Online Essay

JUDICIAL MISTAKES IN DISCOVERY†

Diego A. Zambrano

ABSTRACT—A recent wave of scholarship argues that judges often fail to comply with binding rules or precedent and sometimes apply overturned laws. Scholars have hypothesized that the cause of this “judicial noncompliance” may be flawed litigant briefing that introduces mistakes into judicial decisions—an idea this Essay calls the “Litigant Hypothesis.” The Essay presents a preliminary study aimed at exploring ways of testing the validity of the Litigant Hypothesis. Employing an empirical analysis that exploits recent amendments to Federal Discovery Rule 26, this Essay finds that the strongest predictor of noncompliance in a dataset of discovery decisions is indeed faulty briefs. This study concludes that the Litigant Hypothesis of noncompliance may have explanatory value.

AUTHOR—Harry A. Bigelow Teaching Fellow and Lecturer in Law, University of Chicago Law School. Special thanks to Adam Agata. For comments and conversations, I also thank Will Baude, Omri Ben-Shahar, Joseph Brothers, Adam Chilton, Dhammika Dharmapala, Ben Grunwald, William Hubbard, Aziz Huq, Saul Levmore, Maria Maciá, Jonathan Masur, the Bigelow Fellows, and the staff of NULR. Alex Bolden, Janice Han, and Jun Lee provided excellent research assistance.

† This Essay was originally published in the Northwestern University Law Review Online on February 27, 2018. 112 NW. U. L. REV. ONLINE 217 (2018), https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=1258&context=nulr_online&preview_mode=1&z=1522807998 [https://perma.cc/CQ83-5XG6].
INTRODUCTION

A recent wave of scholarship argues that judges sometimes fail to comply with binding rules or precedents. Indeed, judges often ignore “unambiguous statutory command[s]” and “apply old, overturned laws instead of new laws.” In many ways, some judges act as if they do not care about legal changes or statutory obligations. For instance, in the past few years, we have seen federal courts dodge congressional overrides in the employment context; seemingly monumental changes to patent injunctions come to naught; and state and lower federal courts fail to comply with federal decisions on arbitration, class actions, and general jurisdiction. In all of these areas, judges failed to apply the law either consciously or by mistake.

---


3 Tokson, supra note 1, at 940–44 (describing lower courts’ failure to comply with the Supreme Court’s standard in eBay v. MercExchange, LLC).

4 See Diego A. Zambrano, The States’ Interest in Federal Procedure, 70 STAN. L. REV. 1805, 1833 (2018) (discussing a “tug-of-war” between the Supreme Court and state courts over changes to class action litigation).
The stakes of this judicial noncompliance are high. Noncompliance challenges the basic principle of judicial enforcement: that courts will faithfully apply binding rules and statutes. Under a “perfect-agent” account, courts have perfect information and faithfully comply with legal rules, statutes, and mandates. The faithful judge promotes predictability, equal treatment, fairness, and uniformity across the judiciary—values essential to a functioning legal system. Without a faithful judge, the system can become volatile. Judicial errors and resulting noncompliant decisions may become embedded in the common law, undermining statutory and enforcement regimes and leading to distorted legal outcomes. Even more generally, when judicial noncompliance—intentionally or by mistake—occurs, “the evolution of doctrine is being driven by something that most observers would agree has nothing to do with the normatively correct outcomes.” Judicial mistakes and noncompliance simply lead to suboptimal decisions.

Recent literature has highlighted the prevalence of noncompliance and suggested a variety of underlying causes, including overloaded judicial dockets; judges’ cognitive or heuristic limitations; judges’ limited knowledge of rules; judicial disagreement with legal precedent; and even policy experimentation or, as some have called it, “narrowing from below.” Most of these scholars have derived their theories from two models of judging. First, the “Labor Market” model posits that judges respond to the same institutional pressures as other workers. Judges have superiors (appellate courts), customers (litigants), and dynamic incentives (e.g., possibility of elevation to a higher court). Under this model, noncompliance may simply be a consequence of institutional labor arrangements, laziness,
and judges’ search for leisure time.  

Second, the “Cognitive Costs” model of judicial behavior argues that judicial noncompliance may stem from cognitive forces like status quo bias, the power of habit, and heuristics. Bounded human rationality, in short, may produce predictable “mistakes” that shape judicial noncompliance with statutes, rules, and the common law.

But unlike these two models, a subset of scholars has noted that it may be litigants who are introducing faulty law into the process. This hypothesis of noncompliance posits that litigant briefs may contain legal errors that judges inadvertently incorporate in their decisions—and those decisions, in turn, may be adopted by other courts as precedent. For example, Abbe Gluck suggested that in the context of federal court citations to outdated state cases, “[t]hese citation choices are likely due to errors by law clerks or lawyers or to the tendency of courts to rely on the same (sometimes outdated) set of boilerplate precedents from case to case.” Jonathan Masur and Lisa Larrimore Ouellette wondered whether litigants’ faulty briefs might be responsible for judicial misapplication of standards of review. This “Litigant Hypothesis” is compatible with the Labor Market and Cognitive Costs models—all three are just related elements of a simple judicial welfare function. But the Litigant Hypothesis emphasizes the relationship between litigant labor and judicial compliance. The Hypothesis also applies only to situations where it is apparent that a judge has made a mistake, rather than a conscious decision to defy a rule or statute.

The Litigant Hypothesis is a powerful explanation for the prevalence of mistaken noncompliance. Such a hypothesis calls for a rigorous test that has, thus far, eluded scholars. This isn’t to say that the links between litigant

---

16 See id. at 20 (describing a process in which judges will agree with a strongly opinionated judge on their panel to increase their leisure time).


18 See Tokson, supra note 1, at 922 (defining “mistakes” as situations where lower courts continue to apply overturned doctrine without realizing it).


20 Gluck, supra note 19, at 1933–34.

21 Masur & Ouellette, supra note 1, at 666.

22 The bulk of the Essay is devoted to these “mistake” scenarios rather than deliberate noncompliance.

23 The only rigorous work has come from Todd Henderson and William Hubbard. See generally Henderson & Hubbard, supra note 1.
behavior and noncompliance have gone entirely unnoticed. Some have attempted to evaluate this connection, focusing on proxies for litigation strategy and analyzing its connection to judicial decisions. But these attempts have not tested whether faulty legal rules or standards introduced in briefs lead to noncompliant decisions.

This Essay presents a preliminary study that attempts to test the Litigant Hypothesis. This endeavor is not simple—observing a correlation between faulty briefs and noncompliant decisions requires a special situation. Indeed, it would take a rule change involving an area of law where it is sufficiently simple to measure judicial compliance, and the existence of litigant briefing on the relevant legal issue.

Thankfully, such a scenario recently became available. On December 1, 2015, a set of amendments to the Federal Rules of Civil Procedure came into effect. Specifically, for our purposes, the new version of Discovery Rule 26 introduced two important, but discrete, textual changes to discovery: (1) it transplanted a series of discovery-limiting factors from Rule 26(b)(2) to 26(b)(1), providing that the scope of discovery extends only to information “proportional” to the needs of the case, and (2) it discarded a sentence that allowed discovery requests “reasonably calculated” to lead to relevant information. The amendments constituted a substantive change that cut in the direction of less discovery. Because a large percentage of cases need discovery, the rules immediately changed the civil litigation landscape. The addition of one key word and the elimination of one phrase lend themselves nicely to a textual analysis of decisions and briefs. In addition, almost a year after these changes came into effect, Judge Campbell, the chair of the committee that drafted the rules, noted in a discovery decision that “[d]espite this clear change, many courts continue to use the phrase ‘reasonably calculated’.” With that pithy note, the amendments set in place straightforward textual changes, the possibility of litigation involving those changes (with attendant briefs), and the apparent existence of judicial noncompliance.

The simplicity and transparency of this legal setting is almost tailor-made for empirical analysis. A study of noncompliant decisions and the briefs filed in those cases would elucidate whether the Litigant Hypothesis

---

24 See, e.g., Henderson & Hubbard, supra note 1, at 97–100.
has explanatory value—are faulty briefs correlated with judicial errors? Part II delineates the study parameters, but the methodology is so straightforward that it is worth briefly sketching here.

At the outset, if a discovery motion is brought after December 1, 2015, then any decisions or briefs that apply the new “proportionality” standard and do not mention the “reasonably calculated” language when describing Rule 26 can be coded as “compliant.” By contrast, any orders that apply the obsolete “reasonably calculated” language or quote the pre-proportionality rule as good law are “noncompliant.” Then, a systematic comparison of docket records, decisions, and briefs in both compliant and noncompliant cases would allow us to observe if noncompliant briefs are correlated with noncompliant decisions.

With the above approach in mind, I assembled and analyzed an original dataset of docket records, briefs, and discovery orders in a sample of 157 published discovery decisions decided in 2016—out of a universe of around 1000 published decisions. In order to fully isolate the effects of the Litigant Hypothesis, I tested competing variables based on the Labor Market and Cognitive Costs models that could also account for noncompliance in the discovery context, including: judges’ seniority, docket constraints, time since the reforms, and differential expertise (magistrate vs. district judges). While it would be too hasty to make sweeping conclusions on the basis of this analysis, the Essay presents some preliminary findings.

First, the Essay finds that judges have substantially complied with the rule—more than 93% of published discovery decisions in 2016 mentioned the new proportionality standard.28 Despite this degree of compliance, the Essay also finds that in more than seventy-one decisions, representing approximately 7% of published discovery decisions, judges used the pre-amendment standards as if no change had been made. In short, they ignored governing law and applied obsolete standards. The number of noncompliant decisions presents fertile ground to evaluate the Litigant Hypothesis.

Second, delving into 157 noncompliant and compliant decisions, the Essay finds an important correlation between judicial compliance and litigant brief compliance. A regression analysis confirms the statistically significant relationship between compliant briefs and compliant decisions and noncompliant briefs and noncompliant decisions.29 Based on this, the Essay argues that the Litigant Hypothesis may have explanatory value. But the correlation is complicated and highlights important limitations in the study. In decisions with noncompliant briefs, 89% of judges nonetheless

28 See infra Part III. The vast majority of these decisions also ignored the defunct “reasonably calculated” phrase. But around 100 decisions (<10%) continued to use this outdated phrase.

29 Id.
complied with the new standard. The fact that the vast majority of judges complied regardless of the briefs casts doubt on the validity of the Litigant Hypothesis. But the Essay also finds that a compliant brief is correlated with an increase in compliance rates from 88% to 97% of decisions (or, in other words, compliant briefs were associated with a reduction in noncompliant decisions from 12% of cases to only 3%). This indicates that briefs may have a limited effect because most judges are complying regardless—but submitting a compliant brief is associated with an increase in the probability of a compliant decision.\textsuperscript{30} It is unclear, however, whether these findings apply to other legal areas or are context-dependent (specific to discovery cases).

Third, the Essay finds that discovery decisions assigned to magistrate judges rather than district judges were more likely to be compliant. This may indicate that, for reasons discussed below, magistrate judges had greater awareness of the new rule and complied at higher rates.

The Essay proceeds as follows. Part I discusses the literature on judicial noncompliance and introduces the Litigant Hypothesis. Part II discusses recent discovery reforms and lays out the Essay's research design. Part III employs empirical methods to analyze a recent trend in Rule 26 decisions that ignore new amendments to the rule. Finally, Part IV discusses the findings and introduces future avenues of research.

I. BACKGROUND: ACCOUNTS OF JUDICIAL NONCOMPLIANCE

This Part explores the recent scholarly accounts that have developed to explain judicial noncompliance. Section I.A discusses the Labor Market account of noncompliance; Section I.B discusses the Cognitive Costs account of noncompliance; and, finally, Section I.C introduces the Litigant Hypothesis.

A. The Labor Market Account of Noncompliance

The Labor Market account of judging posits that judges respond to the same pressures as other workers. They are employed by institutions with, among other things, superiors (appellate courts), customers (litigants), and dynamic incentives (e.g., possibility of elevation to a higher court).\textsuperscript{31} Like other workers, judges express a preference for greater leisure time.\textsuperscript{32} As a result, judges are not perfect agents and instead exhibit predictable flaws in

\textsuperscript{30} Id.
\textsuperscript{31} See Posner, supra note 15, at 1.
\textsuperscript{32} Id. at 11.
their enforcement of the law that can change substantive legal outcomes.33 The Labor Market account predicts that judges may distort legal doctrines in order to maximize leisure.34 For example, Epstein, Landes, and Posner argue that leisure preferences may push a judge to limit judicial workloads by embracing “rules in lieu of standards, deferential standards of appellate review, plea bargaining, and, above all, the requirements of standing.”35 These doctrines may be antithetical to traditional conceptions of judging in the sense that the judge is not applying the doctrines because precedent mandates them. Instead, judges overuse these doctrines to limit their workload and enhance leisure time. The primary message of the labor market account is that judicial decisions are predictably “flawed” because of dynamic labor market incentives.

Evaluating this account empirically, Todd Henderson and William Hubbard have shown that district court judges have ignored wholesale a statutory command in the securities context.36 Specifically, Henderson and Hubbard found that instead of applying a specific mandate under the Private Securities Litigation Reform Act of 1995 (PSLRA)—that judges make on-the-record findings that the litigants complied with Rule 11—judges ignored the rule when lawyers did not demand compliance themselves.37 The rate of compliance was remarkably small—the authors observed “on-the-record findings regarding Rule 11 compliance in less than 14 percent of all cases.”38 Many factors influenced this overt judicial noncompliance, including (1) limited knowledge by uninformed judges who apparently were learning over time;39 (2) judicial inertia by judges who preferred to apply pre-PSLRA standards; and (3) litigant behavior.40 Henderson and Hubbard noted that “judges must dispose of hundreds of cases per year and thus cannot devote perfect attention to the legal details of any given case.”41

Ultimately, the authors concluded that judges behave like any other worker: they “learn over time, prefer leisure to labor, and respond to

34 Id.
35 Id. at 39.
36 See Henderson & Hubbard, supra note 1, at S100.
37 Id.
38 Id. at S90.
39 Adi Leibovich, Relative Judgments, 45 J. LEGAL STUD. 281, 290 (2016) (proposing a theory called “judicial learning over time,” which the author describes as a process where judges misapply sentences because they are consistently exposed to incorrect information over time).
40 Henderson & Hubbard, supra note 1, at S97.
41 Id. at S94.
incentives created by supervisors and others in their environment.” 42 In the context of the PSLRA, judges “do not routinely comply” with statutory mandates. 43

B. The Cognitive Costs Account of Noncompliance

Another line of scholarship argues that cognitive forces may influence judicial rejection of costly legal changes. 44 This model begins with the observation that when making complex decisions, bounded human rationality can litter the process with unseen biases. 45 These biases intensify when judges have limited time and information, forcing them to rely on subconscious rules of thumb. In these circumstances, judges may suffer from the shortcomings of heuristics, anchoring bias, status quo bias, and the power of habit, among other cognitive forces. 46 Many operate at a subconscious level but nonetheless influence substantive outcomes.

Take, for instance, the effects of status quo bias. Matthew Tokson and others have identified the tendency for judges to grow accustomed to doctrines they apply on a routine basis, to the point that “doing so becomes almost automatic over time.” 47 Once this process sets in motion, any changes to the doctrine—small or large—are subconsciously seen as “departures.” 48 The more familiar a doctrine is, the stronger the preference to retain it. In time, other cognitive effects may come along for the ride. For example, with justification bias, judges may convince themselves that the doctrines they are applying are fair and justifiable. 49 As a result, judges may ignore new rules or binding precedent.

In line with this reasoning, Tokson has argued that a slew of recent legal changes have produced predictable and consistent judicial resistance and reversion to overturned doctrines. 50 Indeed, Tokson makes the case that the combination of cognitive biases, including status quo and justification

42 Id. at S87.
43 Id. at S89.
44 See supra note 17.
45 See Guthrie, supra note 17, at 787; Korobkin & Ulen, supra note 17.
46 See Robert G. Bone, Who Decides? A Critical Look at Procedural Discretion, 28 CARDOZO L. REV. 1961, 1986 (2007) (citing Guthrie, supra note 17, at 787-816) (discussing the literature on bounded rationality in the context of procedure and explaining, among other things, that “anchoring bias refers to the tendency to use a known fact to anchor estimates of an unknown, and the result is that estimates tend to be lower when the anchor is lower and higher when the anchor is higher”); Korobkin & Ulen, supra note 17, at 1075 (discussing the factors that influence the unconscious use of heuristics and other cognitive biases).
47 Tokson, supra note 1, at 916.
48 Id.
49 Id.
50 See id. at 930.
biases, may result in situations where “[d]efunct doctrines, abolished and replaced by new laws, appear to rise from their graves and walk the earth again, influencing judges much as they did before being overturned.” Tokson notes that this is most likely to occur when legal changes (1) increase costs (time, effort, and cognitive workload), (2) activate a judges’ preference for familiar doctrines, and (3) operate under a low probability of appellate review.

Bert Huang has also analyzed whether increased caseloads affected the outcomes of courts of appeals cases. Focusing specifically on a flood of immigration cases into two circuits, Huang found that these swamped circuits did indeed reverse district court rulings less often in unrelated civil cases. The best explanation for this outcome, Huang argued, was that in order to manage the vast docket increase, judges were ignoring many appeals. This finding supports the Cognitive Costs model’s prediction that congested dockets might lead to higher cognitive strain and resulting error. Summing up the logic, Huang cites Judge Harry Edwards, who once quipped that “the bigger the dockets, the less time we spend on the difficult cases and the more mistakes we make.”

The Labor Market and Cognitive Costs accounts do not provide a baseline for rates of noncompliance, but they do identify influential variables and even suggest that noncompliance is commonplace. These two accounts emphasize that judicial compliance with binding precedent is influenced by dynamic incentives and cognitive forces.

C. The Litigant Hypothesis of Noncompliance

This Essay aims to supplement the Labor Market and Cognitive Costs models with an account of judicial noncompliance that highlights the possibility of flawed briefs. The fundamental premise of the Litigant Hypothesis is that litigants’ briefs are one of the most important judicial information inputs. Hence, to the extent briefs may contain errors of law, they should predictably affect the quality of judicial output.

The Litigant Hypothesis is rooted in the recognition that judges have severely limited information sources. Indeed, the asymmetry of information

---

51 Id. at 965.
52 Id. at 967.
54 Huang, supra note 10, at 1113.
inputs between the judiciary and other branches is striking. In any particular case, a federal judge is limited to information provided by the parties’ briefs, her clerk’s research, judicial conferences, continuing legal education, and the judge’s own reading of the case law or secondary sources. Courts have no independent information-gathering ability akin to congressional hearings, extensive agency fact-finding and empirical models, or support from the vast bureaucracy that underpins executive decision-making. Even more, within judges’ information portfolio, the most important sources are briefs, clerks, and the judge’s own career expertise. This dearth of information input has significant consequences. Without sound information, a judge is unlikely to arrive at a sound decision.

The Litigant Hypothesis receives support from a variety of fields. For example, as administrative law scholars have long noted, “decisions depend on the information that underpins them.” Administrative law doctrines of judicial deference are partly based on recognition that agencies have specialized information and expertise that the judiciary cannot access. Further fields like modern organizational theory emphasize not only the limits of expertise within organizations, but the central role that information processing plays in “organizational decision making.” This organizational literature, in short, stresses that “decisions ensue from narrow perspectives and distorted data.” More relevant for our purposes, in the context of procedure, Robert Bone has noted that “even if a judge is able to process information without cognitive bias, her choice of procedure is only as good as the information she receives,” especially from “the parties and their lawyers.”

These findings support the idea that in order to evaluate faults with judicial output—like the existence of noncompliance—we should focus on judges’ faulty information inputs.

With the Litigant Hypothesis’s emphasis on an information-centered model, it is easy to observe that judicial noncompliance may be an outcome of distorted data input. The mistakes that lead to noncompliance can be introduced into the judicial process in simple ways. Imagine a situation

60 Id. (citing David J. Hickson, Decision-Making at the Top of the Organization, 13 ANN. REV. SOC. 165, 171 (1987)).
61 See Bone, supra note 46, at 1990.
where a new statute or rule has been adopted in the past six months (giving the judge little time to learn about the new rule). The rule clarifies an existing doctrine that has been applied for decades. In drafting an opinion—perhaps at the motion to dismiss stage—the judge assigns one of her clerks to put together a first draft. In that process, the clerk may review the litigants’ briefs and her judge’s last opinion on the matter, especially if the question presented involves a common rule. Flawed briefs, however, may misdirect the clerk or confuse her research. The confusion may be compounded by the fact that legal databases do not indicate when a rule embedded in a prior decision has changed. If the clerk copies a segment of a prior decision that is, as a whole, good law, she may inadvertently incorporate bad law. Moreover, the clerk may base her draft on a template or excerpts of the parties’ briefs. The judge and co-clerks may then review the resulting draft opinion, but it may not undergo intense scrutiny, especially on certain questions of law. By the time of publication, the decision may include clear errors of law.

Other scholars have noted that legal drafting errors can lead to a noncompliant judge. Jonathan Masur and Lisa Larrimore Ouellette have previously addressed the prevalence of judicial mistakes in various contexts, arguing that mistakes may result because “[a] sloppy judge (or clerk) might not read an opinion in full or might not attend to all the details and circumstances surrounding a holding.”62 Indeed, Masur and Larrimore Ouellette note that “judges lack the resources to carefully consider each of their citations,” and that the parties’ briefs may actually be the source of many errors.63 Similarly, Abbe Gluck has noted that in the context of federal court citations of outdated state cases, “[t]hese citation choices are likely due to errors by law clerks or lawyers or to the tendency of courts to rely on the same (sometimes outdated) set of boilerplate precedents from case to case, and we should assume that they are unintentional.”64 These are the basic building blocks of the Litigant Hypothesis: lawyers’ errors may lead to judicial errors.65

The Litigant Hypothesis is compatible with the Labor Market and Cognitive Costs models. The core feature of the Litigant Hypothesis—that judges rely on information from lawyers that may contain inaccuracies—even assumes the existence of other Labor Market and Cognitive constraints. While the Litigant Hypothesis is not a competing account of judicial

62 Masur & Ouellette, supra note 1, at 664.
63 Id. at 665.
64 Gluck, supra note 20, at 1933–34.
65 The litigants’ motivations may also be important here. With certain rule changes, one side may be motivated to misstate the law.
behavior, it does emphasize a different source of errors that may influence noncompliance. The models of noncompliance outlined above and the Litigant Hypothesis produce a set of variables that may be predictive of or correlated with noncompliance, including the following:

1. **Time and Docket Constraints**: Under the Cognitive Costs model, noncompliance may result from overloaded dockets because heuristics and cognitive errors are particularly salient when judges are overworked and underfunded.

2. **Learning Curve**: Under the Labor Market model, we should expect judges to take their time to “learn” about rule changes. Noncompliance may therefore be a consequence of this learning process.

3. **The Quality of Litigants’ Briefs**: Under the Litigant Hypothesis, the quality of the briefs may influence judicial compliance with statutory mandates or rule changes.

4. **Appellate Oversight**: Both the Labor Market and Cognitive Costs models emphasize the disciplinary role of appellate oversight. Judges have reputational and employment incentives to avoid reversal. Noncompliance may therefore result in the absence of appellate oversight.

5. **Judicial Characteristics**: Both the Labor Market and Cognitive Costs models also highlight the importance of other judicial characteristics like seniority status and length of tenure. Senior judges are more likely to seek leisure time and may comply less with recent legal changes.

With this set of working variables, it is easy to see how an empirical test could improve our understanding of these models. In order to isolate the effects of briefs, however, an analysis has to account for the effect of the other four variables described above.

II. **RESEARCH DESIGN: DISCOVERY AND JUDICIAL NONCOMPLIANCE**

This Part outlines the research design, dataset, and methodology for testing the Litigant Hypothesis in the discovery context. In order to evaluate the possible correlation between faulty briefs and noncompliant decisions—evidence for the Litigant Hypothesis—we would need a situation that satisfies the following: (1) a rule change involving an area of law where it is sufficiently straightforward to measure judicial compliance; and (2) litigant briefing on the relevant legal issue. Fortunately, recent changes to discovery rules provide a good test case.
A. Background: Discovery Reform

Federal Rule of Civil Procedure 26 directly addresses the substantive scope of discovery in a civil case. For years, the definition of relevance for discovery purposes included requests “reasonably calculated to lead to the discovery of admissible evidence.” 66 In 2015, however, the Civil Rules’ Advisory Committee published amendments to Rule 26 that altered this language. First, the amendments redefined the scope of discovery to cover the following: “Parties may obtain discovery regarding any nonprivileged matter that is relevant to any parties’ claim or defense and proportional to the needs of the case.” 67 In short, the alteration transplanted a proportionality analysis that was located in a different part of the rule with the goal of constraining the reach of discovery requests. Notably, the amendment also deleted any mention of the “reasonably calculated” relevance language. The Committee Notes explain the deletion:

The former provision for discovery of relevant but inadmissible information that appears “reasonably calculated to lead to the discovery of admissible evidence” is also deleted. The phrase has been used by some, incorrectly, to define the scope of discovery . . . . The “reasonably calculated” phrase has continued to create problems, however, and is removed by these amendments. 68

The amendments as a whole cut in the direction of less discovery. This change became binding on federal courts per the Rules Enabling Act (REA) on December 1, 2015. The REA prescribes that any conflicting rules “shall be of no further force or effect after such rules have taken effect.” 69 Specifically, 28 U.S.C. § 2074(a) provides that any amendments to the rules apply to proceedings commenced after December 1, 2015, and proceedings then pending “as of just and practicable.” 70 The binding nature of the new rules is crucial for the entire analysis.

One caveat is important in this context. I am assuming for the purposes of this Essay that if a judge makes no finding that applying the new rule is impractical or unjust, then she must apply it. If this assumption is correct, then any discovery decision that applies the old rule without making such a finding is therefore noncompliant. 71

67 FED. R. CIV. P. 26 (emphasis added).
71 One possible concern is that in some of these decisions, the judge may have applied the old rules because the cases were filed prior to December 1, 2015. That is unlikely for three reasons. First, cases
With these premises in place, the discovery changes have the ingredients necessary for a successful empirical analysis. While in many areas of law, the existence of judicial compliance is subjective, in the Rule 26 context, it is closer to an objective standard: judges are obligated to apply the new rule. The final element of the analysis came into place when Judge Campbell—the chair of the Advisory Committee that drafted the rule amendments—mentioned in a 2016 decision that judges were ignoring the rule changes. 72

With the possible existence of this scenario in mind, I conducted targeted searches in Westlaw for discovery decisions in the past five years. My main goal was to look for the existence of “noncompliant” decisions in 2016. As mentioned above, testing for compliance in this context is relatively straightforward: for post-December 1, 2015 discovery motions, any decisions or orders that apply the new proportionality standard and do not mention the “reasonably calculated” language when describing Rule 26 can be coded as “compliant.” On the other hand, any orders that apply the “reasonably calculated” language or cite the pre-proportionality rule as good law can be coded as “noncompliant.” My initial findings using this rudimentary coding system and searches on Westlaw were surprising. Contrary to the most pessimistic expectations of judicial behavior, there has been substantial compliance with the new rule language.

Figure 1 below shows a significant decline in the number of published decisions citing the “reasonably calculated” language without any mention of proportionality from an average of 963 a year for the past five years to around 151 in 2016. 73

filed prior to the amendments’ effective date are considered “pending” and should still abide by the new rule unless the judge finds it unjust and impracticable. Supreme Court of the United States, Order Regarding Amendments to the Federal Rules of Civil Procedure (Apr. 29, 2015). Thus, any noncompliant judge should have found that it would be unjust to apply the new rules to an ongoing case. Cf. Stinson v. City of New York, No. 10 CIV. 4228 (RWS), 2016 WL 54684 (S.D.N.Y. Jan. 5, 2016) (explicitly finding that it would be unjust to apply the new rules). I confirmed that none of the noncompliant decisions contained such a finding. Second, judges usually apply rule amendments to pending cases. Cf. Matthew Enter., Inc. v. Chrysler Grp. LLC, No. 13-CV-04236-BLF, 2015 WL 8482256, at *1 (N.D. Cal. Dec. 10, 2015) (noting that “courts have held that it is ‘just and practicable’ to apply the new rules in all cases as soon as they are promulgated”). Third, limiting the dataset to cases filed after December 1, 2015 still leaves seventeen cases with the same characteristics as in the wider universe. 72 In re Bard IVC Filters Prod. Liab. Litig., 317 F.R.D. 562, 564 (D. Ariz. 2016).

73 I arrived at this number by conducting broad searches on Westlaw for any mentions of the reasonably calculated language. I used the following search terms: adv: discovery /p “reasonably calculated” % propor!. My search is likely both underinclusive and overinclusive.
It is unclear whether this level of compliance is high as compared to other areas of law. But there are reasons to suspect that compliance is artificially inflated in this context. First, my initial searches measure only superficial compliance with the rule—the mere mention of the new Rule 26 standard without the deleted language is sufficient to be compliant using this methodology. This measure is likely overinclusive because it includes decisions where judges recited the new rule but otherwise applied the previous discovery framework. Second, these searches only account for Westlaw-published decisions. One empirical study indicates that the vast majority of discovery orders are released without an explanatory decision.74 Bench orders—which are left out of this analysis—may have higher rates of noncompliance because the judge and clerk may not have conducted thorough legal research.

In any case, these searches left the possibility that in a large number of decisions, courts were still applying obsolete language—a paradigmatic example of judicial noncompliance.

B. Dataset: Compliant and Noncompliant Decisions/Briefs

In order to assemble the dataset, I first conducted targeted search terms for 2016 published decisions that mentioned the outdated “reasonably calculated” language and left out any mention of “proportionality” in the context of discovery. As previously mentioned, whether a case references these three words determines compliance and noncompliance. After hand-coding the results, the dataset contained over 100 noncompliant decisions. Reviewing all of these decisions, I confirmed that the decisions failed to acknowledge the amendments and cited the defunct standards as if no changes had been made. Based on the docket numbers in each decision, I then collected a dataset of Public Access to Court Electronic Records (PACER), including a complete, text-searchable set of docket records, briefs, and discovery orders for these cases. After reviewing more than 100 decisions, motions, and sets of briefs, I eliminated those where a motion was filed prior to December 1, 2015, where there were a high number of discovery motions around the time the new standard came into effect, and where the discovery language was used only in reference to the previous rule (and not applied to the case at hand). Limiting the dataset this way left me with a total of seventy-one noncompliant decisions and its attendant set of briefs (usually three).

The remaining number of decisions continuing to cite outdated language was lower than expected but still provided a solid opportunity to analyze the Litigant Hypothesis. Again, in each of these seventy-one decisions since December 1, 2015—when the new rule came into effect—courts have continued to employ the now-defunct “reasonably calculated” phrase and have failed to mention the new proportionality language. In other words, in each of these decisions, courts applied the wrong standard and overtly failed to comply with the Rule 26 amendments. The degree of noncompliance varies. In some cases, courts cited the defunct language of

---

76 Docket records are directly available via Bloomberg Law, allowing targeted searches for specific case dockets.
Rule 26 in direct quotes;\textsuperscript{77} in others, the court cited prior decisions that had themselves cited the defunct “reasonably calculated” phrase.\textsuperscript{78}

In order to test the Litigant Hypothesis, I also assembled a set of compliant decisions and briefs as a comparison group. Starting from a universe of around 1000 possible compliant decisions,\textsuperscript{79} I collected a random sample of briefs submitted in eighty-six compliant decisions where the judge correctly applied the proportionality standards and did not use the “reasonably calculated” language.\textsuperscript{80}

As described further below, this data-gathering process left me with 157 decisions—seventy-one noncompliant and eighty-six compliant decisions—and the attendant briefs (over 300). I then coded these briefs by compliance: if any set of briefs related to a motion mentioned the new rule, I coded them as “compliant”; any set of briefs that mentioned the old rule only or no rule at all were coded as noncompliant. I used this coding system because I was most interested in whether the litigants alerted the judge of a rule change. As a final step, I gathered information about the relevant judges (seniority, magistrate/district, docket loads, etc.).\textsuperscript{81}

In sum, the analysis below is based on a dataset of (1) seventy-one noncompliant decisions; (2) eighty-six compliant decisions; (3) the briefs filed in all 157 cases; and (4) judge-specific data.

III. RESULTS

This Part develops and tests a series of empirical predictions based on the dataset and working variables outlined above. I first offer overall results before explaining each variable in turn.

A. Overall Results

Table 1 below presents the results of a series of logistic regressions that test the effect of the following variables on judicial compliance: whether a litigant briefed the (1) new rule or the (2) old rule; (3) magistrate vs. district


\textsuperscript{79} Search terms: discovery/p proport! /p 26 (1/1/2016-12/31/2016). Although the original results are closer to 1116, many of these decisions are unrelated to discovery or use the “reasonably calculated” language.

\textsuperscript{80} This collection was done through general search terms in Westlaw.

\textsuperscript{81} At least twenty-eight judges in both the compliant and noncompliant cases appeared multiple times in the datasets.
judges; (4) length of time between the reforms and the decision; (5) length of time between the discovery motion and the decision; (6) docket load of district judge; and (7) seniority of district judge. This Essay analyzes each of these variables below, but I present the regression results first in order to frame the entire analysis. For ease of interpretation, Table 1 presents logit coefficients and marginal effects.82

Table 1 indicates that two factors are correlated with judicial compliance: (1) whether litigants briefed the new or old rule; and (2) whether a magistrate or district judge decided the case.83

Prior to exploring these results, a few clarifications and limitations are in order. First, the analysis relies on lopsided samples of compliant and noncompliant decisions. While I analyzed as many noncompliant decisions as I could find (seventy-one), I compared them only to a sample of the compliant universe (eighty-six out of 1000). The weighted nature of these samples may have an effect on the standard error of the regressions. But the odds that the statistical significance results are explained by the lopsidedness are small. Second, in order to fully understand the magnitude of the effect, I report summary statistics below. Finally, while I attempted to control for other variables discussed in the literature, I cannot rule out the possibility of unobservable confounding variables that may bias the results.

B. The Litigant Hypothesis

As discussed above, the Litigant Hypothesis assumes that judges rely extensively on the lawyers’ briefs and are, in many ways, mere deciders between two propositions proposed by the parties. Hence, mistakes in the briefs should be reflected as mistakes in judicial decisions. If the Litigant Hypothesis is right, the following predictions follow:

Prediction: Compliant briefs should be positively correlated with compliant decisions and negatively correlated with noncompliant decisions.

Prediction: Noncompliant briefs should be positively correlated with noncompliant decisions and negatively correlated with compliant decisions.

In other words, brief compliance should be correlated with judicial compliance. By contrast, if the Litigant Hypothesis is wrong, then errant briefs have little to no correlation with judicial compliance.

82 As a robustness check, I also ran the regressions on a different sample of cases.
83 In running the regression, I was interested in the independent effect of citing the old rule. Table 1 thus presents results under “Old Rule” for any cases that cited the old rule, even if they also cited the new rule. But in most of these cases, the old rule is not cited to show that the discovery rules have been updated. Rather, it is cited as good law by at least one of the briefs.
Table 1: Logit Regression Results, All Variables

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief New Rule</td>
<td>1.339**</td>
<td>1.392**</td>
<td>1.462**</td>
<td>1.324**</td>
<td>1.340**</td>
<td>2.174*</td>
<td>2.556**</td>
<td>1.502**</td>
</tr>
<tr>
<td></td>
<td>[0.339]</td>
<td>[0.350]</td>
<td>[0.353]</td>
<td>[0.343]</td>
<td>[0.339]</td>
<td>[0.892]</td>
<td>[0.871]</td>
<td>[0.368]</td>
</tr>
<tr>
<td></td>
<td>(0.32)</td>
<td>(0.32)</td>
<td>(0.33)</td>
<td>(0.31)</td>
<td>(0.32)</td>
<td>(0.44)</td>
<td>(0.48)</td>
<td>(0.32)</td>
</tr>
<tr>
<td>Brief Old Rule</td>
<td>1.017*</td>
<td>1.132*</td>
<td>-0.905**</td>
<td>-0.806*</td>
<td>-0.806*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.424]</td>
<td>[0.444]</td>
<td>[0.351]</td>
<td>[0.365]</td>
<td>[0.365]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.22)</td>
<td>(0.23)</td>
<td>(-0.20)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magistrate Judge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Since Reforms</td>
<td>0.003</td>
<td>0.004</td>
<td>0.003</td>
<td>0.001</td>
<td>0.004</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>[0.002]</td>
<td>[0.002]</td>
<td>[0.004]</td>
<td>[0.004]</td>
<td>[0.004]</td>
<td>[0.000]</td>
<td>[0.000]</td>
<td>[0.000]</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Time Since Motion (short term)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Docket Load of District Judge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seniority of District Judge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Standard errors in brackets. Marginal effects in parentheses.

* Significant at the 5% Level.

** Significant at the 1% Level.

†Smaller N accounts for district judges only (and not magistrate judges). See infra Section III.C.

Another important point here is that the rule constrains the reach of discovery. That means that one side—the side responding to a broad discovery request—will always be incentivized to mention the new rule.

---

84 One limitation in the data is that I only sampled 157 decisions out of a universe of around 1071. This, of course, limits the validity of the conclusions. Moreover, Models 6 and 7 draw only from the smaller sample of district judges because most decisions in this context came from magistrate judges. See infra Section III.C.
There is therefore no reason to believe that noncompliant parties could merely be agreeing to litigate under the auspices of the outdated Rule 26.

In order to test the predictions of the Litigant Hypothesis, I reviewed by hand the briefing in the 157 cases in my dataset. I focused on whether any of the briefs—including those submitted by petitioners and respondents—referred to the new or old rules. Specifically, I divided them into two categories: (1) briefs that cited the new rule; and (2) briefs that did not cite the new rule at all (consisting of briefs that either cited the old rule only or no rule at all).  

Table 2 summarizes these findings and details the distribution of brief compliance within each subset.

<table>
<thead>
<tr>
<th>Briefs Cited New Rule</th>
<th>Briefs Cited Only Old Rule or No Rule at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliant Decisions</td>
<td>67%</td>
</tr>
<tr>
<td>Noncompliant Decisions</td>
<td>35%</td>
</tr>
</tbody>
</table>

At first blush, “eyeballing” the percentages of litigant citation to the rule indicates an important difference. In compliant decisions, approximately 67% of all briefs mentioned the new rule. By contrast, only around 35% of briefs alerted noncompliant judges of a rule change. Models 1–8 in Table 1 indicate that the effect of briefs citing the new rule on compliance is statistically significant. To simplify, the presence of a compliant brief is associated with a 32% increase in the probability of a compliant opinion on average. Lawyer citations to the old rule also increased the odds of noncompliance. This supports the Litigant Hypothesis and suggests an important correlation.

But the data tell a complex story. In a substantial number of compliant decisions (33%), the briefs failed to mention the new rule, but the judges nonetheless complied. Extrapolating from this sample to the universe of 1000 compliant decisions, that means at least 333 decisions were associated with noncompliant briefs. Adding this absolute number of noncompliant briefs to the forty-six noncompliant briefs in the noncompliant decision dataset produces a total of 379 noncompliant briefs out of the 1071 decisions. Operating under certain assumptions, in that universe of noncompliant

---

85 Citing two rules is possible because briefs can cite the new proportionality rule but then define relevance by reference to the extinct “reasonably calculated” language.

86 These numbers could be further broken down by, for example, cases where the parties cited no rule at all or cases where the parties cited both rules.

87 Of course, this is based on the assumption that the distribution for the universe of compliant cases directly mirrors the distribution for the sample of compliant cases. Since I randomly selected the cases, there is no reason to think the sample would be systematically different than the universe. However, there
briefs, 88% of judges nonetheless complied.\textsuperscript{88} That judges complied \textit{despite} errant lawyering emphasizes that most judges are independently aware of the new rule. On the other hand, the effect of the Litigant Hypothesis is still detectable. In decisions involving compliant briefs, compliance rates increased from 88% to 97%\textsuperscript{89} of judges and noncompliance decreased from 12% of decisions to only 3%. These numbers lead to the following conclusion:

\textbf{Conclusion:} Most judges are complying independent of the briefs, but a compliant brief is nonetheless associated with a marked increase in compliance (and decrease in noncompliance).

Moreover, the data highlights two other interesting results. First, there are a few cases (twenty-five) where the briefs correctly identified the new rule, but the judge nonetheless applied the prior standard. This suggests that the briefs did not matter at all to these noncompliant judges. These judges may have relied on prior orders or archived research as templates.

Second, in at least 25% of all cases, the briefs cited both the new and old rules. This suggests substantial litigant confusion over the changes. As mentioned above, most of the cases in this category involved briefs that cited the new proportionality rule but then continued to define relevance by reference to the outdated “reasonably calculated” language. I coded these briefs as “citing the new rule” because I was ultimately concerned with whether the litigants alerted the judge to the rule change.\textsuperscript{90} But this confusion between the new and old versions of the rule affected judges too. Out of the seventy-one noncompliant decisions in my dataset, a sizable number of them involved decisions that cited the “reasonably calculated” language as if it were still in effect. But most judges in cases that briefed both rules ultimately complied with the new standard.

In sum, the Litigant Hypothesis seems to have explanatory value. A compliant brief is associated with an increase in the probability of a compliant decision. But the analysis has important limitations. For example, it does not account for the possibility that the judges were informed of the new rules during a hearing. Moreover, the difference in brief quality does not \textit{entirely} explain the different results. Other factors may influence these decisions.

\textit{is, of course, some uncertainty in this estimate that I leave out of the calculation for purposes of this Essay.}
\textsuperscript{88} The 379 noncompliant briefs were associated with 333 compliant decisions.
\textsuperscript{89} The 621 compliant briefs were associated with 600 compliant decisions.
\textsuperscript{90} Note that many of these briefs that cited the new rule are also included in the “Old Rule” category if they did, in fact, also cite the old rule.
C. Judicial Characteristics: Magistrate vs. District Judge

The role of magistrate judges as compared to district court judges could also be relevant in this context. These two types of judges face widely divergent incentives. First, magistrate judges are creatures of Article I legislation. Although the office has taken on many responsibilities, supervision of discovery remains one of its core tasks. Unlike district judges, the overwhelming majority of the 573 current magistrate judges are appointed for “8-year, renewable terms of office.” Because magistrate judges are not life-tenured, they may be more proactive than district judges in an effort to earn reappointment or promotion.

Second, district judges can reverse or set aside magistrate judge discovery decisions. This means that magistrate judges face the possibility of appellate review. By contrast, district judge discovery decisions generally cannot be appealed because they are interlocutory and nondispositive. To the extent that a discovery decision is appealed after final disposition, it may not be found to be outcome-determinative. The result is that discovery decisions are often de facto not appealable. As Tokson as well as Henderson and Hubbard have argued, the presence of appellate oversight may induce greater compliance with rules.

Finally, magistrate judges are consummate experts in discovery proceedings. In 2015, magistrate judges dealt with over 100,000 nondispositive motions, 55,600 pretrial conferences, and over 10,000 motion

---

91 Christopher R. Drahozal, Judicial Incentives and the Appeals Process, 51 SMU L. REV. 469, 470 (1998) (“Because the institutional characteristics of courts at different tiers of the court system vary, the incentives of judges at the different tiers vary as well.”).
94 Id. at 7.
95 Fed. R. Civ. P. 72 (authorizing district judges to review dispositive and nondispositive matters decided by a magistrate judge).
96 28 U.S.C. § 1291 (2012); see also, e.g., Nicholas v. Wyndham Int’l, Inc., 373 F.3d 537, 541 (4th Cir. 2004) (“Discovery orders are ‘inherently interlocutory’ and typically not appealable.”).
97 8 Charles Alan Wright, Arthur R. Miller & Richard L. Marcus, Federal Practice and Procedure § 2006 (3d ed. 2010) (“A discovery order can always be reviewed on appeal from a final judgment in the case, even though it is often difficult at that stage to show that the party has been prejudiced by the order, or that the question is not moot, and the harmless-error doctrine, together with the broad discretion the discovery rules vest in the trial court, will bar reversal save under very unusual circumstances.”).
98 See Tokson, supra note 1, at 951; Henderson & Hubbard, supra note 1, at S96.
hearings.99 While district court judges also handle discovery matters, their dockets are more diverse and, in their view, pretrial matters and nondispositive motions may be the least interesting or stimulating part of the job. Therefore, we might expect greater discovery expertise from magistrate judges or at least a much faster learning curve.

The combination of appellate oversight, exposure and expertise, and reappointment/promotion suggests that magistrate judges should comply with the new rule more often than district court judges.

In order to test for the differences between the two types of judges, I coded for whether the decisions in the dataset—including compliant and noncompliant—were decided by magistrate or district judges. After this first step, I was left with 77% of the decisions decided by magistrates and the rest by district judges.100 I then analyzed what percentage of each subset (magistrate vs. district) were compliant and noncompliant. Table 4 below summarizes the relevant data.

<table>
<thead>
<tr>
<th>Table 4: Comparison of Magistrate and District Judges</th>
</tr>
</thead>
<tbody>
<tr>
<td>[</td>
</tr>
<tr>
<td>[94%</td>
</tr>
<tr>
<td>[89%</td>
</tr>
</tbody>
</table>

Magistrate judges complied with the discovery changes in 94% of their decisions, while district judges complied in only 89%. Models 3 and 8 of the regression analysis detailed in Table 1 indicate that this difference is statistically significant controlling for which rule is cited. The magistrate/district judge difference is important and suggests that expertise and appellate review, among other things, are associated with an increased rate of judicial compliance.

D. Time and Docket Constraints

Another possible account for noncompliance is that judges and their clerks do not have the time or the resources to account for recent legal changes, especially subtle changes to federal rules. Time and resource constraints may introduce mistakes into the process.

100 As explained in further detail in Section III.A, supra, I arrived at these numbers by extrapolating from the sample of eighty-six compliant decisions to the universe of compliant decisions. I then added the extrapolated number to the number of noncompliant decisions (where I looked at the universe of decisions).
It is by now well-known that the federal judiciary has faced difficulties with expanding dockets. Emphasizing this point, a recent report on judicial case management by Judge Edward A. Infante noted that judicial resources have not “kept pace with the massive expansion of litigation” over the past few years. This may give judges less time to devote to each case, leading to reliance on heuristics, litigant briefs, and previous cases rather than new research.

Regardless of general time constraints, these concerns have particular bite in the context of motion practice where disputes are resolved relatively quickly. Judges with congested dockets may have less time to devote to motions and may therefore get decisions wrong more often. The number of cases in a judicial docket should therefore be correlated with the quality of judicial services. More concretely, one possible prediction is that noncompliant judges may have more congested dockets—and therefore less time per case—than compliant judges.

In order to test for this possibility, I leveraged a federal database that tracks docket congestion for all district judges (and not magistrate judges). The Transactional Records Access Clearinghouse gathers judge-specific data on the civil and criminal dockets of Article III judges. Using this database, I specifically looked at three data points as related to the district judges in my noncompliance sets: (1) the number of all cases pending in front of the judge; (2) the new number of cases assigned to that judge in 2016; and (3) the new number of cases assigned to the judge in 2016 as compared to the average in the judge’s district. All three data points should indicate whether the average noncompliant district judge had unusually congested dockets. I included in Model 6 of the regression only data point (2): the new number of cases assigned to that judge last year. Table 5 below provides summary statistics, indicating the averages for all compliant and noncompliant district court judges in my datasets.

---


102 TRAC REPORTS, Civil Cases in District Court (Through September 2016), JUDGE INFORMATION CENTER, http://tracfed.syr.edu/judges/interp/civjdglist.html?tracdecor=1 [https://perma.cc/58B5-DBEN]. Magistrate judges are not Article III judges and are therefore not included here.
TABLE 5: MID-2016 CASELOADS FOR COMPLIANT AND NONCOMPLIANT JUDGES

<table>
<thead>
<tr>
<th></th>
<th>Compliant Judges</th>
<th>Noncompliant Judges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases Pending</td>
<td>265</td>
<td>205</td>
</tr>
<tr>
<td>New Cases (2016)</td>
<td>267</td>
<td>241</td>
</tr>
<tr>
<td>Compared to District</td>
<td>-4.23%</td>
<td>0.78%</td>
</tr>
</tbody>
</table>

Although there are noticeable disparities, they point in different directions. The average compliant judge actually has significantly more, not fewer, new and pending cases in their docket. But they do indeed have fewer new cases than the average judge in their district. Model 6 in Table 1, however, indicates that this disparity is not statistically significant. As a whole, these docket differences likely do not account for compliance rates.

E. Knowledge Constraints: Learning Curve

A fourth possible account is oriented around judges’ learning curve. As Henderson and Hubbard describe, under the Labor Market model, one would expect judges to take their time to “learn” about the rules. Compliance should steadily increase as knowledge of the Rule 26 amendments disseminates. 103

In order to test the learning account, I ran a regression (Model 4) using the number of days since the amendments were adopted as a continuous variable. Table 1 indicates no significant relationship. In order to analyze the learning curve from a different angle, I also reviewed the number of noncompliant decisions per trimester in 2016. If the learning account is right, the number of decisions that wrongly quote the defunct language should decrease over the year. While the number of noncompliant decisions has indeed decreased over the year, the change is not significant. It therefore seems unlikely that time since adoption is an important explanation in this context.

F. Judicial Characteristics: Years on the Bench

One last possible source of disparity in compliance is judicial seniority. Habit and status quo bias likely fortify with length of judicial tenure. As Henderson and Hubbard note, senior status may be a good “proxy for diminished incentive or ability to exert effort to learn” new rules and may be positively correlated with noncompliance. 104 One limitation of testing length of tenure here is that we can only look at the minority of judges who are not

---

103 Of course, this prediction only makes sense because there was a consistent distribution of all discovery decisions throughout the year. I manually eliminated cases that had a motion pending prior to December 1.

104 See Henderson & Hubbard, supra note 1, at §94.
magistrates. Below is the average number of years on the bench for compliant and noncompliant district judges.

**TABLE 6. JUDICIAL TENURE OF DISTRICT JUDGES**

<table>
<thead>
<tr>
<th></th>
<th>Compliant Judges</th>
<th>Noncompliant Judges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. Number of Years on the Bench</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>&gt; 5 Years</td>
<td>71%</td>
<td>89%</td>
</tr>
<tr>
<td>&gt; 15 Years</td>
<td>57%</td>
<td>39%</td>
</tr>
</tbody>
</table>

The data does not seem to support a seniority explanation. Not only are the means almost the same, Model 7 of Table 1 indicates no statistically significant correlation. Indeed, the largest discrepancy—a much higher percentage of compliant judges who have been on the bench for more than fifteen years—seems to support the opposite conclusion: more experienced judges get it right more often. Although the sample size is small because it lacks magistrate information, the measure is essentially uncorrelated.

**IV. DISCUSSION: LOW-INFORMATION JUDGING?**

As a whole, the Litigant Hypothesis and magistrate/district judge distinction receive support from the data and highlight a possible avenue for judicial noncompliance with statutes and rules. One important limitation of the study is clear: the results are restricted by the fact that most judges are complying with the new discovery standards regardless of briefs. Indeed, the more than 93% compliance rates in published discovery decisions is impressive compared with Henderson and Hubbard’s less than 14% compliance rates in securities cases.\(^{105}\)

Although the Litigant Hypothesis receives support in the data, the analysis suggests there may be a broader problem with *faulty information inputs*. We may call this phenomenon “low-information judging” because noncompliance results when judges have flawed information sources about legal changes. This may explain *why* judges fail to comply with some rules or statutes. Two major findings described above support this: (1) magistrate judges—who are discovery specialists—comply at higher rates, which may imply a connection between expertise and compliance; and (2) compliant

---

\(^{105}\) *Id.* at S90. There are many likely explanations for this disparity. As an initial matter, discovery is a gateway that all civil cases must go through before reaching summary judgment or post-discovery settlement. That is not the case for Rule 11 findings that are merely an added gloss in any single case. Moreover, the rule that Henderson & Hubbard discuss is not relevant to case outcomes. Again, it is just a procedural nicety. Discovery, on the other hand, can have an outsized effect on litigation costs and outcomes.
briefs are positively correlated with compliant decisions. In addition, among the only other sources of information for judges (outside of continuing legal education or conferences) are judicial clerks. This realization has significant consequences. Clerks may also make mistakes in their legal research, resulting in a low-information judge.

While this model emphasizes that low-information judges are starved of appropriate epistemic input, these features are not sufficient alone. They compound already existing problems. The Labor Market account correctly emphasizes the predictable “flaws” that may be introduced into judging. It expects judges set in their ways, as well as leisure-maximizing judges who do not conduct their own research. These different judging styles may stem from many sources, including the judges’ own leisure preferences. Cognitive theories, on the other hand, correctly focus on the limits of rationality that may influence decisions, including status quo bias. This may explain why some judges who faced briefs with the new rules nonetheless applied the old rule.

There are various qualifications to my analysis that point to future avenues of research. As an initial matter, the upshot of the findings is that judges are complying at impressive rates and much more than lawyers. This judge–lawyer disparity is puzzling. Perhaps lawyers are strategically briefing the wrong rules or rely on boilerplate discovery motions even more than judges do. Moreover, the Rule 26 example indicates that low-information judging may apply with particular force in the realm of procedure. As explained above, when judges are overworked and underfunded, the resulting pressures on time and information compound the need for heuristics. Such cognitive quirks apply mostly in areas of routinization, like procedural issues. 106 Indeed, if judges are attracted to the familiar and weighed down by habit, nothing is more routine than procedural doctrines that apply in every case. It is precisely in these circumstances of routinization that status quo bias is at its strongest. 107 This may mean, however, that the Litigant Hypothesis findings presented in this study are context-dependent. 108

In this context, there may be normative reasons to be less concerned with judicial noncompliance. Applying defunct precedent merely returns the litigants to the pre-amendment equilibrium, which may be inferior but nonetheless effective. In the Rule 26 amendment described above, some

106 Bone, supra note 46, at 1988–89 (explaining how cognitive bias could influence procedural decisions).
107 See id. A possible omitted variable is ideology. I leave to a future study the possibility that the ideology of the judge (conservative or liberal) is a relevant variable in procedural decisions.
108 I leave it to other studies to determine whether this is true or not.
courts have failed to apply the proportionality standard, but this has meant a mere return to the pre-December 2015 standard. Although clearly at odds with the new rules, that standard is at least easy to apply and well-known by litigants. In addition, if the Litigant Hypothesis is correct, then the only parties negatively affected suffer from a self-inflicted wound.\textsuperscript{109} It is litigants who should improve, especially when it comes to learning about rule changes.

Any quick fixes to the problem of judicial reliance on briefs seem unrealistic. Possible avenues of reform, like instituting continuing judicial education requirements or increasing the number of federal judges or clerks, would be costly and politically unachievable. Other steps might be easier to apply, such as imposing mandatory continuing legal education for clerks. But there is little reason to think that mistakes can be fully stamped out of judging. At most, we should urge judges and clerks to engage in original research whenever possible and to cease blind reliance on a judges’ prior on-point opinions. Another more direct avenue of reform would be to threaten lawyers with sanctions or adverse inferences when they fail to cite new standards. This approach was recently proposed by Magistrate Judge Peck of the Southern District of New York, who berated attorneys in a case for failing to adjust discovery responses to the new standards.\textsuperscript{110} Beyond this type of solution, however, other attempts to improve information inputs are unlikely to gather sufficient support.

\textbf{CONCLUSION}

This study is not designed to provide definitive answers on the Litigant Hypothesis; its aim has been to present an initial round of findings that indicate that litigants’ briefs may be correlated with levels of judicial compliance. Moreover, the study also indicates that magistrate judges seem to be better informed about discovery changes than district judges. This Essay’s support for the Litigant Hypothesis is a contribution to the wider phenomenon of judicial noncompliance and points to future avenues of research in areas with higher rates of noncompliance.

\textsuperscript{109} It is also possible that parties who do not brief the new rule waive its benefits.

\textsuperscript{110} Tera Brostoff, \textit{Learn Rule 34 Updates or Face Consequences, Judge Peck Says}, BLOOMBERG BNA (Mar. 16, 2017), https://www.bna.com/learn-rule-34-n57982085300 [https://perma.cc/B7QT-3DPU].