CONGRESSIONAL INFLUENCE ON JUDICIAL BEHAVIOR? AN EMPIRICAL EXAMINATION OF CHALLENGES TO AGENCY ACTION IN THE D.C. CIRCUIT

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Building on his earlier work on judicial decisionmaking in the D.C. Circuit, Professor Revesz now examines whether this court's ideological divisions are affected by changes in the composition of the political branches: the two chambers of Congress and the Presidency. Thus, he seeks to test empirically the plausibility of positive political theory models of adjudication, which posit that judges act in an ideologically "strategic" manner. The data set developed for this study consists of all cases decided by the D.C. Circuit between 1970 and 1996 that challenged the health-and-safety decisions of twenty federal agencies. While the study confirms the author's earlier findings of ideological voting in the D.C. Circuit, it does not find any statistically significant evidence that these ideological divisions are affected by the party controlling Congress or the Presidency. This finding invites a reassessment of the leading positive political theory accounts of the effects of judicial review of administrative action.

This Article examines whether the ideological divisions on the United States Court of Appeals for the District of Columbia Circuit are affected by changes in the composition of the political branches: the two houses of Congress and the Presidency. Thus, it seeks to test empirically the plausibility of positive political economy models of adjudication, which posit that judges act in an ideologically "strategic" manner. Under such models, judges seek to impose their policy preferences on regulatory statutes but are willing to compromise these preferences in order to avoid legislative reversal.1 In this manner,

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1 See Lee Epstein & Thomas G. Walker, The Role of the Supreme Court in American Society: Playing the Reconstruction Game, in Contemplating Courts 315, 322-43 (Lee Ep-
strategic judges can ensure that the ultimate outcome, as opposed to merely the judicial decision, is as close to their policy preferences as possible, given the preferences of the institutions that have the power to reverse their decisions.

This model of strategic ideological judging, sometimes termed a separation-of-powers model because of the attention it bestows on the impact of other branches,\textsuperscript{2} differs in important ways from two competing models. Under a model of "sincere" ideological voting, generally termed an "attitudinal" model in the political science literature, judicial votes are also determined by the judges' policy preferences, but they are unaffected by the possible actions of the political branches.\textsuperscript{3} In turn, both strategic and sincere ideological judges differ from judges operating under a "legal formalist" model in which judicial decisions are determined by precedent and are unaffected by a judge's policy preferences.\textsuperscript{4}


\textsuperscript{3} See Jeffrey A. Segal & Harold J. Spaeth, The Supreme Court and the Attitudinal Model 64-69 (1993); see also Segal, supra note 2, at 28-29.

\textsuperscript{4} Segal & Spaeth, supra note 3, at 33-53; see also John Ferejohn, Law, Legislation, and Positive Political Theory, in Modern Political Economy: Old Topics, New Directions 191, 194 (Jeffrey S. Banks & Eric A. Hanushek eds., 1995).

For further discussion of the three models, see Frank B. Cross, Political Science and the New Legal Realism: A Case of Unfortunate Interdisciplinary Ignorance, 92 Nw. U. L. Rev. 251 (1997) (evaluating legal and attitudinal models); Tracey E. George, Developing a Positive Theory of Decisionmaking on U.S. Courts of Appeals, 58 Ohio St. L.J. 1635 (1998) (discussing attitudinal and strategic models and applying hybrid model to courts of appeals); Dhammika Dharmapala & Edward P. Schwartz, A General Model of Judicial Deci-
There has been little empirical examination of the validity of strategic models in which judicial votes are affected by the party control of the political branches.\(^5\) Some studies have focused on one or a small number of high-profile cases and have shown how the Supreme Court's treatment of these cases is consistent with the hypothesis that judges vote strategically.\(^6\) But such studies provide an illustration, rather than an empirical examination, of strategic voting models. The fact that a few cases might be consistent with a theory does not establish that these cases are representative of the cases decided by the Court.\(^7\)

The only large-scale studies of strategic voting have reached opposite conclusions. Based on an analysis of all Supreme Court decisions concerning the interpretation of the National Labor Relations Act decided between 1949 and 1988—a total of 249 cases—Pablo Spiller and Rafael Gely find support for models of strategic voting.\(^8\) In particular, the probability of pro-union decisions by the Supreme Court increases as the composition of Congress becomes more liberal.\(^9\) Similarly, based on a study of 1185 criminal procedure cases decided between 1953 and 1993, Tony Caporale and Harold Winter

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\(^5\) In contrast, more attention has been paid to other forms of strategic voting. For example, there have been studies of how judges in multimember courts are affected by the composition of their panels. See Frank B. Cross & Emerson H. Tiller, Judicial Partisanship and Obedience to Legal Doctrine: Whistleblowing on the Federal Courts of Appeals, 107 Yale L.J. 2155 (1998) (analyzing effects of presence of potential dissenter on panel majority opinions in D.C. Circuit cases citing Chevron U.S.A. v. Natural Resources Defense Council, Inc., 467 U.S. 837); Richard L. Revesz, Environmental Regulation, Ideology, and the D.C. Circuit, 83 Va. L. Rev. 1717, 1751-56 (1997) (analyzing panel composition effects on D.C. Circuit review of EPA decisions); see also infra text accompanying notes 40-54 (discussing Revesz and Cross & Tiller findings).

\(^6\) One prominent study sought to explain in strategic terms the decisions in Motor Vehicle Manufacturers Association v. State Farm Mutual Insurance Co., 463 U.S. 29 (1983) and Grove City College v. Bell, 465 U.S. 555 (1984), both of which involved Supreme Court review of agency action following a change of party control in one of the political branches. Gely & Spiller, supra note 1, at 284-95. Another study examined the Reconstruction cases for evidence of strategic voting. Epstein & Walker, supra note 1.

\(^7\) As the authors of one of these studies recognized, "our analysis of these two Supreme Court decisions does not constitute an empirical test of our theory." Gely & Spiller, supra note 1, at 265. Indeed, "(t)he standards of social science simply require more than reading some cases . . . , developing a model, and then testing the model against the same cases used to develop it . . . ." Segal, supra note 2, at 33 (citation omitted).

\(^8\) Spiller & Gely, supra note 1, at 477-89. The authors note that, at the time of their study, there had been "no attempt to develop an empirically refutable model that can improve our understanding of the systematic influence of the courts on regulatory policy and to integrate their actions with those of elected officials." Id. at 464.

\(^9\) Id. at 481-82.
find that the Supreme Court makes more pro-defendant decisions when the chair of the House Committee on the Judiciary is more liberal, and that the fraction of pro-defendant decisions is lower when the President is Republican.¹⁰

In contrast, a more recent study by Jeffrey Segal, examining the Supreme Court's statutory decisions in civil liberties cases between 1946 and 1993—1052 cases—did not find statistically significant evidence of strategic voting.¹¹ Instead, it concluded that the data was consistent with the attitudinal model.¹²

For many regulatory statutes, including environmental and health-and-safety statutes, the D.C. Circuit plays the central role with respect to judicial review of administrative action. This role results in part from the exclusive venue provisions of many important statutes.¹³ But the D.C. Circuit also hears a disproportionate number of cases under statutes with broader venue provisions as a result of its location at the seat of the federal government.¹⁴ Moreover, the Supreme Court seldom grants certiorari to review D.C. Circuit decisions concerning a variety of administrative law doctrines.¹⁵ In the words of Justice Scalia, "[a]s a practical matter the D.C. Circuit is something of

¹¹ Segal, supra note 2, at 35-42.
¹² Id. at 42-43. For criticisms of the methodology used in this study see Mario Bergara et al., Judicial Politics and the Econometrics of Preferences 9-21 (Oct. 1999) (unpublished manuscript, on file with the New York University Law Review).
¹³ See Revesz, supra note 5, at 1717 & n.1 (listing statutes).
¹⁵ See Revesz, supra note 5, at 1729-30 & n.35.
a resident manager, and the Supreme Court an absentee landlord" in
administrative law cases.\textsuperscript{16}

Thus, the examination of whether the D.C. Circuit's decisions are
consistent with models of strategic behavior is critical to a sophisti-
cated understanding of the administrative state. In recent years, a
number of empirical studies of the D.C. Circuit have found significant
evidence of ideological voting.\textsuperscript{17} To date, however, there have been
no empirical studies designed to test whether this ideological voting is
strategic with respect to the expected response of the political
branches.

This Article seeks to fill the void by analyzing the D.C. Circuit's
review of the health-and-safety decisions of twenty federal agencies
between 1970 and 1996. This study reveals strong, statistically signifi-
cant evidence of ideological voting. Most strikingly, challengers seek-
ing more stringent health-and-safety regulations prevailed in 50.3% of
the cases before panels in which at least two of the judges were ap-
pointed by Democratic presidents, but in only 27.8% of the cases
before panels in which at least two of the judges were appointed by
Republican presidents. This difference is significant at a 99% confi-
dence level.\textsuperscript{18} For expository simplicity, in the remainder of this Arti-
cle, judges appointed by Democratic presidents will be referred to as
Democratic judges, and judges appointed by Republican presidents
will be referred to as Republican judges. No implication should be
drawn, however, about the actual party affiliation of these judges.

There is no statistically significant evidence, however, that these
ideological differences are affected by the party controlling the two
chambers of Congress or the Presidency. The evidence does not sup-
port the hypotheses generated by models of strategic voting that focus
on the effects of possible legislative reversal of judicial decisions.

Even if eventually generalized to broader sets of cases and courts,
these findings should not necessarily be interpreted as a refutation of
models of strategic judging. The probability of legislative reversal
may be sufficiently small that the rational course of action for a strate-
gic judge is to vote consistently with her sincere ideological prefer-
ences. The lack of empirical evidence of strategic voting, however,
calls for a reexamination of the standard positive political theory mod-
els, under which legislative reversal follows inexorably whenever the
judicial decision is sufficiently far from the preferences of Congress

\textsuperscript{16} Antonin Scalia, Vermont Yankee: The APA, the D.C. Circuit, and the Supreme
\textsuperscript{17} See infra Part I.A.
\textsuperscript{18} See infra Part I.B.
and the President.\textsuperscript{19} Instead, further attention needs to be paid to the transaction costs imposed upon Congress whenever it seeks to reverse a judicial decision, as well as to Congress's limited decisional capacity—factors that reduce the probability of legislative reversal.

The findings of this study also have important implications for our understanding of the administrative state. In particular, they are relevant to the evaluation of why Congress provides for the judicial review of administrative action (at least beyond what might be required constitutionally). The findings also have implications for the assessment of doctrines concerning the review of administrative decisions, such as the deference to statutory interpretations by administrative agencies required by \textit{Chevron U.S.A. v. Natural Resources Defense Council}.\textsuperscript{20}

Part I examines the previous empirical studies of decisionmaking in the D.C. Circuit and describes the nature of the ideological voting found in these studies. Part II discusses the hypotheses concerning strategic voting tested in this Article as well as the methodology used to test these hypotheses. Part III describes the empirical study undertaken for this Article of D.C. Circuit review of agency health-and-safety decisions. Part IV examines some of this study's implications for the analysis of the administrative state.

\section*{I

Ideological Voting on the D.C. Circuit

In recent years, social scientists have devoted considerable attention to the D.C. Circuit, focusing particularly on the extent to which the court's decisions can be explained by reference to the ideological proclivities of the judges. Section A discusses the results of the various studies, which show a considerable degree of ideological voting. Section B analyzes the inferences that can be drawn from these studies concerning the extent to which this ideological voting is strategic rather than sincere. Judges may be acting strategically with respect to other judges on their panels and with respect to possible reversal by the Supreme Court. The existing studies, however, were not designed to test whether D.C. Circuit judges also act strategically with respect to the possible legislative reversal of their decisions.

\textsuperscript{19} See infra Part II.B.2.

\textsuperscript{20} 467 U.S. 837, 843-45 (1984)

If Congress has explicitly left a gap for the agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation. Such legislative regulations are given controlling weight unless they are arbitrary, capricious, or manifestly contrary to the statute.)
A. Empirical Studies

In an article published in 1997, I examined the votes of D.C. Circuit judges on challenges to decisions by the Environmental Protection Agency (EPA) between 1970 and 1994.21 The purpose of the analysis was to determine the impact of ideology on judicial decision-making, using the views generally held by the party of the appointing President as a proxy for a judge's ideology.22

The study reached three principal conclusions. First, for the period spanning the mid-1980s through the early 1990s, ideology had strong effects on judicial votes. In the case of industry challenges seeking to set aside environmental regulations as too stringent, where the effects were strongest, Republican judges were significantly more likely to vote to reverse the EPA's decisions than were Democratic judges. In the case of environmental challenges seeking to set aside environmental regulations as too lax, Democratic judges were significantly more likely to vote to reverse the EPA's decisions than were Republican judges.23

Second, the ideological divisions were affected greatly by the nature of the arguments presented to the panel. For the period following the Supreme Court's Chevron decision, there were no statistically significant differences in the way in which Democratic and Republican judges voted on statutory issues.24 In contrast, the differences were

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22 See Revesz, supra note 5, at 1717-18. The choice of this proxy is standard for social scientists studying the courts. See George, supra note 4, at 1651 ("Social scientists have discovered that the political party of the appointing President is a good proxy for a justice's attitudes.").

23 Revesz, supra note 5, at 1742-43.

Similarly, a study of more than one thousand decisions of the courts of appeals reviewing the National Labor Relations Board found that the party of the appointing President was a significant predictor of judicial votes. See James J. Brudney et al., Judicial Hostility Toward Labor Unions? Applying the Social Background Model to a Celebrated Concern, 60 Ohio St. L.J. 1675, 1717-19 (1999).

24 Revesz, supra note 5, at 1747-48. A subsequent study of the role of ideology in statutory challenges in the courts of appeals similarly did not find statistically significant differences across party lines in environmental cases. See Orin S. Kerr, Shedding Light on Chevron: An Empirical Study of the Chevron Doctrine in the U.S. Courts of Appeals, 15 Yale J. Reg. 1, 38-39 (1998). Across the full universe of cases examined, however, there were statistically significant differences. In cases in which acceptance of an agency's interpretation leads to conservative results, Republican judges accepted such interpretations 81% of the time whereas Democratic judges did so only 56% of the time; this difference is significant at a 95% confidence level. In cases in which acceptance of the agency's interpretation leads to liberal results, the acceptance rates were 66% and 84%, for Republican
highly significant with respect to procedural issues in industry challenges.\textsuperscript{25}

Third, panel composition effects also were strong. A Republican judge was significantly more likely to vote to reverse on an industry challenge if she had at least one Republican colleague on the panel, whereas a Democratic judge was significantly less likely to do so if she had at least one Democratic colleague.\textsuperscript{26}

Moreover, the magnitude of some of the differences across panels was staggering. In industry challenges raising procedural claims, the probability of reversal of the agency decision ranged from 2\% to 13\% for panels with two Democrats and one Republican, but ranged from 54\% to 89\% for panels with two Republicans and a Democrat.\textsuperscript{27}

and Democratic judges, respectively; this difference is significant at a 90\% confidence level. The study did not report circuit-specific results. See id.

For other empirical examinations of the application of \textit{Chevron}, see Linda R. Cohen \& Matthew Spitzer, Solving the \textit{Chevron} Puzzle, Law \& Contemp. Probs., Spring 1994, at 65 (concluding that Supreme Court first signaled appellate courts to afford administrative agencies greater discretion, then stopped sending these signals as agencies became more liberal in late 1980s); Linda R. Cohen \& Matthew L. Spitzer, Judicial Deference to Agency Action: A Rational Choice Theory and an Empirical Test, 69 S. Cal. L. Rev. 431 (1996) [hereinafter Cohen \& Spitzer, Judicial Deference] (finding that Supreme Court discriminately endorses judicial deference where it supports policy outcomes to Court's liking); Thomas W. Merrill, Judicial Deference to Executive Precedent, 101 Yale L.J. 969 (1992) (finding that \textit{Chevron} has limited effects on judicial deference to agency decisions); Peter H. Schuck \& E. Donald Elliott, To the \textit{Chevron} Station: An Empirical Study of Federal Administrative Law, 1990 Duke L.J. 984 (analyzing trends in circuit courts' affirmation and remand rates in cases reviewing agency decisions after \textit{Chevron}); Aaron Avila, Student Article, Application of the \textit{Chevron} Doctrine in the D.C. Circuit, 8 N.Y.U. Envtl. L.J. 398 (2000) (concluding that D.C. Circuit's deference to EPA interpretations increased after \textit{Chevron}).

\textsuperscript{25} Revesz, supra note 5, at 1749-50, 1760, 1763-64.

\textsuperscript{26} Id. at 1751-56, 1759-60.

\textsuperscript{27} Id. at 1763.

These ideological differences are critical to a fair evaluation of the performance of administrative agencies. For example, one recent study of the EPA's decisions, on the basis of the proportion of cases that the EPA lost before the D.C. Circuit, concluded that the agency's decisionmaking processes are deeply flawed. Jonathan H. Adler, Environmental Performance at the Bench: The EPA's Record in Federal Court (Reason Pub. Policy Inst., Policy Study 269, 2000). The study states:

Whatever the nature and extent of its statutory mandate, it is important that the EPA administer its responsibilities in a faithful and accountable manner. This means adhering to the priorities, and limits, established by the Congress, and making clear to the public the bases upon which it acts. It has been the EPA's consistent failure to do these things over the past several years, if not longer, that has led to its disappointing record in the courts.

Id. at 16. One cannot, however, "make an assessment of what the EPA is doing without examining the role the court's ideology may be playing." Pat Phibbs, Agency Loses About Half of Cases in D.C. Circuit in Recent Years, Study Says, Daily Env't Rep. (BNA), May 26, 2000, LEXIS, Env't Library, BNAED File (quoting Richard Revesz). Indeed, the EPA must make its decisions without knowing the identity of the panel that will review them. As my prior study shows, how the EPA fares in this review is often largely dependent on
Subsequent studies also found evidence of ideological voting on the D.C. Circuit. Frank Cross and Emerson Tiller reviewed all D.C. Circuit opinions between 1991 and 1995 that cited *Chevron*,28 also using the party of the appointing President as a proxy for a judge's ideology.29 Their results showed that a panel was 31% more likely to defer to an agency "when the agency’s policy outcome is consistent with the policy preferences of the panel’s majority."30 This difference is significant at a 99% confidence level.31

A more recent article by Richard Pierce examines the impact of ideology in challenges to the standing of environmental groups decided by the circuit courts between 1993 and 1998 and compares the behavior of the D.C. Circuit with that of the other courts of appeals.32 During this period, courts denied standing to environmental plaintiffs in 29% of the cases, but there were large interparty differences. Republican judges voted to deny standing in 43.5% of the cases, whereas Democratic judges did so in only 11.1% of the cases. The disparity was particularly pronounced in the D.C. Circuit, where Republican judges voted to deny standing in 79.2% of the cases, whereas Democratic judges did so in only 18.2% of the cases.33

As I explained in a recent article, a comparison between the D.C. Circuit and the other federal courts of appeals, such as the one undertaken by Pierce, is likely to understate the true ideological divisions on the D.C. Circuit.34 The D.C. Circuit is the only federal circuit court that announces the composition of its panels before the litigants prepare their briefs.35 In all the other circuit courts, the panels are announced only after all the briefs are filed, just shortly before the oral argument in the case.36 The early announcement of the panel is likely to change the mix of cases adjudicated by the court. By allowing par-

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28 Cross & Tiller, supra note 5.
29 See id. at 2168.
30 Id. at 2171.
31 Id. at 2170.
33 Id. at 1760. Pierce reports that the interparty differences are significant at a 99% confidence level. Id.
36 The range is from three to four weeks before the argument in the Eighth Circuit to the day of the argument in the Seventh Circuit. See id.
ties to ascertain the composition of the panel before expending the bulk of the costs necessary to litigate a case to a judgment, this procedure encourages litigants to pursue comparatively weak cases only if the panel is favorable.\textsuperscript{37}

For example, an industry group challenging environmental regulation as too stringent might pursue weak cases only under majority-Republican panels. In contrast, under majority-Democratic panels, the probability of prevailing might not be sufficiently high to merit expending the costs necessary to continue the litigation in the period following the announcement of the panel. Thus, on average, industry groups would litigate weaker cases under majority-Republican panels than under majority-Democratic panels. The difference in their success rate across panels will be smaller than if these groups litigated cases of the same strength before both sets of panels. In contrast, under the panel announcement rules of other circuits, such a strategy is unavailable, as the challenger of an administrative regulation must expend essentially all the costs before it ascertains the composition of the panel.\textsuperscript{38}

In summary, the evidence from these studies supports three propositions. First, there are statistically significant interparty voting differences, at least with respect to certain types of cases. Second, the magnitude of these differences is large. Third, though the evidence is not extensive, the interparty voting differences in the D.C. Circuit appear to be larger than in other circuits.

\section*{B. Strategic Versus Sincere Ideological Voting}

The empirical literature has devoted some attention to whether the ideological voting on the D.C. Circuit is strategic, rather than sincere. The evidence is consistent with the conclusion that judges vote strategically with respect to two factors: the composition of the remainder of the panel and the possible review of the circuit court decision by the Supreme Court.\textsuperscript{39} To date, however, there have been no attempts to determine whether D.C. Circuit judges vote strategically


\footnotesize{\textsuperscript{38} See Revesz, supra note 34, at 707-08.}

\footnotesize{\textsuperscript{39} With respect to the Supreme Court, a recent study finds evidence of strategic voting with respect to the decision whether to grant certiorari. The study finds that this decision is affected by the Justices' views of the merits. See Gregory A. Caldeira et al., Sophisticated Voting and Gate-Keeping in the Supreme Court, 15 J.L. Econ. & Org. 549 (1999).}
with respect to a third factor: possible reversal of their decision by Congress.

1. Effects of Panel Composition

My prior study showed that a judge's vote is influenced significantly by the ideologies of the other two judges on the panel. As I indicated, "[t]he findings show, quite strongly, that Democratic judges 'vote as Democrats' only when there are at least two Democrats on the panel, and that similarly, Republican judges 'vote as Republicans' only when there are at least two Republicans on the panel."40

These findings about the effect on a judge's vote of the composition of the panel are consistent with the strategic model of adjudication.41 Judges on the courts of appeals are monitored with respect to the timeliness of their opinions and receive "credit" for writing majority opinions. No such credit is awarded for dissenting opinions, which do not reduce the workload that is otherwise assigned to the judge. Moreover, dissents impose costs not only on the dissenting judge, but also on the members of the majority, who must respond to the attack on their opinion. In addition, by dissenting, a judge gives up whatever influence she might have on the majority opinion.42

If a panel sat together for only one case, the rational strategy for the single judge of a party might well be to dissent. The benefit to the judge of expressing her views might outweigh the burden of writing the dissent. The burden imposed on the majority simply would be an external cost not borne by the dissenting judge. But when the same judges sit on panels with relative frequency, the calculus of a rational judge contemplating a dissent is different. A judge who dissents in one case may well find herself in the majority in a subsequent case. In this situation, having to respond to a dissent by another judge would simply entail costs and have no corresponding benefits.

Judge Richard Posner used the term "go-along voting" for the practice of not dissenting in cases in which one's views are inconsistent with those of the panel majority.43 This practice is akin to a coopera-

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40 Revesz, supra note 5, at 1765-66; see also Revesz, supra note 21, at 834-36 (clarifying significance of findings).
41 See George, supra note 4, at 1657-63 (discussing strategic behavior of judges during deliberative process).
42 For examples of this phenomenon in the Supreme Court, see id. at 1659-61. For further discussion, see Evan H. Caminker, Sincere and Strategic Voting Norms on Multi-member Courts, 97 Mich. L. Rev. 2297, 2315-20 (1999).
tive solution to a repeated prisoner's dilemma, in which actors who would act noncooperatively in single-period games instead behave cooperatively in multiple-period games.\textsuperscript{44} By not dissenting in a particular case, a judge can lower the probability that she would have to respond to a dissent in a subsequent case, in which she is the opinion writer for a panel majority.\textsuperscript{45}

As a result, judges are affected by the behavior of their colleagues on the panel. Under my account, they generally vote sincerely only when they agree with the views of the majority. Otherwise, instead of voting consistently with their ideological preferences, they tend to follow the majority in order to obtain a strategic advantage. Thus, the strong panel composition effects uncovered in my previous study are consistent with models of strategic voting.

The Cross and Tiller study also contains a strategic explanation for the ideological voting on the D.C. Circuit. They find empirical support for a "whistleblower hypothesis," under which a single judge whose preferences differ from those of the majority of the panel has a moderating effect on the panel's decision.\textsuperscript{46} They claim that such a judge can "expose the majority's manipulation or disregard of the applicable legal doctrine" through the threat of a dissent, and that the majority changes its position in order to avoid the dissent.\textsuperscript{47}

To test this hypothesis, they compare the outcomes in unified panels, in which all of the judges belong to the same party, with the outcomes in divided panels, which have a 2-1 split. They find that in cases in which it is in the ideological interest of the majority to set aside the agency decision, unified panels defer to the agency in 33% of the cases, whereas divided panels do so in 62% of the cases; this difference is significant at a 95% confidence level.\textsuperscript{48}

(2000) ("[T]here has been virtually no systematic empirical inquiry into judicial ambition or self-interested judicial motivation.").

\textsuperscript{45} In some cases, however, a judge might choose to dissent in order to increase the probability of review by the en banc court. See Tracey E. George, The Dynamics and Determinants of the Decision to Grant En Banc Review, 74 Wash. L. Rev. 213, 244-47 (1999).
\textsuperscript{46} Cross & Tiller, supra note 5, at 2156.
\textsuperscript{47} Id. at 2172. While the Cross and Tiller results are important, the authors state their conclusions in an infelicitous way. They imply that when the court defers to the agency it is "obey[i]ng" \textit{Chevron}, whereas when it sets aside an agency interpretation it is "disobe[y][i]ng" the case. Id. But, of course, setting aside an agency's interpretation is consistent with \textit{Chevron} under certain circumstances, just as upholding an agency's interpretation can be inconsistent with \textit{Chevron} under other circumstances. \textit{Chevron} requires deference only when particular conditions are met. See Edwards, supra note 14, at 1356. This expositional problem, however, does not detract from the significance of the authors' finding that unified panels vote differently than divided panels.

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The authors’ focus is on a whistleblower who would criticize the panel majority for failing to defer to the agency’s statutory interpretation. But a whistleblower might also expose the majority’s deference to the agency in cases in which proper application of the *Chevron* doctrine would call for setting aside the agency’s decision. Cross and Tiller find no evidence of such behavior.\[49\]

It is important to stress that the evidence discussed above, which is consistent with theories of strategic behavior by judges in multi-member panels, does not rule out alternative explanations of judicial behavior. For example, it is possible to distinguish between a “deliberation” hypothesis and a “dissent” hypothesis.\[50\] Under the former, divided panels vote differently from unified panels because judges on the former change one another’s views in the course of reaching a consensus. As a result, divided panels ultimately vote unanimously but rule differently than would unified panels. Under this account, all the judges vote sincerely, but deliberation affects their sincere views. Under the dissent hypothesis, by contrast, a judge who sits with two colleagues of the other party moderates her views in order to avoid writing a dissent (and thereby obtains some future benefits).\[51\] After examining judges’ voting patterns in different types of panels, my prior article concluded that the strong evidence that a judge’s vote is affected by the composition of the panel did not permit the rejection of either the deliberation or the dissent hypotheses.\[52\]

Similarly, what Cross and Tiller call a whistleblower effect might simply be evidence of the deliberation hypothesis. The authors rule out this possibility because they find no statistically significant difference between divided panels and unified panels when deference to the agency’s interpretation advances the interests of the majority.\[53\] While this evidence undercuts the deliberation hypothesis, it also undercuts the whistleblower effect: A “whistleblower” judge could show that the proper application of the *Chevron* doctrine would call for setting aside the agency’s decision.\[54\] Thus, the lack of statistically significant differences with respect to this issue does not provide a basis for choosing the whistleblower effect over the deliberation hypothesis.

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\[49\] Cross & Tiller, supra note 5, at 2172-73 n.68. Apparently because of their mischaracterization of *Chevron*, see supra note 48, they do not think of such behavior as whistleblowing. Indeed, if one believed that deferring to the agency is always consistent with the legal standards, a dissent from a panel majority decision to defer cannot make the majority look unprincipled.

\[50\] See Revesz, supra note 5, at 1732-34.

\[51\] See id. at 1733-34.

\[52\] Id. at 1755-56.

\[53\] Cross & Tiller, supra note 5, at 2172-73 n.68.

\[54\] See supra notes 48-49 and accompanying text.
2. Effects of Supreme Court Review

My prior study also contains evidence that is consistent with strategic voting in connection with the possibility of Supreme Court review. As already indicated, I did not find ideological voting with respect to statutory issues, but the interparty differences were highly significant with respect to procedural issues.55 This data is consistent with a hierarchical constraint hypothesis, under which “judges act more ideologically when their decisions are less likely to be reviewed by a higher authority.”56

The data, however, are also consistent with the hypothesis that, in certain cases, judges constrain their ideological views in order to avoid a reputational cost. As my prior article suggested, the case law governing procedural challenges may be more malleable than case law governing the application of Chevron.57 Take, for example, the requirement that agencies respond to comments submitted in the course of notice-and-comment rulemaking. Any large proceeding is likely to generate thousands—even tens of thousands—of comments, extending over hundreds of thousands or millions of pages. The legal community may well evaluate the professional competence of judges, at least in part, by reference to their adherence to precedent. Therefore, it is professionally less costly for judges to vote consistently with their ideological preferences in cases, such as those involving the adequacy of an agency’s response to comments, in which precedent inherently is ambiguous.58

The pattern of ideological voting observed in my prior study of the D.C. Circuit is also consistent with a legal formalist model of adjudication. While such a model predicts that judges follow precedent, it

55 Supra notes 24-25 and accompanying text.
56 Revesz, supra note 5, at 1747.
57 Id. at 1731-32.
cannot make predictions in cases in which the case law is overly amorphous.\textsuperscript{59}

In a study of challenges to EPA decisions in the courts of appeals between 1981 and 1993, Joseph Smith and Emerson Tiller attempt to isolate more precisely the effects of strategic voting.\textsuperscript{60} They seek to determine whether the courts of appeals insulate their decisions from Supreme Court reversal through the choice of instrument used to reverse an agency’s action.\textsuperscript{61} According to Smith and Tiller, it is more costly for the courts of appeals to reverse agency decisions on statutory grounds than on “reasoning process” grounds. They claim that statutory decisions impose relatively low burdens on the courts:

The court’s task is to compare the interpretation given by the EPA with the words of the statute and the legislative history surrounding its enactment by Congress. Although such cases often turn on subtle judgments, the source materials are accessible and familiar to judges, and the scope of the material they must consider is relatively well-defined.\textsuperscript{62}

In contrast, they claim that reasoning process decisions are more cumbersome for the courts because they “involve more subjective evaluations of facts and rationales considered, or not considered, by the regulatory agency in making its policy.”\textsuperscript{63}

At the same time, the authors claim, statutory decisions by the courts of appeals are easier for the Supreme Court to reverse, because the Court, too, needs to expend fewer resources in reviewing such decisions. As a result, Smith and Tiller hypothesize that “when circuit panels make decisions they wish to protect from higher court scrutiny,” they decide cases on “reasoning process” grounds.\textsuperscript{64}

Their empirical analysis supports this hypothesis. They find that panels making decisions consistent with their policy preferences are

\textsuperscript{59} See Edwards, supra note 14, at 1362-63 (“In administrative cases involving so-called ‘procedural challenges,’ the differing backgrounds and attitudes of judges are likely to express themselves more than they would in the context of purely legal questions.”); see also Dharmapala & Schwartz, supra note 4, at 2 (presenting model in which judges value both being consistent with precedent and indulging their ideological preferences).


\textsuperscript{61} Their study focuses only on reversals of agency decisions. They claim that the “strategic instrument theory” is not sufficiently well developed to study affirmances. See id. at 4.

\textsuperscript{62} Id.

\textsuperscript{63} Id. at 5.

\textsuperscript{64} Id. at 8.
more likely to base their decisions on high-cost instruments. The difference is significant at a 98% confidence level.

Smith and Tiller's claim that statutory reversals are low cost and the reasoning process reversals are high cost for the courts of appeals seems implausible. First, the legislative histories of many of the environmental statutes are voluminous, and poring through them is not an easy endeavor. Second, and more importantly, appellate judges do not wander aimlessly either through legislative materials or through evidence of the quality of an agency's reasoning process. The arguments for upholding or reversing an agency's decision are distilled in the parties' briefs, which are relatively short documents. If a strategic judge is inclined to reverse the agency on reasoning process grounds, she simply can use the argument presented in the petitioner's brief.

Nonetheless, Smith and Tiller's findings are important. Reasoning process decisions—what I called procedural decisions in my prior study—are, indeed, less likely to be reversed by the Supreme Court. Thus, regardless of what considerations generally govern whether judges decide cases on one ground rather than the other (when both grounds are presented by the parties), strategic judges would be more likely to use the less reversible instrument for decisions consistent with their ideology. As a result, even if the characterization of the respective instruments' impact on judicial workload is misplaced, Smith and Tiller's conclusion nonetheless supports models of strategic voting and undermines alternative models of judicial decisionmaking.

II FRAMING THE HYPOTHESES

That judges act strategically in some contexts does not imply, of course, that they do so in all contexts. None of the studies described above examined whether these ideological divisions are affected by changes in party control of Congress or the Presidency. Section A discusses the predicted impacts on judicial votes of the probability of

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65 Id. at 13.
66 Id.
67 Moreover, to the extent that reversing on reasoning process grounds requires reference to the administrative record, the work can be delegated to law clerks.
68 See Revesz, supra note 5, at 1729-30.
69 My prior article underscored the importance of studying this issue. See Revesz, supra note 5, at 1735. The data set that I constructed for that study, however, was not suitable for determining whether the ideological voting was strategic with respect to possible reversal by Congress. Indeed, during practically the whole period that formed the focus of the study—between 1986 and 1994—the House and Senate were both under Democratic control. The Senate was under Republican control until the November 1986 elections. See id.
legislative reversal. Section B focuses on how to overcome two potential methodological roadblocks, to which the political science literature has paid insufficient attention.

A. Predicted Impacts of the Possibility of Legislative Reversal

Under models of strategic adjudication, one would expect the possibility of legislative reversal to have different effects on judges of different parties. A judge of the party that has control over the legislative process can vote consistently with her ideology without fearing reversal. In contrast, a judge of the other party would have to vote strategically in order to avoid reversal.

Moreover, models of strategic adjudication would predict that the ideological differences between judges of different parties would be greater when Congress is under divided control. In such a case, bicameral agreement on a statutory amendment would be less likely, so judges of both parties could vote consistently with their true ideology without a substantial probability of legislative reversal. In contrast, when Congress is under unified control, the judges of the party that controls Congress can vote in an unconstrained manner, but the judges of the other party cannot.

As an illustration, suppose that Congress moves from divided control at Time 0 to unified Democratic control at Time 1. Under a strategic model of adjudication, one would expect this shift in the control of Congress to have three separate consequences. First, the votes of Democratic judges would not change. Like at Time 0, at Time 1 they can vote consistently with their ideological preferences without fear of reversal.

Second, the shift would have a moderating effect on the ideological voting of Republican judges. Whereas at Time 0 they could vote consistently with their ideological preferences, at Time 1 they would need to moderate their decisions in order to avoid legislative reversal.

Third, there would be a narrowing of the ideological differences between Democratic and Republican judges. Whereas at Time 0 each judge would vote consistently with her ideological preferences, at Time 1 only the Democrats would do so; the Republican votes would be moderated to avoid legislative reversal.

So far, the discussion has focused on the two chambers of Congress. The possibility of a presidential veto, however, also may play a role: When Congress is under unified control, a strategic model of adjudication would predict that reversals of judicial decisions are more likely when the President and congressional majorities are of the same party.
B. Methodological Issues

This Section analyzes two methodological issues. First, it assesses how the factors influencing which cases are selected for litigation affect the interpretation of the empirical results. Second, it discusses how the D.C. Circuit's position in the judicial hierarchy is likely to affect the impact of legislative reversal on judicial behavior.

1. Case-Selection Effects

One distinctive feature of congressional control—the fact that Congress can be under divided control—has important methodological consequences. In the case of reversal by the en banc court or the Supreme Court, in contrast, the choices are dichotomous: these institutions are controlled either by one party or the other. Consider what happens when, say, the en banc court goes from Democratic control to Republican control. Consistent with the model of strategic ideological voting, one would expect both Democratic and Republican votes on the panel to move to the right. Democratic judges would do so in order to protect their votes from reversal by the en banc court, whereas Republican judges would do so because they no longer need to worry about reversal.

Because both sets of judges are expected to move in the same direction, case-selection effects might obscure the presence of strategic voting. In the preceding example, the move to the right of both Democratic and Republican judges would change the set of cases that are litigated. For example, consider the calculus made by industry groups challenging environmental regulation as too stringent. Cases that might not have been worth bringing prior to the rightward shift, in light of the low probability of prevailing, become viable following the shift. As a result of the rightward shift, the average case brought by an industry group is weaker. Therefore, the greater sympathy of Republican judges to industry arguments is counterbalanced by the lower average quality of the cases by the industry groups.

The rightward shift of the judges also has an effect on settlements. Under the model developed by George Priest and Benjamin Klein, cases with either very high or very low probabilities of success

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70 If the en banc court is evenly split, the panel decision is affirmed.
71 For an empirical analysis of the determinants of en banc review, see George, supra note 45, at 249-70.
72 Spiller and Gely acknowledge the possibility of case-selection effects, but argue that for labor law decisions the problem is not important. See Spiller & Gely, supra note 1, at 478.
likely are to be settled rather than litigated.73 The model predicts that the litigated cases would be less clear-cut. In fact, within the universe of litigated cases and under certain restrictive conditions, the probability that plaintiffs prevail is fifty percent, regardless of the composition of the court.74 Under the predictions made by the Priest/Klein model, the rightward shift in the votes of judges changes the mix of litigated cases, but not the probability that plaintiffs will prevail.

These case-selection effects create difficulties for the design of empirical studies. Any technique that focuses on whether changes in the controlling institution affects a judge's vote is biased against finding strategic voting. If judges vote strategically, the shift caused by the changes in the controlling institution would be counteracted by case-selection effects, so that no differences in voting patterns might be observed.

Similarly, if judges do not act strategically, their votes would not be affected by changes in the controlling institution. Nor would such changes have an effect on the selection of cases for litigation if litigants understand that judges are not voting strategically. As a result, under both strategic and nonstrategic models of judicial behavior, changes in the control of Congress would be expected to have no impact on the proportion of litigated cases in which judges accept the industry's argument.

Indeed, as a result of case-selection effects one might expect changes in the control of Congress to affect judicial decisions only if litigants are mistaken about whether judges vote strategically. If litigants believe that judges do not vote strategically when in fact they do, a change in the control of Congress would have no impact on the selection of cases for litigation. Strategic voting on the part of the judges would then lead to an observable change in the voting pattern, consistent with the direction of the change in the control of Congress.

Conversely, if litigants believe that judges vote strategically when in fact they do not, the change in the control of Congress to Republican control, for example, would lead industry groups to litigate comparatively weaker cases. But if judges do not vote strategically, they would recognize the greater weakness of these cases and, at the same time, not be influenced by the congressional changes. The result would be a change in voting patterns, but in a direction opposite to the one predicted by the positive political theory models: Industry

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73 See Priest & Klein, supra note 37, at 15-16. In such cases, the parties are likely to differ less in their estimate of the plaintiff's (or appellant's) probability of success. See id.

74 See id. at 4-5. For explanations of the circumstances under which the plaintiff's probability of success can deviate from fifty percent, see id. at 24-29. See generally Kessler et al., supra note 37; Shavell, supra note 37.
groups would win a lower proportion of cases when the composition of Congress becomes more favorable.

The political science literature has not paid attention to the effects of case-selection on the interpretation of empirical studies of judicial behavior. The standard technique used in these studies has been to look at how changes in Congress affect the proportion of litigated cases in which a judge accepts a particular argument. But this technique is biased against finding evidence of strategic voting. The preceding case-selection discussion suggests that, at least when litigants are not mistaken about how judges decide cases, one ought not to expect changes in the observed judicial voting patterns, regardless of whether such voting is strategic.

This problem, though serious, is not fatal. While attention to the dynamics of case-selection makes it unreliable to test the existence of strategic voting by reference to changes in the voting patterns of particular judges across time, it does not interfere with studies of how the interparty voting differences change as a result of changes in the composition of Congress. In particular, as indicated above, if judges vote strategically with respect to the possibility of congressional reversal, one would expect that the ideological differences between judges of different parties would be greater when Congress is under divided control than when it is under unified control. This hypothesis is impervious to changes in the mix of cases reaching the court. Regardless of whether the cases are relatively stronger or relatively weaker, strategic judges should be expected to be more restrained in voting consistently with their ideology when the probability of legislative reversal is higher.

2. Position of the D.C. Circuit in the Judicial Hierarchy

The political science studies of strategic judicial behavior have focused almost exclusively on the Supreme Court. In the case of the Supreme Court, Congress is the only controlling institution. A D.C. Circuit panel, in contrast, needs to worry also about review by the en banc court and by the Supreme Court, as well as by Congress. As a result, the analysis of the impact of congressional changes on the behavior of a lower court, such as the D.C. Circuit, is somewhat more complicated.

The preceding section explains that one strategic hypothesis is impervious to the impact of case-selection effects: The voting differences between Democratic and Republican judges should be expected

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75 See Caporale & Winter, supra note 10, at 468-72; see also Segal, supra note 2, at 35-36; Spiller & Gely, supra note 1, at 465-66.
to be greater when Congress is under divided control than when it is under unified control. But because the Supreme Court might review a D.C. Circuit decision before Congress does, this additional slack might be captured by the Supreme Court, rather than retained by the D.C. Circuit. As a result, the hypothesis of greater interparty voting differences during periods of divided congressional control would apply to the Supreme Court but not to the D.C. Circuit.

The positive political theory literature does not provide a useful way to analyze this problem because its models are deterministic rather than probabilistic. These models posit that Congress will reverse every judicial decision that is less desirable, from the perspective of each of the chambers, than the outcome that they can produce through the legislative process (taking into account the possibility of a presidential veto and the possible gatekeeping role of the relevant congressional committees). Implicitly, these models assume that Congress faces no transaction costs in reversing judicial decisions, and that it has unlimited decisional capacity, so that it can reverse all the decisions that it does not like.

Neither of these implicit assumptions is particularly plausible. Instead, it is costly for Congress to gear up its legislative machinery. Moreover, Congress can deal with only a limited number of issues at any given time. Therefore, the review of any legislative decision entails opportunity costs: It displaces other issues from the congressional agenda. As a result, there will be instances in which Congress prefers to leave untouched judicial decisions that differ from the preferred outcome that it could impose through legislation.

The impact of Congress on D.C. Circuit decisionmaking under a strategic model of adjudication depends critically on the relationship between the probability that Congress would reverse a D.C. Circuit decision and the probability that the Supreme Court would do so. As long as the reversal of D.C. Circuit decisions by Congress and the Supreme Court are not perfectly correlated events, Congress would override certain D.C. Circuit decisions that the Supreme Court would let stand. As a result, Congress would play a direct role in affecting

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76 One exception is Edward P. Schwartz et al., A Positive Theory of Legislative Intent, Law & Contemp. Probs., Winter 1994, at 51. The authors use a probabilistic model to explain why legislation is sometimes specific and sometimes vague: to signal to the courts whether the costs to Congress of reversing judicial decisions are low or high, respectively. See id. at 71.

77 See Segal, supra note 2, at 31 ("The separation of powers model treats passing legislation as costless."). Eskridge and Ferejohn explicitly acknowledge this assumption. Eskridge & Ferejohn, Making the Deal Stick, supra note 1, at 169 n.3 ("We are, of course, assuming no transaction costs for statutory enactment and frictionless bargaining among the players.").
the D.C. Circuit. In contrast, Congress would play only an indirect role if every case in which it was inclined to reverse the D.C. Circuit first was reversed by the Supreme Court.

There are strong reasons for believing that, for the D.C. Circuit, reversal by Congress and reversal by the Supreme Court are not perfectly correlated events. First, the Supreme Court pays close attention to legal doctrine in deciding whether to grant certiorari. In particular, it tends to accept cases that present important legal issues, as opposed to ones that are heavily fact-bound.78 As indicated above, challenges to the manner in which notice-and-comment rulemaking is conducted are types of cases that the Supreme Court is unlikely to want to review.79 In contrast, Congress is likely to care about the policy implications of the judicial decision and the impact of this decision on influential interest groups, rather than the legal arguments used to reach that outcome.

Second, because Congress is a bicameral institution, different parties can control the two chambers. As a result, when Congress is under divided control, it is less likely to set aside a judicial decision than when it is under unified control.80 In contrast, Supreme Court review does not share this feature.81

A full analysis of the relationship between Supreme Court review and congressional review of D.C. Circuit decisions, though important for the future development of the theoretical literature in this area, is not critical to this project and is outside the scope of this Article. What is important for these purposes is that Congress is likely to exert influence on the D.C. Circuit that is at least partially independent of what the Supreme Court does. As a result, if D.C. Circuit judges act strategically with respect to the possible review of their decisions by Congress, the interparty voting differences between Democratic and Republican judges should be greater when Congress is under divided control than when it is under unified control.82

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78 See Robert L. Stern et al., Supreme Court Practice 189-91 (7th ed. 1993).
79 See supra text accompanying notes 55-58.
80 See supra Part II.A.
81 The arguments made in the preceding paragraphs about Supreme Court review also apply, at least in part, to en banc review by the D.C. Circuit.
82 A scenario under which the probability of congressional reversal is so low that strategic judges essentially decide to ignore it is considered below. See infra text accompanying notes 97-98.
III

THE EMPIRICAL STUDY

A. The Data Set

The data set developed for this study consists of all cases decided by the D.C. Circuit, between 1970 and 1996, challenging the health-and-safety decisions of twenty agencies that have responsibility over such matters. These agencies, which are listed in Table A1 in the Appendix, include the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA), the National Highway Traffic Safety Administration (NHTSA), and the Consumer Product Safety Commission (CPSC). The data set also includes challenges under the National Environmental Protection Act, which requires the preparation of environmental impact statements for federal projects, regardless of which agency's decision was challenged.

The statistical work is split into two parts. One involves antiregulation challenges (challenges against a regulation on the ground that it is too stringent). The other involves proregulation challenges (challenges complaining that a regulation is too lax). The unit for analysis is a judge's vote. There were 1009 judicial votes on antiregulation challenges and 1135 judicial votes on proregulation challenges.

For each type of challenge, the study compares four types of votes, which are indicated in Table 1.

<table>
<thead>
<tr>
<th>Table 1: Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$R_o$: reversal rate of Republican judges in panels with only one Republican judge, so that the Republican judge had no Republican colleagues;</td>
</tr>
<tr>
<td>$R_i$: reversal rate of Republican judges in panels with two or more Republican judges, so that the Republican judge had at least one Republican colleague;</td>
</tr>
<tr>
<td>$D_o$: reversal rate of Democratic judges in panels with only one Democratic judge;</td>
</tr>
<tr>
<td>$D_i$: reversal rate of Democratic judges in panels with two or more Democratic judges.</td>
</tr>
</tbody>
</table>

The votes were separated in this way because, as indicated above, my prior study showed the very significant impact of panel composi-

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84 Id. § 4332(2)(C).
85 For a discussion of the coding methodology, see Revesz, supra note 21, at 818-23. For the manner in which the cases were coded, see Richard Revesz, D.C. Circuit Health and Safety Study: Coding Protocol (July 22, 1997) (on file with the New York University Law Review).
tion. Indeed, for those types of cases in which ideological voting was prevalent, the best predictor of a judge's vote was not the judge's own ideology but the ideology of the remaining judges on the panel.

B. Bivariate Analysis

This section examines the results of bivariate analysis, which compares reversal rates between Democratic and Republican judges. It controls only for the effects of panel composition, separating the votes in which a judge was the only member of his party on the panel from those in which the judge had at least one colleague on the panel.

Table 2 presents the reversal rates in antiregulation challenges. It shows a statistically significant difference, at a 90% confidence level, between the 31.3% reversal rate of majority-Democratic panels and the 40.1% reversal rate of majority-Republican panels.

| Table 2: Reversal Rates in Antiregulation Challenges and Significance of Differences (P-Values in Cells) |
|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| Reversal Rates                              | R₁                                     | D₀                        | D₁                        |
| R₀: 36.8%                                   | .57                                     | .96                       | .12                       |
| R₁: 40.1%                                   | X                                       | .25                       | .09*                      |
| D₀: 36.4%                                   | X                                       | X                         | .36                       |
| D₁: 31.3%                                   | X                                       | X                         |                           |

* Significant at a 90% confidence level

The other differences are not statistically significant. The pattern of the reversal rates is nonetheless interesting. As in my prior article, I interpret D₁ and R₁, respectively, as the votes of "Democrats voting as Democrats" and "Republicans voting as Republicans." In contrast, in the case of D₀ and R₀, the votes are moderated, perhaps in part by a desire not to write a dissent, as a result of the fact that the majority of the panel is of the other party. In fact, D₀ and R₀ are almost exactly at the midpoint between D₁ and R₁.

Table 3 presents the same information for proregulation challenges. Here, the difference between the 27.8% reversal rate of majority-Republican panels and the 50.3% reversal rate for majority-Democratic panels is significant at a 99% confidence level.

In the case of proregulation challenges, there are also statistically significant differences between D₁ and D₀ and between D₁ and R₀. A single Democratic judge on a panel votes almost identically to the two Republican judges and thus quite differently from a Democratic judge.

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86 See supra note 26 and accompanying text.
87 See supra text accompanying notes 43-47.
with at least one other Democratic colleague. For a single Republican judge on a panel, the moderating effect is far less pronounced: while \( R_0 \) is greater than \( R_1 \), the difference between the two is not statistically significant. The relationship among the reversal rates is identical to that observed in the case of antiregulation challenges. Here, too, \( D_1 \) and \( R_1 \) are furthest apart, with \( D_0 \) and \( R_0 \) in between.

**TABLE 3: REVERSAL RATES IN PROREGULATION CHALLENGES AND SIGNIFICANCE OF DIFFERENCES (P-VALUES IN CELLS)**

<table>
<thead>
<tr>
<th>Reversal Rates</th>
<th>( R_1 )</th>
<th>( D_0 )</th>
<th>( D_1 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( R_0: 32.2% )</td>
<td>.39</td>
<td>.55</td>
<td>.00*</td>
</tr>
<tr>
<td>( R_1: 27.8% )</td>
<td>X</td>
<td>.25</td>
<td>.00*</td>
</tr>
<tr>
<td>( D_0: 29.0% )</td>
<td>X</td>
<td>X</td>
<td>.00*</td>
</tr>
<tr>
<td>( D_1: 50.3% )</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at a 99% confidence level

Thus, the bivariate analysis confirms, on a far larger sample and for a longer time period, the conclusions of my earlier study concerning both ideological voting and the effects of panel composition.88

**C. Multivariate Analysis: Choice of Variables**

The multivariate analysis seeks to determine the effects on the judicial votes of changes in one relevant variable when all other relevant variables are held constant. Table 4 lists the variables used in the estimations.

**TABLE 4: VARIABLES IN THE MULTIVARIATE ESTIMATIONS**

* **Dependent Variable**
  Disposition: "1" for reversal or remand; "0" for affirmance

* **Independent Variables**
  Party: "1" if Democratic; "0" if Republican
  Colleague: "1" if one or more colleagues of the same party; "0" otherwise
  Procedural: "1" if the case presents a procedural issue; "0" otherwise
  Chevron: "1" if the case was argued after the Supreme Court’s *Chevron* decision
  (Procedural)(Chevron) interaction term
  Administration: "1" if the challenged agency decision was made during a Democratic Administration

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88 See supra notes 23-27 and accompanying text.
En Banc: "1" if, at the time the case was argued, the majority of active judges on the D.C. Circuit was Democratic

House/Senate Democratic (HSD): "1" if, at the time the case was argued, the House and Senate were both under Democratic control

House/Senate Republican (HSR): "1" if, at the time the case was argued, the House and Senate were both under Republican control

House/Senate/Presidency Democratic (HSPD): "1" if, at the time the case was argued, the House, Senate, and Presidency were all under Democratic control

Party interaction terms for all the independent variables except Party

Colleague interaction terms for all the independent variables except Colleague

(Party)(Colleague) interaction terms for all the independent variables except Party and Colleague

The principal independent variables designed to test the hypotheses concerning the effects on judicial votes of changes in the composition of the political branches are HSD, HSR, and HSPD. During the period of the study, the House, Senate, and Presidency were never all under Republican control. Thus, no HSPR variable was included in the estimations.

In addition, a number of control variables were used. First, I included the Procedural variable because my prior study showed that cases raising procedural challenges resulted in more ideological division. Second, I included a variable for Chevron, because some commentators on my prior article suggested the possibility that the Supreme Court's Chevron decision reduced the ideological polariza-

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89 As indicated in Table 4, HSD, HSR, and HSPD are determined by reference to the date on which the case was argued (when judges typically vote on a case's outcome). Obviously, congressional review will not be immediate, Eskridge, Overriding, supra note 1, at 345, so the composition of some future Congress might be more relevant. But it is difficult for judges to predict when an override might occur or what the composition of Congress at that time will be. As a result, it is reasonable to assume that judges are constrained, if at all, by the current Congress (because they have no basis to believe that a future Congress would be controlled by different parties). The assumption is consistently made in the literature, though generally implicitly. See Segal, supra note 2, at 35-36; see also Spiller & Gely, supra note 1, at 477-78. It is possible, however, that during a short period preceding an election, when extensive polling data are available, judges may assume that the next Congress would have a different party in control.

Moreover, judges are more likely to be concerned about relatively immediate reversal, when the policy consequences (and perhaps reputational costs) of the congressional action are greatest. Especially in the Senate, where only one-third of the seats gets renewed every two years, the probability of change in the majority party is likely to be smaller in the short run.

90 Supra note 25 and accompanying text.
tion with respect to questions of statutory interpretation.\textsuperscript{91} Third, an interaction term for \textit{(Chevron)}(Procedural) was included because one possible impact of \textit{Chevron} might be to accentuate the ideological divisions over procedural challenges, as a result of the greater uniformity in the disposition of statutory challenges. Procedural challenges might then be the place where judges can indulge their ideological proclivities. Fourth, the En Banc variable was needed to test how a higher-level institution affects the ideological divisions on D.C. Circuit panels.

I did not include a Supreme Court variable, dealing with party control of the Supreme Court, because I could not detect a clear break in the Court's approach to regulatory challenges over the relevant time period.\textsuperscript{92}

To the extent that there was such a break, the most likely candidate is the Court's decision in \textit{Chevron}, which is already captured by another independent variable, rather than a change in the Court's composition. It is possible that in the Supreme Court, the ideological decisions come across most clearly in constitutional cases, or in statutory cases intimately linked with constitutional provisions, such as civil rights cases, which are the most salient in its docket. In contrast, regulatory cases are the most important component of the D.C. Circuit's docket, and therefore, perhaps, the most plausible outlet for ideological divisions.\textsuperscript{93}

Because the various independent variables may have different effects on the different types of judges, I interacted each of the variables with Party, Colleague, and (Colleague)(Party). For example, as ex-

\textsuperscript{91} See Revesz, supra note 5, at 1730-31.

\textsuperscript{92} As to the bulk of this period, Eskridge notes: "There was just one change in the Court's personnel between 1975 and 1986, the replacement of the moderately conservative Justice Stewart with the slightly more conservative Justice O'Connor. Hence, the Court's raw preferences remained just about the same throughout that period ...." Eskridge, \textit{Overriding}, supra note 1, at 395. Similarly, the replacements of Chief Justice Burger by Justice Scalia in 1986, of Justice Powell by Justice Kennedy in 1988, and of Justice Brennan by Justice Souter in 1990 were found not to have affected the court's ideological outlook. See Cohen & Spitzer, Judicial Deference, supra note 24, at 447 n.38. The replacement of Justice Marshall by Justice Thomas in 1992 is significant, but should matter for the purposes of this analysis only if it changed the identity of the median Justice. Subsequently, Justice Ginsburg replaced Justice White in 1993 and Justice Breyer replaced Justice Blackmun in 1994. In the last quarter century, the shift in the median Justice has been from Justice Powell or Justice Stewart to Justice Kennedy or Justice O'Connor—probably not a very significant difference.

Moreover, the Supreme Court has not been an important force in environmental regulation during the relevant period. Daniel A. Farber, Is the Supreme Court Irrelevant? Reflections on the Judicial Role in Environmental Law, 81 Minn. L. Rev. 547, 548 (1997) ("Since the late 1970s . . . the Court has been largely irrelevant" in environmental law).

\textsuperscript{93} This hypothesis is worthy of further study.
plained above, consistent with the positive political economy models, one would expect that going from divided houses of Congress to having both houses controlled by the same party would have different effects on Democratic judges than on Republican judges.\textsuperscript{94}

With respect to these interaction terms, I proceeded in two stages. First, I ran an estimation with all of them in. Then, to simplify the presentation of the results, I re-ran the estimation discarding all the Party and Colleague interaction terms on a variable if all of the p-values for these terms were .20 or higher. If at least one such interaction on a variable had a p-value of less than .20, I kept all of them, because they might be useful in interpreting the effects of that variable.\textsuperscript{95}

\textbf{D. Multivariate Analysis: Results}

Table A2 in the Appendix shows the results for antiregulation challenges. Because of the large number of interaction terms, the results cannot be interpreted from this table alone. The significance of the HSD, HSR, and HSPD variables on this table indicates only that the variable has a significant effect on a single Republican judge on a panel when all Party and Colleague interaction terms are zero. As a result, some additional statistical manipulations are necessary to study the strategic effects that are the focus of this Article.

First, to determine whether HSD has a statistically significant effect on \(D_1\), one must add the coefficients of all the variables that become one instead of zero when HSD is equal to one (because the House and Senate are both Democratic), and determine whether the sum is significantly different from zero. For \(D_1\), the Party variable is equal to one (because the judge is Democratic), the Colleague variable is equal to one (because the Democratic judge has at least one colleague of the same party), and consequently, the (Party)(Colleague) interaction term is also equal to one. As a result, a shift of HSD from zero to one turns the following variables to one for a Democratic judge sitting with at least one Democratic colleague: HSD, (HSD)(Party), (HSD)(Colleague), and (HSD)(Party)(Colleague). The p-value for the sum of the coefficients of these variables is .239, indicating that the shift of the House and Senate to unified Democratic control (as opposed to divided control) does not have a statistically significant effect on a Democratic judge sitting with at least one Democratic colleague.

\textsuperscript{94} See supra Part II.A.

\textsuperscript{95} Keeping all the interaction terms would not have altered any of the conclusions.
Second, to determine the effects of HSD on R₁, one must add the coefficients of the (HSD) and (HSD)(Colleague) variables and determine whether the sum is significantly different from zero. For R₁, the Colleague variable is equal to one (because the Republican judge has at least one colleague of the same party). The Party variable, however, is zero (because the judge is Republican). As a result, the (HSD)(Party) and (HSD)(Party)(Colleague) terms, which were both equal to one for D₁, are both equal to zero for R₁. The p-value for the sum of the HSD and (HSD)(Colleague) coefficients is .8938, indicating that the shift of the House and Senate to unified Democratic control (as opposed to divided control) does not have a statistically significant effect on a Republican judge sitting with at least one Republican colleague.

Third, to determine whether HSD has a statistically different effect on D₁ than on R₁ one must examine whether the sum of coefficients of the (HSD)(Party) + (HSD)(Party)(Colleague) variables is significantly different from zero. As explained in the two preceding paragraphs, these two terms are one for D₁ but zero for R₁. The corresponding p-value is .3727, indicating that the effects of the shift of the House and Senate to unified Democratic control (as opposed to divided control) does not have a significantly different effect on a Republican judge sitting with at least one Republican colleague than it does on a Democratic judge sitting with at least one Democratic colleague.

Fourth, the p-value of the HSR (House/Senate Republican) variable is .898, and all the Colleague and Party interaction terms for this variable were eliminated as not sufficiently significant. Thus, HSR does not have statistically significant effects on D₁ or on R₁, and the difference in the effects of HSR on D₁ and R₁, respectively, is not significant either.

Fifth, the p-value of the HSPD (House/Senate/Presidency Democratic) variable is .929, and all the Colleague and Party interaction terms for this variable were eliminated as not sufficiently significant. Thus, HSPD does not have statistically significant effects on D₁ or on R₁, and the difference in the effects of HSPD on D₁ and R₁, respectively, is not significant either.

Table A3 in the Appendix presents the results of the multivariate estimations for pro-regulation challenges. The HSD, HSR, and HSPD variables are not statistically significant. Their p-values are .513, .296, and .937, respectively. Moreover, all the Colleague and Party interaction terms for these variables were eliminated as not sufficiently significant. Thus, none of the variables have statistically significant
effects on $D_1$ or on $R_1$, and the difference in the effects of the variables on $D_1$ and $R_1$, respectively, is not significant either.

E. Interpreting the Results

In summary, the empirical analysis does not support any of the hypotheses derived from the positive political theory models on the impact of changes in the composition of the political branches on judicial votes. Most importantly, changes in the composition of Congress do not appear to affect the ideological divisions on the D.C. Circuit. The empirical analysis, however, strongly supports the academic literature's prior conclusions of ideological voting of the sincere kind—voting consistent with the attitudinal model.96

These results can be interpreted in one of two ways. First, they might be seen as supporting the attitudinal model's view that the ideological voting on the D.C. Circuit is sincere, rather than strategic. Alternatively, it is possible that the judges are in fact voting strategically, but believe that the possibility of legislative reversal is so small that their interests would not be furthered by departing from sincere ideological voting.97 Under this account, judges act in what might be termed a "super-strategic" manner: They pay attention to the possibility that Congress will thwart their ideological interests but at the same time understand that the probabilities of reversal are small. This

96 See supra Part I.A.

97 One cannot reach any definitive conclusions concerning strategic voting from the frequency of reversals. The strategic models predict that the courts anticipate congressional decisions and therefore that no overrides ever take place. See supra note 1 (citing studies of strategic models). Eskridge identifies three instances in which overrides might nonetheless occur: when congressional preferences change over time, when the Court misinterprets congressional preferences, and when the Court invites an override, for example because adherence to the judicial craft stands in the way of achieving the judges' policy preferences. Eskridge, Overriding, supra note 1, at 387-88. For analyses of the third scenario, see Lori Hausegger & Lawrence Baum, Inviting Congressional Action: A Study of Supreme Court Motivations in Statutory Interpretation, 43 Am. J. Pol. Sci. 162 (1999); Pablo T. Spiller, Invitations to Override: Congressional Reversals of Supreme Court Decisions, 16 Int'l Rev. L. & Econ. 503 (1996). For a recent empirical attempt to determine the categories of cases for which overrides are most likely, see Joseph Ignagni et al., Statutory Construction and Congressional Response, 26 Am. Pol. Q. 459 (1998).

The most comprehensive empirical study of congressional reversals of judicial decisions on statutory matters found that between 1967 and 1990 Congress overrode a total of 124 Supreme Court decisions and 220 lower court decisions. See Eskridge, Overriding, supra note 1, at 338 tbl.1.

One study, based on interviews of the relevant actors, found "that legislators and staffs are often not aware of relevant appellate statutory opinions, that they tend not to take courts into account when writing legislation, and that judges may not be ever conscious of the effects of their work on congressional decisionmaking." Robert A. Katzmann, Bridging the Statutory Gulf Between Courts and Congress: A Challenge for Positive Political Theory, 80 Geo. L.J. 653, 668 (1992).
interpretation gains some support from the findings that judges may be acting strategically with respect to other decisions, such as whether to engage in "go-along" voting or whether to act more ideologically in cases in which review by the Supreme Court is less likely.98

Neither interpretation can be ruled out on the basis of the analysis presented in this Article. Nonetheless, the empirical findings have important relevance for the understanding of the administrative state. Indeed, as set forth in Part IV, regardless of which of these accounts better explains why changes in the control of the political branches do not have statistically significant effects on the votes of the D.C. Circuit judges, this Article's empirical analysis raises serious questions about the validity of positive political theory models of adjudication.

IV
IMPLICATIONS FOR AN UNDERSTANDING OF THE ADMINISTRATIVE STATE

The empirical analysis showing that judicial behavior is not significantly affected by changes in the composition of Congress has important implications for the understanding of the role of courts in the administrative state. Perhaps most significantly, it calls into question the leading positive political theory account of the effects of judicial review of administrative decisions, advanced by William Eskridge and John Ferejohn.99

In the Eskridge and Ferejohn model, judicial review brings policy closer to the preferences of the current Congress because a judge "has exogenous preferences about the statutory policy and tries to impose them on the statute in place of the agency's preferences but is willing to compromise her preferences to the extent necessary to prevent being overruled."100 This effect is independent of whether the congressional preferences are closer to those of the judiciary than to those of the agency. For example, consider a situation in which the agency's preferred policy would be legislatively reversed. Absent judicial review, the agency does not enact its preferred policy. Instead, it picks a policy closer to the congressional preference, at the point at which its decision is protected from legislative reversal. In making this assessment, the agency takes into account not only the preferences of the median member of each chamber, but also the President's preferences, in light of the possibility of a presidential veto, as well as the

98 See supra text accompanying notes 43-45; see also Part I.B.2.
99 Eskridge & Ferejohn, Making the Deal Stick, supra note 1.
100 Id. at 183; see also Eskridge, Overriding, supra note 1, at 404 ("As statutory interpreter, the Court is a faithful agent of majoritarian policymaking and carries out statutory policies as Congress desires.").
preferences of the third of each chamber necessary to sustain such a veto.\textsuperscript{101}

Adding judicial review changes both the agency's strategy and the ultimate outcome. If the court's preferences are further from those of Congress than are the agency's, the agency will act as if there were no judicial review. The court will not set the policy aside because, if it did so, Congress would reverse the decision, moving it even further away from the judicial preference.\textsuperscript{102}

In contrast, if the court's preferences are sufficiently close to those of the congressional median, the court would set aside an administrative decision reflecting the agency's preferences. Therefore, the ultimate policy will be closer to the preferences of the median legislator than would be the case absent judicial review. In summary, under certain scenarios, judicial review does not affect the outcome, whereas under others it promotes congressional interests. Because the net effect of judicial review is to advance the interests of Congress, Eskridge and Ferejohn argue that "judicial review of agency action is one of the means Congress has traditionally chosen in order to restrain the tendency of agencies to press statutory policy away from the original statutory bargain and toward the president's preferences."\textsuperscript{103}

The analysis by Eskridge and Ferejohn also is relevant to the related issue of whether judicial review should be deferential. Congressional interests are better served by nondeferential rather than deferential review. Their analysis establishes that the procongressional feature of judicial review is diluted when judicial review is deferential.\textsuperscript{104} Indeed, under their account, whenever the reviewing court defers to an agency in a case in which nondeferential review would have resulted in a reversal, it misses an opportunity to move policy closer to the congressional preference.

As a result, Eskridge and Ferejohn criticize the Supreme Court's decision in \textit{Chevron}, which prescribes that courts should be deferential in reviewing an administrative agency's construction of its governing statute. They take issue with what they believe is the Court's "fear of interposing 'countermajoritarian' judicial review into the law-making and law-implementing process."\textsuperscript{105} To the contrary, according to Eskridge and Ferejohn, the Court diluted an important mechanism

\textsuperscript{101} See Eskridge & Ferejohn, Making the Deal Stick, supra note 1, at 183-86.
\textsuperscript{102} The same is true if the courts' preferences are closer to those of Congress than are the agency's but lie between the agency's preferences and the preferences of the third of each chamber necessary to sustain a veto.
\textsuperscript{103} Eskridge & Ferejohn, Making the Deal Stick, supra note 1, at 187.
\textsuperscript{104} See id.
\textsuperscript{105} Id.
designed to align administrative regulation with congressional preferences.\textsuperscript{106}

The conclusions derived from the Eskridge and Ferejohn analysis are wholly dependent on the assumption that judicial votes are affected by the preferences of the current Congress. The assessment of judicial review, and of the choice between deferential and nondeferential review, is quite different if judges are not concerned about legislative reversal, either because they act consistently with the attitudinal model, or because they are predisposed to vote strategically but believe that the probability of legislative reversal is sufficiently small.\textsuperscript{107}

As a result, the lack of empirical support for the hypothesis that changes in party control of Congress affect the ideological voting of D.C. Circuit judges has important implications for how one evaluates the desirability of judicial review of administrative action and the effects of \textit{Chevron} on the administrative state. In particular, if D.C. Circuit judges do not act strategically with respect to the possibility of congressional reversal, judicial review is not necessarily a means by which administrative action can be made more responsive to congressional interests. Instead, whether judicial review brings agencies closer to or further from the preferences of Congress involves a more complicated inquiry.

First, the assessment depends on the relative ideological views of Congress, the administrative agency, and the reviewing court. To analyze this impact, one needs to probe into an implicit assumption made by Eskridge and Ferejohn. The Congress in their model is an everlasting institution with fixed composition. Therefore, there is no difference between the Congress enacting legislation and the Congress reviewing an agency's exercise of its delegated authority under that statute. Thus, there is no possibility that what might be beneficial for the Congress enacting a piece of legislation would be detrimental to the subsequent Congress reviewing an agency's decisionmaking pursuant to that legislation.

This assumption has an important impact on the analysis. Strategic judges will be concerned about the views of the current Congress, rather than those of the enacting Congress: It is the current Congress

\textsuperscript{106} Elsewhere, however, Eskridge gives a more favorable account of \textit{Chevron}. He argues that \textit{Chevron} deference might serve congressional interests because "[i]t is easier for Congress to send . . . signals to agencies (through oversight hearings, appropriations measures, and informal contacts) than to courts." Eskridge, supra note 58, at 82. For further positive political theory analysis of whether \textit{Chevron} is countermajoritarian, see Julianne Nelson, Defining the Deal: Legislative Bargaining and the \textit{Chevron} Decision, 8 J.L. Econ. & Org. 394, 405-07 (1992).

\textsuperscript{107} See supra text accompanying notes 96-98.
that determines the fate of their decisions. But to have an explanatory theory for congressional action, one needs to show that judicial review—and particularly nondeferential judicial review—furthers the interests of the enacting Congress. Otherwise, the enacting Congress could specify, for example, that judicial review under the statute should be deferential.

If an enacting Congress cares about ensuring the permanence of its decisions, it will not necessarily favor judicial review that is influenced by the views of a successor Congress. In fact, William Landes and Richard Posner argue that judicial review is a means by which the enacting Congress can ensure the permanence of its decisions. This conclusion, however, depends wholly on the characterization that, consistent with a legal formalist model, judges act as faithful agents of the enacting Congress.

The analysis is further complicated, in ways not addressed by Landes and Posner, because a legislator’s optimal strategy will depend on how long she wishes to keep her seat and how safe the seat is. A legislator who does not contemplate a long tenure would be less likely to trade off current support for future support. Similarly, a legislator with an unsafe seat would place a very high discount rate on future support.

A comprehensive assessment of the consequences of judicial review would pay attention to the differences between the Congress enacting a piece of legislation and the subsequent Congress reviewing administrative action undertaken pursuant to that statute. To keep the analysis tractable, however, the discussion that follows asks the same question as Eskridge and Ferejohn: whether judicial review serves the interests of the current Congress. Thus, the following discussion does not take into account the possibility that the type of judicial review that serves the interests of the current Congress with respect to existing legislation might be detrimental to the interests of


109 Landes and Posner argue that, because an independent judiciary would interpret the statute as understood by the enacting Congress, members of that Congress can extract more resources from interest groups because the outcomes reflected in the statutory enactments would be permanent absent the intervention of a subsequent Congress. In contrast, without such review, the ultimate decisionmaker, again absent congressional intervention, would be future administrative agencies, which would not necessarily have interests coextensive with those of the enacting Congress. See Landes & Posner, supra note 108.
the current Congress with respect to new legislation that will be reviewed in the future. Nonetheless, I will take into account how the preferences of the relevant institutions vary over time.

The House of Representatives reflects the preferences expressed in the last two-year election, administrative agencies in the executive branch reflect the preferences in the last four-year election, and the Senate reflects an average of the preferences expressed in the last three two-year elections. In contrast, the average Article III judge has a far longer tenure, and therefore reflects the preferences of a somewhat earlier era. As a result, one might expect that, on average, the preferences of the current Congress are closer to those of the executive branch than to those of the courts. Judicial review then would be countermajoritarian on two accounts: On average, it would move policy away from the preferences of both Congress and the Executive Branch.

One must also take account, however, of the impact of party control of the relevant institutions. The Presidency is an all-or-nothing institution. A President elected in a close election has the same constitutional powers as one elected in a landslide; even the actual authority wielded by these two types of Presidents may not be that different. In Congress, party control of a chamber is highly significant. It enables the majority party to chair all the committees, command far greater institutional resources, and enact legislation when it can make successful appeals to party loyalty. Even in the courts of appeals, where, because of random panel selection, a party with a majority of the full court does not thereby control every panel, the party with the most judges benefits considerably as a result of the possibility of en banc review, particularly given the strong evidence of close-to-party-line votes in such review.

As a result, it is possible that, at particular times, the same party would have a majority of the seats in both Congress and the D.C. Circuit, but the other party would control the Executive Branch. In such cases, on average, nondeferential review of administrative action by the D.C. Circuit could serve congressional interests, because congressional preferences would be closer to those of the D.C. Circuit than to those of the agency. But in cases in which the preferences of Congress were closer to those of the agency than to those of the courts, the opposite would be true. Whereas the convergence of judicial review with congressional interests is systematic under models of

110 See Barry Friedman, Dialogue and Judicial Review, 91 Mich. L. Rev. 577, 674 (1993) ("One condition endemic to our system is that the branches rarely will be equally in sync with their constituencies at the same time.").

111 See Revesz, supra note 5, at 1741-43 & n.63.
strategic ideological voting, it is merely happenstance under models of sincere ideological voting.

The relevant scenarios are set forth in Table 5, which indicates whether judicial review is beneficial from the perspective of Congress under four relevant scenarios. In Box A, where the preferences of both Congress and the reviewing court are aligned with those of the agency, judicial review neither harms nor promotes congressional interests. The same is true in Box B, where Congress would have to set aside the agency decision regardless of whether there is judicial review. In Box C, judicial review is detrimental to Congress: The court strikes down an administrative decision that Congress approves of, and Congress has to reinstate it through legislation. Finally, in Box D, judicial review benefits Congress: The court acts as a useful agent by striking down an administrative decision that Congress does not like.

**Table 5: Congressional and Judicial Assessments of the Agency’s Decision**

<table>
<thead>
<tr>
<th>Judicial Approval</th>
<th>Congressional Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>A: Neutral</td>
</tr>
<tr>
<td>No</td>
<td>B: Neutral</td>
</tr>
<tr>
<td></td>
<td>C: Detrimental</td>
</tr>
<tr>
<td></td>
<td>D: Beneficial</td>
</tr>
</tbody>
</table>

This table illustrates that the assessment of judicial review when judges vote consistently with their sincere ideological preferences without being influenced by congressional views depends on the relative sizes of Boxes C and D. If one viewed the preferences of electoral majorities as moving in a single direction over time, one would predict that Box C would hold more cases than Box D, as a result of the lag between judicial preferences and the views of current majorities. In contrast, if one assumed that these preferences move in a random fashion over time, one would expect that, over the long run, Boxes C and D would be of comparable sizes.

The analysis of the impact of judicial review also must take account of the fact that Congress can control agency decisions through two types of mechanisms. The first, an ex ante approach, involves

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112 The assumption here is that congressional reversal would not be more cumbersome as a result of the judicial decision upholding the agency action.

113 For reviews of the literature of congressional control of administrative action, see Kathleen Bawn, Choosing Strategies to Control the Bureaucracy: Statutory Constraints, Oversight, and the Committee System, 13 J.L. Econ. & Org. 101, 103-05 (1997); Matthew D. McCubbins et al., Administrative Procedures as Instruments of Political Control, 3 J.L. Econ. & Org. 243, 248-53 (1987). For classic works in this genre, see John Ferejohn & Charles Shipan, Congressional Influence on Bureaucracy, 6 J.L. Econ. & Org. (Spec. Issue)
attempting to affect the agency's thinking about an issue before a final administrative decision. Congress can pursue this goal through oversight and appropriations hearings, as well as through informal communications between powerful legislators (or their staffs) and agency heads. The second, an ex post approach, involves the legislative reversal of administrative decisions.\textsuperscript{114}

As already indicated, it is costly for Congress to engage in these activities.\textsuperscript{115} Congress has limited decisional capacity, and therefore can get involved in policing only a limited number of administrative decisions. Relative to strategic judicial review, judicial review that is not influenced by congressional preferences creates a disincentive for Congress to act ex ante.

Indeed, if Congress acts ex ante to influence an agency decision, its efforts might be thwarted by the courts. Then, in order to have a policy consistent with its preferences, Congress would have to act ex post in order to reverse the adverse judicial decision. Ex ante action is less valuable when the congressional investment can be rendered worthless by the courts.

As a result, judicial review has the effect of shifting congressional action from ex ante to ex post mechanisms. Moreover, this effect is stronger when the judicial review is nondeferential instead of deferential. Such a shift potentially is detrimental to congressional interests. In choosing between ex ante and ex post mechanisms, a rational Congress decides how to wield influence at the lowest cost. By making one of the control options relatively more costly, the effect of judicial review shifts congressional attention to the other instrument and raises the overall cost of congressional control of administrative action.

This feature of judicial review would not necessarily be undesirable for Congress if the courts performed a service that was valuable to Congress. But, as indicated above, in the absence of the type of strategic voting predicted by positive political theory models, judicial review does not necessarily have this effect. In fact, because the courts represent the political consensus of an earlier time, the opposite may well be true.\textsuperscript{116}


\textsuperscript{114} For a recent empirical study of the use of ex post mechanisms, see Steven J. Balla, Legislative Organization and Congressional Review of Agency Regulations, 16 J.L. Econ. & Org. 424 (2000).

\textsuperscript{115} See supra text accompanying notes 76-78.

\textsuperscript{116} See supra notes 112-13 and accompanying text.

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In summary, if judicial votes are not affected by changes in the composition of the legislature, one must consider three important effects: the political lag embodied in the courts, the razor-edge feature arising as a result of the large payoff that accrues to the party that controls each of the relevant institutions, and the effects of judicial review in shifting congressional control from ex ante to ex post mechanisms. When judges do not behave in the predictable manner posited by the positive political theory models, there is no compelling reason to believe that judicial review serves congressional interests.

CONCLUSION

This empirical study of the D.C. Circuit's treatment of health-and-safety cases between 1970 and 1996 does not support the claims of positive political theorists that judicial votes are significantly affected by changes in the composition of Congress. As indicated above, this conclusion does not necessarily imply a rejection of models of strategic voting, but it does call for a fundamental rethinking of the role of judicial review in the administrative state. Perhaps most importantly, this Article raises serious questions about the plausibility of the claim by positive political theorists that judicial review of administrative action serves the interests of the current Congress.

This Article also casts light on a number of methodological issues raised by empirical studies of judicial behavior. With respect to the impact of legislation reversal, it shows how to construct tests that can provide meaningful results even when the selection of cases for litigation is affected by changes in congressional composition. It also explores the implications of using probabilistic, rather than deterministic, models for studying the impact on courts of their controlling institutions, in particular when a lower court is controlled by both the Supreme Court and by Congress. Moreover, this Article stresses that strategic voting is not necessarily a unidimensional attribute: Judges can vote strategically with respect to certain institutional features, such as the composition of their panel, but not with respect to others, such as the composition of Congress.

Finally, this Article provides support for a view of the legal system as relatively autonomous from other institutions. It shows that courts are not simply a political institution that is connected to the other political institutions by complex feedback mechanisms. Instead, the judicial votes appear to be unconstrained by the desires of the other branches. It is important to stress, however, that this feature of our system is not necessarily the result of the independence with

117 See supra Part III.E.
which judges approach their role. It may stem, instead, from the relatively insulated position that courts have in our separation-of-powers system. Perhaps our judges would act differently in parliamentary systems, which tend to pay close attention to governmental losses in the courts and where the probability that the legislature would reverse a judicial decision is far higher. But, regardless of whether this relative autonomy of law stems from the predisposition of judges or from structural institutional arrangements, it ought to be recognized as an important feature of our legal system.

118 As Jeffrey Segal notes, referring to the Supreme Court: "[A]s the number of places at which legislation can be kept off the floor increases, the discretionary zone of the Court increases. Thus, under a potentially more realistic view of the legislative process, the Court's ability to act sincerely may be guaranteed almost all the time." Segal, supra note 2, at 32.
APPENDIX

Table A1: Agencies in the Database

Atomic Energy Commission (AEC)
Civil Aeronautics Board (CAB)
Consumer Product Safety Commission (CPSC)
Department of Agriculture (DOA)
Department of Defense (DOD)
Department of Energy (DOE)
Department of the Interior (DOI)
Department of Transportation (DOT)
Environmental Protection Agency (EPA)
Federal Aviation Administration (FAA)
Federal Highway Administration (FHA)
Federal Mine Safety and Health Administration (FMSHA)
Federal Mine Safety and Health Review Commission (FMSHRC)
Federal Railroad Administration (FRA)
Food and Drug Administration (FDA)
National Highway Traffic Safety Administration (NHTSA)
National Transportation Safety Board (NTSB)
Nuclear Regulatory Commission (NRC)
Occupational Safety and Health Administration (OSHA)
Occupational Safety and Health Review Commission (OSHRC)
Challenges under the National Environmental Policy Act (NEPA)
**Table A2: Multivariate Logit Estimation of Disposition of Antiregulation Challenges**

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<th>Coefficient</th>
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<tbody>
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<tr>
<td>Colleague</td>
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<td>.026**</td>
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* Significant at a 90% confidence level
** Significant at a 95% confidence level
TABLE A3: MULTIVARIATE LOGIT ESTIMATION OF DISPOSITION OF PROREGULATION CHALLENGES

<table>
<thead>
<tr>
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<th>P-Value</th>
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<td>Chi Square</td>
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* Significant at a 90% confidence level
** Significant at a 95% confidence level