Rethinking Summary Judgment Empirics: The Life of the Parties

Jonah B. Gelbach

University of Pennsylvania Carey Law School

Follow this and additional works at: https://scholarship.law.upenn.edu/faculty_scholarship

Part of the Behavioral Economics Commons, Civil Procedure Commons, Judges Commons, Law and Economics Commons, Legal Profession Commons, and the Litigation Commons

Repository Citation
https://scholarship.law.upenn.edu/faculty_scholarship/1520

This Article is brought to you for free and open access by Penn Law: Legal Scholarship Repository. It has been accepted for inclusion in Faculty Scholarship at Penn Law by an authorized administrator of Penn Law: Legal Scholarship Repository. For more information, please contact PennlawIR@law.upenn.edu.
ARTICLE

RETHINKING SUMMARY JUDGMENT EMPIRICS:
THE LIFE OF THE PARTIES

JONAH B. GELBACH†

INTRODUCTION .................................................................................. 1663
I. LIVE PARTIES AND SUMMARY JUDGMENT STANDARDS .......... 1670
II. JUDGE CHARACTERISTICS AND PARTY BEHAVIOR ....................... 1673
III. SUMMARY JUDGMENT MOTION FILINGS AND JUDICIAL
    CHARACTERISTICS: NEW EMPIRICAL EVIDENCE ......................... 1676
    A. Data Construction ............................................................. 1676
    B. Summary Data on Judge Characteristics .................................. 1680
    C. Estimation Results .............................................................. 1682
CONCLUSION ...................................................................................... 1687

INTRODUCTION

It hardly needs saying that summary judgment has been a controversial topic. The device was, by many accounts, long a sleepy backwater of the procedural countryside. To that effect, it is fitting, at the seventy-fifth

† Associate Professor of Law, University of Pennsylvania Law School; J.D., Yale Law School; Ph.D., Massachusetts Institute of Technology; B.A., University of Massachusetts at Amherst. This paper was prepared for the University of Pennsylvania Law Review Symposium, The Federal Rules at 75, November 15–16, 2013. I am grateful to William N. Eskridge, Robert C. Post, and the Oscar M. Ruebhausen Fund for their generosity and efforts in helping me to acquire the docket report data used here. I am also grateful to those at Thomson Reuters who have worked with me and answered my many questions about the data. I also thank Steve Burbank, Ed Cooper, Theodore Eisenberg, David Marcus, and Tobias Barrington Wolff for comments and suggestions, as well as the University of Pennsylvania Law Review students who helped put together an outstanding symposium.
anniversary of the Federal Rules of Civil Procedure, to take note of Judge Charles Clark's pushback in the 1950s against the suggestion that summary judgment was inherently problematic. Conceding that "[i]t is obvious that judges should be careful not to grant judgment against one who shows a genuine issue as to a material fact," Judge Clark went on to write,

Just as obvious is the obligation to examine a case with care to see that a trial is not forced upon a litigant by one with no case at all. The very freedom permitted by the simplified pleadings of the modern practice is subject to abuse unless it is checked by the devices looking to the summary disclosure of the merits if the case is to continue to trial. Those are discovery, summary judgment, and pre-trial—all necessary correlatives of each other and of a system which may permit concealment of the weakness of a case in the generalized pleadings of the present day. Refusal of summary disposal of the case may be a real hardship on the more deserving of the litigants. . . . A court has failed in granting justice when it forces a party to an expensive trial of several weeks' duration to meet purely formal allegations without substance fully as much as when it improperly refuses to hear a case at all.1

An oft-told story takes off from there with either a grim or grinning citation to the Supreme Court's 1986 trilogy.2 In one telling of this story, the Court paved paradise and put up a parking lot of pretrial disposition that unfairly and unreasonably burdens plaintiffs3—perhaps even violating the right to a civil jury trial guaranteed by the Seventh Amendment.4

2 Echoing Judge Clark, the Court stated in Celotex Corp. v. Catrett,

[With the advent of “notice pleading,” the motion to dismiss seldom fulfills this function any more, and its place has been taken by the motion for summary judgment. Rule 56 must be construed with due regard not only for the rights of persons asserting claims and defenses that are adequately based in fact to have those claims and defenses tried to a jury, but also for the rights of persons opposing such claims and defenses to demonstrate in the manner provided by the Rule, prior to trial, that the claims and defenses have no factual basis.

477 U.S. 317, 327 (1986); see also Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986) (“[T]he trial judge’s summary judgment inquiry as to whether a genuine issue exists will be whether the evidence presented is such that a jury applying that evidentiary standard could reasonably find for either the plaintiff or the defendant.”); Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586 (1986) (holding that a nonmoving party opposing summary judgment must come forward with specific facts demonstrating a genuine issue and “must do more than simply show that there is some metaphysical doubt as to the material facts”).

3 For an encyclopedic and widely cited discussion of the burdens imposed on plaintiffs, see generally Arthur R. Miller, The Pretrial Rush to Judgment: Are the “Litigation Explosion,” “Liability Crisis,” and Efficiency Clichés Eroding Our Day in Court and Jury Trial Commitments?, 78 N.Y.U. L. REV. 982 (2003). For a practitioner's similar argument that “[t]he Court has transformed summary judgment from a device limited to ascertaining whether there is any dispute about what the truth
As litigation has more than one side, there is, of course, an opposing view—namely that invigorated summary judgment practice simply and efficiently substitutes an early dispositive motion for the substantial and pointless costs of going through the trial motions in a meritless suit. But even this positive position concerning efficiency has been contested. As Samuel Issacharoff and George Loewenstein have suggested, liberalized summary judgment practice might affect the parties' returns from settlement in cases that otherwise would settle early in the litigation process. If liberalized summary judgment eliminates enough early settlements, then it might actually increase the net costs of administering the federal civil justice system: even if fewer cases get past summary judgment, perhaps more cases get to summary judgment. One scholar has even asserted that, as a practical matter, the costs of civil litigation would fall if we abolished summary judgment altogether.

is to a trial on the merits by paper," see Richard L. Steagall, The Recent Explosion in Summary Judgments Entered by the Federal Courts Has Eliminated the Jury from the Judicial Power, 33 S. ILL. U. L.J. 469, 470 (2009); see also John Bronsteen, Against Summary Judgment, 75 GEO. WASH. L. REV. 522, 527-30 (2007) (arguing that summary judgment is costly because it discourages early settlement and thus requires parties to go through pretrial litigation).

4 For an extended argument that summary judgment is and has always been unconstitutional, see generally Suja A. Thomas, Why Summary Judgment Is Unconstitutional, 93 VA. L. REV. 139 (2007).

5 See generally Edward Brunet, Essay, The Efficiency of Summary Judgment, 43 LOY. U. CHI. L.J. 689 (2012) (proposing that summary judgment has several efficient effects, including fact clarification, early legal analysis, formal pretrial assessment of a case's strength, and a "settlement premium" that nonmoving parties gain when a motion for summary judgment is dismissed).

6 Samuel Issacharoff & George Loewenstein, Second Thoughts About Summary Judgment, 100 YALE L.J. 73, 100-03 (1990). Issacharoff and Loewenstein also point out that liberalized summary judgment may "inhibit[] the filing of otherwise meritorious suits and result[] in a wealth transfer from plaintiffs as a class to defendants as a class." Id. at 75. This latter conclusion, of course, would not necessarily hold true if some plaintiffs could expect to benefit from liberalized summary judgment practice. Based on an empirical analysis of all federal court opinions citing to Celotex published in the first quarter of 1988 in which only one party moved for summary judgment, Issacharoff and Loewenstein determined that "[s]ummary judgment is a defendant's motion. Of the 140 motions, 122 were made by defendants and 18 by plaintiffs." Id. at 91-92. For criticism of such reliance on published opinions, see Stephen B. Burbank, Vanishing Trials and Summary Judgment in Federal Civil Cases: Drifting Toward Bethlehem or Gomorrah?, 1 J. EMPIRICAL LEGAL STUD. 591, 603-05 (2004), and Joe S. Cecil et al., A Quarter-Century of Summary Judgment Practice in Six Federal District Courts, 4 J. EMPIRICAL LEGAL STUD. 861, 869-70 (2007). For evidence that in some types of cases filed through 2006, defendants filed the overwhelming share of summary judgment motions, whereas in other types of cases, the filing of such motions was more balanced between plaintiffs and defendants, see Memorandum from Joe Cecil & George Cort, Fed. Judicial Ctr., to Judge Michael Baylson 6 tbl.1 (Aug. 13, 2008) [hereinafter Cecil & Cort Memorandum], available at http://www.uscourts.gov/uscourts/RulesAndPolicies/rules/sujulrs2.pdf.

7 See Bronsteen, supra note 3, at 532-36.
For much of the two decades or so following the 1986 trilogy, a powerful narrative held that these decisions importantly affected not only summary judgment doctrine but also the facts on the ground in litigation. The narrative of sudden change sparked by the 1986 trilogy has commanded support from some noted scholars over the years, perhaps reinforced by normative concerns regarding constitutionality, fairness, and access to justice. The flame of these normative concerns was only fanned by the Supreme Court’s much more recent—and hardly less controversial—intervention into pleading doctrine in Bell Atlantic Corp. v. Twombly and Ashcroft v. Iqbal. No doubt the oft-repeated, positive view that the trilogy loosed the hounds of pretrial disposition fits snugly into the dim-view normative zeitgeist that has sunk roots following Twombly and Iqbal.

But this is not the only story about the development of summary judgment practice over the last several decades. Roughly a decade ago, after considering the then-existing empirical literature, as well as his own examination of docket information from the Eastern District of Pennsylvania, Stephen Burbank wrote that “such reliable empirical evidence as we have, however, does not support the claims of those who see a turning point in the Supreme

---

8 See, e.g., Miller, supra note 3, at 1044-45 & nn.334-36 (noting that scholars Martin B. Louis, Paul Carrington, and John P. Frank all favor the Supreme Court’s trilogy); Martin H. Redish, Summary Judgment and the Vanishing Trial: Implications of the Litigation Matrix, 57 STAN. L. REV. 1329, 1333 (2005) (arguing that “it is not unreasonable to suspect that one of the primary contributors to [the reduction in the number of trials at the federal level] has been the Supreme Court’s substantial modification and expansion of the modern doctrine of summary judgment”).


10 556 U.S. 662 (2009). It is an interesting question—and, to my knowledge, one that has not yet been answered—whether the advent of “plausibility pleading” should alter the balance struck between defendant-movants and plaintiff-respondents at summary judgment. Certainly such an alteration would be the logical and symmetrical result of Justice Rehnquist’s musings in Celotex on the relationship between the Rule 12(b)(6) and Rule 56 motions. See Celotex Corp. v. Catrett, 477 U.S. 317, 327 (1986) (“Before the shift to ‘notice pleading’ accompanied by the Federal Rules, motions to dismiss a complaint or to strike a defense were the principal tools by which factually insufficient claims or defenses could be isolated and prevented from going to trial . . . [T]he motion to dismiss seldom fulfills this function anymore, and its place has been taken by the motion for summary judgment.”).

11 See, e.g., Miller, supra note 3, at 1044-46 (noting that, while some scholars have supported the effects of the trilogy on pretrial disposition, other scholars assert that judges now function as “pretrial factfinders” and therefore overstep the boundaries between judges and juries). See generally Elizabeth M. Schneider, The Changing Shape of Federal Civil Pretrial Practice: The Disparate Impact on Civil Rights and Employment Discrimination Cases, 158 U. PA. L. REV. 537 (2010) (contending that Twombly and Iqbal altered litigation practices so that fewer civil rights and employment discrimination cases are filed, while a greater number of the same types of cases are dismissed).
Court’s 1986 trilogy. Rather, that evidence suggests that summary judgment started to assume a greater role in the 1970s.”

Joe Cecil of the Federal Judicial Center (FJC) later led a team of authors to analyze data on summary judgment activity for six time periods in six U.S. district courts. Cecil’s team, echoing Burbank’s conclusion, found that “when different levels of summary judgment activity across courts and the changing nature of the federal caseload are taken into consideration, the likelihood of one or more summary judgment motions being filed began to increase before the trilogy.” They went on to suggest that the increased disposition of cases on summary judgment motions might simply be attributable to an increase in the relative number of civil rights cases, for which summary judgment—in terms of both the number of motions and the number of dispositions—had always been more prevalent.

On the trilogy’s twenty-fifth anniversary, Linda Mullenix revisited the work of Cecil and his coauthors, concluding that “[a]rguably, the summary judgment trilogy had its greatest impact on the way in which first-year civil procedure professors teach summary judgment.” Mullenix conducted her own empirical study of 222 published and unpublished Circuit Court of Appeals decisions from 2010 in which the appellate court was reviewing district court summary judgment decisions. She found, in brief, that courts often did not cite Celotex. Moreover, “[i]f this were not shocking enough, in the remaining universe of decisions where courts do cite Celotex, some federal judges do not seem to acknowledge, understand, or apply the elaborate Celotex conceptual framework.” Finally, Mullenix found that, even after Celotex, many federal judges continued to use “a kind-of gestalt ‘tennis match’ mode of analysis” to decide summary judgment motions. Combining her findings regarding Celotex with evidence that neither Anderson nor Matsushita had much impact, Mullenix concluded that the trilogy may in fact have been “much ado about very little” and that attorneys

---

12 Burbank, supra note 6, at 620.
13 Cecil et al., supra note 6, at 861.
14 Id. at 863.
15 Id. at 905-06.
16 Linda S. Mullenix, The 25th Anniversary of the Summary Judgment Trilogy: Much Ado About Very Little, 43 LOY. U. CHI. L.J. 561, 562 (2012). Mullenix began her article with the equally provocative suggestion that the trilogy’s anniversary “provide[d] an excellent opportunity to reflect on the legal profession’s ability to overstate, overhype, and overinflate the impact of Supreme Court decisions.” Id. at 561.
17 Id. at 567.
18 Id. at 568.
19 Id. at 584.
20 Id.
“need not overly fret over” the details of summary judgment motion practice.\textsuperscript{21}

Doctrinal issues related to summary judgment surely need no further development in the wake of the flood of scholarship following the trilogy.\textsuperscript{22} Nor is there any sense in presenting yet more evidence concerning how trends in summary judgment disposition relate to the trilogy. As to this aspect of empirical work related to summary judgment, I agree heartily with Mullenix’s position that “[t]he FJC has preempted and occupied the entire field of empirical study of summary judgment in the post-Celotex era.”\textsuperscript{23}

Instead, this Article will pursue two distinct objectives. In Part I, I consider the empirical implications of perceived changes in judges’ adjudicatory practices at summary judgment. I suggest that empirical evidence concerning summary judgment disposition should be considered in the light cast by behavioral models of party behavior that take seriously the fact that litigation involves live parties—who, together with their attorneys, make deliberate, strategic decisions—rather than inanimate particles bouncing around and filing motions exogenously. To give this sort of life to both parties, one must reject the notion that cases will always be litigated in one way or another, regardless of the legal rules and judicial environment that litigants face. Since I doubt that anyone holds such a Calvinist view of litigation behavior, my discussion in Part I is best viewed as indicating the methodological implications of accepting at least some role of free will in litigation. As it turns out, litigants’ ability to carefully consider how to respond to changes in summary judgment standards\textsuperscript{24}—for example, by choosing to file motions

\textsuperscript{21} Id.

\textsuperscript{22} For a particularly insightful discussion about the impact of the trilogy on federal court summary judgment motions, see Adam N. Steinman, The Irrepressible Myth of Celotex: Reconsidering Summary Judgment Burdens Twenty Years After the Trilogy, 63 WASH. & LEE L. REV. 81 (2006).

\textsuperscript{23} Mullenix, supra note 16, at 566.

\textsuperscript{24} In this Article, I use the term “summary judgment standard” not in a black-letter sense, but rather more broadly, as a way to capture any change in the probability that the judge would grant a particular motion filed in a particular case.
they would not have filed under an earlier summary judgment standard or to relax settlement demands under their opponents’ threat to move for summary judgment—has important implications for the interpretation of empirical evidence concerning changes in summary judgment disposition over time, including the evidence already discussed.

In Part II, I discuss some of the empirical implications of Part I’s analytical machinery, concentrating on what this equipment might suggest about the relationship between judge characteristics and observed summary judgment motion-filing behavior, given that parties might settle before either moves for summary judgment.

In Part III, I present empirical results that relate the filing of summary judgment motions directly to judge characteristics. All cases in my data set were filed in the 2005 calendar year, which, of course, long postdates the trilogy. But the characteristics of the district court judges to whom cases are assigned differ substantially, and various arguments in the literature suggest the possibility that certain judge characteristics—namely, sex, race, ethnicity, and appointing President—should make some judges more favorable to defendants than other judges.

Because defendants file the vast majority of summary judgment motions in civil rights and torts cases, it is possible to test the notion that plaintiffs do not respond to summary judgment standards by determining whether cases assigned to judges with more defendant-favorable characteristics are more likely to have summary judgment motions filed. I find significant evidence that judge characteristics are associated with summary judgment motion filing in civil rights cases, but the pattern of estimated effects does not look like what one would expect in a world in which only defendants react strategically to judge characteristics. And for tort cases, one cannot reject the hypothesis that judge characteristics are irrelevant to whether a summary judgment motion is ever filed. An alternative explanation might be that neither plaintiffs nor defendants make motion-filing decisions strategically in tort cases. But what theory would explain why parties respond to judge characteristics in civil rights cases but not in tort cases?

Finally, in Part IV, I offer some thoughts about the normative implications of my analysis and empirical results.

---

25 Yale Law School’s Oscar M. Ruebhausen Fund generously provided the grant that funded this project. I submitted this grant together with William N. Eskridge, Jr., John A. Garver Professor of Jurisprudence at Yale Law School.

26 Cecil & Cort Memorandum, supra note 6, at 6 tbl.1.

27 More likely is the possibility that the bilateral nature of settlement decisions and litigants’ settlement choices obscures the effects of judge characteristics on each party’s strategic calculations.
I. LIVE PARTIES AND SUMMARY JUDGMENT STANDARDS

In this Part, I adapt arguments I made in previous works concerning Twombly, Iqbal, and Rule 12(b)(6) motions. At the motion to dismiss stage, as in the summary judgment context, one can expect parties to adapt their behavior to perceived changes in legal rules. Such adaptations can have empirical implications that would otherwise seem counterintuitive. For convenience, I assume that only the defendant may file a summary judgment motion. I later discuss how certain aspects of the model might change when one considers that both parties may so move. Little is lost, however, by not providing for plaintiff-filed summary judgment motions in the model. For civil rights and tort cases, the assumption that only defendants file summary judgment motions is a reasonable empirical approximation. Also, my intuition is that modeling the fact that plaintiffs may file summary judgment motions would further complicate matters, thereby making it even easier to obtain the anything-goes results derived below.

Consider “judicial behavior effects.” These effects involve changes in the way a judge would adjudicate a summary judgment motion, if filed, in a case. Just as many participants in the debate over pleading have interpreted changes in the Rule 12(b)(6) grant rate as capturing the average judicial behavior effect across cases facing Rule 12(b)(6) motions, participants in the empirical debate concerning summary judgment have generally interpreted the change in the summary judgment disposition rate as capturing the trilogy-induced judicial behavior effect at the summary judgment stage.

In addition to judicial behavior effects, there are three other types of effects to consider. First, the “defendant selection effect” refers to cases that defendants would not challenge under a demanding summary judgment burden of production but would so challenge under an easier burden. Defendant selection can therefore be expected to systematically draw into summary judgment adjudication cases in which evidence more strongly favors the plaintiff. Consequently, we should expect defendant selection to reduce the summary judgment disposition rate. As such, if defendant selection were the only type of party selection happening in federal cases, a finding that the summary judgment disposition rate had not fallen post-

---

trilogy could be explained only by a shift favoring defendants in summary judgment adjudication.

Second, the “plaintiff selection effect” accounts for plaintiffs’ decisions not to file suit in the first place. This effect occurs because some plaintiffs will expect to face summary judgment motions under the new summary judgment standard, whereas they would not expect defendants to file such motions under the earlier standard. The combination of the added costs of opposing the summary judgment motion and the risk that it will be granted can sufficiently reduce the expected value of litigation such that the plaintiff might decide to forgo filing the suit altogether. Plaintiff selection effects also occur in another set of cases. Consider cases in which plaintiffs would expect to face summary judgment motions under either summary judgment practice. In some of these cases, plaintiffs will perceive a greater chance that summary judgment will be granted. When this chance is sufficiently greater, the plaintiff’s perceived value of litigating will fall enough such that the plaintiff might decide not to file suit. To put it more succinctly, if a bit less precisely, one expects that plaintiffs would decide not to bring cases that they believe they are especially unlikely to win at summary judgment. While defendant selection effects add stronger plaintiffs’ cases to the summary judgment mix, plaintiff selection effects remove weaker plaintiffs’ cases. Similar to defendant selection effects, plaintiff selection effects reduce the expected summary judgment disposition rate.

Finally, there are “settlement selection effects.” These effects occur because the two parties’ beliefs concerning the probability that summary judgment will be granted move in the same direction. Consider a case that would settle before the summary judgment stage under the pre-trilogy standard. In this case, settlement occurs because—given the cost of litigating the motion and the parties’ beliefs concerning the likelihood each would win if the motion were filed—the defendant has more to lose from litigating than the plaintiff has to gain. On the other hand, if that same case were filed after the 1986 trilogy, the defendant will predict a greater chance of winning

29 This is the basic logic of the argument in Issacharoff and Loewenstein, supra note 6, at 105-07.

30 This is the “divergent expectations” account of litigation, whose formulation dates to John P. Gould, The Economics of Legal Conflicts, 2 J. LEGAL STUD. 279 (1973); William M. Landes, An Economic Analysis of the Courts, 14 J.L. & ECON. 61 (1971); and Richard A. Posner, An Economic Approach to Legal Procedure and Judicial Administration, 2 J. LEGAL STUD. 399 (1973). Under the primary alternative explanation, asymmetric information, parties might litigate some cases even though settlement would improve both parties’ situations. See generally Steven Shavell, Any Frequency of Plaintiff Victory at Trial Is Possible, 25 J. LEGAL STUD. 493 (1996). Due to space constraints, I will not explore the implications of asymmetric information here, but I do not think the presence of asymmetric information would change my basic conclusion.
at the summary judgment stage and will therefore have less to lose in filing the motion. The plaintiff will likewise think the defendant has a greater chance of prevailing on summary judgment and will now think she has less to gain from litigating.

If the reduction in the plaintiff’s expected gain from litigating a summary judgment motion is greater than the reduction in the defendant’s expected loss, then settlement will still occur, though on terms less favorable to the plaintiff. On the other hand, if the defendant’s expected loss falls more than the plaintiff’s expected gain falls, pre-summary judgment settlement might be impossible to reach post-trilogy. Thus, the number of cases in which summary judgment motions are filed might increase; this is the effect that motivates John Bronsteen’s suggestion that summary judgment actually increases the costs of litigation. Perhaps less obviously, the same kind of argument can be made in the opposite direction, such that cases that would not settle pre-trilogy would settle post-trilogy. In other words, it is theoretically possible that liberalizing summary judgment practice will reduce the amount of trial litigation.

This analysis shows that settlement selection effects can result in either more or fewer cases facing summary judgment litigation. There is no way to know a priori whether settlement selection cases are high- or low-quality cases in terms of the strength of the plaintiff’s case, so settlement selection effects might cause changes in the composition of cases facing summary judgment such that the average quality of cases falls. If so, the presence of

---

31 Burbank notes in passing the possibility that the trilogy may have led to “vanishing settlements.” Burbank, supra note 6, at 617. Gillian Hadfield, meanwhile, reports evidence that “suggests that the settlement rate may have been lower in 2000 than it was in 1970.” Gillian K. Hadfield, Where Have All the Trials Gone? Settlements, Nontrial Adjudications, and Statistical Artifacts in the Changing Disposition of Federal Civil Cases, 1 J. EMPIRICAL LEGAL STUD. 705, 711-12 (2004).


33 If the parties would not settle before summary judgment under pre-trilogy summary judgment practice, then we know the defendant must have expected to lose less from litigation than the plaintiff expected to gain. If the switch to post-trilogy summary judgment practice caused the defendant’s expected loss to fall by less than the fall in the plaintiff’s expected gain, though, the parties might be able to come to a mutually beneficial settlement.
settlement selection effects could outweigh the quality-improving effects of
defendant selection and plaintiff selection. This would cause the summary
judgment disposition rate to rise, offsetting other types of selection effects.

As I indicated earlier, the idea that changes in summary judgment
standards can be expected to change parties' behavior is not entirely novel.
What previous analyses of the trilogy have failed to appreciate—just as
early literature failed to appreciate in its analysis of Twombly and Iqbal—is
the implication of party selection effects for interpreting existing empirical
evidence. The analysis here shows that the net impact of selection effects
might either reinforce or counteract any trilogy-induced judicial behavior
effects. It follows from my analysis that any observed change in the summary
judgment disposition rate—whether positive, negative, or zero—is consistent
with the hypothesis that the trilogy tilted the summary judgment terrain
toward defendants. To my knowledge, this link between the behavioral effects
of changes in summary judgment standards and the proper interpretation of
the empirical evidence on summary judgment has not been previously
analyzed.

II. JUDGE CHARACTERISTICS AND PARTY BEHAVIOR

A first question, if a somewhat pedantic one, is whether identifiable
judge characteristics indicate more sympathy to a particular type of party to
litigation. By their nature, employment discrimination cases involve allegations
of discrimination on the basis of membership in a protected class. Parties
might logically believe that judges' attitudes toward employment discrimi-
nation might vary according to race, gender, and age, although others argue
that judges simply "call balls and strikes." Christina Boyd, Lee Epstein,
and Andrew Martin summarize the large literature concerning the role of
gender in judging, noting four distinct arguments for why male and female
judges might decide differently. Joshua Fischman discusses a number of
other studies that posit that appellate judges decide cases differently
according to race, sex, or ideology as measured by party of appointing

34 See supra notes 3–6 and accompanying text.
35 Confirmation Hearing on the Nomination of John G. Roberts, Jr. to Be Chief Justice of the United
States: Hearing Before the S. Comm. on the Judiciary, 109th Cong. 56 (2005) (statement of John G.
Roberts, Jr.) (“I will decide every case based on the record, according to the rule of law, without
fear or favor, to the best of my ability, and I will remember that it’s my job to call balls and strikes,
and not to pitch or bat.”).
36 Christina L. Boyd et al., Untangling the Causal Effects of Sex on Judging, 54 AM. J. POL. SCI.
389, 391 tbl.1 (2010) (identifying several accounts for why female judges might “behave differently”
from their male counterparts in a given case).
President.\textsuperscript{37} And consider what now-Justice Sotomayor famously said in 2002:

Whether born from experience or inherent physiological or cultural differences, . . . our gender and national origins may and will make a difference in our judging. Justice O'Connor has often been cited as saying that a wise old man and wise old woman will reach the same conclusion in deciding cases. . . . I am not so sure that I agree with the statement. First, as Professor Martha Minnow [sic] has noted, there can never be a universal definition of wise. Second, I would hope that a wise Latina woman with the richness of her experiences would more often than not reach a better conclusion than a white male who hasn't lived that life.\textsuperscript{38}

If parties to litigation believe, like Justice Sotomayor, that a judge's background affects how the judge will adjudicate a given case, then—regardless of whether such a belief is actually true—the parties' litigation

\textsuperscript{37} Joshua B. Fischman, Interpreting Circuit Court Voting Patterns: A Social Interactions Framework, J.L. ECON. & ORG. (forthcoming) (manuscript at 25), available at http://jleo.oxfordjournals.org/content/early/2013/01/16/jleo.ews042.full.pdf+html. Most research concerning the role of federal judge characteristics has involved appellate judges, but there have been several studies of associations between civil case outcomes and judge characteristics in the district courts. See, e.g., Orley Ashenfelter et al., Politics and the Judiciary: The Influence of Judicial Background on Case Outcomes, 24 J. LEGAL STUD. 257, 281 (1995) (finding that, in three U.S. district courts, “judges influence the procedures within civil rights cases but have relatively little effect on whether cases settle or win”); Adam B. Cox & Thomas J. Miles, Judging the Voting Rights Act, 108 COLUM. L. REV. 1, 18 (2008) (concluding that “the powerful effects of [judges’] race and partisanship” contribute to how judges allocate liability in cases under section 2 of the Voting Rights Act); Jennifer A. Segal, Representative Decision Making on the Federal Bench: Clinton’s District Court Appointees, 53 POL. RES. Q. 137, 145-46 (2000) (finding that “despite their symbolic representation of specific societal groups, the behavior of Clinton’s black and female appointees does not support the expectations that they actively promote the interests of those groups as they perform the duties of their office”); Thomas G. Walker & Deborah J. Barrow, The Diversification of the Federal Bench: Policy and Process Ramifications, 47 J. POL. 596, 614-15 (1985) (reporting that “[w]ith the exception of relatively high government support levels displayed by female judges, there is little to distinguish women or black judges as a class from their white, male colleagues”); Kenneth L. Manning, ¿Cómo Decide?: Decision-Making by Latino Judges in the Federal Courts (paper presented at the Annual Meeting of the Midwest Political Sci. Ass’n, Apr. 14-17, 2004), available at http://citation.allacademic.com/meta/p_mla_apa_research_citation/0/8/3/3/3/p83393p83393-10.php (finding that “[i]n criminal justice matters, Latino jurists spoke with a different—and more conservative—voice” and that “[t]he same holds true in civil liberties and rights cases”). Authors of these studies generally interpret their findings in ways that fail to acknowledge the two-sided nature of litigation. In a more recent work, Christina L. Boyd studied four U.S. district courts and found that a female judge will “settle it” more often and more quickly than her male colleagues. Christina L. Boyd, She’ll Settle It?, 1 J.L. & COURTS 193, 211 (2013). Boyd discusses the possibility that party behavior might take judge characteristics into account, but she downplays the possibility that both parties consider the judge’s characteristics, rather than just the defendant. Id. at 209.

\textsuperscript{38} Sonia Sotomayor, A Latina Judge’s Voice, 13 BERKELEY LA RAZA L.J. 87, 92 (2002).
strategies can be expected to vary with the identity of the judge assigned to their cases. Therefore, one might think that in cases where most summary judgment motions are filed by defendants, such as civil rights and tort cases, the cases assigned to judges with a defendant-friendly reputation would be more likely to be ones in which summary judgment motions are filed. But the conceptual framework outlined in Part I implies that this expectation can be wrong. Even in civil rights and tort cases, where most summary judgment motions are filed by defendants, there will not necessarily be a simple relationship between measures of judicial standards and whether a summary judgment motion is filed in a case.

Consider two hypothetical cases in which a woman sues her employer for sex discrimination. Case One is assigned to a female judge with a record of scrutinizing and rarely granting summary judgment motions filed by the defendant in employment-related sex discrimination cases. Case Two is assigned to her mirror image—a male judge with a record of liberally granting summary judgment motions to the defendant in sex discrimination cases. In which case is it more likely that a party will file for summary judgment?

The answer is not as simple as it might seem. If plaintiffs and their attorneys were just automatons, while defendants and their attorneys behaved rationally and self-interestedly, then, of course, we would expect it to be more likely that a summary judgment motion would be filed in Case Two. But if plaintiffs and their attorneys are real, sentient beings who act in their own interests as they discern them, then the Case Two plaintiff can be expected to reduce her settlement demand to avoid the risk of summary disposition in front of an unsympathetic judge. Consequently, when both parties are what I have called “live,” even judge characteristics often thought to be pro-defendant will not necessarily be associated with a greater rate of summary judgment motion filing.

For clarification, notice what I am not arguing. I am not arguing that the Case One defendant would be just as likely to file a summary judgment motion as the Case Two defendant, if each case failed to settle before any summary judgment motions were due. There is no doubt that the Case Two defendant would be more likely to file in this event. The point here is that the Case Two plaintiff can be expected to realize her reduced chances of

39 It is also possible that, on learning the judge’s identity, the plaintiff might voluntarily dismiss her case under Rule 41. FED. R. CIV. P. 41. Under Rule 41(a)(1)(A), the plaintiff can voluntarily dismiss her case and then refile, subject to certain consequences. For example, Rule 41(d) imposes the costs of the initial action on such a plaintiff, and Rule 41(a)(1)(B) makes any later dismissal an adjudication on the merits.
succeeding and change her own behavior in order to avoid summary judgment. This is the critical analytical point here.

I turn now to empirical evidence on summary judgment motion filing and judge characteristics.

III. SUMMARY JUDGMENT MOTION FILINGS AND JUDICIAL CHARACTERISTICS: NEW EMPIRICAL EVIDENCE

In Section A of this Part, I introduce the docket report data I rely upon in my empirical analysis, explain how I constructed this subset of cases, and present some basic characteristics of these cases. In Sections B and C, I report the empirical results.

A. Data Construction

The data relied upon in this Article come from two sources. Data on activity in civil cases filed in the U.S. district courts come from Westlaw’s database of U.S. district court civil docket reports, commonly known as the “DCT” database. The DCT database contains essentially the same docket information as PACER. Most important for purposes of this Article, the DCT database provides the name of the judge assigned to the case, the U.S. district court forum, the nature of the suit, and the text of entries in the case’s docket report. The Westlaw DCT data were provided to me in raw form, and I wrote computer code to upload them to a relational database that allows me to run queries concerning docket activity. For this Article, I use data on all docket activity through the end of 2011—at least five years (and up to six years) for cases that originated in or were removed to a U.S. district court during the 2005 calendar year. Across all types of suits, there were 250,774 such cases in my data. Of these, 34,475 have a PACER “nature of suit” code indicating that they are civil rights actions, and 47,071 have a code indicating that they are tort actions.

To determine whether a summary motion judgment was filed in a particular case, I queried my database for all cases with a docket entry

---

indicating that a party had filed a motion for summary judgment. To do so, I searched for docket entries with text beginning with the phrase, “MOTION FOR SUMMARY JUDGMENT,” or certain variations. I coded all cases having a docket description containing such text as ones in which a summary judgment motion was filed.

I then merged my case-level data set with one containing background characteristics on judges. This latter data set is from the Federal Judicial Center’s (FJC) Biographical Directory of Federal Judges. The background characteristics included in the directory that I use in this Article are the judge’s birth year, race, gender, date on which the judge received his or her commission, and name of the President who first nominated the judge.

The case-to-judge match was complicated somewhat because the name provided by Westlaw for the judge assigned to a case does not always match that judge’s name as it appears in the FJC Biographical Directory. To illustrate this problem, consider a hypothetical judge named “Andrea Beatrice Clayton.” This judge’s name could appear in the FJC directory as

- Andrea Clayton,
- Andrea Beatrice Clayton,
- A. Beatrice Clayton,
- Andrea B. Clayton,

and so on. Meanwhile, her name might appear in the Westlaw-provided data as

- JUDGE ANDREA CLAYTON,
- HONORABLE ANDREA BEATRICE CLAYTON,
- HON. A. BEATRICE CLAYTON,
- U.S. DISTRICT COURT JUDGE ANDREA B. CLAYTON,
- U.S. JUDGE DRE CLAYTON,

41 Note that the data provided by Westlaw are in all capital letters. This is a convention I have adopted in this Article when referencing the Westlaw data.

42 Examples of variations include “[X] [Y] MOTION FOR [Z] SUMMARY JUDGMENT,” where [X] was allowed to be either empty or any of “SECOND,” “THIRD,” “FOURTH,” “FIFTH,” “SIXTH,” “SEVENTH,” “EIGHTH,” “NINTH,” or “TENTH”; [Y] was allowed to be either empty or “CROSS”; and [Z] was allowed to be either empty or “PARTIAL.” Because a small number of docket descriptions have summary judgment motions entered with the text structure “MOTION BY [DEFENDANT/PLAINTIFF] [NAME OF PARTY] FOR SUMMARY JUDGMENT,” I did the analogous set of searches using this pattern as well.

and so on.

To address the potential inconsistencies, I repeatedly merged the case-level data with the FJC judge-background data, using eleven variants of the judge's name. This procedure achieved matches in 31,695 civil rights cases (92%), and in 44,704 tort cases (95%).\textsuperscript{44} I dropped twenty-one civil rights cases and 14,634 tort cases that appeared to involve multidistrict litigation (MDL) subject to pretrial activity consolidation under 28 U.S.C § 1407.\textsuperscript{45} These deletions left 29,673 civil rights cases and 30,070 tort cases.

Of the remaining cases, it appeared at least possible that in some circumstances the judge listed in the PACER data was assigned the case as a result of a reassignment. This is notable because the judge field in the PACER data is determined in real time. Consider a simple example in which a case commenced on January 2, 2005, was initially assigned to Judge Dredd. A docket report pulled on January 2 would list Judge Dredd as the assigned judge. At 12:00 AM on July 17, 2005, the case was reassigned to Judge Reinhold. A docket report pulled on July 17 or any time thereafter would list the assigned judge as Judge Reinhold. Short of searching the docket reports directly for judge names, there is no way to discern the originally assigned judge's name when there is a mid-litigation reassignment. Reassignment is potentially problematic because, to the extent that the initial judge assignment is done randomly,\textsuperscript{46} reassignment may undo the exogeneity of judge characteristics created by randomization.

\textsuperscript{44} For some cases, the match failed because PACER's judge field was either empty or contained text indicating that no judge was assigned to the case in question. For others, PACER's judge field identified a magistrate judge rather than an Article III judge. Magistrate judges accounted for the bulk of the cases with unmatched judges.

\textsuperscript{45} The Westlaw data do not have a variable that positively indicates MDL status. There is a "case status" flag variable, but it does not identify all MDL cases. To identify MDL cases, I searched the text of all docket entries, selecting those cases that had a docket entry in which the string "MDL" appeared. While this MDL screen led me to drop roughly a third of tort cases, and while MDL cases of course are of great interest in general, the remaining cases form a coherent and interesting collection for the purposes of this study.

\textsuperscript{46} The Administrative Office of the U.S. Courts explains on its website, Judge assignment methods vary. . . . By statute, the chief judge of each district court has the responsibility to enforce the court’s rules and orders on case assignments. Each court has a written plan or system for assigning cases. The majority of courts use some variation of a random drawing. One simple method is to rotate the names of available judges. At times judges having special expertise can be assigned cases by type, such as complex criminal cases, asbestos-related cases, or prisoner cases. . . . Sometimes cases may be assigned based on geographical considerations. For example, in a large geographical area it may be best to assign a case to a judge located at the site where the case was filed. Courts also have a system to check if there is any conflict that would make it improper for a judge to preside over a particular case.
To determine which cases involved a judicial reassignment, I searched all docket entry descriptions for the string “REASSIGNED.” There were 4543 civil rights cases and 2878 tort cases with this string, which amounts to roughly 14% and 10%, respectively, of the otherwise usable cases. These are not large fractions, but they are also not trivial. I thus include in the estimated models a dummy variable indicating whether a case was reassigned.

It is a necessary assumption of this paper that reassignments are not importantly correlated with unmeasured factors that affect whether a summary judgment motion will be filed in a certain case. For example, one subset of reassigned cases, which is clearly problematic to include in the estimation, involves those assigned to judges who did not receive their commissions until after the case’s filing date. It is easiest to see this problem with President Obama’s appointees, who by construction cannot have assumed the bench until at least 2009. Cases that are assigned to these judges at the time the PACER data are pulled must have lasted more than three years, and common sense indicates that a greater share of such long-lasting cases will have summary judgment motions filed than will the full set of cases. To avoid this built-in problem, I simply dropped all cases whose PACER-named assigned judge received his or her commission after the date the case was filed, which eliminated 1241 civil rights cases and 764 tort cases.

Table 1 reports the percentages of cases in which a summary judgment motion was filed within 2191 days of commencement, which is the maximum time horizon allowable to ensure that all cases will have docket entries over that period.\(^{47}\) The table’s top row shows that a party filed a summary judgment motion in 25.5% of civil rights cases and 10.4% of tort cases.\(^{48}\) The third row shows that the rate of summary judgment motion filing was a bit lower in cases that were not reassigned. The fifth row shows that, among

\(^{47}\) Since I have data on docket entries for all cases through December 31, 2011, and since the last date a case could be filed in calendar year 2005 was December 31, 2005, I have data on all cases for 2191 days. Note that 2008 was a leap year; therefore, six years from January 1, 2005, equals 2191 days, rather than 2190 days (6 × 365).

\(^{48}\) For a study in comparison to these statistics reporting the share of all cases in which a summary judgment motion was filed among those cases that terminated in the 2006 fiscal year, see Memorandum from Joe Cecil & George Cort, Fed. Judicial Ctr., to Judge Michael Baylson (Apr. 12, 2007, rev. June 15, 2007), available at http://bulk.resource.org/courts.gov/fjc/sujufy06.pdf. This memo’s set of cases differs from that represented in Table 1 in a number of ways: Cecil and Cort exclude cases from sixteen districts that had not yet fully implemented the CM/ECF system; the calendar and fiscal year dates are not the same; and the set of cases terminated in a given period generally will have been filed in other years, possibly many years earlier. Nonetheless, the memo may be a useful basis for comparison. It reports that the share of terminated cases in which a summary judgment motion was filed was 28% for civil rights cases and 9% for tort cases. Id. at 6 tbl.3.
reassigned cases, the percentage that had summary judgment motions exceeded the non-reassigned cases’ percentage by more than ten percentage points, again suggesting the importance of including a dummy variable indicating whether the case was reassigned.

Table 1: Percentage of Cases with Summary Judgment Motion

<table>
<thead>
<tr>
<th></th>
<th>Civil Rights</th>
<th>Tort</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Cases</td>
<td>25.5</td>
<td>10.4</td>
</tr>
<tr>
<td>Number</td>
<td>30,372</td>
<td>29,305</td>
</tr>
<tr>
<td>Non-Reassigned Cases</td>
<td>24.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Number</td>
<td>26,620</td>
<td>26,925</td>
</tr>
<tr>
<td>Reassigned Cases</td>
<td>34.8</td>
<td>21.1</td>
</tr>
<tr>
<td>Number</td>
<td>3752</td>
<td>2381</td>
</tr>
</tbody>
</table>

B. Summary Data on Judge Characteristics

Table 2 presents some basic summary statistics concerning the judges assigned to the cases studied here. The first row shows that the average age of a judge assigned to a case in my estimation data is sixty-one for both case types. The summary statistics in the table’s second row show that the percentages of cases assigned to male judges were 79% and 81% for civil rights and tort cases, respectively. The percentages of cases assigned to white, non-Hispanic judges were 83% and 86%, and the percentages assigned to Hispanic judges were 5% and 4%, respectively. In terms of the nominating President, 22% and 20% of cases were assigned to judges appointed by George W. Bush (Bush II); 38% and 49% were assigned to judges appointed...
by Bill Clinton,\textsuperscript{51} 30\% and 24\% were assigned to judges appointed by either George H. W. Bush (Bush I) or Ronald Reagan; 7\% and 5\% were assigned to judges appointed by Jimmy Carter; and the rest were assigned to judges appointed by Gerald Ford, Richard Nixon, Lyndon B. Johnson, or John F. Kennedy. The listed percentages in some of the appointing-President cells are zero due to rounding errors; there are at least a smattering of cases assigned to judges appointed by each listed President.

Table 2: Characteristics of Judges Assigned to Cases, by Nature of Suit

<table>
<thead>
<tr>
<th>Judge Characteristic</th>
<th>Civil Rights</th>
<th>Tort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at filing date</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>Percentage of cases whose judge is:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>79</td>
<td>81</td>
</tr>
<tr>
<td>White</td>
<td>83</td>
<td>86</td>
</tr>
<tr>
<td>Hispanic</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Percentage whose judge appointed by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bush II</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Clinton</td>
<td>38</td>
<td>49</td>
</tr>
<tr>
<td>Bush I</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Reagan</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Carter</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Ford</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Nixon</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Johnson</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kennedy</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Number of cases:</td>
<td>30,366</td>
<td>29,305</td>
</tr>
</tbody>
</table>

\textsuperscript{51} The 49\% figure, which is for tort cases, is the clearest outlier in these characteristics. Presumably this figure is explained by systematic reassignment of tort cases, though it is not obvious why so many should have been reassigned to Clinton appointees. Note that since I dropped cases that appear to involve multidistrict litigation, it is unlikely that this phenomenon is connected to asbestos and other mass tort cases, though it is possible that my MDL case-finding algorithm was less-than-perfect.
C. Estimation Results

In this Section, I report and discuss the estimated average marginal effects of each judge characteristic on the probability that a summary judgment motion will be filed in a case within 2191 days. For all but the age variable, the marginal effect of each characteristic reveals the estimated impact on the probability of the filing of a summary judgment motion when a case is switched from a judge lacking the given characteristic to one possessing that characteristic. For example, consider Judge Smith, a sixty-one-year-old, female, non-white, non-Hispanic Carter appointee. Consider also Judge Jay, who shares all the same characteristics as Judge Smith except that he is male. Since all characteristics of these judges are the same except for gender, the marginal effect of being assigned to a male judge for cases assigned to sixty-one-year-old, non-white, non-Hispanic Carter-appointed judges is simply the probability of observing a summary judgment motion in a case assigned to Judge Jay minus the same probability in a case assigned to Judge Smith.

To find the average marginal effect of being male across all sets of other characteristics, one would calculate the marginal effect of being assigned to a male judge for cases assigned to each type of judge in the data and then compute the average over all types of judges. For example, this averaging would include seventy-two-year-old, white, non-Hispanic Reagan appointees; fifty-five-year-old, Hispanic Bush II appointees; and so on. To find the average marginal effect of another characteristic—say, of a case being assigned to a white judge—we undertake a similar procedure: first, we calculate the marginal effect of being assigned to a white judge for each judge in the data, holding all characteristics but being white at their actual values for that judge, and then we compute the average over all cases of these marginal effects. In practice, we do not know the exact marginal

52 See infra note 53 for the calculation of the age variable’s marginal effect.

53 In general, a binary dependent choice model relates the probability that outcome variable \( Y \) will equal 1 (rather than 0) to a set of \( K \) explanatory variables labeled \( X_1, X_2, \ldots, X_K \). The logit model imposes the mathematical structure that, given that \( X_1=x_1, X_2=x_2, \ldots, X_K=x_K \), this probability may be written

\[
P(Y = 1|X_1 = x_1, X_2 = x_2, \ldots, X_K = x_K) = \frac{\exp\left[\sum_{j=1}^{K} x_j \beta_j\right]}{1 + \exp\left[\sum_{j=1}^{K} x_j \beta_j\right]},
\]

where the set of coefficients \( \{\beta_1, \beta_2, \ldots, \beta_K\} \) is the object of estimation. With the exception of judge’s age, all \( X \) variables in this paper are dummy variables, so that they are binary: either \( x_j=0 \) or \( x_j=1 \). The marginal effect of binary variable \( X_j \) on the probability that \( Y=1 \), given the values of all the other variables, is
effect for each type of judge—that is why we have to estimate a model such as logit.

In Table 3, I report estimates of the marginal effects for cases involving civil rights and torts. All models include dummy variables indicating the district in which the action occurred as well as whether the case appeared to have been reassigned to a new judge, though the estimated marginal effects for these variables are not displayed. For reference, the top row of the table reports the share of cases of each type in which a motion for summary judgment was filed within 231 days of commencement. The bottom row reports p-values testing the null hypothesis that all judge-characteristic marginal effects are simultaneously zero.

All other cells in the table report the estimated average marginal effect for various judge characteristics, together with estimated standard errors. Estimated marginal effects that are statistically significant at the 0.10 level but not the 0.05 level are denoted by one asterisk (*). Those that are statistically significant at the 0.05 level but not the 0.01 level are denoted by Δ.

\[
\Delta P(x_j) = P(Y = 1|X_j = 1, X_{-j} = x_{-j}) - P(Y = 1|X_j = 0, X_{-j} = x_{-j}),
\]

where the notation “\(X_{-j} = x_{-j}\)” indicates that the values of all variables other than \(X_j\) are given by the vector \(x_{-j}\). To estimate \(\Delta P(x_j)\), one does the following: (i) set \(X_j = 1\) and set \(X_{-j} = x_{-j}\); (ii) use the estimated values of the \(\beta\) coefficients and the formula for \(P(Y = 1|X = x)\) to estimate the probability that \(Y = 1\) given these values; (iii) set \(X_j = 0\) and again set \(X_{-j} = x_{-j}\); (iv) again, use the estimated values of the \(\beta\) coefficients and the formula for \(P(Y = 1|X = x)\) to estimate the probability that \(Y = 1\); and (v) subtract the estimated probability calculated in step (iv) from the estimate calculated in step (ii). The difference calculated in step (v) is the estimated marginal effect of binary characteristic \(X_j\); this estimate has various desirable statistical properties.

For a judge’s age, which is treated as a continuous variable, one finds the marginal effect by differentiating the conditional probability function in the first equation above with respect to the age variable. It can be shown that the logit marginal effect for a continuous variable equals the product of the variable’s \(\beta\) coefficient times the product of (a) the estimated probability that \(Y = 1\) given \(X\) and (b) the estimated probability that \(Y = 0\) given \(X\), so that the marginal effect for age is

\[
\Delta P = (1 - P)P_{age},
\]

where \(P\) is the estimated probability in (a).

54 The number of observations used in each model differs modestly from the numbers Table 1, because in some districts, a summary judgment motion was filed either in all or none of the cases. Since this situation prevents estimation of the district-level dummy variable’s coefficient, observations from such districts are dropped automatically during estimation of the logit model. For example, there were six civil rights cases filed in the District Court of Guam that had to be dropped, because there was no variation in the outcome variable for these cases. See also supra note 49.

55 The p-values are based on Wald tests of the null hypothesis that all judge-related coefficients are truly zero, against the alternative hypothesis that they are non-zero. See WILLIAM H. GREENE, ECONOMETRIC ANALYSIS 785-87 (6th ed. 2008) (discussing the Wald statistic and stating that it has a limiting chi-squared distribution); id. at 993-95 (discussing the chi-squared distribution).

56 Estimated standard errors are computed as the square root of the estimated variance for each marginal effect calculated using the delta method, which is the conventional way to estimate the variance of nonlinear functions of consistent estimators. Id. at 1055-56.
two asterisks (**). Those that are statistically significant at the 0.01 level or lower are denoted by three asterisks (***). Because each reported marginal effect indicates an impact on the probability of an outcome's occurrence, the marginal effects can be converted to percentages by multiplying by 100. It is important to understand that for the appointing President variables, Carter appointees serve as the omitted category. This means that the figures reported in the table for these variables tell us the estimated average impact of switching from a Carter appointee to a judge appointed by another President.

For civil rights cases, a number of the coefficient estimates are statistically significant. Assignment of a case to either a white, non-Hispanic judge or to an Hispanic judge is associated with an increase in the probability of the filing of a summary judgment motion by 3.1 and 3.4 percentage points, respectively. These effects amount to 12% to 13% of the overall percentage of civil rights cases with summary judgment motions, which is 25.5%. Assignment of a case to a Bush II, Clinton, or Bush I appointee is associated with an increase in the probability of the filing of a summary judgment motion by 4.3 or 4.4 percentage points—a 17% increase relative to the overall percentage of cases with summary judgment motions. Assignment to a Reagan appointee is associated with a slightly smaller increase of 3.6 percentage points, and assignment to a Johnson appointee (of whom very few are represented in the data) increases the probability of the filing of a summary judgment motion in a case by a very large 10.4 percentage points. Finally, observe that the $p$-value testing the null hypothesis that all judge characteristics are irrelevant is zero to three decimal digits, so this hypothesis is overwhelmingly rejected.57

For tort cases, there is much less to say. The $p$-value testing that all characteristics' marginal effects are zero fails to reject the null hypothesis. Only the Bush II effect is even marginally statistically significant. It suggests a 3.757

---

57 Because home-state senators have considerable influence on the selection of district court nominees, one might think that the nominating President would fail to measure judicial ideology. Stephen B. Burbank, Politics, Privilege & Power: The Senate's Role in the Appointment of Federal Judges, 86 JUDICATURE 24, 26 (2002). To address this possibility, I supplemented my data using a judicial ideology variable provided by Christina Boyd on her website. See Christina L. Boyd, Federal District Court Judge Ideology Data (June 15, 2010), http://clboyd.net/ideology.html (providing data that take into account partisan information about both the nominating President and senators in a given judge's state). For further details on an empirical methodology for testing the hypotheses of positive political theory on justices, judges, and courts, see generally Lee Epstein et al., The Judicial Common Space, 23 J.L. ECON. & ORG. 303 (2007). When I re-estimated my model for civil rights cases with the ideology score included, it had virtually no association with summary judgment motion filing. While it did reduce the precision of my marginal effects estimates, my basic qualitative conclusions continue to hold.
percentage point reduction in the probability of the filing of a summary judgment motion, which is very large relative to the 10.4% of all tort cases in which summary judgment motions are filed.\textsuperscript{58}

\footnote{58 When I modified the torts model to include the ideology score variable, this variable was statistically insignificant. See supra note 57 and accompanying text. The model that includes this variable yields statistically significant and sizable negative marginal effects for the two Bush Presidents, with no other variables having individually significant marginal effects, though the \(p\)-value testing exclusion of all characteristics is now 0.04, low enough to reject this exclusion.}
Table 3: Logit Marginal Effects for Cases Involving Civil Rights and Torts

<table>
<thead>
<tr>
<th></th>
<th>Civil Rights</th>
<th>Tort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motion filed within 2191 days of commencement</td>
<td>0.255</td>
<td>0.104</td>
</tr>
<tr>
<td>Male judge</td>
<td>0.001</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>White judge</td>
<td>0.031***</td>
<td>-0.024</td>
</tr>
<tr>
<td></td>
<td>(0.012)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>Hispanic judge</td>
<td>0.034**</td>
<td>-0.017</td>
</tr>
<tr>
<td></td>
<td>(0.017)</td>
<td>(0.021)</td>
</tr>
<tr>
<td>Judge’s age</td>
<td>0.003</td>
<td>-0.019</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.015)</td>
</tr>
<tr>
<td>Bush II</td>
<td>0.043**</td>
<td>-0.037*</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Clinton</td>
<td>0.043**</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>(0.017)</td>
<td>(0.032)</td>
</tr>
<tr>
<td>Bush I</td>
<td>0.044**</td>
<td>-0.034</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Reagan</td>
<td>0.036*</td>
<td>-0.007</td>
</tr>
<tr>
<td></td>
<td>(0.019)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Carter</td>
<td>Omitted</td>
<td>Omitted</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ford</td>
<td>-0.002</td>
<td>-0.023</td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.029)</td>
</tr>
<tr>
<td>Nixon</td>
<td>0.068</td>
<td>0.019</td>
</tr>
<tr>
<td></td>
<td>(0.046)</td>
<td>(0.025)</td>
</tr>
<tr>
<td>Johnson</td>
<td>0.104*</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>(0.041)</td>
<td>(0.041)</td>
</tr>
<tr>
<td>Kennedy</td>
<td>0.026</td>
<td>-0.016</td>
</tr>
<tr>
<td></td>
<td>(0.044)</td>
<td>(0.070)</td>
</tr>
</tbody>
</table>

*p-value* 0.000*** 0.157

Note: Estimated standard errors appear in parentheses.

* Denotes estimated marginal effects that are statistically significant at the 0.10 level but not the 0.05 level.

** Denotes estimated marginal effects that are statistically significant at the 0.05 level but not the 0.01 level.

*** Denotes estimated marginal effects that are statistically significant at the 0.01 level or lower.
What do we learn from these estimates? First, the overwhelming statistical significance of the pattern of results of civil rights cases clearly rejects the possibility that parties are indifferent to judge characteristics. Second, the pattern of civil rights cases results defies any simple, only-defendants-respond story for summary judgment behavior. Standard theories of the roles of gender, race, and ethnicity would strain to explain why cases assigned to male and female judges exhibit no difference in the summary judgment motion filing rate, while those assigned to non-Hispanic whites and to Hispanics are both more likely to be ones in which summary judgment motions are filed than those assigned to non-white, non-Hispanic judges. And the results for the appointing President are also difficult to comprehend under a simple, one-party-only story: Why does summary judgment filing in cases assigned to Clinton appointees look just like filing in those assigned to appointees of either of the Bushes? The answer cannot be that all such variables indicating positive marginal effects are for Presidents elected after the trilogy, because the marginal effect for Johnson appointees is large and statistically significant (likewise, the effect for Nixon appointees is large and positive, if statistically insignificant).

In sum, the estimation results suggest that judge characteristics are likely significant determinants of whether a litigant will file a motion for summary judgment in a civil rights case, but the pattern of effects does not reflect predictions attributed to a unilateral model of defendant party behavior. Nor would the general absence of significant effects for tort cases—except for the reduction in the probability that a summary judgment motion is filed for Bush II appointees—square with such a unilateral model.

**CONCLUSION**

The arguments and evidence in this Article have important implications, both for conducting empirical research concerning litigation and for drawing policy conclusions based on that research.

The empirical evidence in Part III shows that simple stories involving either no behavioral response by any party or unilateral defendant responses to post-trilogy changes in summary judgment standards are not supported by the data. Previous research shows that defendants file the vast majority of summary judgment motions in both civil rights and tort cases. Yet the filing of summary judgment motions in such cases does not generally track predictions that claim we will more often see defendants filing motions when the judge assigned to a case is more favorable to defendants. My analysis in Part II suggests a simple explanation for this finding: at least some plaintiffs or plaintiffs’ attorneys understand that when they draw an
unfavorable judge assignment, avoiding the threat of adverse summary judgment adjudication will require them to revise their demands and accept less in settlement. While I have not yet worked out all of the details of a model of settlement in a sequential model that allows summary judgment, it is easy to see that perceived increases in the probability that a judge will grant a defendant’s summary judgment motion can lead to complicated patterns of change in the set of cases facing summary judgment motions.

Given all this, one normative issue arises with regard to what researchers should and should not do when trying to assess the effects of apparent changes in legal rules. What they should not do is simply compute the plaintiff win rate before and after a hypothesized change in legal rules and then treat the observed difference as illustrating whether the rule change favored plaintiffs or defendants. When party behavior might change the composition of cases adjudicated under the standard of interest, such comparisons risk comparing apples to oranges.

On this point, I note that Daniel Klerman and Yoon-Ho Alex Lee have recently argued that things might not be quite as dire as I suggest.\(^59\) Klerman and Lee show that in simple, one-shot economic models of litigation based on both divergent expectations and asymmetric information, there are assumptions about the distribution of case quality and party beliefs such that one can use changes in the plaintiff win rate to draw inferences concerning changes in legal rules.\(^60\) However, my own work in progress shows, by direct example construction, that the set of possible results in such models includes essentially anything: a pro-defendant change in legal rules can cause the plaintiff win rate to rise, fall, or even stay the same.\(^61\) While Klerman and Lee’s findings and my own results might appear incompatible, they are not. Together, the two papers illustrate the important role that assumptions about litigants’ behavior play in making sense of empirical information concerning who wins in litigation.\(^62\)

In brief, the takeaway from my work thus far is that attempts to draw assumption-free inferences about changes


\(^{60}\) Id. at 25-29.

\(^{61}\) See Jonah B. Gelbach, Everything You Need to Know about Litigation Selection and the Plaintiff’s Win Rate in One Simple Graph 31 (June 2, 2014) (unpublished manuscript) (on file with author) (employing a graphical representation of litigation models and pointing out that the “tight relationship between the decision standard and the plaintiff’s win rate” requires specific assumptions and does not hold generally).

in legal rules from data regarding changes in win rates are doomed to fail. The takeaway from Klerman and Lee’s work is that there can be an epistemic payoff to making behavioral assumptions. The question of whether the assumptions necessary to collect that payoff can be stomached is an important one, although not within the scope of this Article.

But the normative implications of these methodological issues for the debate over summary judgment doctrine and policy is simple. Without some strong behavioral assumptions, the received empirical facts concerning summary judgment do not establish the absence of a genuine dispute about the impact of the trilogy. Researchers, judges, and the federal rulemakers should recognize that more than the existing evidence will be needed to dispose of the hypothesis that the trilogy, in particular, had an important impact on litigation, or that summary judgment practice, in general, has changed in ways that erode plaintiffs’ access to justice in meritorious cases. A failure of the summary judgment disposition rate to rise in employment discrimination cases, for example, is entirely consistent with the proposition that the trilogy has led judges to tighten the screws on plaintiffs in these cases at summary judgment.

To be clear, I do not mean to suggest that the quantitative empirical evidence shows that such a change has actually occurred. I claim only that, given the absence of careful consideration of changes in party behavior, the data we have simply cannot tell us. As a general matter, we need more detailed models, more detailed empirical evidence, or—more likely—both.