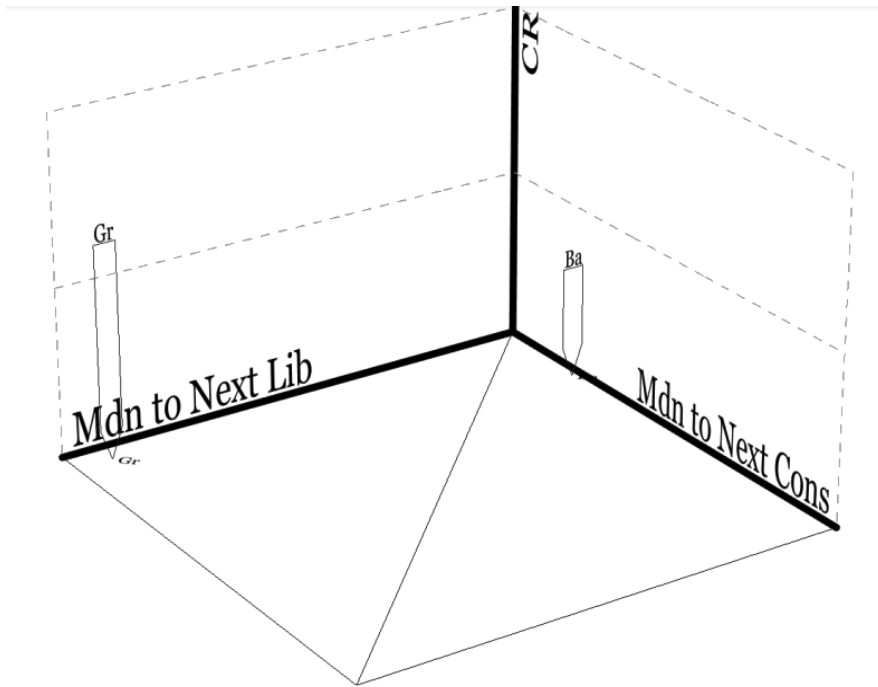


Figure 1. The conservative ratios and distances from the median to the next justices on each side, Barrett and Gorsuch compositions.

In this visual representation, the phenomenon that larger distances from the median to the next liberal justice than to the next conservative justice correspond to greater conservative ratios should appear as tall posts on the left of the figure. Vice versa, the phenomenon of low conservative ratios when the next conservative justice was far from the median, and while the next liberal was not, should appear as short posts on the right of the figure, continuing the pattern these two posts start.

Figure 2 includes all the posts, one for each composition since 1946. The Figure also shows the expected relation according to the regression.⁷² As expected, the conservative ratios on the left side tend to be greater than those on the right.

The height of the sloping surface corresponds to the predicted conservative ratio according to the probit regression, represented as “CR” on the vertical axis. The vertical axis runs from 0 to 1, and the back walls are scored at 0.5 and 1 in light dashed lines. The abbreviation at the foot and the head of each post corresponds to the name of the junior justice who defines

⁷² Rotating, animated versions of these figures exist at my site, under scholarship, at a link at the paragraph corresponding to this Article also accessible from tinyurl.com/conspx3d.

the composition.⁷³ On the surface that corresponds to the predicted conservative ratio lies a heavy gray line that marks the 50% height, i.e., where the expected conservative ratio is 50%.

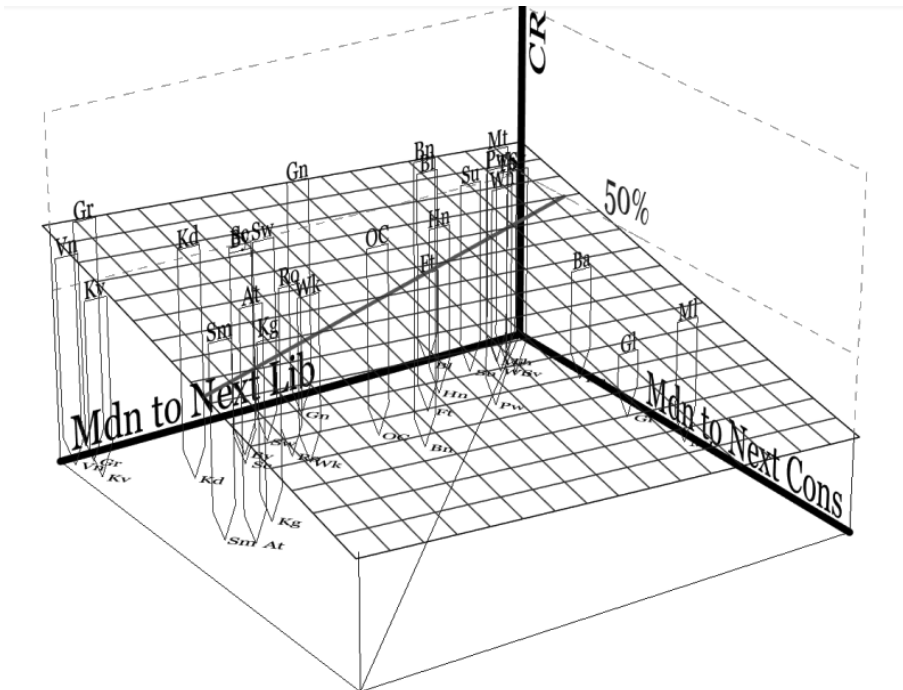


Figure 2. The surface of the predicted first-year conservative ratio and the actual conservative ratios per composition plotted against the ideological distances of the median justice from the next conservative, and liberal, justice.

The highest point of the plotted surface, the predicted conservative ratio, is at the left-hand corner, the corner that corresponds to a small distance from the median to the next conservative justice and a great distance to the next liberal justice. The lowest point is at the right-hand corner, the corner that corresponds to a small distance from the median to the next conservative justice and a large distance to the next conservative justice. The liberal side is more likely to be joined by the median justice in the latter case than in the former one.

Relatively few posts lie to the right of the diagonal, to the side that

⁷³ The abbreviations, in alphabetical order, are Alito into At, Barrett into Ba, Blackmun into Bl, Brennan into Bn, Breyer into By, Fortas into Ft, Ginsburg into Gn, Goldberg into Gl, Gorsuch into Gr, Harlan into Hn, Kagan into Kg, Kavanaugh into Kv, Kennedy into Kd, Marshall into MI, Minton into Mt, O'Connor into OC, Powell & Rehnquist into Pw, Roberts into Ro, Scalia into Sc, Sotomayor into Sm, Souter into Su, Stevens into Sv, Stewart into Sw, Thomas into Th, Vinson into Vn, Warren into Wn, and Whittaker into Wk.

corresponds to a greater distance to the next conservative justice. Significantly to the right of the diagonal lie only two compositions, Goldberg's, and Marshall's. They both have a conservative ratio that leans liberal. Most posts lie on the left of the diagonal, corresponding to greater distances to the next liberal justice than the next conservative one. In other words, after most appointments, the median justice was closer ideologically to the next conservative justice than to the next liberal justice. This shows that the conservative paradox is largely explained by the location of the median justice. Because after most appointments the median justice was ideologically closer to the next conservative justice, the conservative ratio has tended to be conservative.

After the two refinements, when the data is reduced to (i) the first-year decisions in which (ii) the justices align by ideology, the relation becomes much more pronounced. The distances influence much more strongly the conservative ratio, as Figure 3 shows. The compositions at the right corner, those of Goldberg, and Marshall, produce zero first-year decisions with their justices aligned by ideology that are conservative. Vice versa, the compositions at the left corner, Kavanaugh, Gorsuch, and Vinson, produce very high conservative ratios when they issue decisions with their justices aligned during their first year. The resulting probit surface, which predicts the conservative ratio, changes much more pronouncedly from low values at the right corner to high values at the left one than did the one of Figure 2.

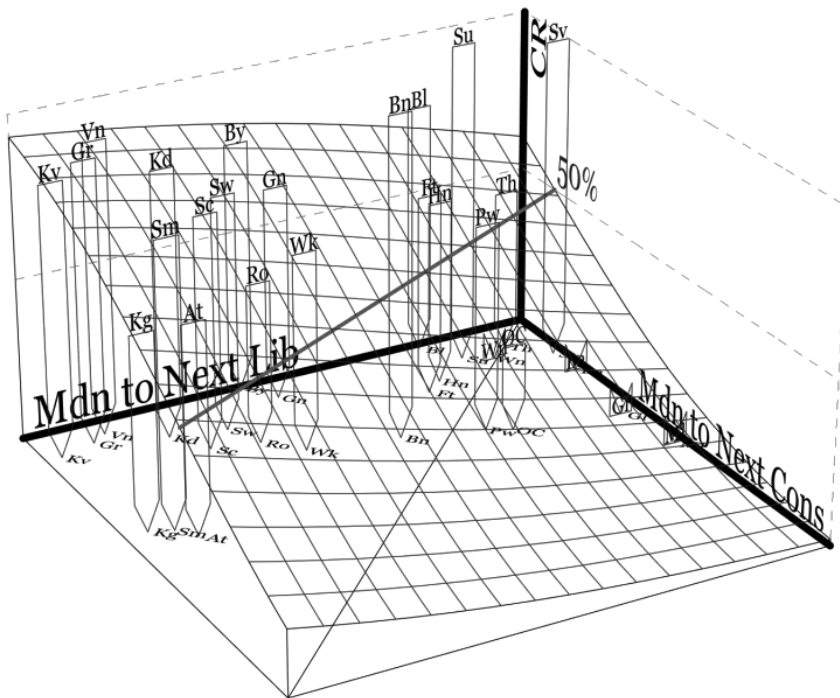


Figure 3. The conservative ratio of compositions from their first-year decisions where justices align by ideology.

By contrast, the non-party-line decisions tell a very different story. There, the conservative paradox does not even arise. Their conservative ratio is 48% (in only first-year decisions it is 47%). The effect of the location of the ideologically median justice cannot be distinguished from chance and has little explanatory power.⁷⁴ Moreover, those decisions are the majority of the sample, 52% of all 5–4 decisions and 55% of first-year 5–4 decisions.⁷⁵ The distinction between aligned and non-party-line voting as well as the power of ideological scoring is also confirmed by the predictive power of the distance between the justices adjacent to the median with respect to the fraction of decisions in which the justices align by ideology, which Appendix C explains.

The decisions of the first year should reasonably be expected to

⁷⁴ The p-values of the probit regressions for all-year decisions are under 1% and 30% (first year 8% and 34%) for, respectively, the effect of the distance to the next liberal justice and that to the next conservative one. The corresponding r-squared values of the explained fraction of the variation of the conservative ratio are 12% and, for first-year decisions, 9%.

⁷⁵ The number of 5–4 decisions where the justices align by ideology is 668 and that in which they do not align is 715. The corresponding counts of first-year decisions are 234 and 278.

present a slightly more direct expression of the justices' positions. Because the justices are not yet familiar with the reasoning of the new justice, actions leading up to the consideration of a dispute and especially the votes about grants of *certiorari* are more inaccurate and less customized to the new justice's thinking. Therefore, unexpected attitudes of the new justice are more likely to appear, whereas in later years, actions leading to a *certiorari* petition and the vote about granting *certiorari* more accurately account for the new justice's thinking with the result that the votes of all justices are more filtered through the strategies surrounding bringing disputes and granting *certiorari*.

As an example of how knowing the justices shapes argumentation, consider the oral argument in *Financial Oversight Board v. Aurelius Investment* by ex-Solicitor-General Donald Verrilli, Jr.⁷⁶ The insolvency of Puerto Rico led Congress to appoint the Board to rehabilitate the territory's finances.⁷⁷ The investment fund Aurelius sought to invalidate all actions of the Board with the argument that the Board members were improperly appointed: the Board members were principal officers of the United States; principal officers must be appointed pursuant to the appointments clause by the President with the "advice and consent" of the Senate.⁷⁸ The Oversight Board was appointed by statute, not that process.⁷⁹ The main answer of Mr. Verrilli was that the Board was a component of the government of a territory, and Congress can appoint territorial officers.⁸⁰

An auxiliary foundation for the authority of the Board could be the authority of Congress over bankruptcy in Article I.⁸¹ Granted, Article I jurisdiction may be seen as entirely irrelevant to the Appointments Clause.⁸² However, insolvency has an inescapable pragmatic dimension. For example, Professors David Skeel and Mark Roe criticize the reorganization of Chrysler as procedurally and doctrinally problematic, despite that, in hindsight, the reorganization was a seminal success.⁸³ The inescapably pragmatic nature of insolvency is also illustrated by the Supreme Court's grant to the legislature

⁷⁶ Transcript of Oral Argument at 3, *Fin. Oversight & Mgmt. Bd. for P.R. v. Aurelius Inv., LLC*, 140 S. Ct. 1649 (2019) (No. 18-1334).

⁷⁷ *Fin. Oversight & Mgmt. Bd. for P.R. v. Aurelius Inv., LLC*, 140 S. Ct. 1649, 1655 (2020).

⁷⁸ *Id.* at 1654, 1681; see also U.S. CONST. Art. II, Sec. 2 ("[The President] . . . with the Advice and Consent of the Senate, shall appoint . . . all other Officers of the United States.").

⁷⁹ *Id.* at 1654.

⁸⁰ Transcript of Oral Argument, *supra* note 76, at 6–9.

⁸¹ U.S. CONST. art. I, § 8. ("The Congress shall have power . . . [t]o establish . . . uniform laws on the subject of bankruptcies . . .").

⁸² Compare U.S. CONST. art. 1, with U.S. CONST. art. 2 § 2.

⁸³ See Mark J. Roe & David Skeel, *Assessing the Chrysler Bankruptcy*, 108 MICH. L. REV. 727 *passim* (2010) (raising a multiplicity of issues with a process that gave secured creditors a fractional payment but let unsecured claims become creditors of the new Chrysler under FIAT's control; yet, in pragmatic terms, the doctrinally faulty process was a success in revitalizing the failed enterprise, restoring its productivity and avoiding numerous social and economic issues that would follow from a closure of Chrysler plants in the middle of a major recession).

of time to cure the procedural improprieties of the Bankruptcy Code.⁸⁴ The grounds for the appointment of the Board was the insolvency of Puerto Rico and having the Appointments Clause prevent Puerto Rico's financial salvation could be considered to give form more power than should be due.

Whatever the merits of the argument resting on bankruptcy jurisdiction may be, Mr. Verrilli did not make it. His rejection of it was related to his knowledge that several of the justices favored states' rights and arguing that Congress had a broad power on account of a clause that went beyond the territories, as bankruptcy jurisdiction does, would not appeal to those justices.⁸⁵ In a Court with a majority of justices who favored states' rights, explicitly making this argument risked alienating those justices in a way that overcame any benefit the argument may have as an auxiliary one for other justices.

Justice Kagan reached this crux by referring to insolvency and asking, "why [given the national concerns over insolvency] shouldn't we think that Congress, in enacting this piece of legislation, was not thinking about it through a broad national lens [rather than a territorial one]?"⁸⁶ The straightforward answer, that Congress may have that authority under the bankruptcy clause, would produce exactly the danger of alienating the justices who favored states' rights. Mr. Verrilli's answer evaded that danger. His answer opened by objecting to the conflating of individual legislators' intent with that of the legislature.⁸⁷ He continued by pointing to language in the statute that was specific to Puerto Rico.⁸⁸

An advocate who did not know the justices might have considered that mentioning the bankruptcy power would be a better answer because it would provide an additional foundation of the Board's authority. Mr. Verrilli, knowing the justices he faced, saw the argument as disadvantageous. The bankruptcy clause as a source of congressional authority for an insolvency-resolving intervention could wait until the now unlikely eventuality that Congress addresses the insolvency of a state without following the Appointments Clause.

⁸⁴ In *Marathon Pipe Line* the Supreme Court held that the system of bankruptcy judges without life tenure failed to provide litigants with a judge of the independence to which Article III of the Constitution entitled them. Yet, instead of invalidating that part of the statutory scheme, the Supreme Court gave Congress time to pass a new and complying statute. *N. Pipeline Constr. Co. v. Marathon Pipe Line Co.*, 458 U.S. 50, 88 (1982) ("However, we stay our judgment until October 4, 1982. This limited stay will afford Congress an opportunity to reconstitute the bankruptcy courts or to adopt other valid means of adjudication, without impairing the interim administration of the bankruptcy laws.").

⁸⁵ Other justices, however, may have had the opposite predilection: favor laying the groundwork for Congressional jurisdiction over states according to the bankruptcy clause, with an eye to facilitating Congress to later address the insolvency of a state.

⁸⁶ Transcript of Oral Argument, *supra* note 76, at 14.

⁸⁷ See Transcript of Oral Argument, *supra* note 76, at 14 ("First, I think what matters is what Congress did, not what the motivations of individual legislat[ors] were in moving forward with what Congress did.").

⁸⁸ *Id.* at 14 lines 20 *et seq.* ("Second, the best evidence of what Congress did is the statute itself, where it made a choice to create an entity in Puerto Rico and it instructed it to act on behalf of Puerto Rico. . .").

The point is that the knowledge of how the justices think in the many dimensions of legal reasoning shapes surrounding behaviors, including (a) advocates' decisions about petitions and choice of arguments, (b) justices' colleagues' decisions about granting *certiorari* and (c) arguments between justices. First-year decisions miss this knowledge for one-ninth of the Court.

In sum, the model of vying for the median, which turns on the distances of the next justice on each side from the median, has more explanatory power than its contestants. Its explanatory power is the greatest when considering only first-year decisions in which the justices align by ideology. Decisions in which the justices do not align by ideology are not explained by the model, especially first-year ones. Moreover, those decisions do not exhibit the conservative paradox.

V. INFERENCES

The conservative paradox is explained by the ideological distances of the median justice to the next justice on each side. When the justices align by ideology, then the side with a justice closer to the median is more likely to obtain the median's vote. In most compositions, the next conservative justice has been ideologically closer to the median than the next liberal justice. This explanation is powerful, however, only in those decisions in which the justices align by ideology. Non-party-line decisions are not explained by the median's location and do not display the conservative paradox. These two phenomena raise several questions. First, to what inferences about the relation of political leaning and adjudication does this bifurcation lead? Second, where should research turn to explain the uneven spacing around the median justice?

A. Judging and Political Leaning

A naïve interpretation of these phenomena is that judges are political in some dimensions of adjudication and principled in others. That judges alternate the way in which they make decisions is implausible. Moreover, if one believes in these two modes of adjudication, one must explain why judges seem to be more political in their first year than in subsequent years. Furthermore, the switch to a second mode of adjudication is no limit under this reasoning, and judges may use even more modes of adjudication, refuting any constancy of principle. This contradicts basic concepts of legal reasoning.

The implausibility of judges alternating the way in which they make decisions comes primarily from the function of law and adherence to precedent. The very essence of law requires constancy and, in a judge, that constancy is not only one of interpretive positions but also of method. Furthermore, evidence indicates that judges do display such constancy in their

various interpretive positions. Court-watchers and litigators spend significant effort to know the details of each justice's thinking.⁸⁹ In the same vein, the study of the dimensions of criminal procedure that I undertook with Justice Sullivan showed that the justices of that Court maintained relatively constant attitudes about six different dimensions of criminal procedure, some congruent with their political attitudes and some not.⁹⁰ In order for one to believe that justices are political in some dimensions of adjudication, one must believe that the entire legal profession's focus on the legal attitudes of the justices is misplaced and that the persistent phenomena where the justices display consistency of views are illusions that the justices readily sacrifice to political expediency.

An alternative view that seems much more sound is that justices employ a single method of adjudication in all matters, voting and taking positions according to their interpretive principles or legal philosophies. The justices' legal philosophies lead the justices to fairly specific attitudes in the numerous dimensions of legal reasoning and adjudication. The phenomenon of some of those positions appearing political and others principled is the result of the appointment process. In the appointment process, the political branches select jurists for appointment to the Supreme Court depending on the agreement of the candidates' legal philosophies with the political positions of the appointing presidents. However, the appointing presidents do not and cannot vet candidates on every dimension of their legal philosophies. Rather, the political system focuses on the set of candidates' attitudes that politicians consider important, the politically salient dimensions of adjudication. The result is that when a case turns on politically salient matters, then justices align by their attitudes that the political appointment process used and the decision appears political. When a case turns on a matter that is not politically salient, then the justices' attitudes do not correlate with their appointing parties and political leanings. Then, the decision appears unexplainable by politics and, therefore, principled. However, all decisions are principled in that the justices follow their own interpretive principles and legal philosophies rather than

⁸⁹ Books and law review articles focus on the thinking of specific justices. The magnitude of the investment appears in a Westlaw search for articles with titles including the phrase "justice *name*" with *name* being replaced by the justices appointed since 1970, from the appointment of Justice Blackmun. Imperfect as this search is, it produces 1,020 articles. The imperfections include that the search also returns speeches of the justices, retrospectives, and articles that have epigraphs by the justices; the search corresponding to Justice Thomas also captures articles about other justices with that first name; however, first, those reflect the same focus on individual justices, second, even if those are most of the 78 articles that search produces, they do not alter the conclusion that legal analysis is interested in the thinking of individual justices. The front-runner by far, due to being the median justice for a long time, is Justice Kennedy with 111 articles, with titles such as Justice Kennedy's Democratic Dystopia; The 'Super Median'; or Justice Kennedy and Environmental Waters Cases. Indeed, the lawyers for gay marriage in *Obergefel v. Hodges*, 576 U.S. 644 (2015) acknowledge not only that "[they] had written [their] briefs for Justice Kennedy" but also that during the oral argument "every question that every justice asked was designed to sway Justice Kennedy." See Mary Dieter, *How to Argue Before the Supreme Court*, DEPAUW UNI. (April 13, 2021), <https://www.depauw.edu/stories/details/how-to-argue-before-the-supreme-court/>.

⁹⁰ See Nicholas L. Georgakopoulos and Frank Sullivan, Jr., *Six Dimensions of Criminal Procedure*, 28 S. CT. ECON. REV. 181, *passim* (2020).

deciding in the way that is politically appealing to their appointing party.⁹¹ According to this reasoning, calling new interpretations by the Court political, when they are in the political dimensions, and surprising, when they are in the non-political ones, is an error of perception.⁹² New interpretations may arise in any dimension of legal reasoning and no reason exists to think that they are produced by two different processes.

Legal philosophies do not even have a political leaning that is inherent or constant. Consider two examples. Two dimensions of judging that reflect accurately political leaning are attitudes about federal power and breadth of constitutional interpretation.⁹³ In the former, conservative politics asks for judges to have a narrow view of federal powers and an expansive view of states' rights.⁹⁴ In the latter, conservative politics asks for narrow constitutional interpretation that does not expand federal rights and disapproves of taking interpretive liberties with the constitutional text.⁹⁵

⁹¹ This is neither to deny (1) that some jurists may approach law after selecting a political leaning and may have a bias in favor of attitudes that agree with their political leaning nor (2) that justices' attitudes are informed by events and may fluctuate. (1) For example, conservative legal students in the early twentieth century might have found broad interpretation and expansive federal powers appealing, just as conservative students in the late twentieth century might have found them unappealing, *see infra*, notes 94–95. Furthermore, perhaps their attitude on such matters might change more easily if the parties' positions change. However, even such jurists, would tend to select their attitudes about non-politically salient dimensions based on their personal legal philosophies. (2) The fluctuation of attitudes in reaction to events is most visible in the study of un-Americanism prosecutions after the Second World War, a period when the primacy of the Bill of Rights fluctuated depending on the fear of Communism. *See* Nicholas L. Georgakopoulos, *The Supreme Court's Un-Americanism Pendulum*, 15 FIU L. REV. 259, *passim* (2021) (showing the fluctuation of the number of votes un-Americanism prosecutions received).

⁹² Compare, for example, the commentary on the Court's recent decisions about Indian affairs in *McGirt v. Oklahoma*, 140 S. Ct. 2452 (2020), with any decision on a politically salient issue. The former is treated as news with scant accusations of political motivation while the latter are branded political. Compare the coverage by left-leaning e-magazine Slate, for example, of *McGirt*, which contains no hint of an accusation of politicization, to its coverage of a decision that Slate considered the paradigm of politicization, *Dobbs v. Jackson Women's Health Organization*, 597 U.S. ____ (2022). Cf. Stacy Leeds, *What the Landmark Supreme Court Decision Means for Policing Indigenous Oklahoma*, SLATE, *What the Landmark Supreme Court Decision Means for Policing Indigenous Oklahoma*; Mark Joseph Stern, *The Supreme Court Overrules Roe v. Wade*, SLATE, <https://slate.com/news-and-politics/2022/06/supreme-court-overturns-roe-v-wade-abortion-to-become-illegal-in-half-the-states.html> (“Justice Samuel Alito’s opinion for the court, joined by four other Republican-appointed justices;” “*Dobbs* reads more like a polemic against abortion than a piece of legal analysis;” “Republicans have spent decades preparing for this day”).

⁹³ *See also, e.g.*, A.C. Pritchard & Todd J. Zywicki, *Finding the Constitution: An Economic Analysis of Tradition's Role in Constitutional Interpretation*, 77 N.C.L. REV. 409, 431 (1999).

⁹⁴ *See, e.g.*, Stanley Mosk, *State Constitutionalism: Both Liberal and Conservative*, 63 TEXAS L. REV. 1081, 1092 (1985) (discussing the “conservative appeal to federalist principles” that favor states’ rights); Cato Handbook for Policymakers 154 *et seq.* (8th ed. 2017) CATO INST., <https://www.cato.org/cato-handbook-policymakers/cato-handbook-policy-makers-8th-edition-2017> (on “Returning Power Wrongly Taken from the States and the People”); Earl M. Maltz, *Faint-Hearted Federalism: The Role of State Autonomy in Conservative Constitutional Jurisprudence*, 72 S.C. L. REV. 55 *passim* (2020).

⁹⁵ *See, e.g.*, Ernest Young, *Rediscovering Conservatism: Burkean Political Theory and Constitutional Interpretation*, 72 N.C. L. REV. 619, 625–29 (1994) (describing conservative jurisprudence as resting on originalism and judicial restraint); Richard H. Fallon Jr., *Are Originalist Constitutional Theories Principled, or Are They Rationalizations for Conservatism*, 34 HARV. J. L. & PUB. POL'Y 5 *passim* (2011) (proceeding from the premise that modern conservatism argues for originalism); David A. Strauss, *Originalism, Conservatism, and Judicial Restraint*, 34 HARV. J. L. & PUB. POL'Y 137 *passim* (2011) (arguing that conservative legal scholars should no longer be originalists); Keith E. Whittington, *Is Originalism Too Conservative*, 34 HARV. J. L. & PUB. POL'Y 29 *passim* (2011); Jamal Greene, *How*

Expanding the federal power and taking interpretive liberties with the Constitution are seen as not being conservative. Compare this political interpretation of these two legal attitudes to those existing around the *Lochner* era at the turn of the previous century.⁹⁶ *Lochner* produced a conservative outcome, the defeat of a state's attempt to reduce the workweek hours. This conservative outcome was reached from an expansive interpretation of the Constitution—the Due Process clause—and a narrow concept of states' rights—not respecting the legislative outcome of New York. In these two dimensions, opposite legal attitudes advance conservative politics at those different times. The political arena determines the political leaning of legal attitudes.

For this Article's analysis, it is fortunate that reversals of the political leaning of legal philosophies during its time span, like those of federalism and breadth of interpretation (which occurred outside this time span), have not frustrated the statistics. The correspondence of legal philosophies to political leaning have stayed sufficiently steady for the observed result, that in 5–4 decisions in which justices align by ideology, the model of vying for the median explains a large fraction of the outcomes, especially in the first year after appointments. This is revealing about the way that the Supreme Court reaches 5–4 decisions in all matters, ideological or not. Vying for the median is the model that best explains most 5–4 decisions. The ideological scores merely make this visible in the decisions about matters that have an ideological salience. No reason exists to doubt that the model of vying for the median has a similar power in the dimensions that do not have ideological salience, but which cannot reveal this pattern due to the absence of a similarly exact measure of judicial attitudes in other dimensions.

Returning to law, that some legal attitudes may be strongly associated with political leanings does not give the political leanings legal salience. An advocate arguing before the Supreme Court with a strong conservative majority must still make legal arguments, not political ones, to persuade the justices. The advocate would never argue that conservativeness dictates the outcome the advocate promotes. A legal argument must dictate the outcome.

This lack of a strict relation between legal attitudes and political leanings does not necessarily rank the two fields. Legal attitudes will have dominant importance in legal interpretation, and political attitudes will have dominant importance for political discourse. Whereas the design of the

Constitutional Theory Matters, 72 OHIO ST. L.J. 1183 *passim* (2011) (discussing conservative originalism); Cato Handbook for Policymakers, *supra*, note 252 (on “Returning Power Wrongly Taken from the States and the People”).

⁹⁶ See *Lochner v. New York*, 198 U.S. 45, 56 (1905) (invalidating a New York law, which set maximum working hours for bakers, as unconstitutional; the five-judge majority held that such a law violated the Fourteenth Amendment's Due Process Clause as constituting an “unreasonable, unnecessary, and arbitrary interference with the right of the individual to his personal liberty, or to enter into those contracts in relation to labor. . .”).

Constitution indicates that politics is supposed to influence law through the selection of justices, law may also influence politics in ways that are beyond this project.

A concern for this project is the accusation that it produces a tautology: saying that political leanings of justices are important for politically salient decisions can be seen as meaningless. The point, however, was that the political leanings revealed the mechanism by which 5–4 splits form. The mechanism became apparent in the politically salient decisions because only for those decisions was the quantification of the justices' attitudes apt.

B. Further on Median Justice Distances?

The next question may be why the distances around the median justice have taken this shape. Whereas future research may be able to shed light on them, at present the issue is a cypher.

For example, one may reasonably infer that the absence of Republican Senate control during nominations by Democrat presidents and the occasional Democratic control of the Senate during nominations by Republican presidents may have produced centrist nominations of only conservative justices. Even if that were true, which is unclear, it would only presumptively create a smaller distance from the median to the next conservative justice when the median would be the most liberal Republican-appointed justice. First, in few terms was the composition of the Court exactly 5–4 by Republican appointees.⁹⁷ While nominally this was the case after the appointment of Stewart, one of those Republican nominees was Brennan, who was and acted as a Democrat but was appointed by President Eisenhower in a bipartisanship gesture.⁹⁸ The other case was after the appointment of Kagan. Yet, the resulting composition produced among the lowest conservative ratios despite that the median, Kennedy, was significantly closer to the next conservative justice, Roberts, than the next liberal one, Breyer.⁹⁹ Second, since the Court has often contained more than five Republican nominees, the centrist influence of the Democrat controlled Senate would not be dispositive. Several of the Republican-appointed justices would have this theorized centrist influence, and one cannot form a prediction

⁹⁷ See *supra*, text accompanying note 34.

⁹⁸ See, e.g., Brennan, William J. Jr., 1906-1997, ENCYCLOPEDIA OF THE SUPREME COURT OF THE UNITED STATES 195 (2008) (“During his 1956 reelection campaign, Eisenhower, a Republican, made a recess appointment of Brennan to the Court to demonstrate to the public that partisan politics was not the major consideration in his judicial appointments.”); Brennan, William, AMERICAN GOVERNANCE 154 (2016) (reporting that Eisenhower nominated Brennan “to shore up support among Democratic and independent voters” for Eisenhower’s coming reelection bid); William J. Brennan, Jr., Wikipedia, [https://en.wikipedia.org/wiki/William_J._Brennan_Jr.](https://en.wikipedia.org/wiki/William_J._Brennan_Jr) (reporting that the appointment of a Democrat was seen as likely to attract votes in the coming re-election campaign for President Eisenhower).

⁹⁹ See *supra* tbl.2.

whether it would produce a smaller ideological distance between the first and second or from the second to the third Republican justices.

Future research may pursue the possibility that liberalism may tend to produce more dispersed justices from an ideological perspective. Among the utterly speculative foundations for this may be that liberalism pursues more causes than conservatism, a more equal treatment for persons with numerous attributes, from low wealth to race, origin, immigration status, gender, and sexual attributes. This might produce increasing distances among the liberal justices, who would embrace a different number of these goals. Presently, however, this remains mere speculation.

VI. CONCLUSION

This Article explored the paradox that, since the 1946 term, the United States Supreme Court's 5–4 decisions have leaned conservative. No structural or political explanation was forthcoming. Importing the justices' ideology estimates and testing three hypotheses about the formation of 5–4 divisions produced the most support for vying for the median, which turns on the ideological distance between the median and the next justice on each side. The intuition on which it rests is that the more extreme justices on each side realize that insisting on their position would cost them the majority and produce an even less desirable outcome than if they compromised and tried to appeal to the median justice. Effectively, the weight of each side falls on the justice closest to the median; a small distance to the median makes getting the median's vote easy; a large distance justifies dissenting. The phenomenon becomes successively more intense as the sample narrows to only first-year decisions and to only decisions with the justices aligned by ideology. Then, the distances explain over half the variation of the conservative ratio between coalitions. At the opposite side, decisions with the justices not in party-line votes neither present the conservative paradox, nor give these ideological distances explanatory power.

The implication of these phenomena is that justices vote consistently according to their principles in the many dimensions of the legal system. However, justices are selected according to their positions in the few legal dimensions that the political branches consider salient. The result is outcomes that appear political in the politically salient matters and outcomes that appear principled in the rest. To disagree with this conclusion, one must believe that justices employ different methods of adjudication in different fields, that the legal system's investment in knowing the attitudes of justices is baseless, and that justices violate the very concept of legal reasoning and interpretation. Adjudication does not occur in the political space with conservative or liberal arguments. Adjudication occurs in the legal space with arguments crafted for each of the many facets of the legal system.

APPENDIX A: AUDIT AGAINST 800 MANUALLY CODED DECISIONS

To provide some comfort about the absence of a bias in the Database's assignment of political slants to decisions, I resort to my work with Justice Sullivan for an audit. In the context of studying 5–4 coalitions, we assign political slant manually to tightly split decisions issued by non-minor coalitions during long-lived compositions of the Court.¹⁰⁰ A composition is “long-lived” if it issued over fifty tightly split decisions. The long-lived compositions are those of Vinson (terms 1946–1948), Stewart (terms 1958–1961), Powell and Rehnquist (appointed on the same day, terms 1971–1975), Stevens (terms 1975–1980), O'Connor (terms 1981–1985), Kennedy (terms 1987–1989), Breyer (terms 1991–2004), Alito (terms 2005–2008), and Kagan (terms 2009–2015; the 2015 term encompasses the death of Justice Scalia on February of 2016, which ends the Kagan composition).¹⁰¹ Each composition issues tightly split decisions from various majority coalitions of five justices. A coalition is not minor if it issued three or more decisions. In other words, we assigned political slant to every 5–4 decision when its majority of five justices issued three or more decisions while being part of any of the compositions that issued more than fifty 5–4 decisions: 800 decisions in total.

Table A1 presents the results of this audit. The first column has the junior justice who defines the composition. The second column has the number of decisions reviewed. In the rare cases of disagreement with the Database's slant, slightly over 5% of the time, either the third column presents the number of disagreements where the Database assigned a conservative slant, or the fourth column presents the number of disagreements where the Database assigned a liberal slant. For example, the first row indicates that during the composition defined by the junior justice being Vinson, the Court issued fifty-two tightly split decisions from majorities that issued three or more decisions. We disagree with none of those of the fifty-two that the Database codes as conservative. We disagree with one of those that the Database codes as liberal.

¹⁰⁰ See Georgakopoulos & Sullivan, Jr., *supra* note 11 at 135.

¹⁰¹ See e.g., Joan Biskupic and Lawrence Hurley, *U.S. Justice Scalia, conservative icon, dead at 79*, REUTERS (Feb. 13, 2016), <https://www.reuters.com/article/usa-scalia/u-s-justice-scalia-conservative-icon-dead-at-79-idUSKCN0VN03K>.

Table A1. Audit of Political Slant

<i>Composition</i>	<i>Reviewed</i>	<i>DB cons</i>	<i>DB lib</i>
Vinson	52	0	1
Stewart	81	0	0
Powell & Rehnquist	78	2	2
Stevens	101	3	1
O'Connor	123	6	5
Kennedy	73	0	1
Breyer	159	6	5
Alito	69	0	0
Kagan	64	3	6
Total	800	20	21

Note: Audit of 5–4 decisions of long-lived compositions, number of decisions reviewed, and disagreements where the Database coded the decision conservative and liberal.

An example of a disagreement is *San Diego Gas & Electric v. City of San Diego*.¹⁰² A municipality changed the zoning of a large parcel of land, preventing the owner's planned development.¹⁰³ The owner sought compensation arguing that the change was a regulatory taking.¹⁰⁴ The Court dismissed the claim.¹⁰⁵ The dismissal meant that the municipality did not have to pay compensation to the owner whose plans for the land were frustrated by the changed zoning.¹⁰⁶ The Database codes this as a takings issue and a conservative result.¹⁰⁷ Some readers would agree with the Database that this is a conservative result, likely either from the perspective of federalism, that the local authorities are allowed to act, or from the perspective that federal (takings) law was not expanded to cover this setting. With Sullivan, we consider more salient the result for business activity. Municipalities were empowered against owners of land to prevent the planned use of the land. Therefore, we see it as a liberal result.

The disagreement is neither unassailable nor unreasonable. Perhaps scholars focused on federalism or takings would see those aspects as more important, whereas both Sullivan and I teach business law courses, which may produce a slight bias to place more importance on the consequence of the decision for business.

¹⁰² See generally *San Diego Gas & Elec. Co. v. San Diego*, 450 U.S. 621 (1981).

¹⁰³ *Id.* at 624–25.

¹⁰⁴ *Id.* at 625–26.

¹⁰⁵ *Id.* at 630.

¹⁰⁶ *Id.* at 633.

¹⁰⁷ *San Diego Gas & Elec. Co. v. San Diego*, THE SUPREME COURT DATABASE, <http://scdb.wustl.edu/analysisCaseDetail> (last visited Oct. 20, 2022). The Database codes the dispute as issue 40070, which the data guide describes as “due process: takings clause, or other non-constitutional governmental taking of property.” Spaeth, et al., *supra* note 3 at 103.

How different readers could interpret political slant differently is also apparent in the discussion of the decisions of the Stevens and the O'Connor compositions that the ELP filtering drops.¹⁰⁸ Especially poignant are two, *NLRB v. Int'l Longshoremen's Assn. AFL-CIO* of the Stevens composition and *New York v. Uplinger* of the O'Connor composition.¹⁰⁹ The Database and our assessment differ about the slant of those two cases.¹¹⁰ The Database codes both as conservative and we consider both liberal. We think the Database is making an obvious error in *Longshoremen*. The union wins.¹¹¹ That is liberal and we do not understand from which perspective the Database codes it as conservative.

Uplinger is more complex. The ostensible issue in *Uplinger* is the constitutionality of a loitering statute, which the New York courts invalidated in connection with their simultaneous invalidation of the criminal prohibition of homosexual sodomy as a matter of interpreting the Constitution of New York.¹¹² The police used the loitering statute to target the same individuals as the criminal sodomy that was decriminalized.¹¹³ The Supreme Court of the United States did not grant *certiorari* to the sodomy issue but heard the loitering one.¹¹⁴ Then, the Court dismissed for *certiorari* improvidently granted.¹¹⁵ The dismissal restored the outcome in the New York courts, namely the invalidation of the loitering prohibition.¹¹⁶ With Sullivan, we concluded that this was a liberal outcome because of the pro-gay-rights result.¹¹⁷ The Database codes it as conservative, but an explanation is not apparent. Perhaps the Database editors consider the case conservative from a federalism perspective, that federal law did not encroach into this loitering corner of state law.

Although confidence in Justice Sullivan's political sensitivity, after having served about four years as State Budget Director and about two decades on the Indiana Supreme Court, should be high, the point is not that this audit used the objectively correct slants because the perception of political slant is fundamentally subjective for the borderline cases.¹¹⁸ Rather,

¹⁰⁸ See *infra*, text accompanying notes 120–149.

¹⁰⁹ See *supra* tbl. A1; see also *infra* tbl. B1.

¹¹⁰ Compare *NLRB v. Int'l Longshoremen's Ass'n*, THE SUPREME COURT DATABASE, <http://scdb.wustl.edu/analysisCaseDetail.php?sid=&cid=1979-125-01&pg=0> (last visited Oct. 29, 2022), and *with infra* tbl. B1, and *New York v. Uplinger*, THE SUPREME COURT DATABASE, <http://scdb.wustl.edu/analysisCaseDetail.php?sid=&cid=1983-110-01&pg=0> (last visited Oct. 29, 2022), *with infra* tbl. B2.

¹¹¹ *NLRB v. Int'l Longshoremen's Ass'n*, 447 U.S. 490, 493, 512–13 (1980).

¹¹² *New York v. Uplinger*, 467 U.S. 246 (1984).

¹¹³ *Id.* at 247–48.

¹¹⁴ *Id.* at 248–49.

¹¹⁵ *Id.* at 249.

¹¹⁶ *Id.* at 248–49.

¹¹⁷ See *infra* tbl. B2.

¹¹⁸ See *Hon. Frank Sullivan Jr.*, INDIANA SUPREME COURT <https://www.in.gov/courts/supreme/justices/frank-sullivan/> (last visited Oct. 31, 2022); see *Justice Frank*

the point is that this alternative, but admittedly also subjective, assignment of slants does not reveal a bias. Different jurists' audits would likely disagree over the slant of slightly different subsets of decisions. The claim is that no reasons appear for thinking that any disagreement is biased. The disagreements of this audit could not have been more evenly distributed, twenty with conservative assignments and twenty-one with liberal assignments, as the bottom line of the Table A1 shows.

Debatable as some assignments of political slant are, compared to our reading of 800 cases, the Database assignments do not appear to have a bias. Therefore, whether a reader has confidence in the Database's assignment or in our assignments with Sullivan, the statistical analysis will not tend to mislead. More generally, although many readers will disagree with some assignments of political slant, if those readers assigned slants, then their experience could parallel ours: their assigned slants could come very close to the counts of the Database despite disagreeing over some decisions. Confidence in the likelihood of this will increase as more scholars subject the Database to additional audits. Habilitating the Database's investment in assigning political slants is not trivial.

APPENDIX B: THE THIRTEEN FILTERED DECISIONS OF THE STEVENS AND O'CONNOR COMPOSITIONS

This appendix reviews the eight cases that are filtered from the Stevens composition and the five that are filtered from the O'Connor one by the correction of Epstein, Landes, and Posner ("the ELP correction").¹¹⁹ The ELP correction changes to unspecified the political slant of cases that the Supreme Court Database codes as belonging to a set of issues.

Table B1 has the eight cases dropped from the Stevens composition. The first column holds the citation to the decision. The second column holds the political slant that the Database assigns. The third and fourth columns hold the slant assigned by Georgakopoulos and Sullivan and the action recommended by this audit. For example, the first row shows that *Alfred Dunhill* was coded liberal by the Database; that it was not included in the Georgakopoulos and Sullivan coding (because it came from a majority that did not produce three or more decisions); and that this audit recommends that it should be dropped. The paragraphs after the table discuss each decision in turn.

Sullivan, Jr., INDIANA SUPREME COURT <https://www.in.gov/courts/supreme/files/justice-bios.pdf> (last visited Oct. 31, 2022).

¹¹⁹ See *supra* text accompanying note 14.

Table B1: Cases of the Stevens Composition Dropped by the Epstein, Landes, & Posner Filtering

<i>Decision, US citation, year</i>	<i>Dbse Slant</i>	<i>G&S Slant</i>	<i>Audit recom'n</i>
Alfred Dunhill of London v. Cuba, 425 U.S. 682 (1976)	Lib'l	N/A	Drop
Concerned Citizens of Southern Ohio, Inc., v. Pine Creek Conservancy Distr., 429 U.S. 651 (1977)	Cons've	N/A	Drop
Trainor v. Hernandez, 431 U.S. 434 (1977)	Cons've	Cons've	Cons've
First National Bank of Boston v. Bellotti, 435 U.S. 765 (1978)	Cons've	N/A	Cons've
ABC Inc. v. Writers Guild, 437 U.S. 411 (1978)	Cons've	Cons've	Cons've
Moore v. Sims, 442 U.S. 415 (1979)	Cons've	Cons've	Cons've
NLRB v. Int'l Longshoremen's Ass'n AFL-CIO, 447 U.S. 490 (1980)	Cons've	Liberal	Liberal
Rosewell v. LaSalle National Bank, 450 U.S. 503 (1981)	Cons've	N/A	Cons've

The case of *Alfred Dunhill of London, Inc. v. Cuba* was an indirect result of Cuba's nationalization of cigar manufacturing facilities.¹²⁰ Dunhill imported cigars before and after expropriation. The Cuban previous owners of the facilities, who had fled to the United States, sought the payments that Dunhill made to intermediaries of the new Cuban regime. Cuba intervened and the lower courts accepted Cuba's argument that the expropriation of facilities located in Cuba was covered by the act of state doctrine and was not reviewable by United States courts. However, some of Dunhill's payments corresponded to cigars made before the expropriation. The Cuban erstwhile owners won in district court. The Court of Appeals sided with Cuba and treated those amounts as expropriated as well. The Supreme Court disagreed in an opinion by White. The unusual dissenting coalition of Brennan, Stewart, Marshall, and Blackmun took the position that once Dunhill paid, the funds were in Cuba and were covered by the act of state treatment of Cuba's expropriation of the manufacturers' accounts receivable, despite that if the

¹²⁰ 425 U.S. 682 (1976).

funds had not been paid, then the US-centric nature of the contract would have excluded it from Cuba's act-of-state sphere. Georgakopoulos and Sullivan do not code *Dunhill* because it was authored by a coalition that did not author three or more decisions (the other decision that this coalition authors is *Young v. Amer. Mini Theaters*).¹²¹ The Database assigns *Dunhill* issue 90490 ("Judicial Administration: Act of State doctrine" adding "note: jurisdiction of the federal courts or of the Supreme Court") and codes it as liberal.¹²² If the result is seen from the perspective of property location, as the dissent does, then the dissent would be seen as the conservative one, refusing to take jurisdiction. If the result is seen as vindicating property rights of expropriated owners, then the majority could be seen as conservative. If the result is seen as one where United States courts take jurisdiction over property abroad, then it takes the liberal slant that the Database assigned. Reasonable interpreters can differ. Someone following the spirit of Shapiro and refusing to assign slant could not be faulted.¹²³ The removal of the case by the ELP filtering, therefore, is perfectly reasonable.

The Court issued a brief *per curiam* (by the court, rather than authored by a justice) opinion in *Concerned Citizens of Southern Ohio, Inc., v. Pine Creek Conservancy Dist.*¹²⁴ Ohio created a regime of review of Ohio's creation of multi-county conservancy districts for flood control and similar issues. The creation of the districts would be reviewed by courts composed of judges of each county. Citizens challenged this regime as unconstitutional for violating judicial independence (the judges were paid extra for their work on such courts), one-person-one-vote principles (the number of judges from each county was not proportional to its population), and takings law (related to trusting counties to weigh the taking). The court below considered the matter foreclosed by the upholding of the same statute in *Orr v. Allen*.¹²⁵ The majority's opinion stated that the challenges to the statute in *Orr v. Allen* were different and remanded for full consideration of the new arguments.¹²⁶ Chief Justice Burger would not remand, would rather give full consideration to the case but did not write a dissent. The dissent by Rehnquist with Powell and Stevens observes that the lower court did fully consider these arguments and appropriately dismissed them. Georgakopoulos and Sullivan drop the case because Burger's position to grant a full hearing could not be reconciled with the other three dissenters' position for dismissing. Indeed, the former should be seen as liberal for taking jurisdiction and the latter as conservative for respecting the state's arrangement. The Database codes the disposition as

¹²¹ 427 U.S. 50, 52 (1976).

¹²² *Alfred Dunhill of London, Inc. v. Cuba*, THE SUPREME COURT DATABASE, <http://scdb.wustl.edu/analysisCaseDetail.php?sid=&cid=1975-096-01&pg=0>
<http://scdb.wustl.edu/analysisCaseDetail> (last visited Oct. 28, 2022).

¹²³ See generally, Shapiro, *supra* note 13, *passim*.

¹²⁴ 429 U.S. 651 (1977).

¹²⁵ 248 U.S. 35 (1918).

¹²⁶ *Concerned Citizens of S. Ohio*, 429 U.S. at 652–53.

conservative under issue 90200 (a civil procedure category of “no merits: miscellaneous” with “note: use only if the syllabus or the summary holding specifies one of the following bases.” Not further explained.).¹²⁷ The political slant of the decision depends on which alternative an interpreter considers. If the alternative is a full hearing, then the remand appears to merely delay matters without a clear political slant but perhaps with a liberal bend for prolonging judicial involvement. If the alternative is the dismissal for which the three-member dissent argued, then the remand appears liberal. A reader even weakly subscribing to the spirit of Shapiro would refuse to assign a slant to the case.¹²⁸ ELP’s dropping of the case can hardly be faulted.

Takings issues surface in *Trainor v. Hernandez*, under the guise of the seizure of fraudulently obtained welfare payments. The Court found that resorting to federal courts was inappropriate while state remedies for the taking existed.¹²⁹ The dissenters (Stewart, Brennan, Marshall, and Stevens) would side with the recipients of the payments and find the state process inappropriate. Clearly, the dissenters took the liberal position. The majority took the conservative one (both from a federalism perspective and from a takings one). So agrees the coding of the case by Georgakopoulos and Sullivan.¹³⁰ Dropping the case is not appropriate.

A famous First Amendment case allowing corporate political spending joins this list with *First National Bank of Boston v. Bellotti*.¹³¹ The majority found the campaign spending limitations violative of corporations’ free speech rights, clearly the conservative result.¹³² The unusual group of dissenters was split.¹³³ White with Brennan and Marshall took squarely the position that limits on the campaign spending of corporations are appropriate, the liberal position. Rehnquist dissented separately to argue that the number of states over a long span of time that had limited corporate campaign spending deserved special deference. Rehnquist’s is a conservative position from the federalism perspective. Because this 5–4 alignment is unique, Georgakopoulos and Sullivan do not code the case. However, the outcome is clearly conservative, and the case should not be dropped.

A labor dispute was at the center of *ABC Inc. v. Writers Guild*.¹³⁴ The dispute involved a union’s disciplining of members who only did work covered by the collective bargaining agreement (writing for shows) as an

¹²⁷ *Concerned Citizens of S. Ohio v. Pine Creek Conservancy Dist.*, THE SUPREME COURT DATABASE, <http://scdb.wustl.edu/analysisCaseDetail.php?sid=&cid=1976-052-01&pg=0> (last visited Oct. 20, 2022)..

¹²⁸ See generally Shapiro, *supra* note 13, *passim*.

¹²⁹ 431 U.S. 434 (1977).

¹³⁰ Georgakopoulos & Sullivan, Jr., *supra* note 11, at 162.

¹³¹ 435 U.S. 765 (1978).

¹³² *Id.* at 784, 795; see also *First Nat’l Bank v. Bellotti*, THE SUPREME COURT DATABASE, <http://scdb.wustl.edu/analysisCaseDetail> (last visited Oct. 25, 2022).

¹³³ See *First Nat’l Bank*, 435 U.S. at 802–28.

¹³⁴ 437 U.S. 411 (1978).

adjunct to their main duties, which were supervisory, because they were directors, or producers, etc. These member directors and producers continued to work (but without writing for shows) during a strike. The union penalized them. The Supreme Court ruled against the union, which is the clearly conservative result. No reason to drop the case appears.

Federal abstention from state processes reviewing child custody was the focus of *Moore v. Sims*.¹³⁵ The state, suspecting child abuse, had summarily taken custody of the children. The parents tried to raise habeas corpus arguments in federal court. The Supreme Court held that the federal courts should abstain while the state custody process was under review. The result is conservative. The Georgakopoulos and Sullivan coding agrees.¹³⁶ Granted, from a child custody perspective, one could argue that the outcome is liberal, in that state intervention was allowed. Most readers should agree that this is not the most salient aspect of the case. The case is conservative and should not be dropped.

Even the one decision where the Database disagrees with Georgakopoulos and Sullivan does not indicate that it was correctly dropped by the ELP filtering. Rather, *NLRB v. Int'l Longshoremen Ass'n AFL-CIO* is clearly liberal.¹³⁷ The issue stemmed from the new technology of containers and their handling by longshoremen. The NLRB had ruled that some aspects of the work were outside the collective bargaining agreement, letting employers turn to non-union labor. The Supreme Court, in an opinion by Marshall joined by Brennan, White, Blackmun, and Powell, sided with the union. The dissent by Burger with Stewart, Rehnquist, and Stevens, sees the original interpretation by the NLRB, which only excluded from the collective bargaining agreement the work of loading and unloading containers far from the pier (as parts of the activity of trucking the containers, for example) as correct. The Database categorizes the issue as 70020, "union antitrust: legality of anticompetitive union activity," which is not further defined.¹³⁸ Issues 70040 ("Fair Labor Standards Act") and 70210 ("miscellaneous union") are alternatives that the Database did not choose but a reader may consider more apt. Most readers would agree that the decision is liberal, the Database's coding of it as conservative is false, and that no reason to drop the case exists.

Last is *Rosewell v. LaSalle National Bank*.¹³⁹ Taxpayers argued that the state's process for contesting tax payments violated federal due process because of the slowness of the state process; and therefore, the state was not entitled to the usual statutory deference. The Supreme Court sided with the

¹³⁵ 442 U.S. 415 (1979).

¹³⁶ Georgakopoulos & Sullivan, Jr., *supra* note 11, at 162.

¹³⁷ 447 U.S. 490 (1980).

¹³⁸ Spaeth, et al., *supra* note 3, at 99.

¹³⁹ 450 U.S. 503 (1981).

state, which is the clearly conservative result from a federalism perspective.¹⁴⁰ Georgakopoulos and Sullivan do not code the case because it came from a unique coalition. Granted, if a reader focused on the tax consequences of the case, that the taxpayers do not get to challenge a tax, then one could argue that the outcome is liberal. However, that level of analysis seems less salient. Most readers should agree that *Rosewell* is conservative and no reason to drop the case appears.

In sum, the result of the audit of the eight decisions that the ELP filtering drops from the Stevens composition is that two decisions should indeed be dropped but the rest should not. The dropped cases are coded by the Database one liberal and one conservative. No reason to drop the remaining cases appears but one seems falsely coded by the Database as conservative. Instead of 7–1 conservative to liberal, these cases should be counted as 5–1. The 1.7% decrease of the conservative ratio of the Stevens composition by the ELP filtering is excessive. The best estimate of the conservative ratio of the Stevens composition should be recalibrated from 61.24% (79 out of 129) to 60.63% (77 out of 127), or unchanged at 61% after rounding.

In sum, the position of this analysis that the disagreements with the Database are likely to be unbiased and do not deserve correction is vindicated. Especially important for this implication is the fact that the ELP filtering did drop a falsely coded case, but the unfiltered results are nevertheless more accurate. The reason for relying on the Database's unfiltered results, again, is not their accuracy but their unbiasedness. Accuracy, due to subjectivity, is unattainable and pointless. Unbiasedness, due to the large number of decisions, can be relied upon with the caveat that small disagreements will exist.

Turning to the 5–4 decisions of the O'Connor composition that the ELP filtering drops, those are five. They appear in table B2 and are all coded as conservative by the Database.

¹⁴⁰ *Id.* at 528; see also *Rosewell v. LaSalle Nat'l Bank*, THE SUPREME COURT DATABASE, <http://scdb.wustl.edu/analysisCaseDetail> (last visited Oct. 28, 2022).

Table B2: Cases of the O'Connor Composition Dropped by the Epstein, Landes, & Posner Filtering

<i>Decision, US citation, year</i>	<i>Dbse Slant</i>	<i>G&S Slant</i>	<i>Audit recom'n</i>
Fair Ass'mt v. McNary, 454 U.S. 100 (1981)	Cons've	N/A	Cons've
Bowen v. USPS, 459 U.S. 212 (1982)	Cons've	N/A	Cons've
NY v. Uplinger, 467 U.S. 246 (1984)	Cons've	Liberal	Drop or Liberal
Pattern Maker's League . . . v. NLRB, 473 U.S. 95 (1985)	Cons've	Cons've	Cons've
Posadas de P.R. Ass'ts v. Tourism Co of PR, 478 U.S. 328 (1986)	Cons've	Cons've	Cons've

Taxation is at the center of *Fair Assessment in Real Estate Association, Inc. v. McNary*.¹⁴¹ Taxpayers complained in the federal courts alleging the impropriety of state taxes. The Supreme Court refused to allow the federal courts to intervene. From a federalism perspective, the result is conservative, the state's result stands. From a taxation perspective, the result is liberal, a tax stands. Most jurists should agree that the more salient aspect is the former and the decision is a conservative one. Georgakopoulos and Sullivan do not assign slant because this majority coalition only issued one more decision.

The apportionment of damages to a union for falsely refusing to help a member against a false termination from employment was the issue in *Bowen v. United States Postal Service*.¹⁴² The trial found that the Postal Service terminated Bowen's employment falsely and that his union aggravated the harm by not taking the case to arbitration. The Court of Appeals held that the union did not have liability, only the employer could owe back wages. The Supreme Court reversed, restoring the apportionment of liability so that it would also burden the union. This is a decision to the disadvantage of unions and, therefore, is conservative. Georgakopoulos and Sullivan do not code the decision because this majority coalition issued no other decisions.

A New York loitering statute was the issue in *N.Y. v. Uplinger*.¹⁴³ The Supreme Court considered that the analysis of the New York courts depended on their analysis of the statute on consensual sodomy. The New

¹⁴¹ 454 U.S. 100 (1981).

¹⁴² 459 U.S. 212 (1983).

¹⁴³ 467 U.S. 246 (1984).

York courts considered the two statutes linked, and when they held the sodomy statute to violate the New York constitution, the loitering statute became pointless and also improper. The Supreme Court of the United States, having refused to hear the sodomy issue, dismissed the case, letting the New York result invalidating the statute stand. The Database codes the result as conservative with issue number 90150 (“no merits: writ improvidently granted”), perhaps under a federalism reasoning, that the state result stands. Georgakopoulos and Sullivan code it as liberal, because the result aligns with gay rights. The majority are Blackmun, Brennan, Marshall, Powell, and Stevens.¹⁴⁴ White writes for the minority joined by Burger, Rehnquist, and O’Connor, that the Court should reach the merits.¹⁴⁵ This minority would be unlikely to align themselves with gay rights, reinforcing the notion that the outcome is liberal. A reader following the spirit of Shapiro would likely consider that the case should be dropped.¹⁴⁶ However, most readers would likely agree that the outcome was a liberal one despite the curiosity of the refusal to decide.

A union’s fining of members who resigned during a strike (in order to resume work) was considered inappropriate by the National Labor Relations Board and that decision was under review in *Pattern Makers’ League of North America, AFL–CIO v. N.L.R.B.*¹⁴⁷ The Supreme Court sided with the NLRB producing the clearly conservative result. Georgakopoulos and Sullivan agree.¹⁴⁸ The case should not be dropped.

The freedom of commercial speech was at issue in *Posadas de Puerto Rico Associates v. Tourism Co. of Puerto Rico*.¹⁴⁹ Puerto Rico prohibited casinos from advertising. The casino challenged the prohibition as a violation of its right to free speech. The majority, Burger, White, Powell, Rehnquist, and O’Connor, found that the prohibition did not violate the Constitution. Brennan, Marshall, Blackmun, and Stevens did consider the prohibition improper. Both the Database and Georgakopoulos and Sullivan consider the result conservative from a free speech perspective. Although one could consider the result liberal from a regulation perspective, most readers should agree that the salient point is that of free speech and find the result conservative.

In sum, the five decisions that the ELP filtering drops from the O’Connor composition should either count as four conservative and one liberal or four conservative and one dropped, depending on one’s stance on *Uplinger*. The conservative ratio of the O’Connor composition, from 56%

¹⁴⁴ See *supra* note 292.

¹⁴⁵ *New York v. Uplinger*, 467 U.S. 246, 252 (1984) (White, J. dissenting).

¹⁴⁶ Shapiro, *supra* note 13.

¹⁴⁷ 473 U.S. 95 (1985).

¹⁴⁸ Georgakopoulos & Sullivan, Jr., *supra* note 11, at 162 app. B5.

¹⁴⁹ 478 U.S. 328 (1986).

conservative (for 82 conservative out of 147 decisions), becomes either 81 out of 147 conservative and 55% conservative, or 81 out of 146 and again 55% after rounding. The ELP filtering would have changed it to 54% conservative. After this mini audit, both the unadjusted figure of 56% and the 54% of the ELP adjustment appear equally accurate. If the comparison were based on unrounded results, the filtered figure is 54.23% and the unfiltered one is 55.78%, whereas the mini audit suggests 55.1% or 55.4%. The unfiltered result differs by less from the audited result than the filtered result does (0.7% and 0.3% rather than 0.9% and 1.3%). Again, the unfiltered estimate is more accurate.

This audit focused on the decisions that the ELP filtering drops from two compositions, those compositions that the filtering changes the most in the liberal direction, the Stevens and O'Connor compositions. The result is that the filtering produces less accurate conservative ratios despite that it removes some decisions correctly. Because the filtering removes many more decisions falsely, the unfiltered result is more accurate.

APPENDIX C: FRACTION ALIGNED

If the premise of the Article's analysis that ideological scores have some accuracy is correct, then the striking difference between the accuracy of distance as an explanation of the conservative ratio in those decisions where the justices align by ideology and its lack of explanatory power in the remaining decisions has an implication about the mix of decisions. Each composition produces a mix of decisions, those in which justices align by ideology, and those in which they do not; those in which the legal issues split the justices in a way that correlates highly with ideology, and those in which the legal issues have little relation to ideology. That the median's ideological location was predictive of the likely outcome—the conservative ratio—in the former group, suggests that, if the same dynamics are in operation, the distance between the justices adjacent to the median should be related to the fraction of 5–4 decisions that have the justices align by ideology. Moreover, the strength of the relation between the ideological distance and the fraction of decisions with aligned justices supports the framework of the analysis in the main text. The premise of the analysis—that ideological scores have some accuracy—is validated.

Imagine a composition in which the justices next to the median are very close in terms of ideology. How often will that composition split 5–4 on matters that correlate strongly with ideology compared to a composition that has significant ideological space separating the two justices next to the median? The small ideological differences of the former suggest that, as disputes vary on matters correlated to ideology, all three middle justices will relatively often change sides together. The result is relatively fewer 5–4

decisions by ideology.¹⁵⁰ When the justices next to the median have much ideological ground separating them, more disputes would tend to fall into that middle ground. The two justices next to the median would tend to take opposite positions and the dispute would produce a 5–4 split. Therefore, more ideological ground between the justices next to the median should tend to produce more 5–4 disputes. The frequency of 5–4 decisions should increase with the ideological distance between the justices next to the median.

This dynamic would not have an effect on the disputes that correlate weakly with ideology. Consider trust in juries as an example of an area in which judicial attitudes have a weak correlation with political alignment. Some judges may require that the court supervise and guide juries closely. Other judges may grant juries latitude and accept jury decisions more easily. For disputes in which trust in juries is dispositive, the ideological distance between the justices next to the median has little relevance. Changes in the ideological distance between the justices next to the median would tend not to influence the frequency of such 5–4 decisions.

The phenomenon at issue is again binary: does a 5–4 decision have the justices aligned by ideology? The above theory posits that the probability of observing 5–4 decisions with the justices aligned by ideology should increase as the distance between the justices next to the median increases. An appropriate statistical test for this relation is, again, the probit regression. The explanatory variable is ideological distance between the justices next to the median according to the Martin & Quinn metric.¹⁵¹ The outcome variable is whether decisions have ideologically aligned justices.

Running this probit regression produces extraordinary confidence in the statement that the probability that a 5–4 decision has the justices align by ideology increases with the ideological distance between the justices next to the median. The probability that the data can arise simply by chance, without an underlying relation, is a number that starts with twenty-five zeros after the decimal point.¹⁵² The corresponding percentage value of statistical confidence is ninety-nine followed by twenty-five nines after the decimal point. The distance between the justices next to the median increases the probability that a first-year 5–4 decision has the justices align ideologically.

The relation is visible in Figure 4. The horizontal axis holds the ideological distance between the justices next to the median in the units used by Martin & Quinn (the Figure's maximum is about 2.8). The vertical axis corresponds to the fraction of 5–4 decisions where the justices align by

¹⁵⁰ One may jump to the conclusion that more decisions will be 6–3 but yet more justices may also switch sides and instead produce more decisions of stronger majorities.

¹⁵¹ See MARTIN-QUINN SCORES: DESCRIPTION, <https://mqscores.lsa.umich.edu/> (last visited Oct. 28, 2022).

¹⁵² See *infra* tbl.C1.

ideology, from zero to one. Each point corresponds to a new composition of the Supreme Court, defined by its junior justice. The junior justices are abbreviated as in Figures 2 and 3. Again, compositions that last more than one term appear at the average of their distances, weighted by the number of decisions issued each term.

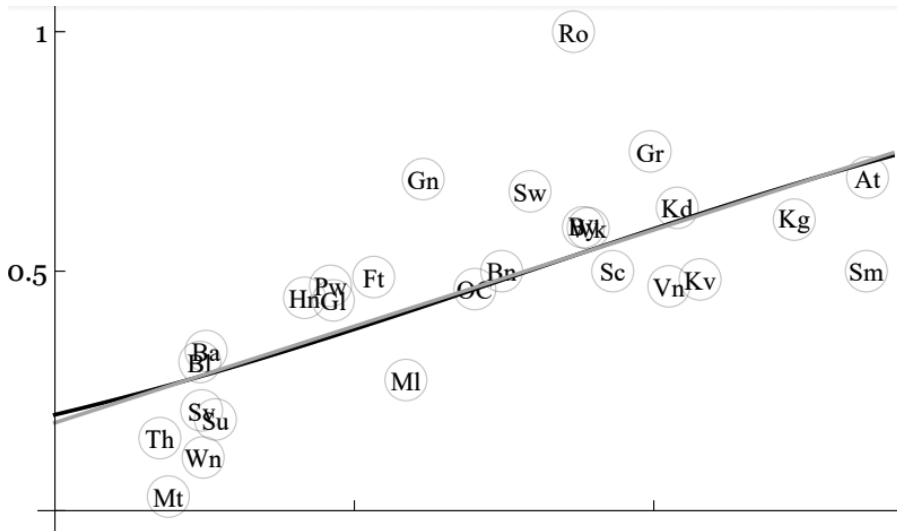


Figure 4. The fraction of 5–4 decisions where the justices align ideologically against ideological distance between the justices adjacent to the median.

Take as examples the compositions of Warren (from his appointment on October 5, 1953, to the departure of Robert Jackson on October 9, 1954, and the appointment of the next justice, Harlan, on March 28, 1955) and Roberts (from his appointment on September 29, 2005, to the appointment of the next justice, Alito, on January 31, 2006).¹⁵³ They abbreviate to “Wn” and “Ro.” The point corresponding to Warren is at the lower left. The distance between the justices next to the median was unusually small after the appointment of Warren. The ideological distance between Jackson and Frankfurter (Clark was the median), is about 0.5 according to Martin & Quinn. That composition had nine tightly split decisions.¹⁵⁴ The justices aligned ideologically in one of those nine.¹⁵⁵ By contrast, in the—admittedly

¹⁵³ JUSTICES 1789 TO PRESENT, https://www.supremecourt.gov/about/members_text.aspx (last visited Oct. 25, 2022).

¹⁵⁴ See generally *Arkansas v. Texas*, 346 U.S. 368 (1953); *United States v. Five Gambling Devices*, 346 U.S. 441 (1953); *United States v. Morgan*, 346 U.S. 502 (1954); *Irvine v. California*, 347 U.S. 128 (1954); *United States ex rel. Accardi v. Shaughnessy*, 347 U.S. 260 (1954); *Miller Bros. Co. v. Maryland*, 347 U.S. 340 (1954); *Ry. Express Agency, Inc., v. Virginia*, 347 U.S. 359 (1954); *United States v. Dixon*, 347 U.S. 381 (1954); *Md. Casualty Co. v. Cushing*, 347 U.S. 409 (1954).

¹⁵⁵ See *Accardi*, 347 U.S. at 270.

only two—tightly split decisions while the junior justice was Chief Justice Roberts, the justices aligned ideologically in both.¹⁵⁶ The distance between the justices next to the median after the appointment of Roberts is a little above average. The distance between Breyer and Kennedy (O'Connor is the median) is over 1.7 per Martin & Quinn.

The black solid line is the probability of a decision in which the justices align by ideology according to the probit regression.¹⁵⁷ The regression predicts about a quarter of the decisions would be aligned in the Warren composition. About half of the decisions are predicted to have ideologically aligned justices in the Roberts composition.

In light gray, the Figure also presents the linear regression that clones the probit (and is barely distinguishable) in order to obtain the fraction of the variation of aligned decisions that the regression explains, its adjusted r-squared. The linear regression that clones the probit seeks to explain how the fraction of decisions that have the justices align ideologically responds to the ideological distance between the justices next to the median (whereas the probit estimates the probability that a decision has aligned justices given those distances). To clone the probit, each term of each composition is weighed by the number of 5–4 decisions issued, because the probit takes as input each decision, not each term. As a result, Warren's data, for example, receive more weight than Roberts's. If the data for the linear regression were not weighed then the line would be a little steeper, in part due to the increased impact of the Roberts composition in the calculation.

Table C1 presents the results of the probit regression and the adjusted r-squared of the linear clone. Because the results of the probit regression pass through the normal distribution, they are not directly interpretable.¹⁵⁸ But the p-value, the probability of observing these results if the relation did not truly exist, is telling. Distance between the justices adjacent to the median increases the probability that a 5–4 decision has the justices align by ideology. If that relation did not truly exist, the probability that the observed data could arise by chance is a number that begins with twenty-five zeros after the decimal point, strikingly small. From the adjusted r-squared we learn that the regression explains 55% of the variation in percentage of decisions that are aligned, a fairly high percentage in social science research.

¹⁵⁶ See *Brown v. Sanders*, 546 U.S. 212, 242 (2006); *Cent. Va. Cmty. Coll. v. Katz*, 546 U.S. 356, 393 (2006).

¹⁵⁷ Formally, it is the cumulative distribution function of the normal distribution located and scaled according to the parameters that the probit regression establishes.

¹⁵⁸ Of course, due to the arbitrary units of the Martin & Quinn ideological ratings, the coefficients of the linear regression are not readily interpretable either. The linear regression indicates that the aligned ratio increases by about 20% per M&Q unit of ideology.

Table C1. Distance and Ideological Alignment

	<i>Estimate</i>	<i>P-Value</i>
<i>Constant (probit)</i>	-0.814	7E-24
<i>Distance (probit)</i>	0.52	5E-26
<i>Adj R Squared (linear clone)</i>	56%	

Note: Regressions of whether the justices align ideologically in 5-4 decisions against the ideological distance between the justices next to median.

The relation of the ideological distance between the justices next to the median to the fraction of party-line decisions does not separate first-year decisions. Indeed, upon splitting the sample into first-year and subsequent year decisions, no difference appears in the impact of distance on the fraction of decisions in which the justices are aligned by ideology.

The primary point, however, is the support of the premise of the Article's analysis. Both these looks at the Court's operation in the production of 5-4 decisions are highly responsive to the Martin & Quinn ideology scores, which means that these scores cannot be entirely false.

