

The Hollowed Out Common Law

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April 20, 2020

Abstract:

The electronic marketplace poses novel issues for contract law. Contracts created through browsewrap, clickwrap, and shrinkwrap (contracts whose embedded terms are only available after purchase) poorly fit doctrines that emerged from face-to-face offer and acceptance, the mutual execution of a common set of documents, or the rituals of mass market transactions involving physical fine print. Not surprisingly, these contracts of the new electronic marketplace require doctrinal elaboration.

Our Article asks not about the specific resolution of new doctrinal challenges, but about how the common law of contracts will be elaborated. Specifically, the Article begins with empirical observations about the domain of all electronic and shrinkwrap contract cases and makes four critical findings.

First, we document two shifts: One arises from a steady decline in the number of cases adjudicated in state court relative to federal courts, which by 2015 adjudicate the vast majority of cases in this area. The other stems from a rise in class actions, which is intimately tied to the migration of cases to federal court. The result is that today the vast majority of cases are class actions brought in federal court. The increase in class actions is not surprising given the relatively small stakes of most transactions and the little incentive that creates for individual consumer litigation. We hypothesize that the increased dominance of the federal forum is in part likely a reflection of the federalization of class action law under the Class Action Fairness Act (CAFA).

*Second, the consequence of the dominance of the federal forum is that the common law is being elaborated in federal court in suits arising under diversity jurisdiction. In turn, those federal courts are largely bereft of any state law moorings as they develop the common law of the electronic marketplace. *Erie Railroad v. Tompkins* notwithstanding, the common law is driven by federal court decisions, building incrementally on each other rather than state law.*

Third, the development of common law in federal court means that there is no apex court that can define conclusively the law of any jurisdiction. Diversity jurisdiction allows federal courts to predict how they believe state common law would develop, but binds no state courts in the affected jurisdiction, and does not even bind federal courts in the same Circuit putatively applying the law of another state. Rather than the law resolving hierarchically, we identify a “tournament effect” in which the law settles on one or a few influential decisions, regardless of the state law that the case may have arisen under.

Finally, we conjecture that the use of contractual clauses compelling arbitration and forbidding claim aggregation may have affected the number of cases being adjudicated in court and, consequently, depressed the development of publicly-available law in this area.

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I. Introduction

We begin with a puzzle from the application of the modern law of contracts to the technology of today. Not surprisingly, the law of exchange derived from a world of identifiable sellers and buyers engaging directly in a commercial market does not precisely fit the anonymous transactions of the electronic age. This is hardly a novel insight, and our concern is not so much the particular resolution of the ensuing problems of contract law, but the process by which the common law is evolving to address the issue. More specifically, our concern is how one identifies what exactly constitutes the common law governing modern commercial transactions conducted in the new electronic marketplace. The problem of how offer and acceptance are manifested is today quite distant from the older world of a handshake signaling the meeting of the minds, or the contemporaneous in-person signing of a binding written instrument. Under the terms of UCC section 2-206(1)(a),³ the issues of offer and acceptance are basically kicked down the road and relegated to the rule of custom, such that “an offer to make a contract shall be construed as inviting acceptance in any manner and by any medium reasonable in the circumstances.” For purposes of this Article, the inquiry concerns how that common law understanding can be filled in.

Consider a typical problem of the electronic age, *ProCD, Inc. v. Zeidenberg*,⁴ a case involving the sale of access to an electronic phone directory that maintained millions of active individual files. The transaction in question took place in Wisconsin where Zeidenberg, a graduate student in computer science, used his pet company, Silken Mountain Web Services, to buy the directory created by ProCD, a Delaware-based company. The company made the data available to individuals for a low price, but charged commercial users a higher price. The defendant decided to arbitrage the market by buying the directory and then making information from that directory available for resale to third-

³ U.C.C. § 2-206(1)(a) (AM. LAW INST. & UNIF. LAW COMM'N 1995) (“Unless otherwise unambiguously indicated by the language or circumstances an offer to make a contract shall be construed as inviting acceptance in any manner and by any medium reasonable in the circumstances”).

⁴ 86 F.3d 1447 (7th Cir. 1996).

parties, no doubt at lower cost than charged by ProCD – given that Zeidenberg had spent nothing to develop the product.

From ProCD’s perspective, it could not long stay in business if it gave away its entire inventory with each sale and then had to compete against users with no costs of origination. This problem was not unanticipated and the contractual remedy lay in the strict terms of the licensing agreement that would bind any subsequent commercial use of the information aggregated by ProCD. Therein was the rub. When a consumer purchased the ProCD directory from a store, what she obtained was a physical copy of ProCD’s software which was packaged in a box. The box itself did not list any terms and conditions, but included a notice stating that there were additional terms to which the software was subject.⁵ Those terms became viewable once a buyer used the software; upon booting up the software, a licensing agreement appeared that had to be agreed to before the software could be used.⁶ Any buyer who refused the terms had 30 days to return the software for a full refund. In turn, this raised the uncertain UCC question: was the licensing agreement enforceable despite its not being reviewable prior to purchase?⁷

In the capable hands of Judge Easterbrook, the licensing agreement was not only economically sensible, but well-grounded in common law principles. The Seventh Circuit exercised diversity jurisdiction over the dispute and purported to apply Wisconsin law to hold that a binding contract formed not when Zeidenberg paid for his copy of the software,⁸ but subsequently. Under this interpretation, the initial sale constituted an “offer,” such that “ProCD proposed a contract that a buyer would accept by using the software after having an opportunity to read the license at leisure,”⁹ meaning that the contract was only formed once Zeidenberg read the license—despite the fact he could do so only after paying money. Judge Easterbrook relied on other UCC provisions that find a contract enforceable when a buyer accepts goods after having had an opportunity to inspect.¹⁰ Thus, Zeidenberg in not rejecting ProCD’s terms after having notice and an opportunity to review them was accordingly contractually bound.¹¹ Although the acceptance-by-non-rejection approach is

⁵ *Id.* at 1450.

⁶ *Id.*

⁷ We leave to the side the preemption issue under the Copyright Act. *Id.* at 1453, 1455. Our focus is on the development of the common law.

⁸ *Id.* at 1452.

⁹ *Id.*

¹⁰ *Id.* at 1452-53 (citing U.C.C. § 2-606(1)(b) (1995)).

¹¹ *Id.*

typically applied to the acceptance or rejection of goods, not contracts, and only when UCC 2-207 does not apply, this was another interpretive extension of the common law and UCC to the domain of the modern electronic age.¹²

We come neither to praise nor to bury *Pro-CD* in this Article. Clearly the common-law foundations of contract law must continue to evolve to meet the challenges of new market frontiers. Just as clearly, there will be strong disagreements about the relation of contract principles to transactions where the indicia of offer and acceptance seemingly are dictated on an adhesion basis.¹³ And there is much to appreciate in Judge Easterbrook's innovation, as captured by Eric Posner:

From a pedagogical perspective, the opinion belongs to an important genre, the contract opinion that drags the law forward so that it can address a new type of behavior . . . Judge Easterbrook reformulates offer/acceptance doctrine so as to permit enforcement of “terms later” contracts, an important new business tool.¹⁴

Our concern is independent of the merits of the substantive disputes. We are intrigued by the source of law for the new common law and UCC interpretation governing these increasingly prevalent forms of consumer transactions. Zeidenberg's purchase of the ProCD database took place in Wisconsin, the state whose law presumably governed the transaction, and in the post-*Erie R.R. Co. v. Tompkins*¹⁵ world, the state whose law would

¹² For some of the extensive criticism of Judge Easterbrook's UCC interpretation, see Roger C. Bern, “*Terms Later*” *Contracting: Bad Economics, Bad Morals, and a Bad Idea for a Uniform Law, Judge Easterbrook Notwithstanding*, 12 J.L. & POL'Y 641, 647-50 (2004) (arguing that a reasonable interpretation of 2-206(1)(a) would lead to the conclusion that a contract had formed between ProCD and Zeidenberg upon purchase); Jean Braucher, *UCITA and the Concept of Assent*, 673 PLI/PAT. 175, 184 (2001) (“[n]othing in the language of section 2-207 limits its application to two-form situations or even to forms at all . . . [t]he Pro-CD analysis also is contrary to Comment 1 to Section 2-207, which refers to one-form transactions”); Christopher L. Petit, *The Problem with “Money Now, Terms Later”*: ProCD, Inc. v. Zeidenberg and the Enforceability of “Shrinkwrap” Software Licenses, 31 LOY. L. A. L. REV. 325, 341-42 (1998). (pointing out both that the UCC only restricted a buyer's ability to accept an offer when the seller unambiguously specifies a manner of acceptance, and that ProCD had not had not unambiguously stated that their offer could only be accepted by agreeing to the license); James J. White, *Contracting Under Amended 2-207*, 2004 WIS. L. REV. 723, 741 (2004) (“Easterbrook's statement is wrong; nothing in Section 2-207, its comments, or case law limits this Section to cases with more than one form. Indeed, the second sentence in comment one states a hypothetical case with only one form”).

¹³ This discussion goes back at least to *Carnival Cruise Lines, Inc. v. Shute*, 499 U.S. 585 (1991). In applying *Carnival Cruise* to *ProCD*, Bern claims that whether unseen terms were enforceable was never an issue in *Carnival Cruise*, as the plaintiff conceded that he had notice of the terms prior to entering the contract. Bern then claims that other cases involving bills of lading had implied a contractual obligation when the party bound by the contract had not seen it prior to purchase. See Bern, *supra* note 12, at 657—58

¹⁴ See Eric A. Posner, *ProCD v. Zeidenberg and Cognitive Overload in Contractual Bargaining* 11 (John M. Olin Law & Econ. Working Paper No. 492, 2009).

¹⁵ 304 U.S. 64 (1938).

presumably serve as the source for any common law evolution to meet the new marketplace realities.

To understand *Pro-CD* as an opinion on Wisconsin law, however, makes as much sense as Hamlet without the prince. Rather than offer any analysis of Wisconsin law to guide the inquiry, Judge Easterbrook reduces the Badger State's law to the banal: "In Wisconsin, as elsewhere, a contract includes only the terms on which the parties have agreed."¹⁶ That coupled with the observation that Wisconsin follows the UCC forms the entirety of the analysis of state law.¹⁷ The thoughtful opinion discusses many features of contract theory and the modern electronic marketplace. Then, after all the heavy lifting is done in allowing the contract to be formed on terms revealed only after purchase, state law returns in an even more pedestrian form: "we believe, Wisconsin would not let the buyer pick and choose among terms."¹⁸ To belabor the obvious, regardless of the merits of the *ProCD* resolution of the dispute, it is impossible to find that the outcome is a product of "Wisconsin law."

Nor has *ProCD* come to be seen as defining Wisconsin law. It is without doubt the most influential opinion in this area of law and has been amply cited by courts around the country as authority for the new common law of the electronic age.¹⁹ And the primary courts in further defining the law based on *ProCD* share something else with the Seventh Circuit: they are largely federal courts expounding the new common law. The new common law of the new national electronic market, developed in federal courts? After *Erie*? That is the subject we address.

We proceed by making four sets of observations. First, we show from data surveying all consumer cases available on Lexis, Westlaw, and secondary sources, largely in the domain of electronic transactions, how state common law has largely disappeared. We contend further that an era marked by the Class Action Fairness Act and the resulting relocation of cases to federal courts (which in theory cannot make common law but only predict its application); and the likely rise of mandatory arbitration (which takes cases out of courts altogether) contributed to the diminution of state-based common law.²⁰ Second,

¹⁶ *ProCD*, 86 F.3d at 1450.

¹⁷ *Id.* at 1452.

¹⁸ *Id.* at 1453.

¹⁹ See Oren Bar-Gill, Omri Ben-Shahar & Florencia Marotta-Wurgler, *Searching for the Common Law: A Quantitative Approach to the Restatement of Consumer Contracts*, 84 U. CHI. L. REV. 7 (2017).

²⁰ Pub. L. No. 109-2, 119 Stat. 4 (2005). [CITE DRAHOZAL AND OTHER ARTICLES DOCUMENTING RISE IN ARBITRATION]

we return to the influence of the *ProCD* decision, which turns out to be emblematic of a trend within the new common law: One influential opinion—the “tournament winner” like *ProCD*—tends to define doctrine in a particular area with little space for further evolution. Finally, we conclude with a discussion of the implications of this new form of hollowed-out common law for the legacy of *Erie* and the presumed primacy of state common law.

The paper proceeds as follows. Section II describes the cases and methodology used to select and code case law addressing the enforceability of shrinkwraps, clickwraps (where consumers must signify assent to a standard form contract on a screen by clicking “I agree”), and browsewraps (where acceptance online is silent and no unambiguous action seeking assent is sought). Section III presents the findings. Section IV discusses the implications of the findings. Section V concludes.

II. Searching for Law.

Because cases such as *Pro-CD* engage in common law reasoning, the heart of our examination must be decisional law. That is, after all, the operative definition of the common law system. We focus specifically on the case law trying to make sense of the new electronic marketplace, in particular cases addressing enforcement of three relatively novel forms of consumer contracts: shrinkwraps, clickwraps, and browsewraps. These three forms of contract arose from transacting over the internet and remote transacting between buyer and seller. Shrinkwraps, or “pay now, terms later” (“PNTL”) contracts, take the form of the agreement at issue in *ProCD* and includes any other contract where payment precedes the presentation of terms.²¹ Clickwraps involve contracts where assent is sought by asking the other party to click a box on a screen next to an “I agree” or similar legend. The terms are usually made available on a scrollable box above the icon or in a nearby hyperlink.²² Browsewraps are online contracts that do not require unambiguous assent. Instead, hyperlinks with the terms, sometimes accompanied by a notice, are placed on a webpage and assent is manifested silently, by continuing with the process of completing a purchase.²³

²¹ See, e.g., *Bischoff v. DirecTV, Inc.*, 180 F. Supp. 2d 1097 (C.D. Cal. 2002), *Marsh v. First USA Bank, NA*, 103 F. Supp. 2d 909 (N.D. Tex. 2000), *Brower v. Gateway 2000, Inc.*, 676 N.Y.S.2d 569 (App. Div. 1998).

²² See Mark Lemley, *Terms of Use*, 91 MINN. L. REV. 459, 459—60 (2006) (describing different forms of electronic contracting). See also *Berkson v. Gogo LLC*, 147 F.Supp. 3d 123 (E.D.N.Y. 2015) (providing a detailed taxonomy of the different forms of online contracts).

²³ Lemley, *supra* note 22, at 460.

We analyze the data set introduced in Bar-Gill, Ben-Shahar, and Marotta-Wurgler, *Searching for the Common Law: The Quantitative Approach of the Restatement of Consumer Contracts*.²⁴ That article offers a detailed description of the data collection process and methodology, which we briefly outline in Appendix I to this article.²⁵ This data set yielded 67 shrinkwrap cases, 32 browsewrap cases, and 110 clickwrap cases that involved consumer disputes.²⁶ The earliest case was decided in 1954—a precursor of the modern PNTL case, since browsewraps and clickwraps are creations of the internet—and the latest cases included are from 2016.

A. *The Big Picture*

Pro-CD introduces many of our points of analysis. First off, it is a shrinkwrap arrangement in which the common law is uncertain at best. Second, it is in federal court. It is not a class action, most likely because the party seeking legal redress is the repeat player and not the one-time consumer. And, despite its provenance in federal court, it is a field-defining case, what we term the “tournament winner” for staking out the legal contours of an emerging area of law.

The leftmost columns in Table 1 introduce the cases by contract and court type. Panel A reports that out of 67 cases addressing the enforceability of PNTL cases, 50 (or 74%) were decided in federal court. 84% are district court decisions, and 66% of all the cases brought in federal court in this group were class actions—which is not surprising given that these are consumer and small business cases and the losses suffered typically wouldn’t be large enough justify the costs of bringing suit individually. Compare this to the bottom part of the panel, which reports case distribution among state courts. Of 17 state cases involving PNTLs, only two are trial court opinions, with eight appellate and seven supreme court opinions. Compared to browsewraps and clickwraps, the enforceability of PNTLs has been more extensively treated by state supreme courts. Note, too, that only 29 percent of state

²⁴ Bar-Gill, Ben-Shahar & Marotta-Wurgler, *supra* note 19. See also Mark A. Hall and Ronald F. Wright, Systematic Content Analysis of Judicial Opinions, 96 Calif. L. Rev. 63 (2008) (providing a thorough explanation of content analysis methods of cases and a review of studies that conducted content analysis of cases).

²⁵ Both Lexis and Westlaw report all published state and federal cases and well as some unpublished state and federal cases.

²⁶ Employment cases are not part of this data set. For other studies examining the evolution of case law in the field of contracts, see e.g., Robert A. Hillman, Questioning the “New Consensus” on Promissory Estoppel: An Empirical and Theoretical Study, 98 COLUM. L. REV. 580 (1998); Jason S. Johnston, The Statute of Frauds and Business Norms: A Testable Game-Theoretic Model, 144 U. PA. L. REV. 1859 (1996). [CITE SCOTT AND SCHWARTZ PROMISSORY ESTOPPEL STUDY]

law cases were class actions. We explore this difference in more detail below, and we conjecture that the rise of multi-district litigation and CAFA have played a role in the diminution of class actions in state courts. The most striking feature of Panel A is the dominance of cases adjudicated by federal courts in what has been traditionally the domain of state courts. This difference wouldn't be as significant if federal court opinions were rarely cited. Indeed, one would anticipate that state courts, especially state supreme courts, while adjudicating fewer cases, would be the most influential and thus still reign over the evolution of common law. We focus on this question next.

The right columns in all panels focus on total or cumulative case influence. This measure is noisy, as it may capture both positive and negative treatments and does not discriminate between young and old cases, but nonetheless serves as a natural starting point. Federal cases addressing the enforceability of PNTLs have an average of 24.2 citations, with circuit cases obtaining an average of 79.9 cites and district cases have been cited an average of 12.7 times. The high standard deviations in some cells indicating that high averages may be driven by a few extremely influential cases (which might be called “tournament winners,” as we describe later). State law cases have slightly more average citations in total: 27.4. As expected, supreme court cases have more citations (36.6 citations on average) than state appellate and trial cases (with 24.4 and 7.5 citations on average, respectively). Interestingly, the cases with the highest average citation in this category are not state supreme court decisions, as one would expect, but rather federal circuit court cases, whose average total case citations outnumber state supreme court ones by more than two to one.

The next column addresses the potential problem of negative treatments driving citations and reports the average citations under the “followed” category. The pattern of citations is similar to the more inclusive measure, except that the dominance of federal circuit court opinions is much stronger, with 14.4 average cites versus 3.6 supreme court citations. The same is true for out-of-states cites, reported in the rightmost column, which indicates that the average circuit court case has 43.4 such cites versus 15.9 for state supreme court cases. The high standard deviation again hints at the presence of a small number of highly influential cases. One picture is already clear, however: By all measures of influence, federal circuit court cases have cast, cumulatively across time, the largest shadow. Later on, when we analyze citation rates as opposed to cumulative citations, we will see that the dominance of federal case influence is only accelerating.

Panels B and C report similar statistics for browsewraps and clickwraps. Again, federal cases dominate, comprising 72 percent and 80 percent of all browsewrap and clickwrap cases, respectively. Unlike PNTLS, the enforceability of clickwraps and browsewraps has rarely been addressed by state supreme courts, with only three such decisions for clickwraps and one for browsewraps. Class actions are still more common in federal courts, but the difference in their incidence is less pronounced than in the case of PNTLS. In the case of browsewraps, 74% of cases brought in federal courts are class actions, as compared to 67% in state courts. For clickwraps, those percentages are 45 percent and 28 percent, respectively. In terms of cumulative citations, federal cases addressing the enforceability of browsewraps are more likely to be cited under all three measures. Like PNTLS, circuit cases are leading in terms of average citations. For example, circuit court opinions have an average of 33.7 out-of-state cites, whereas the one supreme court opinion has yet to be cited once. Clickwraps reveal less pronounced differences. Indeed, overall cites for all state decisions are essentially identical to those from all federal courts. Yet as in the two other categories of cases, circuit courts have been the most cumulatively influential in clickwrap cases, most notably in terms of out-of-state citations, where circuit court opinions have been cited 12 times on average, as compared to supreme court opinions, which average 1.7 citations.

Table 1. Sample Cases and Summary Statistics

	Number	% Class Action	Case Cites (s.d.)	Out-of-State Case Cites (s.d.)	Followed (s.d.)
Panel A. Pay Now, Terms Later (PNTL) Cases					
All Courts	67	57	25.0 (40.3)	12.8 (25.7)	4.3 (8.6)
Federal	50	66	24.2 (43.9)	12.8 (28.3)	4.8 (9.9)
Circuit	8	25	79.9 (82.9)	43.4 (58.4)	14.4 (20.8)
District	42	74	12.7 (16.8)	6.6 (10.0)	2.8 (3.9)
State	17	29	27.4 (28.8)	12.8 (17.8)	3.0 (3.4)
Supreme	7	43	36.6 (27.1)	15.9 (20.6)	3.6 (3.6)
Appellate	8	13	24.4 (32.6)	12.9 (17.6)	2.8 (3.7)
Trial	2	50	7.5 (4.9)	1.5 (0.7)	2.0 (1.4)
Panel B. Browsewrap Cases					
All Courts	32	72	13.8 (28.3)	7.3 (18.6)	3.5 (5.2)
Federal	23	74	14.6 (32.8)	8.1 (21.8)	4.0 (5.7)
Circuit	3	67	52.7 (86.9)	33.7 (58.3)	9.7 (12.7)
District	20	75	8.9 (13.5)	4.3 (8.5)	3.1 (3.8)
State	9	67	11.7 (12.5)	5.1 (5.1)	2.4 (3.9)
Supreme	1	100	1 (.)	0 (.)	0 (.)
Appellate	6	67	15.2 (13.7)	6.7 (5.3)	3.3 (4.6)
Trial	2	50	6.5 (9.2)	3.0 (4.2)	1 (1.4)
Panel C. Clickwrap Cases					

All Courts	110	42	8.8 (12.3)	3.4 (5.8)	1.9 (2.7)
Federal	88	45	8.7 (11.6)	3.3 (5.2)	2.0 (2.5)
Circuit	3	100	17.3 (15.6)	12.0 (12.0)	3.3 (3.2)
District	85	46	8.4 (11.4)	3.0 (4.7)	1.9 (2.5)
State	22	28	9.1 (15.2)	4.0 (7.8)	1.6 (3.1)
Supreme	3	33	15.3 (23.1)	1.7 (1.5)	3.0 (5.2)
Appellate	14	21	10.9 (15.8)	5.9 (9.3)	1.9 (3.2)
Trial	5	40	0.6 (0.5)	0.4 (0.5)	0 (.)
Panel D. All Cases					
All Courts	209	51	14.6 (27.4)	6.9 (17.1)	2.9 (5.7)
Federal	161	56	14.1 (28.9)	6.8 (18.3)	3.1 (6.2)
Circuit	14	50	60.6 (74.7)	34.6 (50.5)	11.0 (16.7)
District	147	56	9.6 (13.4)	4.1 (7.2)	2.3 (3.2)
State	48	35	16.1 (22.0)	7.3 (12.5)	2.3 (3.4)
Supreme	11	45	27.5 (26.8)	10.5 (17.6)	3.1 (3.8)
Appellate	28	29	15.6 (21.5)	8.0 (11.7)	2.4 (3.6)
Trial	9	44	3.4 (5.0)	1.2 (1.9)	0.7 (1.1)

A closer look at the composition and timing of each category of cases, as well as particular contractual clauses at issue, reveals some interesting trends behind the high-level perspective of Table 1. For PNTLs, the number of cases rises from 1997 to 2005, at which point they begin to decline, perhaps due to increased clarity regarding their enforceability. Most PNTL cases (61 percent) involve challenges to arbitration clauses—an important obstacle to class actions, with the plaintiffs arguing that such clauses are not applicable because no contract was formed. PNTL enforceability has been addressed across 12

circuits, with a concentration of cases in California. Similar patterns emerge for browsewraps and clickwraps, except that browsewraps are a newer type of contract and their enforceability is still being addressed. As with PNTLs, the clauses predominantly at issue with clickwraps and browsewraps are arbitration and forum selection clauses (40 percent and 35 percent of the cases, respectively), with California and New York hosting a particularly large number of actions. There are commonalities among the three types of cases, but the most salient is the predominance of dispute resolution clauses as a central issue.

This first look at the data revealed two clear patterns: most of the cases are heard in federal courts, and federal circuit court opinions have a much stronger influence than any other court. We unpack this further by examining how case law in state versus federal courts is evolving over time.

B. The Shift from State to Federal Courts

Figure 1 shows a decline in the number of cases adjudicated by state courts relative to federal courts. By now, the vast majority of cases covering each contract type are being adjudicated in federal courts. This was not always the case. In earlier years, the jurisdiction was more evenly distributed. In the case of PNTLs, this fraction was about 50 percent. Fifteen or twenty years ago, at the dawn of internet commerce, state court opinions outnumbered federal opinions for browsewraps and clickwraps. A concern is that these findings may be the result of the case collection patterns of Lexis and Westlaw. Studies tracking the evolution of case publication on these sites were more likely to collect federal rather than state opinions until about the early 2000s, thus working against our findings, as it was more likely to find a comprehensive set of federal court cases during the first half of the sample period, while a smaller number of state court cases would be present. This started changing when both federal and state courts began digitizing their docket and facilitating case collection, bringing them close to parity by around 2010.²⁷ This

²⁷ See David A. Hoffman, Alan J. Izenman, and Jeffrey R. Lidicker, *Docketology, District Courts, and Doctrine*, 85 Wash. U. L. Rev. 681 (2007) (noting that “[u]ntil very recently, the Databases [WestLaw and Lexis] obtained opinions when the court, judges, clerks, and attorneys submitted them,” and that federal cases were more likely to be collected in the earlier periods of such sites’). Other studies have also noted case selection issues when published decisions were more likely to be collected. See, e.g., Peter Siegelman & John J. Donohue III, *Studying the Iceberg from Its Tip: A Comparison of Published and Unpublished Employment Discrimination Cases*, 24 LAW & SOC’Y REV. 1133, 1135 (1990) (“We begin [...] by confirming what most readers probably know already—the potential unrepresentativeness of cases with published opinions is likely to be significant because only a few cases ever leave a published record.”); Allan D. Vestal, *Publishing District Court Opinions in the 1970s*, 17 LOY. L. REV. 673 (1970) (noting that judges exercise discretion in

means that, *during the period we study*, Lexis and Westlaw began collecting relatively more state opinions, thus decreasing any collection gap between state and federal cases (note that we also supplemented our case collection using secondary sources, as explained in the Appendix). In fact, Lexis and Westlaw were more likely to collect federal cases earlier in the period. Clearly, the dominance of federal courts as forums for state law claims, at least in this sample, has steadily increased over time.²⁸ We conjecture that class actions, along with other factors, have played a role in this trend, as federal courts took a more active role in this space.

Figure 1. Cases in Federal Courts As Percentage of All Cases

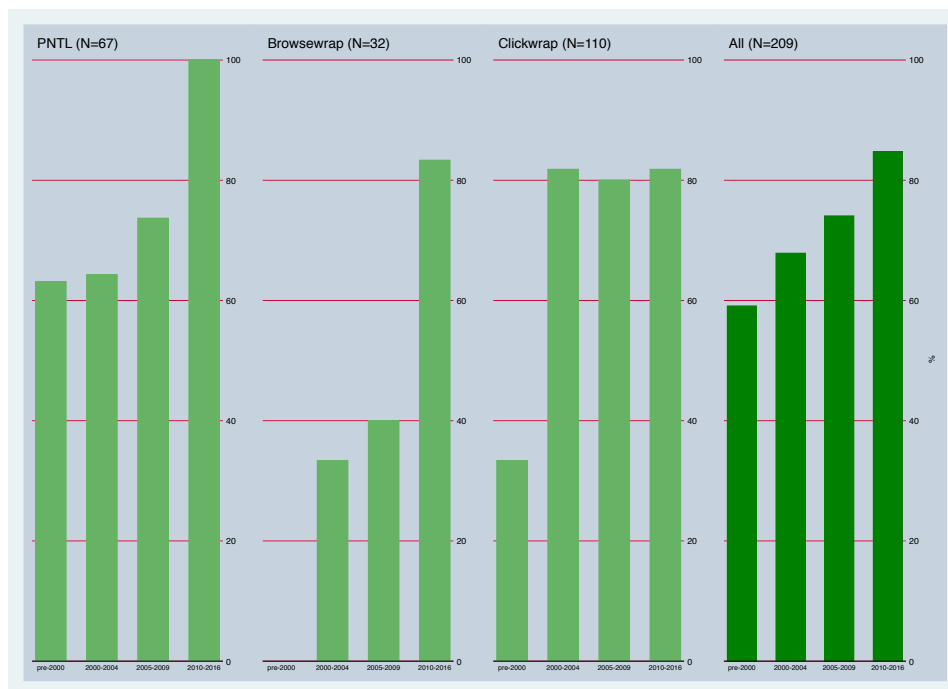


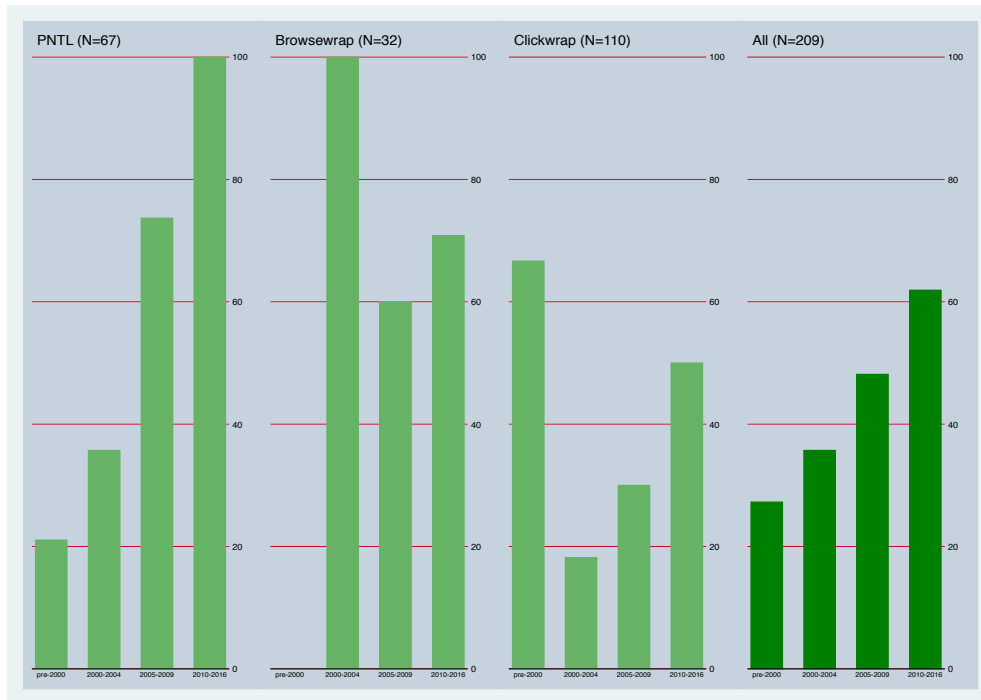
Figure 2 reports an intimately related trend in class action activity. The fraction of all cases consisting of class actions has increased considerably over the sample period, similar to the federal versus state court trend in Figure 1. While this evolution is noisy for

which opinions they publish and that some state are more likely to publish opinions than others.) During the period in our study, Lexis and Westlaw collected both published and unpublished decisions.

²⁸ A line of research documents and explores the normative implications of decrease in trials overall. *See, e.g.*, Marc Galanter, *The Vanishing Trial: An Examination of Trials and Related Matters in Federal and State Courts*, 1 J. EMPIRICAL LEGAL STUD. 459 (2004) (documenting a decrease in trials in both federal and state courts over time, which might logically result in fewer opinions); Judith Resnik, *Lawyers' Ethics Beyond the Vanishing Trial: Unrepresented Claimants, De Facto Aggregations, Arbitration Mandates, and Privatized Processes*, 85 FORDHAM L. REV. 1899 (2017). *But see* 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, 705-34 (2004) (noting errors in studies measuring the decrease in trials). We document a decrease in state court trials, but our main focus is on the composition of state versus federal cases for particular claims.

browserwraps (given the small number of early cases) and clickwraps (again, very few pre-2000 cases), the general trend for all cases is very plain. These days, more than 60 percent of cases that address the enforceability of these contracts are class actions.

Figure 2. Percentage of Class Action Cases



What is the relationship between the shift toward federal courts and the shift toward class actions? Figure 3 breaks down, for both federal and state courts, the fraction of cases corresponding to class actions over time. Before 2000, class actions comprised less than 20 percent of cases adjudicated in federal courts. But now they make up more than 60 percent. The upward trend is strong (and, in unreported results, overwhelmingly statistically significant). Compare this to the absence of a trend for cases brought in state courts. Before 2000, class actions represented over 40 percent of all cases of these types brought in state courts, only to dip below this fraction by the end of the sample period.

Figure 3. Percentage of Class Actions in Federal and State Courts

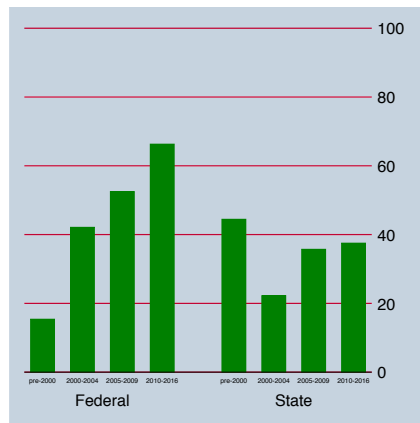
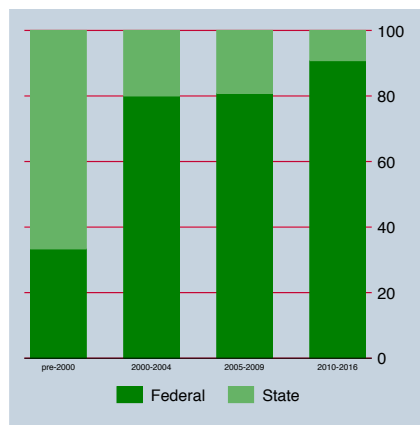


Figure 4. Split of Class Actions Between Federal and State Courts



How have class actions shifted between state and federal courts for these types of cases? Figure 4 depicts the split of actions between state and federal courts. Before 2000, two-thirds of class actions were brought in state courts. Yet this reverses dramatically soon after. By 2000-2009, federal courts were handling 80 percent of class actions of these types of cases, and after 2010 they were handling 90 percent. Thus, class actions, once within the purview of state courts, moved almost exclusively to federal courts within a brief period.

Every indication is that CAFA played a significant role in this shift. In 2005, Congress enacted CAFA to expand federal subject matter jurisdiction to multistate class actions. That allowed the nationwide consumer cases to be filed directly in federal court or removed

to state court, without any federal question presented and without the customary perfect diversity of citizenship. As a result, class actions involving state law claims became the province of federal courts. Consistent with the goals of CAFA, there is a shift in cases from state to federal courts, especially as consumer cases are brought predominantly in the form of class actions. The consequence, though, is the slow disappearance of common law development by state courts. Nonetheless, the figure itself (and unreported results) shows that CAFA did not redirect a pre-existing trend so much as accentuate the dominance of the federal forum. Other contributing factors may have been the rise of MDLs²⁹ and the emergence of mandatory arbitration clauses in standard form contracts—which could have taken non-class cases out of state courts as well.³⁰ This could also help explain how class actions take a much higher fraction of cases now than fifteen years ago.

Yet another feature of CAFA may have prompted a further shift to federal court. Prior to CAFA, plaintiffs could fairly readily avoid federal court if they filed in state court, made sure to include a non-diverse defendant so as to avoid removal on diversity grounds, and did not include any federal claims so as to avoid removal on federal question grounds. But once CAFA changed the basis of federal removal to the presence of a class action or mass action allegation, then the old strategies failed. All of a sudden, there was a willingness to consider more causes of action that might have made class actions likelier, but would have triggered removal. Class actions that included a claim under the Truth in Lending Act³¹ or Magnuson-Moss³² could now be used to organize national cases, including ones that included disparate common law claims for citizens of different states. While undoubtedly CAFA was intended to inter class actions by removing state forum shopping,³³ the results

²⁹ There is evidence documenting the role of MDLs contributing towards a shift from state to federal courts. *See, e.g.*, Emery G. Lee III et al., *Multidistrict Centralization: An Empirical Examination*, 12 J. EMPIRICAL LEGAL STUD. 211, 211-35 (2015) (finding that, all else equal, that the MDL Panel is more likely to centralize a proceeding including class allegations, and more likely to centralize proceedings when particular types of claims are raised); Margaret S. Williams & Tracey E. George, *Who Will Manage Complex Civil Litigation? The Decision to Transfer and Consolidate Multidistrict Litigation*, 10 J. EMPIRICAL LEGAL STUD. 424, 424-61 (2013) (finding that most motions to transfer and consolidate are granted by MDL panels, and that most cases are assigned to district courts where a current panelist resides).

³⁰ Several studies report the pervasive use of arbitration clauses in consumer contracts. *See, e.g.*, CONSUMER FIN. PROT. BUREAU, *ARBITRATION STUDY: REPORT TO CONGRESS 2015* (2015) (reporting that 81% of pre-paid card contracts included an arbitration clause, 44 percent of insured deposits include arbitration clauses in their contracts); Theodore Eisenberg, Geoffrey P. Miller & Emily Sherwin, *Arbitration's Summer Soldiers: An Empirical Study of Arbitration Clauses in Consumer and Nonconsumer Contracts*, 41 U. MICH. J. L. REFORM 871 (2008) (finding that over 75% of consumer contracts filed on Edgar between 2006 and 2007 included arbitration clauses).

³¹ Pub. L. No. 90-321, 82 Stat. 146 (1968) (codified as amended at 15 U.S.C. §§1601-1665e).

³² Pub. L. No. 93-637, 88 Stat. 2183 (1975) (codified as amended at 15 U.S.C. §§ 2301-12).

³³ *See, e.g.*, Nan S. Ellis, *The Class Action Fairness Act of 2005: The Story Behind the Statute*, 35 J. LEGIS. 76, 98 (2009) (noting that “CAFA was intended to respond to perceived abuses in class action practice, specifically to the perceptions that plaintiffs engage in forum shopping”).

were a broader section of class action claims being heard in federal court.³⁴ So, while CAFA may not have created the trend towards federal court adjudication, it may have crowded out other mechanisms allowing plaintiffs to have their cases heard in federal court.

C. *The Influence of Federal Court Opinions*

So far we have seen that three types of consumer contracts cases that govern a significant portion of mass retail commerce have been adjudicated by federal courts and MDL, CAFA, and the rise in arbitration in adjudicating consumer claims, may have contributed to the relative decline in the number of cases brought into state courts.³⁵ Yet the opinions by district and circuit court judges have little formal precedential value since, in the absence of dispositive rulings by state supreme courts, federal courts “must predict how the highest court would decide this case.”³⁶ Theoretically, common law questions might come to be increasingly heard in federal courts, but the direction of the law might be determined by state courts, culminating in opinions by state supreme courts.³⁷ This would ensure that *Erie* is respected and that state law questions are addressed within their proper confines. But what if this is not the case? If state court judges hardly see such cases, they might not even have the opportunity to rule on a common law question. This lack of common law initiative at the state court level by state judges might in turn license more venturesome rulings by federal judges, who are understandably less constricted by the absence of compelling state law authority and more willing to move the law in new directions. This is especially true for the cases we study, since new technologies have brought new ways of contracting.

Figures 5, 6, and 7 unpack the influence of decisions for each type of contract and for each type of court. Each Figure lists all cases in decreasing order of out-of-state citations (in the left panel) and out-of-state citations per year (to account for the fact that older cases, more commonly state cases, have had longer to get cited). Figure 5 shows that for PNTLs,

³⁴ Consider the bizarre history of the Telephone Consumer Protection Act of 1991, 47 U.S.C. § 227, [Pub.L. No. 102–243, 105 Stat. 2394 \(1991\)](#) (TCPA), the statutory prohibition on “junk faxes.” Although a federal statute, the TCPA apparently failed to create federal jurisdiction for its enforcement. *See* Chair King, Inc., v. Houston Cellular Corp., 131 F.3d 507 (5th Cir. 1997). Following CAFA, there was no shortage of TCPA claims in federal court.

³⁵ *See, e.g.,* Geoffrey C. Hazard, Jr., *Has the Erie Doctrine been Repealed by Congress?* 156 U. PA. L. REV. 1629 (2008) (arguing that CAFA is another example of legislative affirmation that federal procedure is appropriate for the enforcement of state law rights); Judith Resnik, *Lessons in Federalism from the 1960s Class Action Rule and the 2005 Class Action Fairness Act: “The Political Safeguards” of Aggregate Translocal Actions*, 156 U. PA. L. REV. 1929 (2008).

³⁶ *Molinos Valle Del Cibao, C. por A. v. Lama*, 633 F.3d 1330, 1348 (11th Cir. 2011) (“Where the highest court—in this case, the Florida Supreme Court—has spoken on the topic, we follow its rule. Where that court has not spoken, however, we must predict how the highest court would decide this case.”).

³⁷ *See, e.g.,* *Milwaukee v. Illinois*, 451 U.S. 304, 312 (1981) (“Federal courts, unlike state courts, are not general common-law courts and do not possess a general power to develop and apply their own rules of decision.”).

the clear leader is *ProCD*, with over 160 out-of-state citations, and about nine out-of-state cites per year, followed by *Hill v. Gateway*, another Easterbrook opinion. And even the most influential state case, in terms of the most out-of-state cites per year (over three on average) is *Brower v. Gateway 2000*,³⁸ a New York case where the court, while ultimately refusing to enforce the arbitration clause at issue on unconscionability grounds, followed *ProCD* when it concluded that the “terms later” contract, as presented, was enforceable because the plaintiff was given reasonable notice and an opportunity to reject the terms and terminate the transaction.³⁹

The same patterns emerge for browswraps and clickwraps, as depicted in Figures 6 and 7. In all three categories of cases, the relative influence of state courts is low and declining; state courts have fewer highly influential opinions when measured cumulatively, and fewer of their opinions are being cited at high rates, so they are falling further behind the newer federal cases. The results are robust to other measures of influence; in results omitted for brevity, we observe the same pattern for all cites and for citations that narrowly follow the proposition presented in the given case.

A concluding observation is that not only are cases decided by circuit courts more influential by standard measures than cases decided in state courts (even state supreme courts), this influence is often due mostly to a single “tournament winner” case, which outranks all others by a wide margin.⁴⁰ Because cases arising in diversity on state law issues are unlikely candidates for Supreme Court review, the resolution of new areas of common law comes to rest at the court of appeals level. This gives a finality to diversity rulings that belies the formal doctrine of being mere predictions of how state law would

³⁸ 676 N.Y.S.2d 569 (App. Div. 1998).

³⁹ See Bar-Gill, Ben-Shahar & Marotta-Wurgler, *supra* note 19 for a thorough treatment of this question. For a general treatment of measuring court influence, see, e.g., Lawrence M. Friedman, Robert A. Kagan, Bliss Cartwright & Stanton Wheeler, *State Supreme Courts: A Century of Style and Citation*, 33 STAN. L. REV. 773 (1981) (examining the evolution of state supreme court opinions between 1870 and 1970, including changes in trends in citations to other state supreme court cases and federal cases and finding that state supreme courts tend to cite their own precedent with higher frequency and that at the beginning of the period federal cases were barely cited. Federal case citations increase over time, but this is due to the increase of criminal cases that the courts hear.); William M. Landes et al., *Judicial Influence: A Citation Analysis of Federal Courts of Appeals Judges*, 27 J. LEGAL STUD. 271, 319—25 (1998).

⁴⁰ Several studies have documented a “superstar effect” for particular judges. See Stephen J. Choi & Mitu Gulati, *Choosing the Next Supreme Court Justice: An Empirical Ranking of Judge Performance*, 78 S. CAL. L. REV. 23 (2004); Daniel A. Farber, *Supreme Court Selection and Measures of Past Judicial Performance*, 32 FLA. ST. U. L. REV. 1175, 1183 (2005). (“Presumably, judges tend to cite cases which best support their arguments or most require distinguishing or rebuttal. Consequently, they should favor strong opinions over weak ones in their citation practice.” Farber also considers other factors affect citation counts that make this a noisy signal. Still, he concludes that “[a] judge whose opinions are consistently useful to others is probably doing something right, while a judge whose opinions are rarely cited is probably performing badly”); Mitu Gulati & Veronica Sanchez, *Giants in a World of Pygmies? Testing the Superstar Hypothesis With Judicial Opinions in Casebooks*, 87 IOWA L. REV. 1141 (2002) (finding the superstar effect for certain judges). See also *Earthquakes and Tremors in Statutory Interpretation: An Empirical Study in the Dynamics of Interpretation*, 89 MINN. L. REV. 848 (2005) (finding that Supreme Court citations follow a power law).

develop. In turn, certain federal court decisions—most specifically circuit courts with high-profile judges (such as Judge Easterbrook in the Seventh Circuit for PNTLs and Judge Sotomayor, during her tenure in the Second Circuit, for browsewraps)—have become the leaders by wide margins. In particular, Easterbrook’s *ProCD* decision garnered three times as many citations than the most-cited state law PNTL case, which itself cites *ProCD*. The normative implications of this are beyond the reach of this paper.⁴¹ Our goal is to document this practice and to conjecture about its causes and consequences.

⁴¹ There is a rich literature describing “information cascades,” where likeminded judges who are not necessarily bound by precedent or similar facts emulate one another, thus converging into a single outcome. *See, e.g.*, Andrew F. Daughety & Jennifer F. Reinganum, *Stampede to Judgment: Persuasive Influence and Herding Behavior by Courts*, 1 AM. L. & ECON. REV. 158 (1999); Clayton P. Gillette, *Lock-In Effects In Law and Norms*, 78 B.U. L. REV. 813 (1998) (discussing “lock-in” effects and their relationship to precedent); Timur Kuran & Cass Sunstein, *Availability Cascades and Risk Regulation*, 51 STAN. L. REV. 683, 765 (1999) (suggesting that information cascades can be present in judicial decision making). *See also* Robert Cooter & Lewis Kornhauser, *Can Litigation Improve the Law without the Help of Judges?*, 9 J. LEGAL STUD. 139 (1980); Marcel Kahan & Michael Klausner, *Path Dependence in Corporate Contracting: Increasing Returns, Herd Behavior and Cognitive Biases*, 74 WASH. U. L. Q. 347 (1996) (noting information cascades in the context of sovereign bond contracting); Eric L. Talley, *Precedential Cascades: A Critical Appraisal* (Univ. of S. Cal. Law Sch., Olin Working Paper No. 99-6, 1999).

Figure 5. Top Ten PNTL Cases by Out-of-State Citations

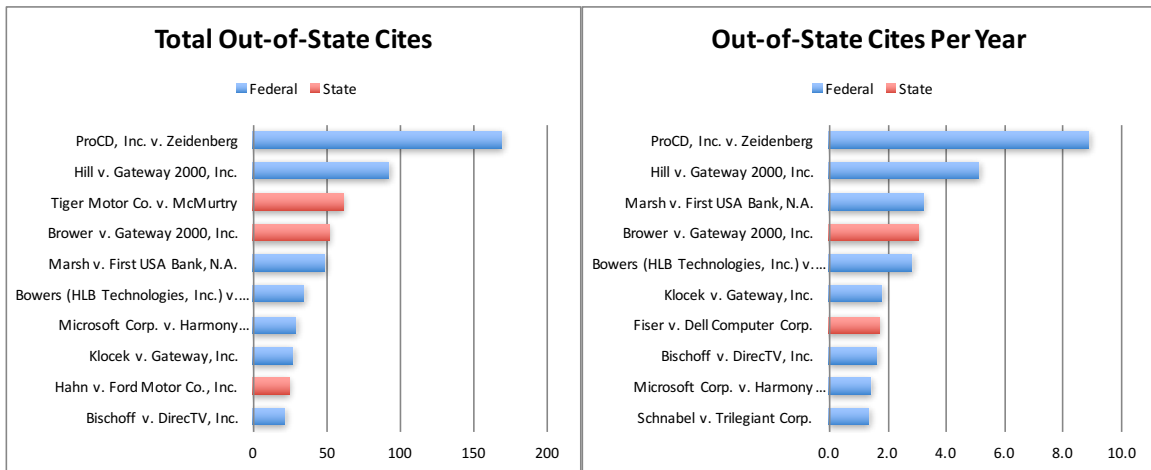


Figure 6. Top Ten Browsewrap Cases by Out-of-State Citations

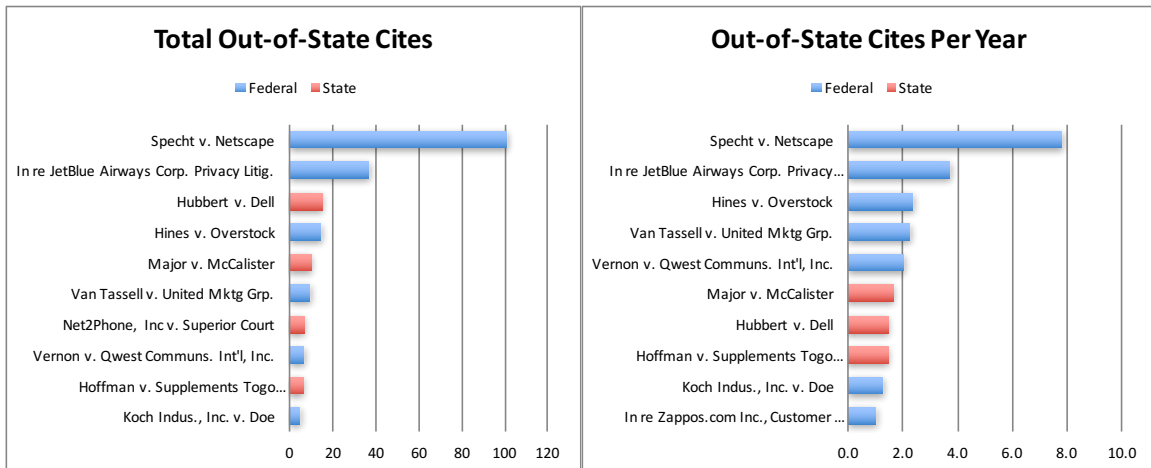
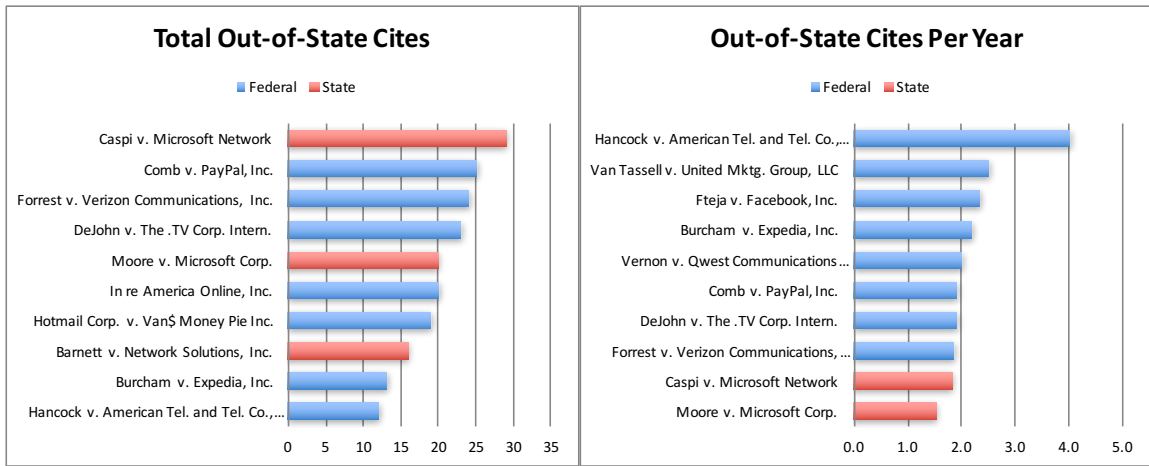


Figure 7. Top Ten Clickwrap Cases by Out-of-State Citations



III. Federalized Common Law.

In one sense, the data show a pattern of common law development that is consistent with the bulk of the experience in Anglo-American legal development. New markets create new issues and the accretive process of decisional law gives greater and greater guidance to parties that find themselves in new or unfamiliar positions. At a deeper level, however, the picture is entirely unfamiliar. The cases are developing in federal court, not state court and that presents two difficulties in the ordinary common law process of case filtration. The first is that federal courts, unlike state courts, are disabled by *Erie* from creating new common law, as opposed to applying or anticipating state law developments. Second, rulings of federal courts sitting in diversity jurisdiction are treated as a one-off development, without binding effect on state courts, or other courts. As a result, the normal hierarchical ordering of the law does not occur. We present some of the implications for the odd state of the common law.

A. Searching for Law.

First, there is the methodological issue of how one determines the role of the law. As every capable lawyer knows, the issue in advising clients is not just whether there is a case here or there that stands for a certain proposition. Rather the question is always how settled is the law. The question in reading the common law is not just whether there is doctrine on any particular point, but how embedded and elaborated is that law. And being able to ascertain the law is fundamental to its development. Judges must identify the right precedent to rule, and attorneys must find suitable case law to effectively argue. This process follows the doctrine of *stare decisis*, where only the decisions of the higher courts in a given state act as binding authority on its lower courts.⁴² Despite its rigid hierarchical structure, this essential process is often fraught and complex, as binding cases may appear vague or in conflict, or their reasoning might not naturally apply to novel sets of facts.⁴³

⁴² See Amy Coney Barrett, *Statutory Stare Decisis in the Courts of Appeals*, 91 TEX. L. REV. 1711, 1712 (2013) (describing “vertical” *stare decisis* as “a court’s obligation to follow the precedent of a superior court”). Cf. Evan H. Caminker, *Why Must Inferior Courts Obey Superior Court Precedents?*, 46 STAN. L. REV. 817, 824 (1994) (noting that courts are only bound to obey the precedent of superior courts that have “revisory jurisdiction” over them).

⁴³ Bar-Gill et al., *supra* note 19.

These realities complicate efforts to identify general trends in the evolution and state of law across jurisdictions.⁴⁴

There are several well-established approaches to ascertaining the state and evolution of the law.⁴⁵ Perhaps the most prominent is the American Law Institute's ("ALI") Restatement project, which seeks "to promote the clarification and simplification of the law."⁴⁶ Reporters are asked to determine the law, and the traditional ALI approach has been to identify the majority rule from the most recent decisions of the highest state courts.⁴⁷ The findings in this paper identify a key methodological challenge to this well-established method as well as the narrative of *stare decisis*. There is certainly good reason for looking at cases hierarchically and focusing only on the decisions of the highest courts. After all, lower courts are supposed to follow their state supreme court. But what if this hierarchy doesn't, in fact, adequately reflect the way the law develops? The difficulty in identifying refinements in the common law follows from the lack of exposition of the law by apex courts. In the general development of the common law, as has been at the heart of the highly influential Restatement projects of the ALI, patterns of common law experience are reflected in the decisions of state supreme courts, from which majority and minority rules can be discerned and compared. But in the situations we study, the critical case law developments are in federal courts sitting in diversity jurisdiction, not in state courts. The normal process of hierarchical filtration does not occur. Looking at high state courts in this area would offer only a stale and incomplete reflection of current law.

Looking at the entire case law also tells a different story about where the law originates and how it evolves. For reasons we posit below, legal innovations tend to originate in federal court and are typically created by a single judge sitting in a circuit court. The result is often a single opinion, a "tournament winner," whose influence cascades to govern subsequent disputes, largely irrespective of jurisdiction and court hierarchy. Even state supreme courts follow *ProCD*, for

⁴⁴ *Id.*

⁴⁵ Among others, through mapping of judicial trends and reliance on leading cases.

⁴⁶ THE AMERICAN LAW INSTITUTE, *How the Institute Works*, <https://www.ali.org/about-ali/how-institute-works/> (last visited Sept. 6, 2018).

⁴⁷ It is a well established method to focus on the decisions on the highest state In addition to identifying and clarifying the majority rule, Reporters also suggest moving the law in particular directions when doing so is normatively justified. Sometimes this is endeavored by following a minority position. THE AMERICAN LAW INSTITUTE, *CAPTURING THE VOICE OF THE AMERICAN LAW INSTITUTE: A HANDBOOK FOR ALI REPORTERS AND THOSE WHO REVIEW THEIR WORK 5* (2015) (noting that the majority law may be "widely regarded as outmoded and undesirable" and that reporters should consider other factors such as coherence and trends as well).

example.⁴⁸ This dynamic, combined with the migration of case law to federal courts, challenges the traditional approach of assuming that state supreme courts in the post-*Erie* world are the fulcrum of the common law, at least in the settings we study—but, one must suspect, in other settings as well.⁴⁹

Stare decisis aside, the findings also tell a new story of judicial authority. The process of systematically evaluating the entire case law on a subject can reveal how many confirmatory examples there are of lower courts following the state supreme court. Any focus on the lower state courts would be a doctrinal attempt to test where the nuances are and what might be the areas of case development. But when adding *Erie* and federal subject matter jurisdiction to this picture, things go awry. Now there are appellate decisions that have no authority. As a technical matter, *ProCD* is controlling law only on other cases in the Seventh Circuit arising in Wisconsin. It does not even control a Seventh Circuit case arising in Indiana or Illinois.

What this could mean is that the weight of decisional law is how innovative, dispositive and persuasive it is. This translates into a constant tournament for authority, unlike the normal hierarchy of state law controlled by the state supreme court. Law likes clarity and in the absence of clarity through hierarchy, there is clarity through tournament. But, as with the U.S. Open, the first rounds are entertaining, but at some point we need to reach the finals. The law's search for clarity in the absence of hierarchy might increase the likelihood of producing tournament winners.

This exercise reveals that finding the law is a more elaborate process, and procedural changes and the nature of the actions might affect where the law is developed and by whom. But the assumption that state supreme and appellate courts are heaviest carriers of doctrine is simply not borne out in the setting of contract formation issues in modern consumer transactions.

B. *Erie Notwithstanding.*

⁴⁸ See, e.g., *DeFontes v. Dell, Inc.*, 984 A.2d 1061 (R.I. 2009).

⁴⁹ Necessarily, this complicates the Restatement-style undertaking. Bar-Gil et al., *supra* note 19, at 9 (noting the “conventional ALI method of discerning the majority rule by looking to the highest court in each state”).

There has long been tension in the American effort to consolidate a seamless national market while at the same time maintaining the States as important sources of common-law regulation.⁵⁰ From the beginning of the new Republic, federal courts saw commercial cases arising between citizens of different states as an opportunity to pronounce a “general commercial law” that would guide the growth of the integrated national market. This was the law of *Swift v. Tyson*,⁵¹ and the fortuity of federal subject matter jurisdiction allowed federal courts to free commerce from the potential balkanizing effects of competing state laws. As proclaimed by Chief Justice Shaw of the Massachusetts Supreme Court, if perhaps a bit prematurely, the aim was the creation of “one extended commercial community.”⁵² Representing Swift in *Swift v. Tyson*, Daniel Webster could proclaim, “Whatever we may think of it now, the Constitution has its immediate origin in the conviction of the necessity for this uniformity, or identity, in commercial regulations. . . . Unity and identity of commerce among all the States was its seminal principle.”⁵³

Clearly something happened in 1938 and the Supreme Court reasserted the primacy of state law in *Erie*, or at least in theory. Much as *Erie* limited the capacity of federal courts to declare the substance of the common law, *Erie* did nothing to check the expansion of federal regulatory authority through the New Deal and the creation of the modern administrative state. Nor did *Erie* check the preemptive pressure toward increased federal law at the expense of all state-based regulation, the common law included. To the extent that *Erie* sought to create a constitutionally-protected domain for state generation of the common law, this would create inevitable tension with the demands of a national market. The pressure of statutory law and the accompanying regulatory state on state common law regulation is, in turn, a well examined phenomenon.⁵⁴

Even where Congress has not acted to preempt or formally circumscribe the domain of state common law, federal supremacy might still assert itself indirectly. The mechanism for ousting state common law need not necessarily be the federalization of substantive law. As one of us argued with Catherine Sharkey at the time of the passage of CAFA, the same result could obtain

⁵⁰ For an extended discussion of this tension and how the market pushes toward federal uniformity, see Samuel Issacharoff & Catherine M. Sharkey, *Backdoor Federalization*, 53 UCLA L. REV. 1 (2006). The empirical observations in this Article confirm the hypothesis presented in that paper, which was published just as CAFA went into effect.

⁵¹ 41 U.S. 1 (1842).

⁵² *Staples v. Franklin Bank*, 42 Mass. 43, 47 (1840).

⁵³ Alfred B. Teton, *The Story of Swift v. Tyson*, 35 ILL. L. REV. 519, 538 n.107 (1940), quoted in Issacharoff & Sharkey, *supra* note 49, at 47.

⁵⁴ See, e.g., GUIDO CALABRESI, *A COMMON LAW FOR THE AGE OF STATUTES* (1982).

by federalizing the procedural law. If only federal courts hear cases in emerging areas, then only federal courts will be in a position to engage in the accretive process of common law adjudication:

Although CAFA declared its intent to leave *Erie* untouched, once national-market cases are jurisdictionally isolated in federal courts, the need to develop incremental decisional law to address the particular concerns of these cases will be inescapable. And if federal courts are the only courts hearing these cases, then the most relevant source of authority for how to handle similar problems will be the common experience of federal courts in other CAFA cases. The likely effect of CAFA will then be to allow a body of national law to develop that corresponds to the demands of an undifferentiated market in which products are manufactured and sent to consumers across a distributional chain of ever-expanding geographic reach. Despite the entreaties of *Erie*, there is only one term for a body of self-referential decisional law emerging from the federal courts: federalized common law.⁵⁵

Watching the tournament-dominance of *Pro-CD*, one sees what federalized common law looks like, even while maintaining formal obeisance to *Erie*. It is hard not to chuckle when the entirety of Wisconsin's contribution to these new contract forms is reduced to the observation that the state is unlikely to allow a buyer to choose some but not all of the proffered conditions of exchange. Surely a state that invented cheese-heads is capable of offering more. But, in fairness, Wisconsin does not have any more to lend to Judge Easterbrook's analysis because the process of common law generation has passed the state by.

C. *The Role of Federal Anti-Aggregation Law.*

Third, there is a troubling aspect to the data in the form of what is not observed – the well-known dog that did not bark style observation. The contracts under review emerge from an increasingly large component of the economy.⁵⁶ This is a classic asymmetric market in which repeat sellers

⁵⁵ Issacharoff & Sharkey, *supra*, note 49, at 67-68.

⁵⁶ Charlotte Howard, *E-commerce takes off*, THE ECONOMIST (Oct. 26, 2017), <https://www.economist.com/special-report/2017/10/26/e-commerce-takes-off> (noting that “[o]ver the past decade global e-commerce has been expanding at an average rate of 20%”).

are dealing anonymously with lone purchasers, in many instances one-shot actors. Such markets are rife with the capacity for exploitation, checked perhaps in part by the corresponding rise in consumer outlets for public grievances.⁵⁷ Perhaps the combination of consumer voice and the desire for honorable transactions cures all temptation for on-line deceit. Perhaps, but that would ill explain the repeat requests for our bank information to allow deposit of proceeds from winning the Irish Lottery.

Given the asymmetry of the market, what is also striking is just how few cases there are in any tribunal. There are two key features to the contracts under review. First, they tend to involve repeat actor sellers on one side, and consumers with limited repeat activity on the other. Second, the terms of the contract are not only not negotiated, they are unknown to the buyer at the time of purchase. These are classic contracts of adhesion that have significant resemblance to a unilateral offer followed by conforming action. Indeed, the reasoning of Judge Easterbrook's opinion in *Pro-CD* has much this quality to it.

It has become almost *de rigueur* for sellers to insert mandatory arbitration provisions in such contracts, which in turn require individual arbitration of any consumer dispute. Recent litigation in San Francisco over Fitbit is typical in this regard.⁵⁸ Under the facts asserted, a consumer buys a Fitbit and only once activated is there a connection to a website for tracking fitness data (the purpose of the entire enterprise) which also provides the terms of the warranty. Included there, once the product is purchased and is activated, is a mandatory arbitration agreement.

Under the Supreme Court's decisions on mandatory arbitration, culminating in *Italian Colors v. American Express*,⁵⁹ such agreements are binding even if they prevent any "effective vindication" of underlying claims.⁶⁰ The commentary on the mandatory arbitration cases is by now rather extensive.⁶¹ Two critiques tend to dominate. The first has to do with concerns about the structural

⁵⁷ Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. CHI. L. REV. 1203, 1244 (2003) ("Private intermediaries that increase the salience of form terms to buyers and/or increase the reputational cost to sellers of providing low-quality terms might further reduce the market's tendency toward inefficiently low-quality terms."). In addition, various social media outlets may provide consumers a platform through which to impose reputational harms on sellers.

⁵⁸ *McClellan v. Fitbit, Inc.*, No. 3:16-cv-00036-JD, 2017 WL 4551484 (N.D. Cal. 2017). [CITE ARTICLES ON THE USE OF ARBITRATION CLAUSES; CFPB RULE; ETC.]

⁵⁹ 570 U.S. 228 (2013).

⁶⁰ *Id.* at 235—36.

⁶¹ For a recent discussion, see Arthur Miller, *What Are Courts For? Have We Forsaken the Procedural Gold Standard?*, 78 LA. L. REV. 739, 773—85 (2018). See also Judith Resnik, *The Privatization of Process: Celebration and Requiem for the Federal Rules of Civil Procedure*, 162 U. PA. L. REV. 1793, 1809—14 (2015); Jean R. Sternlight, *Creeping Mandatory Arbitration: Is It Just?*, 57 STAN. L. REV. 1631 (2005).

bias in arbitration between a repeat player on the one hand and a single-shot actor on the other.⁶² Unlike in the labor arbitration context in which repeat play by both the employer and a union allows arbitrators tipping excessively to one side to be weeded out, there is typically only one repeat actor involved in consumer or non-union employment arbitrations. In practice this allows for relations to develop only on one side of the aisle, and for the weeding out to be unidirectional. To some extent, this is mitigated by the use of larger arbitration operations, such as AAA, which have independent repeat play concerns.⁶³

Second, there is the concern that in the absence of aggregation, most consumer claims will never see the light of day. In the inimitable words of Judge Posner, “only a lunatic or a fanatic sues for thirty dollars.”⁶⁴ Our data are certainly consistent with the concern that the confluence of centralization and anti-aggregation rules (arbitration waiver agreements) threatens to crater any form of legal protection of consumers in a robust area of the economy. Interestingly, there is little evidence that CAFA centralization alone did that, or that the absence of state development of the common law inhibited creative federal courts. While the small overall number of cases in our dataset does not necessarily establish that claims are being underenforced, the prospect of cases having gone MIA (“missing in arbitration”) is consistent with efforts to quantify the “black hole” effect of arbitration of removing large number of cases from legal visibility at all.⁶⁵

Our primary observation is of a third sort. Decisional law generates a public good, even though private parties have no reason to want to invest in its creation.⁶⁶ The highly influential Priest-Klein hypothesis suggests that parties are likely to be unable to settle and find themselves in litigation when legal claims are uncertain.⁶⁷ The testing of the boundaries of legal norms under conditions of uncertainty prompts the creation of additional positive law that, in turn, helps avoid costly litigation by future disputants. When dispute resolution is privatized so that no published legal

⁶² See, e.g., Cynthia L. Estlund, *The Black Hole of Mandatory Arbitration*, 96 N.C. L. REV. 679 (2018); Sternlight, *supra* note 60, at 1650—51. See also Alexander J.S. Colvin, *Mandatory Arbitration and Inequality of Justice in Employment*, 35 BERKELEY J. EMP. & LAB. L. 71 (2014).

⁶³ Christopher R. Drahozal, “Unfair” Arbitration Clauses, 2001 U. ILL. L. REV. 685, 769 (2001) (arguing that arbitration institutions have incentives to maintain the fairness of proceedings).

⁶⁴ *Carnegie v. Household Int’l, Inc.*, 376 F.3d 656, 661 (7th Cir. 2004).

⁶⁵ See Estlund *supra* note 61 (providing estimates of “missing” cases in the employment arbitration setting and concluding that “a very large majority of aggrieved individuals who face the prospect of mandatory arbitration give up their claims before filing”).

⁶⁶ See SAMUEL ISSACHAROFF, *CIVIL PROCEDURE* (2017).

⁶⁷ George L. Priest & Benjamin Klein, *The Selection of Disputes for Litigation*, 13 J. LEGAL STUD. 1 (1984).

rulings ensue, this process of creating law as a public good is potentially arrested. This has been a source of academic concern and speculation for some time.⁶⁸

For the most part, this concern has seemed stylized. American society does not seem to lack for litigation, and the courts always seemed at the bursting point in terms of case law management. Our data indicate that there may indeed be more to this concern than we would have assumed. Electronic contracts are both robust in terms of economic impact and impoverished in terms of nuanced case law. It is not difficult to surmise that some of the capacity for case law development is being consumed by either the cases that never get brought at all because they cannot be aggregated or because whatever decisions do emerge are in turn quarantined in the world of unknown arbitral rulings.

IV. Conclusion

Generally, law is hierarchical and we rightly look to the apex courts to define where the law stands. But every good litigator knows that it is not just the words of the formal doctrine that are important, but how deeply thought out they are and how embedded they are in actual legal practice. In other words, there has always been an understood robustness measure that is implicit in legal research and analysis. To say that there is one district court case from decades before and that there is nothing to the contrary is not to say the law is well settled, but the contrary. What our analysis here does is not to substitute quantitative measures for the lawyer's task of reading and analyzing doctrine, but to help understand whether the doctrine is robust or not.

Using both quantitative and qualitative analysis allows us to say that in a growing important sector of the economy, there is virtually no contract case law at the state level, and that the driving doctrinal work is being done at the federal appellate level. In turn, the fact that there is little or no decisional law from any apex court generates a persistent tournament effect for influence, with a

⁶⁸ See Marc Galanter & Mia Cahill, "Most Cases Settle": *Judicial Promotion and Regulation of Settlements*, 46 STAN. L. REV. 1339, 1380 (1994) (criticizing settlements on the grounds that they fail to produce the public good of precedent) David Luban, *Settlements and the Erosion of the Public Realm*, 83 GEO. L.J. 2619, 2623 (1995) (noting that the original litigants "purchase" rules which future litigants can then use for free); H. Lee Sarokin, *Justice Rushed is Justice Ruined*, 38 RUTGERS L. REV. 431, 433 (1986) (criticizing settlements on the grounds that they deprive the public of rules which guide future conduct). See also William A. Landes & Richard A. Posner, *Adjudication as a Private Good*, 8 J. LEGAL STUD. 235, 238 (1978) (arguing that "private judges" will under-produce rules to serve as a precedent). [EISENBERG AND MILLER STUDY]

few commanding federal appellate cases the clear tournament winners. For an area of law that is purportedly the *Erie*-commanded province of state substantive law, that is an important and unsettling observation.

Appendix I

For each type of contract, the data set includes all available state and federal court cases, including unpublished decisions, reported on Lexis and Westlaw.⁶⁹ These two sources are commonly used in empirical research studying state and federal court decisions.⁷⁰ Finding all relevant case law began with broad and flexible natural language searches likely to bring relevant cases. Each case in this early search was read and the relevant ones were Shepardized to identify further cases. Then these cases were read and Shepardized, and so on. To further round out the sample, the list of cases was supplemented by secondary sources, including state dockets, legal publications, and expert consultations.⁷¹ Once the universe of cases had been identified, each was re-read and coded

⁶⁹ Studying unpublished decisions helps better identify trends in judicial treatment of issues and outcomes. See David A. Hoffman, Alan J. Izenman & Jeffrey R. Lidicker, *Docketology, District Courts, and Doctrine*, 85 WASH. U. L. REV. 681 (2007). See also K. N. LLEWELLYN, *THE BRAMBLE BUSH: ON OUR LAW AND ITS STUDY* (1969). See also Theodore Eisenberg & Sheri Lynn Johnson, *The Effects of Intent: Do We Know How Legal Standards Work?*, 76 CORNELL L. REV. 1151, 1195 (1991) (Published opinions may not be a representative sample of all race-based intent cases filed, and in some respects, pointed out below, they surely are not. The ideal methodology for studying plaintiff successes in intent claims presumably would be representative of all trial court level activity.” At 1164). See also Pat K. Chew, *Unwrapping Racial Harassment Law*, 27 BERKELEY J. EMP. & LAB. L. 49, 52 n.7 (2006) (“Basing an empirical study on published opinions also has certain limitations.”); Jeff L. Lewin, *The Genesis and Evolution of Legal Uncertainty About “Reasonable Medical Certainty,”* 57 MD. L. REV. 380, 435 (1998) (“[E]mpirical shortcomings that result from using published opinions as evidence of litigation practice are obvious.”).

⁷⁰ See, e.g., Hoffman et al and sources cited therein. See also Bar-Gill, Ben-Shahar & Marotta-Wurgler, *supra* note 19.

⁷¹ One concern is that the sources of cases might not yield a complete set of cases or a representative sample. For instance, the E-Government Act of 2002 requires federal courts to post all of their opinions and related document on their websites, thus making it easy to collect by online legal directories, such as WestLaw and Lexis. Hoffman et al., *supra* note 68, at 693. A natural concern is that the increase in federal cases over time is due to the effect Act on the population of cases are reported by these sources. It shouldn’t. Indeed, both WestLaw and Lexis were more inclined to collect federal rather than state court opinions in the beginning of the period that we study because of the difficulty experienced in collecting state trial opinions in smaller cities until those cities adopted digital dockets. In addition, both firms increased their collection state court opinions during the beginning of the period we study, around the year 2000, as this is the decade when states began reporting cases electronically, thus facilitating collection into aggregate sites. This succession of events thus works against our findings, as it was more likely to find a comprehensive set of federal court cases during the first half of the sample period, while a smaller number of state court cases would be present. Given the rise of electronic dockets, parity was likely established over time. In addition, our cases were collected from various sources, not only from electronic databases. See also Susan M. Olson, *Studying Federal District Courts Through Published Cases: A Research Note*, 15 JUST. SYS. J. 782, 790 (1992); Peter Siegelman & John J. Donohue III, *Studying the Iceberg from Its Tip: A Comparison of Published and Unpublished Employment Discrimination Cases*, 24 LAW & SOC’Y REV. 1133, 1135 (1990); Allan D. Vestal, *Publishing District Court Opinions in the 1970s*, 17 LOY. L. REV. 673 (1970); Allan D. Vestal, *Reported Opinions of the Federal District Courts: Analysis and Suggestions*, 52 IOWA L. REV. 379 (1966); Allan D. Vestal, *Reported Federal District Court Opinions: Fiscal 1962*, 4 HOUS. L. REV. 185 (1966); Allan D. Vestal, *A Survey of Federal District Court Opinions: West Publishing Company Reports*, 20 SW. L.J. 63 (1966).

on multiple dimensions to make them amenable to empirical analysis. These dimensions included aspects related to facts, such as identity of the parties, the subject matter of the transaction, and the precise manner in which the standard terms were presented, as well as intervening factors that might have affected the courts' reasoning and final outcome, including other claims as well as the substance of the agreements. The study also tracked the rationales articulated by the courts in making their decisions, as well as precedent, Uniform Commercial Code (UCC) and (Second) Restatement of Contracts sections relied upon. Coding was done for both holdings and dicta.⁷²

The data set also includes procedural details, including the court, jurisdiction, law applied, class action or not, and other dimensions. For this article, we supplemented the data to include information related to whether class actions that were initiated in state courts were later removed or sought to be removed to federal court and the reasons for such removals or attempted removals. In addition to tracking the number of cases in state and federal courts over time, we are interested in identifying the relative influence of each case. The natural expectation is for opinions by federal courts to have relatively little influence, given that such decisions are not binding. The underlying study collects various measures of influence that are commonly used in the literature.⁷³ These include total case citations, citations by out-of-state courts, and the number of times a case is followed by other courts. The first measure, all court case cites, is likely over inclusive, as it includes both positive and negative treatment for a case. At the least, this measure offers a glimpse as to the overall attention each decision has received. The next measure, citations by out-of-state courts, is the one traditionally used by other scholars to measure influence, as it reflects the impact of each decision beyond intra-state and intra-circuit norms.⁷⁴ The last measure, whether other courts followed the court's treatment of the issue in question, is narrower but helps address the

⁷² There is a rich literature debating the extent to which judges distinguish dicta versus holdings in selecting the precedent they intend to rely on. There is evidence that judges rely on both. See Thomas Fowler, *Holding, Dictum . . . Whatever*, 25 N.C. CENT. L.J. 139, 147-53 (2003) (examining a line of opinions in North Carolina courts to demonstrate the inconsistent treatment of dicta and holding); David Klein & Neal Devins, *Dicta, Schmicta: Theory Versus Practice in Lower Court Decision Making*, 54 WM. & MARY L. REV. 2021 (2013) (conducting a large empirical study on 13,823 intermediate state and federal court citations and finding that, in practice, the distinction between dicta and holding is "largely irrelevant"). See also RICHARD A. POSNER, *THE FEDERAL COURTS: CHALLENGE AND REFORM* 371-81 (1996); Louis Fisher, *The Staying Power of Erroneous Dicta: From Curtiss-Wright to Zivotofsky*, 31 CONST. COMMENT 149 (2016); Pierre N. Leval, *Judging Under the Constitution: Dicta about Dicta*, 81 N.Y.U. L. REV. 1249, 1250-67 (2006). For a theoretical approach to this question, see Adam B. Badawi & Scott Baker, *Appellate Lawmaking in a Judicial Hierarchy*, 58 J.L. & ECON. 139, 141 (2015).f

⁷³ See, e.g., Landes et al., *supra* note 38 and other references cited in Bar-Gill et al., *supra* note 19.

⁷⁴ See, e.g., DAVID KLEIN, *MAKING LAW IN THE UNITED STATES COURTS OF APPEALS* (2002); Gregory A. Caldeira, *The Transmission of Legal Precedent: A Study of State Supreme Courts*, 79 AM. POL. SCI. REV. 1 (1985); Stephen J. Choi, G. Mitu Gulati & Eric A. Posner, *Judicial Evaluations and Information Forcing: Ranking State High Courts and Their Judges*, 58 DUKE L.J. 1313 (2009); Landes et al., *supra* note 38; Eric A. Posner & Cass R. Sunstein, *The Law of Other States*, 59 STAN. L. REV. 131, 131-79 (2006) (noting that citing out-of-state precedent is a routine practice among courts).

concern that case might not be cited for the issue of interest.⁷⁵ We report all measures, but, consistent with the literature exploring the influence of precedent, we focus on out-of-state and out-of-circuit citations, as these capture the reach of decisions above and beyond the usual norms and hierarchies.⁷⁶

⁷⁵ For an explanation of how cases are annotated and citations grouped, see LEXISNEXIS, *CaseBase Count Annotations*, http://www.lexisnexis.com/help/global/AU/en_AU/citation_annot_tips.asp.

⁷⁶ See, e.g., KLEIN, *supra* note 73; Caldeira, *supra* note 73; Landes et al., *supra* note 38; Posner & Sunstein, *supra* note 73.