Locking the Doors to Discovery? Assessing the Effects of *Twombly* and *Iqbal* on Access to Discovery

**ABSTRACT.** Many observers believe the Supreme Court’s *Twombly* and *Iqbal* opinions have curtailed access to civil justice. But previous empirical studies looking only at Rule 12(b)(6) grant rates have failed to capture the full effect of these cases because they have not accounted for party selection—changes in party behavior that can be expected following changes in pleading standards. In this Note, I show how party selection can be expected to undermine the empirical usefulness of simple grant-rate comparisons. I then use a conceptual model of party behavior that allows me to derive an adjusted measure of *Twombly/Iqbal*’s impact and show how to estimate a lower bound on this measure using data from recent studies by the Federal Judicial Center. My empirical results suggest that, depending on the nature of the suit in question, *Twombly* and *Iqbal* have negatively affected plaintiffs in at least 15% to 21% of cases that faced Rule 12(b)(6) motions in the post-*Iqbal* data window. Again depending on the nature of the suit, these figures represent between one-fourth and two-fifths of the cases that fail to reach discovery on at least some claims in the post-*Iqbal* data window.

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LOCKING THE DOORS TO DISCOVERY?

INTRODUCTION

Rule 8 [of the Federal Rules of Civil Procedure] marks a notable and generous departure from the hyper-technical, code-pleading regime of a prior era, but it does not unlock the doors of discovery for a plaintiff armed with nothing more than conclusions.


Bell Atlantic v. Twombly and Ashcroft v. Iqbal have sparked a broad debate concerning federal pleading standards. In the parallel-conduct antitrust context, Twombly overruled the Conley v. Gibson standard that a complaint attacked by a Rule 12(b)(6) motion to dismiss for failure to state a claim should be dismissed only if no set of facts exists under which the complaint’s claims could entitle the plaintiff to relief. Iqbal explicitly broadened Twombly to “all civil actions.”

A number of empirical studies have appeared concerning Twombly and Iqbal’s impact on motion-to-dismiss dispositions. Opinions seem to be split about the implications of these studies, with some commentators suggesting that the body of evidence signals a major and ominous impact of heightened pleading’s advent, especially in discrimination and civil rights cases. Others argue either that it is a good thing that Twombly and Iqbal elevate pleading standards, or that they do not actually change prior pleading doctrine.

In March 2011, the Federal Judicial Center (FJC) released a detailed report concerning Rule 12(b)(6) practice and adjudication, hereinafter the “original

4. Id. at 45-46.
5. Iqbal, 129 S. Ct. at 1953 (“Our decision in Twombly expounded the pleading standard for ‘all civil actions,’ and it applies to antitrust and discrimination suits alike.” (citation omitted)).
6. See infra Section I.C.
7. See sources cited infra notes 50-54.
8. See sources cited infra note 53.
9. For scholars applauding the perceived elevation of pleading standards, see, for example, sources cited infra notes 55-56. For those arguing that Twombly and Iqbal did not depart importantly from existing doctrine, see sources cited infra note 57.
The FJC released another report in November 2011, hereinafter the “updated FJC report.” The authors of these FJC reports characterize their results as suggesting that there is little reason to believe that *Twombly* and *Iqbal* have importantly affected Rule 12(b)(6) adjudication. Others have gone further, like prominent Supreme Court litigator Andrew Pincus, who stated in congressional testimony that the original report has “proven wrong” prior “speculation” that *Iqbal* would greatly restrict civil justice access. Not surprisingly given the stakes, critics of *Twombly* and *Iqbal* have raised objections to the original report.

In this Note, I make several contributions related to the measurement of *Twombly/Iqbal*’s effects. First, I show that simply comparing the Rule 12(b)(6) motion-to-dismiss grant rate under *Conley* with the Rule 12(b)(6) motion-to-dismiss grant rate under *Twombly/Iqbal* is of limited use in evaluating whether


12. See, e.g., CECIL ET AL., supra note 10, at vii (“In general, there was no increase in the rate of grants of motions to dismiss without leave to amend. There was, in particular, no increase in the rate of grants of motions to dismiss without leave to amend in civil rights cases and employment discrimination cases . . . . There was no increase from 2006 to 2010 in the rate at which a grant of a motion to dismiss terminated the case . . . .”).

13. Barriers to Justice and Accountability: How the Supreme Court’s Recent Rulings Will Affect Corporate Behavior: Hearing Before the S. Comm. on the Judiciary, 112th Cong. 2 (2011) (statement of Andrew Pincus, Partner, Mayer Brown LLP), available at http://judiciary.senate.gov/pdf/11-6-29%20Pincus%20Testimony.pdf (“Two years ago, many asserted that the Court’s ruling in Ashcroft v. *Iqbal* . . . would dramatically restrict plaintiffs’ access to court and that Congressional action was needed to overturn that decision. That speculation has been proven wrong . . . .” (citing CECIL ET AL., supra note 10)).

pleading standards have changed. An increase in pleading standards can change the number of granted Rule 12(b)(6) motions to dismiss (MTDs) through any or all of the following four channels:

(i) Judicial behavior effects: More MTDs might be granted in cases that would have MTDs filed under either pleading regime.

(ii) Defendant selection effects: Defendants might file MTDs in cases that they would have answered under Conley, and some of these new MTDs will be granted.

(iii) Plaintiff selection effects: Plaintiffs might choose not to file some cases that they think will be either more expensive to litigate or less likely to get to discovery. Since some of the cases plaintiffs choose not to file as a result of increased pleading standards would have faced MTDs under Conley and some of those MTDs would have been granted, plaintiff selection will tend to reduce the number of granted MTDs.


16. I am certainly not the first to recognize the likely existence of defendant selection following changes in pleading standards. See, e.g., Kevin M. Clermont & Stephen C. Yeazell, Inventing Tests, Destabilizing Systems, 95 IOWA L. REV. 821, 840 & n.70 (2010) (writing that a defense attorney “commits legal malpractice if he or she fails to move to dismiss with liberal citations to Twombly and Iqbal” and quoting “experienced litigator” Tom Goldstein as “predict[ing] that Iqbal will be ‘the basis for an attempt to dismiss more than 50 percent of all the complaints filed in federal court’” (citation omitted)); Scott Dodson, Pleading Standards After Bell Atlantic Corp. v. Twombly, 93 VA. L. REV. IN BRIEF 135, 142 (2007), http://www.virginialawreview.org/inbrief/2007/07/09/dodson.pdf (“[O]ne thing is certain after Bell Atlantic: it will . . . encourage[] defendants to file motions to dismiss, both in the set of cases likely to be covered by its language, and also in the set less likely to be covered . . . .”).

(iv) Settlement selection effects: The parties’ perceptions of the gains and costs from litigation might either create or eliminate the possibility of settlements where settlement surplus was either negative or positive under Conley. Thus, the number of settlements might rise or fall, and the number of MTDs granted might change as a result.

A critical consequence of party selection is that differences between the Conley-era and post-Twombly or post-Iqbal MTD grant rates mix together two kinds of effects: changes in judicial behavior among cases that would have MTDs filed under either pleading regime, and selection-induced compositional differences in the sets of cases that actually do face MTDs under the Conley and Twombly/Iqbal regimes. Previous empirical studies have not taken account of such potentially important changes in behavior. These studies typically subtract the observed MTD grant rate under Conley from the observed MTD grant rate under Twombly/Iqbal. But as I argue in Part IV, any observed difference in grant rates across pleading regimes is consistent with large, small, or even zero judicial behavior effects. Thus, the existing empirical literature cannot settle disagreements over the effects of switching from Conley to Twombly/Iqbal.

My second contribution relates to the fact that changes in pleading standards affect litigants in ways other than through changes in judicial behavior. For example, the discussion of defendant selection above explains that if defendants file additional MTDs after a switch to the Twombly/Iqbal pleading standard, more MTDs likely will be granted as a result. This effect will harm the plaintiffs in these cases, in that the switch causes these cases not to reach discovery. Conversely, the switch in pleading standards will help defendants, for the same reason. We should want to measure such effects.

In Part V, I derive a measure of Twombly/Iqbal’s impact among a particular set of cases, those in which MTDs are actually filed under Twombly/Iqbal.¹⁹

¹⁸. I discuss these issues, and the concept of settlement surplus, in detail in Part III.

¹⁹. To understand why my estimates relate to this particular set of cases requires one to understand the methodological discussion in Parts II-V, which is too much to pithily explain here. For the moment, though, the key aspect of the set of cases that have MTDs filed against them under Twombly/Iqbal is that this set’s composition is fixed: it does not vary with the pleading regime that is actually in place at any given moment. By contrast, it does not make sense to speak of the impact of Twombly/Iqbal among sets of cases whose composition does vary with the pleading regime. For example, consider three interesting-sounding sets of cases: “cases in which a motion to dismiss is filed,” “cases in which a motion to dismiss is granted,” or “all filed cases.” Party selection can cause the composition of all three of these sets to change when the pleading regime changes. As a result there is no
Among these cases, switching to heightened pleading causes two types of effects. First, there are discovery-prevented cases—those that would reach discovery under Conley but do not as a result of switching to Twombly/Iqbal. Second, there are settlement-prevented cases—those that would be settled under Conley but that, because of the switch to Twombly/Iqbal, plaintiffs will file and defendants will challenge via successful MTDs. Even though these settlement-prevented cases would not reach discovery under either pleading regime, plaintiffs in these cases are worse off as a result of switching from Conley to Twombly/Iqbal, since they do not receive a settlement under Twombly/Iqbal and must also litigate MTDs that they wind up losing.

Taken together, discovery-prevented cases and settlement-prevented cases constitute the set of what I call “negatively affected cases,” because these are cases whose disposition leads to worse results for the plaintiffs who bring suit. The negatively affected share is the ratio of (i) the number of negatively affected cases to (ii) the number of cases that face MTDs under Twombly/Iqbal. For selection-related reasons that I explain in Part V, the negatively affected share generally cannot be calculated with real-world data. However, I show how to use available data to measure a lower bound on it. This is an important contribution, because it allows me to provide meaningful empirical evidence concerning the effects on the parties of switching pleading regimes, among cases that have MTDs filed under Twombly/Iqbal.

My final contribution comes in Part VI, where I use data from the FJC’s two reports to estimate this lower bound separately among three categories of cases. My results suggest that switching pleading standards affected plaintiffs negatively in a sizable share of those cases that faced MTDs in the Iqbal period. For employment discrimination and civil rights cases, switching from Conley to Twombly/Iqbal negatively affected plaintiffs in at least 15.4% and at least 18.1% of cases, respectively, that faced MTDs in the Iqbal period. Among cases not

meaningful way to measure “the” impact of switching pleading regimes on such sets of cases.

20. I do not mean to take sides in any normative arguments by using the adverb “negatively.” One might as easily refer to the underlying concept as “positively affected cases,” given that a switch in pleading regimes makes defendants better off in discovery- and settlement-prevented cases. Twombly and Iqbal do raise important normative questions, of course; I discuss these briefly in Parts I and VII.

21. A lower bound on one function’s value—in this case, the negatively affected share—is another function with the property that the second function never takes on a value greater than the value taken on by the first function.

22. In the October 23, 2011, draft version of this paper, Jonah B. Gelbach, Locking the Doors to Discovery? Conceptual Challenges in and Empirical Results for Assessing the Effects of
involving civil rights, employment discrimination, or financial instruments, *Twombly/Iqbal* negatively affected at least 21.5% of plaintiffs facing MTDs in the *Iqbal* study period. These results tell us that *Twombly/Iqbal* negatively affected a sizable share of those plaintiffs who actually faced MTDs in the post-*Iqbal* period that the FJC studies.

My findings raise important policy questions. Defenders of *Twombly* and *Iqbal* cite high discovery costs as a reason to raise the pleading bar. Thus, a first question is whether discovery-prevented cases (those negatively affected cases that would have reached discovery under *Conley* but do not under *Twombly/Iqbal*) are the cases for which discovery is especially expensive. Critics of *Twombly* and *Iqbal* argue that the decisions create a Catch-22: in order to meet heightened pleading standards, plaintiffs must already have information that in at least some cases may be accessible only via discovery. And yet *Twombly* and *Iqbal* allow the plaintiff access to discovery only if she has already constructed a complaint with that information. Thus, a second question is whether *Twombly* and *Iqbal* disproportionately affect the types of hard-to-plead cases for which this Catch-22 is most salient. And what if the answers to both of these questions are yes? While these questions are beyond my ability to answer in this Note, they frame an agenda for future research concerning pleading standards.

This Note proceeds as follows. In Part I, I briefly discuss *Twombly* and *Iqbal* and the previous empirical literature, and I give an overview of the current findings on post-*Twombly/Iqbal* MTD grant rates. In Part II, I lay down some methodological bricks that form the foundation of the substantive results that follow. In Part III, I present an economic model of pre-discovery litigation. I first discuss a stripped-down economic model of litigation in which procedure plays essentially no role. I then augment this model so that it is detailed

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23. I exclude financial-instruments cases because there is good reason to believe that trends involving them are due at least in part to the financial crisis.

enough to yield several qualitative predictions concerning party selection effects, which will be useful in succeeding Parts of this Note.25

In Part IV, I show that in the presence of party selection, observed MTD grant rates might rise, fall, or stay the same, even when there are substantial judicial behavior effects among cases that would face MTDs under either pleading regime. An implication of this finding is that nothing of substance can be learned, without more data, from differences in grant rates across pleading regimes. Further, I argue in this Part that even if they could be measured correctly, judicial behavior effects are themselves a truncated measure of the effects of changes in pleading standards, because they fail to capture important direct effects of party selection.

In Part V, I introduce my alternative measure, the negatively affected share discussed above. Unfortunately, unless we assume that there is no party selection, this measure cannot be calculated using actual data. However, I show that a lower bound for the negatively affected share can be established using real-world data that are actually available.


1. TWOMBLY, IQBAL, AND ACCESS TO DISCOVERY

In Section I.A, I begin by discussing doctrinal issues related to Twombly and Iqbal. In Section I.B, I then argue that limiting access to discovery played a critical role in the Supreme Court’s opinions in these cases. I also discuss critics’ concerns that Twombly and Iqbal will harm plaintiffs. Finally, I canvass previous empirical studies in Section I.C, including the FJC reports.

LOCKING THE DOORS TO DISCOVERY?

A. Pleading Standards: Rule 8(a), Conley, Twombly, and Iqbal

Rule 8(a) of the Federal Rules of Civil Procedure provides in pertinent part that “[a] pleading that states a claim for relief must contain: . . . (2) a short and plain statement of the claim showing that the pleader is entitled to relief.” This rule plays a critical role in the adjudication of Rule 12(b)(6) motions to dismiss for failure to state a claim: failure to make a “short and plain statement of the claim showing that the pleader is entitled to relief” is the basis for dismissal under Rule 12(b)(6).

Before Twombly, the leading Supreme Court case interpreting this standard was 1957’s Conley v. Gibson, which held that “a complaint should not be dismissed for failure to state a claim unless it appears beyond doubt that the plaintiff can prove no set of facts in support of his claim which would entitle him to relief.” While there has been some debate as to the faithfulness with which courts honored Conley’s no-set-of-facts standard, there is no question that Conley and the no-set-of-facts standard were the Court’s target in Twombly.

Twombly was a putative class-action antitrust case filed by subscribers against incumbent local phone carriers, including Bell Atlantic. The plaintiffs contended that the carriers had violated section 1 of the Sherman Antitrust Act by engaging in a conspiracy both to hobble competition and not to enter each other’s markets following the deregulation of these markets by the Telecommunications Act of 1996. To prove a Sherman Act section 1 violation, a plaintiff must establish that there was a “contract, combination . . . or conspiracy, in restraint of trade.” But in their complaint, the plaintiffs offered no direct reason to believe that such an agreement existed. Instead, they relied on the existence of the carriers’ parallel conduct—the carriers’ simultaneous failure to enter each other’s pre-1996 markets—and simply alleged, “upon information and belief,” the existence of a “contract, combination or

26. FED. R. CIV. P. 8(a).
conspiracy.” In his opinion for the *Twombly* Court, Justice Souter wrote that the carriers’ behavior was “consistent with conspiracy, but just as much in line with a wide swath of rational and competitive business strategy unilaterally prompted by common perceptions of the market.” Further, the Court found that the averment of an agreement in the plaintiffs’ complaint was conclusory and so was not entitled to the usual benefit of construction that courts considering a Rule 12(b)(6) MTD owe to plaintiffs’ factual allegations at the pleading stage.

Having thus disregarded the plaintiffs’ allegation of illegal agreement, the *Twombly* Court construed the complaint as alleging nothing more than parallel conduct. Because existing Supreme Court precedent held that parallel conduct is not per se illegal without additional reason to suspect the existence of an illegal agreement, the *Twombly* Court concluded:

The need at the pleading stage for allegations plausibly suggesting (not merely consistent with) agreement reflects the threshold requirement of Rule 8(a)(2) that the “plain statement” possess enough heft to “sho[w] that the pleader is entitled to relief.” A statement of parallel conduct, even conduct consciously undertaken, needs something suggesting the agreement necessary to make out a § 1 claim; without that further circumstance pointing toward a meeting of the minds, an account of a defendant’s commercial efforts stays in neutral territory.

Lest there be any doubt as to Justice Souter’s distinction between “possibility” and “plausibility,” he stated explicitly that “Conley’s ‘no set of facts’ language has been questioned, criticized, and explained away long enough. . . . [A]fter puzzling the profession for 50 years, this famous

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31. Complaint at ¶ 51, *Twombly* v. Bell Atl. Corp., 313 F. Supp. 2d 174 (S.D.N.Y. 2003) (No. 02 CIV. 10220), 2003 WL 25629874 (“Plaintiffs allege upon information and belief that Defendants have entered into a contract, combination or conspiracy to prevent competitive entry . . . and have agreed not to compete with one another and otherwise allocated customers and markets to one another.”).


33. Id. at 557.

34. Id.

35. See id. at 553 (“[T]he crucial question’ is whether the challenged anticompetitive conduct ‘stem[s] from independent decision or from an agreement’ . . .” (quoting Theatre Enter., Inc. v. Paramount Film Distrib. Corp., 346 U.S. 537, 540 (1954))).

36. Id. at 557.
observation has earned its retirement.”37 What was not clear, though, was whether *Twombly* applied only to antitrust cases—or even just parallel-conduct cases—or whether its reach was transsubstantive. The logic of the Court’s argument can easily be read to involve the substantive details of antitrust law, and some commentators continue to advocate reading *Twombly* that way even after *Iqbal*.38

Enter *Ashcroft v. Iqbal*.39 The plaintiff, Javaid Iqbal, was held in a maximum security “Special Housing Unit” as part of the U.S. government’s post-September 11 policy of confining persons “of high interest” in such facilities.40 Alleging he was beaten and otherwise mistreated during his detention,41 Iqbal filed a *Bivens* action against multiple parties, including FBI Director Robert Mueller and then-Attorney General John Ashcroft.42 As Justice Kennedy characterized it in his opinion for the Court, Iqbal’s complaint alleged that Mueller and Ashcroft had “adopted an unconstitutional policy that subjected Iqbal to harsh conditions of confinement on account of his race, religion, or national origin.”43 Justice Kennedy wrote that these aspects of the instant complaint were “bare assertions, much like the pleading of conspiracy in *Twombly*, [that] amount[ed] to nothing more than a ‘formulaic recitation of the elements’ of a constitutional discrimination claim.”44

Justice Kennedy then went on to evaluate whether the claims he labeled conclusory were plausible. He noted that the attacks of September 11 were carried out by nineteen Arab Muslims who belonged to al Qaeda, whose membership was largely Arab Muslim.45 Thus, the Court opined: “It should come as no surprise that a legitimate policy directing law enforcement to arrest and detain individuals because of their suspected link to the attacks would

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37. *Id.* at 562-63.
41. *Id.* at 19, 31-33.
42. *Id.* at 4-5.
43. *Iqbal*, 129 S. Ct. at 1942.
44. *Id.* at 1951 (quoting Bell Atl. Corp. v. Twombly, 550 U.S. 544, 555 (2007)).
45. *Id.*
produce a disparate, incidental impact on Arab Muslims, even though the purpose of the policy was to target neither Arabs nor Muslims.\textsuperscript{46} Indeed, the Court continued, “[a]s between that ‘obvious alternative explanation’ for the arrests and the purposeful, invidious discrimination respondent asks us to infer, discrimination is not a plausible conclusion.”\textsuperscript{47}

The \textit{Iqbal} Court’s guidance concerning what qualifies as plausible is less than rigorous: “Determining whether a complaint states a plausible claim for relief will . . . be a context-specific task that requires the reviewing court to draw on its judicial experience and common sense.”\textsuperscript{48} Of course, one person’s common sense might be another’s close-mindedness. Even as five Justices might not have found “purposeful, invidious discrimination” a plausible explanation for Javaid Iqbal’s treatment, it is not difficult to imagine that others might disagree.\textsuperscript{49} Whatever \textit{Conley}’s drawbacks, the “no set of facts” standard is, on its face, at least objective: either it would be possible to adduce facts entitling a plaintiff to relief based on a complaint’s allegations or it would not be. By contrast, the subjective nature of “experience and common sense” is self-evident.

The Court’s decisions in \textit{Twombly} and \textit{Iqbal} have faced a fusillade of criticism. Arthur Miller has written that the cases “mark[] a continued retreat from the principles of citizen access, private enforcement of public policies, and equality of litigant treatment in favor of corporate interests and concentrated

\begin{itemize}
\item \textsuperscript{46} \textit{Id.} Note that, according to the Second Circuit, “Iqbal is a Muslim and a Pakistani, but not an Arab.” \textit{Iqbal} v. Hasty, 490 F.3d 143, 148 n.2 (2d Cir. 2007).
\item \textsuperscript{47} \textit{Iqbal}, 129 S. Ct. at 1951–52 (citation omitted) (quoting \textit{Twombly}, 550 U.S. at 567). The \textit{Iqbal} Court also held that Iqbal would need to establish more than just the unconstitutionality of his arrest, since “[his] complaint challenges neither the constitutionality of his arrest nor his initial detention.” \textit{Id.} at 1952. Instead, his complaint rested on the allegation that detainees categorized as being “of high interest” were confined in the Administrative Maximum Special Housing Unit because of their race, religion, or national origin. \textit{Id.} at 1952. The Court then determined that Iqbal’s complaint “does not contain any factual allegation sufficient to plausibly suggest [the] discriminatory state of mind” on the part of Ashcroft and Mueller that would be necessary to meet the Court’s reading of Rule 8(a) as to the policy that led to Iqbal’s confinement in the unit. \textit{Id.} at 1952.
\item \textsuperscript{48} \textit{Id.} at 1950.
\item \textsuperscript{49} \textit{See}, e.g., Michael C. Dorf, \textit{Iqbal and Bad Apples}, 14 LEWIS & CLARK L. REV. 217, 227 (2010) (“[T]he allegation that the detainees sent to the abusive maximum security prison unit were disproportionately Arab and Muslim, combined with the allegations of actual incidents of guards’ express prejudice alleged in the complaint, would seem to make out a more-than-plausible prima facie case that the underlying policy designed and implemented by Ashcroft and Mueller targeted Arab and Muslim men for confinement under the harsh conditions of the maximum security prison.”).
\end{itemize}
Characterizing *Twombly* and *Iqbal*’s results as “Pleading Left Bleeding,” Kevin Clermont and Stephen Yeazell argue that “[b]y inventing a new and foggy test for the threshold stage of every lawsuit, [*Twombly* and *Iqbal*] have destabilized the entire system of civil litigation.” Judge Colleen McMahon of the Southern District of New York wrote after *Twombly* that “no one quite understands what the case holds. . . . We district court judges suddenly and unexpectedly find ourselves puzzled over something we thought we knew how to do with our eyes closed: dispose of a motion to dismiss a case for failure to state a claim.” And a number of commentators have expressed special concern about *Twombly* and *Iqbal*’s effects on civil rights claimants.

Bills were introduced in both houses of Congress in 2009 with the aim of overruling *Twombly* and *Iqbal*, though both stalled.

Other observers have welcomed *Twombly* and *Iqbal*. For example, Mark Herrmann and James Beck write that “out-of-control litigation prompted the Supreme Court in *Twombly* to adjust the threshold pleading requirements for unleashing the legal process.” On the basis of a mathematical model, Keith Hylton advocates “rigorous assessment at the pleading stage,” which “provides


53. See, e.g., Joshua Civin & Debo P. Adegbile, Restoring Access to Justice: The Impact of *Iqbal* and *Twombly* on Federal Civil Rights Litigation, AM. CONST. SOC’Y FOR L. & POL’Y 2 (2010), http://www.acslaw.org/sites/default/files/Civin_Adegbile_Iqbal_Twombly.pdf (expressing fear that *Twombly* and *Iqbal* might “create an undesirable safe harbor that effectively places some defendants beyond the reach of civil rights laws”); Alexander A. Reinert, The Costs of Heightened Pleading, 86 IND. L. J. 119, 159 (2011) (“[C]ases in which state of mind plays a large role or in which there are large information asymmetries, such as civil rights, constitutional, and employment discrimination cases, are most likely to be vulnerable to accusations of thin pleading.”); Elizabeth M. Schneider, The Changing Shape of Federal Civil Pretrial Practice: The Disparate Impact on Civil Rights and Employment Discrimination Cases, 158 U. PA. L. REV. 517, 519 (2010) (“[T]he greatest impact of this change in the landscape of federal pretrial practice is the dismissal of civil rights and employment discrimination cases from federal courts in disproportionate numbers.”).


an economic rationale for the Supreme Court’s decision in *Bell Atlantic v. Twombly*, and suggests that it may have a broader application than to the circumstances of that case. Still others have argued that *Twombly* and *Iqbal* actually change relatively little in the pleading system. Finally, some commentators have read the two cases as having important differences, with *Twombly* having either changed little or made beneficial changes, by contrast to a perceived negative effect of *Iqbal*.

**B. The Crucial Role of Discovery Access in *Twombly* and *Iqbal***

The underlying issue animating not only the Supreme Court’s decisions in *Twombly* and *Iqbal*, but also the controversy surrounding them, is discovery access. When discovery costs are asymmetrically high for defendants, a plaintiff’s ability to get through the answer/MTD stage can be a powerful club. Liberal pleading rules may have an *in terrorem* effect on defendants in these cases, possibly inducing more, and more one-sided, settlements. The Supreme Court’s opinions in both *Twombly* and *Iqbal* take note of this point; the opinions make repeated and extensive references to the burden of discovery.

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56. Hylton, supra note 25, at 42.


58. See, e.g., Robert G. Bone, *Plausibility Pleading Revisited and Revised: A Comment on Ashcroft v. Iqbal*, 85 Notre Dame L. Rev. 849, 852 (2010) (“*Iqbal* applies a thick screening model that aims to screen weak as well as meritless suits, whereas *Twombly* applies a thin screening model that aims to screen only truly meritless suits. The thick screening model is highly problematic on policy grounds . . . .”).
borne by large corporations (as in \textit{Twombly}) or government officials (as in \textit{Iqbal}).\textsuperscript{59}

Citing a 1989 law review essay by Judge Frank Easterbrook,\textsuperscript{60} Justice Souter argues in \textit{Twombly} that not all “groundless” claims can “be weeded out early in the discovery process through careful case management . . . given the common lament that the success of judicial supervision in checking discovery abuse has been on the modest side.”\textsuperscript{61} Moreover, Justice Souter argues, summary judgment is too late in the game for weak claims to be eliminated, because “\textit{the threat of discovery expense} will push cost-conscious defendants to settle even anemic cases before reaching those proceedings.”\textsuperscript{62} Still other text from \textit{Twombly} highlights the Court’s specific concern about the expense discovery brings along in complex antitrust cases:

\begin{quote}
Probably, then, it is only by taking care to require allegations that reach the level suggesting conspiracy that we can hope to avoid the \textit{potentially enormous expense of discovery} in cases with no reasonably founded hope that the [discovery] process will reveal relevant evidence to support a § 1 claim.\textsuperscript{63}
\end{quote}

The concern about discovery burdens appears in \textit{Iqbal} too, with Justice Kennedy’s opinion for the Court repeatedly stressing the role of discovery. Justice Kennedy places special emphasis on the Court’s “rejection of the careful-case-management approach” in cases involving qualified immunity, whose “basic thrust . . . is to free officials from the concerns of litigation, including avoidance of disruptive discovery.”\textsuperscript{64} Finally, the epigraph of this Note leaves no doubt as to the importance Justice Kennedy assigns to limiting

\begin{itemize}
\item \textsuperscript{59} Andrew Blair-Stanek argues that one can view a Rule 12(b)(6) dismissal as “effectively just the denial of discovery, followed by summary judgment based solely on the facts alleged in the complaint.” Andrew Blair-Stanek, Twombly \textit{Is the Logical Extension of the Mathews v. Eldridge Test to Discovery}, 62 FLA. L. REV. 1, 36 (2010). Blair-Stanek notes that denial of discovery finds a basis in Rule 26(b)(2)(C)(iii), \textit{id.}, which allows a court to limit discovery if it finds that “the burden or expense of the proposed discovery outweighs its likely benefit.” FED. R. CIV. P. 26(b)(2)(C)(iii).
\item \textsuperscript{60} Frank H. Easterbrook, \textit{Discovery as Abuse}, 69 B.U. L. REV. 635 (1989).
\item \textsuperscript{61} Bell Atl. Corp. v. Twombly, 550 U.S. 544, 559 (2007) (emphasis added and internal quotation marks omitted).
\item \textsuperscript{62} \textit{id.} (emphasis added).
\item \textsuperscript{63} \textit{id.} (emphasis added and internal quotation marks omitted).
\item \textsuperscript{64} Ashcroft v. Iqbal, 129 S. Ct. 1937, 1953 (2009) (emphasis added and internal quotation marks omitted).
\end{itemize}
discovery in *Iqbal*. Despite its generosity and departure from “hyper-technical . . . code-pleading,” Justice Kennedy writes, “Rule 8 . . . does not unlock the doors of discovery for a plaintiff armed with nothing more than conclusions.”

C. Previous Empirical Literature

I am aware of nine studies by other authors that attempt a quantitative assessment of how MTD grant rates changed after *Twombly* or *Iqbal*. Two of these are the FJC reports, which I will discuss momentarily. Four of the studies consider only data from the pre-*Iqbal* period, so that they compare MTD grant rates in the *Conley* era with MTD grant rates in the period between *Twombly* and *Iqbal*. These studies are Kendall W. Hannon’s student note; University of South Carolina School of Law Professor Joseph A. Seiner’s separate studies of employment discrimination and of ADA cases; and a paper by University of Chicago Law School Professor William Hubbard that is unpublished as of

65. Id. at 1950 (emphasis added).
66. In addition, I am working on a paper that will link a formal, game-theoretic model of pre-discovery litigation to empirical work similar to the results I report in Part VI. As of this writing, a very rough draft is available as Jonah B. Gelbach, Selection in Motion: Measuring and Estimating the Effects of Heightened Pleading (Nov. 3, 2011) (unpublished manuscript), http://ssrn.com/abstract=1884505.
67. Kendall W. Hannon, Note, Much Ado About *Twombly*: A Study on the Impact of Bell Atlantic Corp. v. *Twombly* on 12(b)(6) Motions, 83 NOTRE DAME L. REV. 1811 (2008). Because it was written before *Iqbal*, Hannon’s study provides limited guidance, though its sample construction has the virtue of being less likely than most other studies to suffer from party selection effects since “the vast majority of cases in this study involved a complaint that was filed before the *Twombly* decision,” id. at 1831, and “the majority of the 12(b)(6) motions in the study set were brought before *Twombly*,” id. Thus, Hannon argues that his sample should be insulated from the sorts of selection effects on which I focus in this Note. Id.
69. Joseph A. Seiner, Pleading Disability, 51 B.C. L. REV. 95 (2010). Seiner notes that the Americans with Disabilities Act (ADA) Amendments Act of 2008 expanded the set of people covered by the ADA. Id. at 108 (stating that the Act “explicitly seek[s] to ‘reinstat[e] a broad scope of protection’” under the ADA (quoting the ADA Amendments Act of 2008, Pub. L. No. 110–325, § 2(b)(1), 122 Stat. 3553, 3554 (2008))). As a consequence, one might expect to see more ADA-related suits filed. Supplemental evidence provided to me by Joe Cecil of the FJC shows that this is indeed the case. See infra note 167. Since the Amendments took effect between *Twombly* and *Iqbal*, the composition of ADA cases may have changed for reasons unrelated to changes in pleading doctrine. Thus, even in the absence of party selection, I do not believe that Seiner’s *Pleading Disability* would be a reliable guide to the effects of *Twombly* and *Iqbal* on discovery access, and I will not discuss it further.
locking the doors to discovery? this writing. The other three papers include two by St. Thomas University School of Law Professor Patricia Hatamyar Moore—an initial one that includes a relatively small post-Iqbal sample and a follow-up study with a larger sample of post-Iqbal cases—and another by Albany Law School Professor Raymond Brescia.

All seven of these studies use data collected via searches of either Lexis’s federal cases combined database (in the case of Brescia’s paper) or one of Westlaw’s case databases (for the other six studies). The details vary somewhat across studies, but the basic approach is to search case databases for judicial opinions that contain “Conley,” “Twombly,” or “Iqbal,” as appropriate depending on the time period of interest, together with terms indicating that the opinion concerned the adjudication of a Rule 12(b)(6) MTD. These studies typically include cases from a search window of between one and two years before Twombly, between Twombly and Iqbal, and after Iqbal.

It is difficult to do justice to seven studies that used overlapping but distinct data-gathering and empirical methodologies. However, as a rough approximation, it is possible to draw a few basic general conclusions from these studies:

70. William H.J. Hubbard, The Problem of Measuring Legal Change, with Application to Bell Atlantic v. Twombly (Univ. of Chi. Law & Econ., Olin Working Paper No. 575, 2011), available at http://ssrn.com/abstract=1883831. Like Hannon, see supra note 67, Hubbard uses only cases filed before Twombly was decided in order to prevent selection related to case-filing decisions from driving his results. See Hubbard, supra, at 31. In addition to his empirical work, Hubbard also presents an interesting mathematical model of selection, which he states “generates new predictions about the prevalence and success rates of motions to dismiss . . . [that] are borne out empirically.” Id. However, Hubbard does not prove that his model generates the predictions that he attributes to it, so it is not clear whether they are model predictions or simply conjectures.


73. Brescia, supra note 14. Brescia makes the interesting point that there should not be judicial behavior effects of Twombly and Iqbal in some cases with Rule 12(b)(6) motions, since not all such motions will involve problems with plausibility. Id. at 5. Nonetheless, he finds that “courts rarely found that a case should be dismissed because a judge considered there to be a more plausible, and entirely legal, basis for the complained of conduct,” which is the doctrinal cornerstone of Twombly and Iqbal’s change to pleading standards. Id. at 7.

74. Brescia, supra note 14, at 31-32 n.98.

75. See Hannon, supra note 67, at 1830; Hatamyar, supra note 71, at 684-85, nn.200, 202; Hatamyar Moore, supra note 14, at 5, nn.25-27; Hubbard, supra note 70, at 28; Seiner, supra note 68, at 1028, nn.128, 129; Seiner, supra note 69, at 116-17, nn.180, 185.
• They tend to find relatively little difference in MTD grant rates across their pre-Twombly and post-Twombly/pre-Iqbal periods.76
• They tend to find differences in the MTD grant or denial rate that range between zero and ten percentage points across their Conley and post-Iqbal periods,77 with larger differences for cases involving civil rights of one type or another.78
• They find either small or no changes in the rate at which MTDs are granted without leave for the plaintiff to amend her complaint, and sizable increases in the rate they are granted with leave to amend.79

As the original FJC report points out, coverage in case databases like Westlaw and Lexis is incomplete, because not all decisions are included in these databases.80 In addition, the report notes, “whether an order was granted or denied may be related to its likelihood of publication.”81 Thus, one concern about the aforementioned studies is that, party selection issues aside, their samples may not represent the set of all cases that actually have MTDs filed or adjudicated in either the Conley or Twombly/Iqbal periods.

76. See, e.g., Brescia, supra note 14, at 29-30; Hannon, supra note 67, at 1836; Hatamyar, supra note 71, at 597-99; Hubbard, supra note 70, at 28.
77. See, e.g., Hatamyar Moore, supra note 14, at 7-8 (finding that the MTD denial rate “fell from 26% under Conley to . . . 17% under Iqbal”).
78. For example, in her earlier paper, Hatamyar Moore finds that grant rates for MTDs in cases she codes as involving constitutional civil rights rose from 50% under Conley to 55% under Twombly to 60% under Iqbal. Hatamyar, supra note 71, at 556. Her later paper shows a much larger Conley-Iqbal difference, roughly twenty-three percentage points, when she follows the FJC's methodology and excludes cases with pro se plaintiffs, but her samples in this comparison include just sixty-two cases under Conley and fifty-three post-Iqbal, so it is unclear what to make of this result. Hatamyar Moore, supra note 14, at 11-12.
79. See, e.g., Brescia, supra note 14, at 36-37; Hatamyar, supra note 71, at 598 tbl.1; Hatamyar Moore, supra note 14, at 7 (showing that the rate at which MTDs are granted without leave to amend was 40% in both her Conley and Iqbal samples but indicating “[t]he percentage of 12(b)(6) motions granted in full with leave to amend increased from 6% under Conley to . . . 21% under Iqbal”).
80. Cecil et al., supra note 10, at 37 & n.47.
81. Id. After searching Westlaw’s “allfeds” database for thirty to forty orders that appear in the FJC’s sample for each of three districts, Cecil et al. were able to match 87% of them for the Eastern District of Arkansas and 82% for the District of Colorado, but only 18% for the District of Kansas. Id. How much of the differences between results in the FJC report and those in the studies discussed supra are due to such case-coverage differences is an open question. Hatamyar Moore does write that when she tries to replicate the FJC’s sample inclusion criteria, her “findings are broadly consistent with the FJC’s.” Hatamyar Moore, supra note 14, at 3.
A second concern is that it is unclear how to combine results involving MTD grants with and without leave to amend. If plaintiffs never file amended complaints (or defendants always challenge amended complaints again and win grants without leave to amend), then the best way to measure MTD grant rates would be to add together grants with and without leave to amend. On the other hand, if plaintiffs always file amended complaints, and if none of these is ever dismissed with prejudice, then the best way to measure MTD grant rates would be to use only grants without leave to amend. One would expect—and the updated FJC report confirms, as I discuss below—that the reality lies somewhere between these extremes. Even if we could be confident there were no party selection, then, it would not be clear how we should use the grant-rate figures in the studies discussed above. This is especially problematic since trends in the rates at which MTDs were granted with and without leave to amend have differed noticeably.82

I turn now to the FJC reports. These reports combine the fruits of two distinct data-gathering efforts, which I will refer to as the filing data set and the grants data set. Both studies involve cases originally filed in, or removed from state courts to, twenty-three federal district courts that “account for 51% of all federal civil cases filed” in 2009.83 Rather than use legal reference databases to find cases in which MTDs are adjudicated as in the studies discussed above, Cecil and his coauthors searched the FJC’s database of civil case docket sheets for codes that indicate filing of MTDs and orders resolving them.84 They then used computer algorithms to search associated electronic documents for phrases that indicated that the MTD in question involved Rule 12(b)(6).85

The filing data set includes all cases that meet the FJC’s inclusion criteria86 and were filed between October 1, 2005, and June 30, 2006 (what I will call the

82. See supra text accompanying note 79.
83. Cecil ET AL., supra note 10, at 5. These courts consist of the U.S. District Court for the District of Columbia as well as, in general, “the 2 districts in each of the 11 circuits with the largest number of civil cases filed in 2009,” though in some circuits the FJC instead was forced to use “the court in the circuit with the next greatest number of civil filings.” Id.
84. Id.
85. Id.
86. The FJC excluded cases involving prisoners and pro se plaintiffs due to “the distinctive characteristics and procedural requirements of such litigation, and because they were concentrated in only 4 of the 23 districts” the FJC studied. Id. at 6 n.10. The FJC also excluded orders resolving motions that responded to counterclaims and affirmative defenses. Id. at 6.
Conley period), or October 1, 2009, and June 30, 2010 (what I will call the Iqbal period). Filings of cases involving financial instruments more than tripled, and civil rights filings grew 18%, but the number of cases filed changed little in the other categories the FJC considered. The FJC’s civil rights category excludes Title VII employment cases, which the FJC considers separately. However, the civil rights category does include ADA cases. Given the liberalization of ADA coverage arising from the ADA Amendments Act of 2008, changes in case and MTD filings in the FJC’s civil rights category most likely mix together effects of Twombly and Iqbal and effects of the ADA Amendments.

Among filed cases, the rate at which defendants filed Rule 12(b)(6) MTDs increased from 4.0% to 6.2% between the early and later periods. This is a substantial change in filing rates: a 2.2 percentage-point increase in the MTD filing rate constitutes a 55% increase from the Conley-period filing rate of 4.0%. Thus, Twombly and Iqbal were accompanied by a substantively large increase in the rate at which defendants filed Rule 12(b)(6) MTDs.

Next, I turn to the original FJC report’s grants data set, which includes cases for which a judicial order was entered either between January 2006 and June 2006 (the Conley period), or between January 2010 and June 2010 (the Iqbal period). There were 700 such orders in the Conley sample and 1221 in

87. When referring to the FJC reports, I use phrase “Iqbal period,” since the FJC did not collect data covering the post-Twombly, pre-Iqbal period. Elsewhere I use variants of “the Twombly/Iqbal period,” since both Twombly and Iqbal potentially raised pleading standards.

88. Table 1 of the original FJC report shows that there were 1524 cases involving financial instruments in the FJC’s early period and 4790 in its later period; the figures for civil rights cases were 4214 and 4976, respectively. Id. at 9 tbl.1.

89. Id.

90. Id. at 39-40 tbl.B-2.

91. Id.

92. See supra note 69.

93. In my own empirical work using the FJC’s data in Part VI, I exclude all ADA cases. I am able to do this only because of the generous provision of supplemental tables by Joe Cecil, lead author of the FJC reports.

94. Cecil et al., supra note 10, at 9-11. While each of the FJC reports contains results from multivariate models that account for various case characteristics, I will focus my discussion on the simple differences between the pre-Twombly and post-Iqbal periods studied; the multivariate results are broadly consistent with the simpler differences in grant rates.

95. Id. at 5.
the *Iqbal* sample. The FJC used recent graduates from the University of Oklahoma College of Law to code these orders not only for the judge’s action, but also for a variety of factors, including whether the challenged complaint had been amended. Coders “indicated whether a motion was denied, was granted as to all relief requested by the motion, or was granted as to some but not all of the relief requested by the motion.”

When the court granted relief, the FJC “also coded whether the plaintiff was allowed to amend the complaint, and whether the motion eliminated only some claims or all claims of one or more plaintiffs.” It is thus important to remember that the FJC’s grant data concern claims rather than cases, since some of a complaint’s claims might survive to discovery even as others will not. Thus, my results using the FJC data should be interpreted as telling us about the share of cases in which at least some claims are dismissed as a result of *Twombly* and *Iqbal*.

The FJC found that the share of orders that denied in full a Rule 12(b)(6) MTD fell from 34.1% to 25.0%; put differently, the share of orders that granted some or all relief sought by defendants increased from 65.9% to 75.0%. These more favorable results for defendants are more than fully explained by the (statistically significant) increase in the share of MTD orders that were granted with leave to amend: this share rose more than 14%, from 20.9% to 35.3% (a statistically significant increase), while the share granted without leave to amend actually fell about five percentage points, from 45.0% to 39.7%.

For employment discrimination cases, the share of MTDs that were granted as to some or all claims challenged increased from 67.4% to 70.6%, with the difference being statistically insignificant. For civil rights cases, the

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96. *Id.* at 14 (author’s calculations from tbl.4).
97. *Id.* at 41.
98. *Id.* at 5.
99. *Id.* Observe that even a grant in full need not eliminate all claims against a defendant, or even all of a particular plaintiff’s claims against that defendant, since the defendant might challenge only some claims.
100. *Id.* at 14 tbl.4.
101. *Id.*
102. *Id.*
103. *Id.*
grant rate rose from 70.3% to 78.0%.\textsuperscript{104} As with other cases, the increase in the share of MTDs granted is composed of a large increase in the share granted \textit{with} leave to amend and a smaller drop in the share granted \textit{without} leave to amend.\textsuperscript{105} Results for MTD orders are very different for financial instrument cases compared with others.

In November 2011, the FJC released its updated report, which conducted further collection and analysis of cases represented in the original report’s grants data set.\textsuperscript{106} Unlike the initial report, which coded only the specific order found via the FJC’s search of its database, the updated report follows all cases included in the original grants study through September 1, 2011.\textsuperscript{107} Plaintiffs submitted one or more amended complaints in 347 cases, just under two-thirds of the 543 cases in the original report’s grants study that had MTDs granted with leave to amend.\textsuperscript{108} Defendants filed renewed Rule 12(b)(6) MTDs in 209 of these 347 cases, roughly 60%.\textsuperscript{109} All but eighty of these MTDs were resolved within the FJC’s follow-up period.\textsuperscript{110}

For my purposes, the most important aspect of the updated report concerns its results on whether MTD movants (presumably defendants) or respondents (presumably plaintiffs) prevail at the Rule 12(b)(6) stage after the MTD filing that the FJC considered in its original report’s grant study. By the FJC’s definition, plaintiffs prevail when MTDs are denied, and defendants prevail when MTDs are granted without leave to amend as to all claims. But when the

\textsuperscript{104} The report’s table 4 has a typographical error, transposing the last two digits of the actual pre-\textit{Twombly} rate so that it reads 27.9%; I calculated a rate of 29.7% by dividing the number of denied civil rights MTDs, 51, by the corresponding total number of MTDs considered, 172, which yields 29.7%. See id.

\textsuperscript{105} Id.

\textsuperscript{106} CECIL ET AL., supra note 11.

\textsuperscript{107} In personal communication, lead author Joe Cecil informed me that this date, which does not appear in the updated report, was the end of the follow-up period. E-mail from Joe Cecil, Lead Author, FJC Report, to author (Dec. 7, 2011, 11:18 AM EST) (on file with author). The updated report also adds the caveat that, as a result of “idiosyncratic coding practices by court staff” in some districts, the authors missed some orders in constructing the sample used in both the original and updated reports; however, the updated report states that the authors “presently have no reason to believe that inclusion of the missing orders will change the findings of our study of outcomes of motions” and promises a reanalysis once missing orders are located. CECIL ET AL., supra note 11, at 1-2.

\textsuperscript{108} Id. at 3.

\textsuperscript{109} Id.

\textsuperscript{110} See id.
court grants an MTD with leave to amend, the plaintiff has the option to file an amended complaint, so either party might ultimately prevail.

In the updated report, the FJC coded the movant as prevailing in a case whose MTD had been granted with leave to amend if “the court granted the last motion to dismiss in whole or in part and no opportunity to amend the complaint remained. This included all cases in which the motion was granted with leave to amend, but no amended complaint was submitted during the time allowed.”111 The FJC coded the respondent in such a case as prevailing if “the last motion to dismiss was denied, or . . . the respondent submitted an amended complaint and the movant chose not to respond with an additional motion to dismiss.”112 The FJC excluded from consideration eighty cases in which the chain of events following the filing of the initial MTD the FJC considered had yet to terminate in one of these ways.113

Neither movants nor respondents bat a thousand among cases that have MTDs granted with leave to amend. The FJC report reveals that in all cases considered together, movants ultimately prevailed in 56.4% of cases in the Conley sample.114 This figure lies roughly midway between the 45.0% that have MTDs granted without leave to amend115 and the 65.9% that have MTDs granted either with or without leave to amend.116 The analogous figures for the FJC’s Iqbal sample show that movants ultimately prevail in 62.7% of MTDs,117 while 39.7% of MTDs are granted without leave to amend118 and 75% of MTDs are granted either with or without leave to amend.119 These statistics indicate that movants in the FJC’s Iqbal sample ultimately prevail in a greater share of cases involving MTDs granted with leave to amend than did movants in the Conley sample.

111. Id.
112. Id.
113. Id. Of these eighty cases, fifty-seven involved pending MTDs, and twenty-three involved cases in which the respondent still had the right to refile following an MTD granted with leave to amend and had not yet done so. Id.
114. Id. at 7 tbl.A-1.
115. CECIL ET AL., supra note 10, at 14 tbl.4.
116. Id.
117. CECIL ET AL., supra note 11, at 7 tbl.A-1.
118. CECIL ET AL., supra note 10, at 14 tbl.4.
119. Id.
II. METHODOLOGICAL UNDERPINNINGS: POTENTIAL OUTCOMES AND JUDICIAL BEHAVIOR EFFECTS

This Note’s empirical objective is to analyze the effects of changes in pleading standards. Such analysis necessarily involves comparing observed case outcomes under the *Conley* and *Twombly/Iqbal* pleading regimes. These observed case outcomes are the result of deliberate decisions parties make. Some of these decisions will be different as a result of parties’ behavioral responses to the differing incentives under the two pleading regimes. To understand the interaction of party selection and judicial behavior effects, we must have language that allows us to separately characterize (i) the outcome that *would* happen in a case if the *Conley* standard governed and (ii) the outcome that *would* happen if, instead, the *Twombly/Iqbal* standard governed. Following what is sometimes known as the evaluation methodology literature, I will refer to these what-*would*-happen results as “potential outcomes.”

If we could observe each case’s potential outcome under both pleading regimes, it would be a simple matter to measure the but-for effects of changing the pleading regime. We do observe cases’ outcomes under the pleading regime that actually governs at the time data are collected: a case’s actual outcome tells us the case’s potential outcome in the pleading regime currently in place. Thus, real-world data on MTDs adjudicated in the *Conley* era tell us about potential outcomes under *Conley* for cases that wind up facing MTDs when the *Conley* standard governs. Likewise, data on MTDs from the *Twombly/Iqbal* era tell us about potential outcomes under *Twombly/Iqbal* for cases that wind up facing MTDs when the *Twombly/Iqbal* standard governs. But we do not—and cannot—observe any case’s potential outcome in the pleading regime that is not actually in place at the time we collect data. Without making assumptions of one type or another, we cannot know what would have happened to cases that actually have MTDs filed under *Conley* had *Twombly/Iqbal* actually been in place, and so on. This quandary boils down to the observation that it is impossible to observe what would happen to the same unit of study in multiple mutually exclusive states of the world—a challenge known in the evaluation methodology literature as the fundamental evaluation problem.120

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120. The literature concerning evaluation methodology is vast. Its object is to measure the causal “treatment” effects of changing a policy or other environmental behavior when only a single actual outcome can be observed. In the absence of random assignment experiments (and even sometimes in the presence of them), the fundamental evaluation problem cannot be solved without making some behavioral assumptions. For example, in this Note, I partially solve the fundamental evaluation problem by assuming that litigants are economically
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Suppose we assume that all cases in which MTDs are actually observed being filed under Conley would also have MTDs filed under Twombly/Iqbal, and vice versa. Then the difference in observed grant rates across pleading regimes would identify the but-for impact of the pleading-standard switch on judicial behavior for these cases. But what if the parties change their litigation behavior when pleading standards change? Then as I discussed in the Introduction, simple comparisons of observed MTD grant rates under the two pleading regimes will mix together judicial behavior effects and changes in the composition of cases that face MTDs under the pleading regime that is actually in place.

To avoid such compositional problems requires finding a way to hold fixed the set of cases whose outcomes we compare across pleading regimes. I will show how to do that in Part V. My more modest objective in the current Part is to develop two key building blocks that will help us get to Part V. In Section A of this Part, I develop a taxonomy for the various pre-discovery postures that cases can take as a function of parties’ choices. This taxonomy is critical to the rest of my methodological analysis in Parts III-V (and thus to my empirical work in Part VI). In Section B, I then give a precise definition to the concept of judicial behavior effects, which will also play an important role throughout Parts III-V in helping to distinguish the different channels through which heightened pleading creates negatively affected cases.

Throughout this Part, and also throughout Parts III-V, I shall rely on a number of simplifying assumptions for the sake of exposition. I shall assume that each case involves a single plaintiff and a single defendant; that each case

rational. That assumption turns out to provide enough behavioral structure to allow me to measure an object of interest, the lower bound on the negatively affected share among cases that face MTDs under Twombly/Iqbal. To learn more than this lower bound, we would have to make stronger behavioral assumptions. For discussions of the fundamental evaluation problem in the applied econometrics literature, see, for example, James J. Heckman, Robert J. LaLonde & Jeffrey A. Smith, The Economics and Econometrics of Active Labor Market Programs, in 3 HANDBOOK OF LABOR ECONOMICS 1865, 1879 (Orley Ashenfelter & David Card eds., 1999). See also Donald B. Rubin, Estimating Causal Effects of Treatments in Randomized and Nonrandomized Studies, 66 J. EDUC. PSYCHOL. 688 (1974), for an early and widely celebrated discussion of the potential-outcomes approach to defining causal effects; and Guido W. Imbens & Joshua D. Angrist, Identification and Estimation of Local Average Treatment Effects, 62 ECONOMETRICA 467 (1994), for a careful and widely cited discussion of treatment-effect heterogeneity in a potential-outcomes model.

Perhaps it would be more accurate to speak of controversies than cases, since some of the “cases” I discuss will not be filed under one or both of the pleading regimes. For simplicity, though, I will use the word “cases” generically to refer to any controversy, whether litigated or not.

involves a single claim; that Rule 12(b)(6) is the only type of MTD that can be filed; and that when MTDs are granted, they are always granted without leave to amend. Each of these assumptions lacks realism in one way or another. But the main methodological points of my discussion would carry over to an appropriately generalized discussion, and making these assumptions greatly simplifies the expositional burden of dealing with multiple conceptually subtle issues.

A. Developing a Taxonomy for Cases’ Pre-Discovery Posture

In terms of the parties’ actions, a case might have any of four pre-discovery procedural postures. First, in “A” cases, the plaintiff files a complaint and the defendant then files an answer. Second, in “M” cases, the plaintiff files a complaint that the defendant attacks with a motion to dismiss, rather than answering. Third, in “D” cases, the plaintiff never files a complaint; instead, she “drops” the case without receiving any settlement. Fourth, in “S” cases, the parties agree to settle the case at some time before the defendant must file an answer or MTD. The S category includes both (i) settlements that occur before the plaintiff files her complaint and (ii) those that occur after the plaintiff files her complaint but before the defendant files either an answer or MTD.

Given the pleading standard actually in place, a case’s potential party behavior is captured by the A, M, D, and S categories. But to understand the causal effects of changing pleading regimes requires a taxonomy of the pair of potential choices that parties would make when assigned to the different pleading regimes. For example, consider the set of cases that plaintiffs would file and defendants would answer under both pleading regimes. I will refer to these as “AA” cases, since they belong to category “A” under both the Conley and Twombly/Iqbal pleading regimes. Similarly, “MM” cases are those in which, under both pleading regimes, plaintiffs would file complaints that

122. In addition, I shall assume that filing MTDs and answers is mutually exclusive. This assumption rules out various procedural maneuvers, like a defendant’s choosing to file a post-answer Rule 12(c) motion, or to file both (i) an answer to two alleged claims and (ii) a Rule 12(b)(6) MTD on the first claim only. A defendant might choose to do this out of fear that, if the judge denies the defendant’s Rule 12(b)(6) motion, the judge might then also discount Rule 15(a)(2)’s admonition that the court should “freely give leave” to amend an answer “when justice so requires.” Fed. R. Civ. P. 15(a)(2). In any case, assuming that defendants do not file MTDs and answers simultaneously is just a way to be able to use the simple phrase “file an answer” rather than more cumbersome ones that cover all possible eventualities, like “choose not to act in such a way as to forfeit one’s ability to prevent discovery on the basis of the plaintiff’s failure to state a claim.”
locking the doors to discovery?

defendants would attack via MTDs. Cases that would be answered under Conley but would face MTDs under Twombly/Iqbal are “AM” cases, and so on.

Because there are four potential outcomes—A, M, D, and S—under each pleading standard, there are sixteen total categories. Figure 1 shows these categories in a four-by-four matrix, with the rows given by Conley potential outcomes and the columns given by Twombly/Iqbal potential outcomes.

Figure 1.
A TAXONOMY OF CASES IN TERMS OF THEIR POTENTIAL OUTCOMES UNDER THE CONLEY AND TWOMBLY/IQBAL PLEADING REGIMES

<table>
<thead>
<tr>
<th>OUTCOME UNDER TWOMBLY/IQBAL STANDARD</th>
<th>DROPPED</th>
<th>SETTLED</th>
<th>ANSWERED</th>
<th>MTD FILED</th>
</tr>
</thead>
<tbody>
<tr>
<td>DROPPED</td>
<td>DD</td>
<td>DS</td>
<td>DA</td>
<td>DM</td>
</tr>
<tr>
<td>SETTLED</td>
<td>SD</td>
<td>SS</td>
<td>SA</td>
<td>SM</td>
</tr>
<tr>
<td>ANSWERED</td>
<td>AD</td>
<td>AS</td>
<td>AA</td>
<td>AM</td>
</tr>
<tr>
<td>MTD FILED</td>
<td>MD</td>
<td>MS</td>
<td>MA</td>
<td>MM</td>
</tr>
</tbody>
</table>

If party behavior were unaffected by switching pleading standards, then every controversy would fit into one of the cells labeled DD, SS, AA, or MM. To understand selection is thus to understand why some cases might instead appear in any of Figure 1’s twelve other cells. Before I address that issue in Part III, though, it will be useful to show how potential outcomes can be used to precisely define the judicial behavior effects associated with a change in pleading standards.

B. Judicial Behavior Effects

When I use the term “judicial behavior effects,” I have in mind the familiar sense of but-for causation: cases that exhibit judicial behavior effects are those in which a motion to dismiss would be granted under one pleading regime, but not the other, in the (counterfactual) event that the case faced MTDs under both pleading regimes. Notice that the concept of judicial behavior effects is thus defined even for cases that would never have MTDs filed. For example,
there may be judicial behavior effects in AA cases, even though defendants would never file MTDs in these cases under either pleading regime.\textsuperscript{123}

Consider the set of MM cases, which would have MTDs filed under both pleading regimes. Figure 2 shows that this group of cases can be divided into four subcategories. Let “MD” indicate the compound potential outcome that a case would have a motion to dismiss filed and that the MTD would be denied. Analogously, let “MG” indicate the compound potential outcome that a case would have a motion to dismiss filed and that the MTD would be granted. Then MM cases in which the MTD would be denied under Conley and also under Twombly/Iqbal—that is, MDMD cases—belong to the figure’s top-left cell. Similarly, MM cases in which the MTD would be granted under both pleading standards belong to the figure’s bottom-right, MGMT cell. By definition, judges in MDMD and MGMT cases would do the same thing under Conley as they would do under Twombly/Iqbal.

As far as I know, no one believes that there are any cases in which Twombly or Iqbal would lead to a more lenient pleading standard. Therefore, Twombly/Iqbal’s judicial behavior effects operate in one direction only, via cases in which a judge would (i) deny a motion to dismiss under Conley, if one were filed, but (ii) grant a motion to dismiss under Twombly/Iqbal, if one were filed. Therefore, the figure’s bottom-left cell is grayed out, indicating that there will be no MGMT cases.

Figure 2.
ILLUSTRATING THE JUDICIAL BEHAVIOR EFFECT FOR MM CASES

<table>
<thead>
<tr>
<th>MOTION OUTCOME UNDER CONLEY</th>
<th>MOTION OUTCOME UNDER TWOMBLY/IQBAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENIED</td>
<td>DENIED</td>
</tr>
<tr>
<td>MDMD</td>
<td>MGMT</td>
</tr>
<tr>
<td>GRANTED</td>
<td>GRANTED</td>
</tr>
<tr>
<td>MGMT</td>
<td>MGMT</td>
</tr>
</tbody>
</table>

\textsuperscript{123}. To illustrate, suppose that under Conley, MTDs would be granted in half of AA cases if defendants filed MTDs in all these cases, and suppose that under Twombly/Iqbal, MTDs would be granted in 60% of them if defendants filed MTDs. Then the judicial behavior effect for AA cases would be ten percentage points (60% minus 50%), even though no AA case would ever face a motion to dismiss under either pleading regime. Judicial behavior effects are thus counterfactual objects—they depend on events that logically could happen, regardless of whether those events ever do happen.
We come now to the top-right cell of Figure 2, where the judicial-behavior action is. For this cell’s cases, which I label M_D,M_G, a motion to dismiss would be denied under *Conley* but granted under *Twombly/Iqbal*. In other words, but for the switch to *Twombly/Iqbal*, MTDs would be denied for these cases. Thus, these are the cases that involve changes in judicial behavior. Since the number of such cases will rise and fall with the total number of MM cases, it will often be useful to think of the judicial behavior effect in relative terms, as the number of M_D,M_G cases divided by the total number of MM cases.

To make all of this concrete, in Figure 3 I provide two illustrative numerical examples. In each example, there are a total of forty MM cases, and twenty of these are M_G,M_G cases—cases in which MTDs would be granted under either pleading regime. In Panel (a), there are an additional twelve cases in the M_D,M_D cell, and eight in the M_D,M_G cell. Eight divided by forty is 0.20, so switching from *Conley* to *Twombly/Iqbal* would cause 20% of the forty MM cases in this example to have MTDs granted rather than denied. In Panel (b), all MM cases in which the MTD is denied under *Conley* also have it denied under *Twombly/Iqbal*: there are no M_D,M_G cases, and thus there is no judicial behavior effect among MM cases in this Panel.

Notice that in both examples in Figure 3, the difference in grant rates across pleading regimes equals the judicial behavior effect. In Panel (a), the MTD grant rate is 70% under *Twombly/Iqbal* and 50% under *Conley*, so the cross-pleading regime grant-rate difference is twenty percentage points—the same as the judicial behavior effect. In Panel (b), the MTD grant rates are the same, since no cases appear in the M_D,M_G cell, so the difference in grant rates across pleading regimes is zero—again the same as the judicial behavior effect.

Thus, if we could isolate MM cases and measure the difference in grant rates across pleading regimes for them only, we would be able to calculate their judicial behavior effect. Unfortunately, I show in Part IV that once we allow for the possibility that there is party selection, there is no way to learn the judicial behavior effects for any set of cases. I now turn to the analysis of party selection itself.
Figure 3.
TWO EXAMPLES ILLUSTRATING THE JUDICIAL BEHAVIOR EFFECT FOR MM CASES

PANEL (A): AN EXAMPLE WITH A JUDICIAL BEHAVIOR EFFECT OF TWENTY PERCENT

<table>
<thead>
<tr>
<th>MOTION OUTCOME UNDER TWOMBLY/IQBAL</th>
<th>DENIED</th>
<th>GRANTED</th>
<th>CONLEY TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTION OUTCOME UNDER CONLEY</td>
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<td>12</td>
<td>8</td>
</tr>
<tr>
<td>GRANTED</td>
<td>0</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>TWOMBLY/IQBAL TOTAL</td>
<td>12</td>
<td>28</td>
<td>40</td>
</tr>
</tbody>
</table>

PANEL (B): AN EXAMPLE WITH A ZERO JUDICIAL BEHAVIOR EFFECT

<table>
<thead>
<tr>
<th>MOTION OUTCOME UNDER TWOMBLY/IQBAL</th>
<th>DENIED</th>
<th>GRANTED</th>
<th>CONLEY TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOTION OUTCOME UNDER CONLEY</td>
<td>DENIED</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>GRANTED</td>
<td>0</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>TWOMBLY/IQBAL TOTAL</td>
<td>10</td>
<td>30</td>
<td>40</td>
</tr>
</tbody>
</table>

III. PARTY SELECTION IN AN ECONOMIC MODEL OF LITIGATION

In Section III.A, I introduce a typical economic model of litigation, in which procedure plays no role. A single plaintiff and a single defendant decide whether to litigate or settle a single claim, and litigation involves no procedural aspects.124 As such, this model is of no direct use to understanding the selection effects of changes in procedural rules like those involved in Twombly/Iqbal. But this model is worth a quick exposition, because it helps introduce some central concepts in a simple context, which might be useful for readers who are

124. See, for example, Priest & Klein, supra note 15, for such a model.
unfamiliar with economic models of litigation. In Section III.B, I incorporate pre-discovery procedural issues and discuss the ways in which a change in pleading regimes induces party selection behavior. In Section III.C, I discuss the ways in which a change in pleading regimes induces party selection.

A. A Simple Economic Model of Litigation

Parties will settle whenever there is a positive surplus from doing so. Surplus is defined as the difference between the defendant’s net expected costs from litigating and the plaintiff’s net expected gains from litigation. Each party’s net expected gain (or cost) equals its gross gain minus (plus) its litigation costs.

The plaintiff’s gross expected gain from litigation equals the probability she assigns to the event that she will win if the parties litigate, times the gain she expects if she wins. Suppose the plaintiff believes that (i) she has a 75% chance of winning in litigation and that (ii) if she does win, she will win $1 million. Then her gross expected gain is 75% of $1 million, or $750,000. Litigation is costly, though, so the plaintiff’s net expected gain is less than this amount. Suppose the plaintiff’s expected litigation costs equal $100,000. Then her net expected gain from litigation equals her gross expected gain of $750,000 minus her expected litigation costs of $100,000, or $650,000.

The defendant’s net expected costs from litigating equal the sum of her gross expected loss given that the parties litigate and her expected litigation costs. The defendant’s gross expected loss, in turn, equals her perceived probability of losing if the parties litigate times the loss she expects when she

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125. Readers familiar with ideas like settlement surplus can skip ahead to Section III.B.

126. Note that “gains” here need not be confined to pecuniary returns; nothing in my analysis prevents plaintiffs (or defendants, for that matter) from assigning value to cases based on considerations of principle, revenge, or any other moral or emotional motive. All that matters is that such value can be quantified by the plaintiff herself.

127. Notice that the variables that determine the plaintiff’s net expected costs are inherently subjective variables; what drives party behavior according to the economic model is the parties’ own assessments. This is true even if parties make “mistakes” in assessing the strength or value of their cases, in the sense of being overconfident, or unnecessarily pessimistic, relative to actual results in similar cases. Indeed, in the absence of such “mistakes,” the economic model predicts there would be no litigation at all—since the parties would agree on the values of all variables, they would settle all cases to avoid litigation costs. For classic accounts of differences in party estimates concerning litigation variables, see, for example, Posner, supra note 25, at 418-20; and Priest & Klein, supra note 15, at 9-24.
litigates and loses. Suppose the defendant believes she has a 50% chance of losing if the parties litigate, and suppose that she expects she will have to pay damages of $500,000 when she loses. Then her gross expected loss is 50% of $500,000, or $250,000. Suppose the defendant expects her litigation costs to be $150,000. Then her net expected costs from litigating equal $250,000 plus $150,000, or $400,000. In this example, the defendant’s net expected costs from litigating are lower than the plaintiff’s expected gains from litigating. There is no settlement amount such that each party will believe herself better off than she will be if they litigate. Consequently, the economic model of litigation predicts that the parties will litigate.

But now consider an altered version of this example, one in which the defendant agrees with the plaintiff both that the plaintiff’s probability of prevailing in litigation is 75% and that the plaintiff would win damages of $1 million if the plaintiff did win. Then, like the plaintiff’s gross expected gain from litigation, the defendant’s gross expected costs from litigation would equal $750,000. Adding the defendant’s expected litigation costs of $150,000 to this figure, we see that the defendant’s net expected costs from litigating now would be $900,000, while the plaintiff’s net expected gain from litigating would continue to be $650,000. The defendant thinks she has $250,000 more to lose from litigation than the plaintiff thinks she stands to gain, so there is now positive settlement surplus. In this simple example, the parties would understand that litigating is equivalent to setting fire to a quarter of a million dollars. As a result, the economic model of litigation predicts that the parties would settle in this example.

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128. This view of settlement is not universal; for an impassioned critique of settlement, see Owen M. Fiss, Against Settlement, 93 YALE L.J. 1073 (1984). According to Fiss:

Consent is often coerced; the bargain may be struck by someone without authority; the absence of a trial and judgment renders subsequent judicial involvement troublesome; and although dockets are trimmed, justice may not be done. Like plea bargaining, settlement is a capitulation to the conditions of mass society and should be neither encouraged nor praised.

*Id.* at 1075.

129. Predicting the amount of the actual settlement requires a model of bargaining. The standard model used in the economics of litigation has three main inputs: the plaintiff’s reservation position, the defendant’s reservation position, and some measure of bargaining power. The plaintiff’s reservation position is what she gets in the absence of a settlement—namely, her net expected gains from litigating. The defendant’s reservation position is what she pays in the absence of a settlement—her net expected costs from litigating. The economic model of litigation predicts (i) that the plaintiff will never accept a settlement amount below her reservation position, which is $650,000 in our current example and (ii) that the defendant
As skeletal as this model is, it has enough flesh to cover the fact that party-chosen case selection complicates the measurement of legal change. Changes in legal rules, whether substantive or procedural, generally change at least one of the main model inputs—parties’ perceived win probabilities, their expectations concerning the value of gains or losses when the plaintiff wins, or their expectations concerning the costs of litigation. The contrast between the two examples above demonstrates that changes in these model inputs can affect whether a case settles before formal adjudication. Consequently, changes in legal rules change model inputs, affecting party behavior, so that the sets of cases that are litigated differ across different regimes of legal rules. Simple comparisons of adjudicative results, like how often plaintiffs win at trial, tend to mix together (i) the effects of changes in legal rules on cases that would be litigated regardless of the choice of legal rules and (ii) changes in case composition that result from the change in legal rules. Party selection thus lurks beneath the empirical surface, laying a trap for researchers who try to measure the effects of changes in legal rules using before-and-after comparisons of variables that seem to measure outcomes of interest.

B. Extending the Model To Account for Pre-Trial Process

In this Section, I develop the simplest model that can account for changes in pleading standards; note that I continue to maintain the assumptions stated in the introductory text of this Part. Once a plaintiff has filed her case, the defendant has three options before trial: settle the case for an amount the plaintiff will accept, file a motion to dismiss, or file an answer and proceed to trial. A plaintiff will never agree to pay a settlement amount above her reservation position, which is $900,000. Bargaining power determines where in the interval between $650,000 and $900,000 the parties will settle. For example, if the parties have equal bargaining power, they will split the difference—which is the $250,000 surplus—and settle for $775,000. According to the economic model, if the plaintiff had more bargaining power, then she would receive a settlement of more than $775,000 (though no more than $900,000), and if the plaintiff had less bargaining power, she would receive a lesser settlement (though no less than $650,000).


131. Below I modify the discussion to allow plaintiffs to decide whether or not to file suit in the first place.
discovery. A motion to dismiss may result in either of two possible outcomes: a denial or a grant. If the MTD is denied, the defendant’s expected future costs associated with the post-answer/MTD stage of the case will be the same after the motion’s adjudication as they were before the defendant filed the motion.\textsuperscript{132} That is, the MTD’s adjudication affects only whether such costs will come into play, not their expected magnitude. A granted MTD eliminates the targeted claim, so the defendant’s subsequent costs associated with the claim would be zero. I will assume for purposes of this discussion that when MTDs are granted, they are granted without leave for the plaintiff to amend her complaint.\textsuperscript{133} A rational defendant will file a motion to dismiss whenever the cost of litigating the motion is less than the product of (i) the probability the defendant assigns to the event that the motion would be granted and (ii) the expected costs that the defendant avoids as a result of the dismissal. All else equal, then, the greater the defendant’s perceived probability of winning a motion to dismiss, the more likely she will be to file one.

Rational plaintiffs will not always file suit. According to the economic model of litigation, they will do so if and only if their net expected gains from litigating are positive. These net expected gains will depend partly on whether the plaintiff expects the defendant to exercise her option to file a motion to dismiss. If the plaintiff thinks the defendant will file a motion to dismiss, then the plaintiff will recognize both (i) that she will have to bear the costs of litigating this motion to protect her claim and (ii) that there is some chance that a motion to dismiss will be granted, which would eliminate the net expected gains from litigating discussed in Section III.A. Thus, a rational plaintiff who expects an MTD to be filed must balance (a) the total costs of filing suit and litigating the MTD against the product of (b) the probability the plaintiff assigns to the event that the MTD would be denied and (c) the plaintiff’s net expected gains from litigating when the MTD is denied. All else equal, plaintiffs will be more likely to file suit when they perceive a lower probability that a defendant’s MTD would be denied. Conversely, an increase

\textsuperscript{132} If the motion is denied, then the defendant’s net expected costs associated with the case will depend on whether the defendant subsequently would settle the case or would litigate. It is algebraically complicated to sort out the details of this decision, so I do not do so here. See Gelbach, supra note 66, for a discussion of this issue.

\textsuperscript{133} It is straightforward, but again, somewhat complicated algebraically, to extend the model to account for grants with leave to amend. The complication is that the effect of a grant with leave to amend on the defendant’s costs depends on post-grant decisions by both parties—whether the plaintiff would file an amended complaint, whether the defendant would file a motion to dismiss that complaint, whether the parties might settle, and so on. I do allow for this possibility in Gelbach, supra note 66; the main qualitative results are unaffected.
in the MTD grant probability will reduce the number of cases plaintiffs are willing to file.

C. Party Selection Effects in the Economic Model of Litigation

We can now explore the broad contours of how a change in the pleading regime causes party selection. Suppose that a change in procedural rules increases each party’s perceived probability that a motion to dismiss would be granted—as many observers, and virtually all critics, think *Twombly* and *Iqbal* do. Defendants will believe their returns to filing MTDs have risen. As a result, under *Twombly*/*Iqbal* they will file MTDs against some complaints that they would answer under *Conley*—there will be some defendant selection. In terms of the case taxonomy I introduced in connection with Figure 1, the existence of defendant selection means that there will be some cases in Figure 1’s AM cell.

To emphasize the presence of defendant selection, I redraw Figure 1’s four-by-four matrix in Figure 4, lightly shading the AM cell.

**Figure 4.**

**TAXONOMY OF CASE TYPES IN TERMS OF PARTY BEHAVIOR, EMPHASIZING DEFENDANT AND PLAINTIFF SELECTION**

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<table>
<thead>
<tr>
<th>OUTCOME UNDER TWOMBLY/IQBAL STANDARD</th>
<th>DROPPED</th>
<th>SETTLED</th>
<th>ANSWERED</th>
<th>MTD FILED</th>
</tr>
</thead>
<tbody>
<tr>
<td>DROPPED</td>
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<td>DS</td>
<td>DA</td>
<td>DM</td>
</tr>
<tr>
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<td>SA</td>
<td>SM</td>
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<tr>
<td>ANSWERED</td>
<td>AD</td>
<td>AS</td>
<td>AA</td>
<td><strong>AM</strong></td>
</tr>
<tr>
<td>MTD FILED</td>
<td>MD</td>
<td>MS</td>
<td>MA</td>
<td>MM</td>
</tr>
</tbody>
</table>
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Key: 1. Box with lighter shading involves defendant selection 2. Boxes with darker shading involve plaintiff selection

I have also shaded Figure 4’s AD and MD cells, emphasizing that these cells are ones in which the plaintiff (i) would file a complaint under *Conley* but (ii) would drop the case under *Twombly*/*Iqbal*. Such plaintiff selection occurs in cases where a switch to heightened pleading increases a plaintiff’s perceived
probability that a motion to dismiss would be granted against her complaint. The plaintiff’s net expected gains from litigating will fall if she thinks the defendant might file an MTD. Some plaintiffs will choose not to file their cases in the first place as a result of this reduction in net expected gains from litigating.

Recall that the economic model of litigation predicts the parties will settle whenever there is a positive settlement surplus—whenever the defendant’s net expected costs from litigating minus the plaintiff’s net expected gains is positive. Increasing each party’s perceived probability that a defendant’s MTD would be granted if filed reduces both the plaintiff’s net expected gains from filing suit and the defendant’s net expected costs from litigating. Since both of these “nets” fall, a switch to heightened pleading might either increase or reduce settlement surplus in any given case. Heightened pleading therefore might induce the parties to settle some cases they would have litigated under Conley, but it also might cause settlements to break down in other cases. This is why switching from Conley to Twombly/Iqbal could cause some settlement selection, the catch-all term I use to refer to cases that would be settled under one, but not both, of the pleading regimes. In terms of the taxonomy of cases I introduced in connection with Figure 1, settlement selection cases appear in the AS, MS, DS, SA, SM, and SD cells. In Figure 5, I highlight these cells with dark shading to indicate that the cases they represent involve settlement selection.

**Figure 5.**

**TAXONOMY OF CASE TYPES IN TERMS OF PARTY BEHAVIOR, EMPHASIZING DEFENDANT, PLAINTIFF, AND SETTLEMENT SELECTION**

<table>
<thead>
<tr>
<th>OUTCOME UNDER TWOMBLY/IQBAL STANDARD</th>
<th>DROPPED</th>
<th>SETTLED</th>
<th>ANSWERED</th>
<th>MTD FILED</th>
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<td>DS</td>
<td>DA</td>
<td>DM</td>
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<tr>
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<td>SS</td>
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<td>SM</td>
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<td>AD</td>
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<tr>
<td>MTD FILED</td>
<td>MD</td>
<td>MS</td>
<td>MA</td>
<td>MM</td>
</tr>
</tbody>
</table>

Key: 1. Box with lightest shading (AM) involves defendant selection 2. Boxes with intermediate shading (AD, MD) involve plaintiff selection 3. Boxes with darkest shading (other boxes) involve settlement selection

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134. This is true regardless of whether the defendant would have answered or challenged the complaint with a motion to dismiss.
Economic models are useful in part because they help clarify the channels through which behavior occurs. They are also useful in another way: they can help us understand which sorts of behavior will not occur at all if agents are rational. The economic model of litigation has this second property. It predicts there will be no cases of certain types, which allows us to disregard them moving forward. Consider the MA controversy type, in which (i) the plaintiff would file a complaint under both pleading standards; (ii) the defendant would challenge this complaint with a motion to dismiss under Conley; but (iii) the defendant would answer the complaint under Twombly/Iqbal. The economic model predicts that for no case would a rational defendant ever follow this pattern of behavior. Holding constant the details of the case, switching from Conley to Twombly/Iqbal will never increase a defendant’s net expected costs from litigating, as of the time when the defendant must make her MTD/answer decision.\textsuperscript{135} Thus, if it would make sense for the defendant to prefer filing an MTD over filing an answer under Conley, it must also make sense for her to prefer filing the MTD under Twombly/Iqbal. If defendants are rational, then, the economic model predicts there will be no MA cases. A similar, if somewhat lengthy, argument can be deployed to establish that there will be no SA cases, either.\textsuperscript{136} Finally, it is possible to show that rational plaintiffs will always drop cases under Twombly/Iqbal that they would drop under Conley.\textsuperscript{137} All together, these results tell us there will be no cases of types

\textsuperscript{135} This is true because the only effect of switching to heightened pleading is to increase the probability that a motion to dismiss is granted in a case. So if the defendant answers, her costs moving forward in the case will be unaffected by the change in pleading standards.

\textsuperscript{136} This argument is as follows. Since the defendant would agree to settle under Conley, the settlement payment under Conley must be less than her net expected costs from litigating would be if she filed an answer. The argument in note 135 establishes that the defendant’s net expected costs from litigating, once the MTD stage has passed, would be the same under Conley and Twombly/Iqbal. Therefore, the Conley settlement payment must be less than the net expected costs from litigating under Twombly/Iqbal. Now, the settlement payment the defendant must make to the plaintiff will not rise as a result of switching from Conley to Twombly/Iqbal, because the defendant’s reservation position never worsens, and the plaintiff’s reservation position never improves, as a result of this switch. Therefore, the Twombly/Iqbal settlement payment cannot be greater than the Conley settlement payment, which establishes that it must be less than the net expected costs from litigating under Twombly/Iqbal.

\textsuperscript{137} The plaintiff drops the suit under Conley, so her net gain must be negative under Conley. Since her net expected gain from litigating cannot rise as a result of the switch from Conley to Twombly/Iqbal, the plaintiff’s net gain must also be negative under Twombly/Iqbal. Thus, a rational plaintiff would drop any case under Twombly/Iqbal that she would drop under Conley.
MA, SA, DA, DM, or DS. I depict this fact by blacking out the cells corresponding to these controversy types in Figure 6.

Figure 6.
TAXONOMY OF CASES, EMPHASIZING “EMPTY” CONTROVERSY TYPES AND ALL FORMS OF SELECTION

<table>
<thead>
<tr>
<th>OUTCOME UNDER TWOMBLY/IQBAL STANDARD</th>
<th>DROPPED</th>
<th>SETTLED</th>
<th>ANSWERED</th>
<th>MTD FILED</th>
</tr>
</thead>
<tbody>
<tr>
<td>DROPPED</td>
<td>DD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SETTLED</td>
<td>SD</td>
<td>SS</td>
<td></td>
<td>SM</td>
</tr>
<tr>
<td>ANSWERED</td>
<td>AD</td>
<td>AS</td>
<td>AA</td>
<td>AM</td>
</tr>
<tr>
<td>MTD FILED</td>
<td>MD</td>
<td>MS</td>
<td></td>
<td>MM</td>
</tr>
</tbody>
</table>

Key:
1. Box with lightest shading involves defendant selection
2. Boxes with intermediate shading involve plaintiff selection
3. Boxes with darkest shading involve settlement selection
4. Blacked-out boxes denote case types that will not occur

Figure 6 captures all the qualitative predictions concerning party behavior that can be made, without further assumptions, using the extended economic model of litigation I have developed in this Section. Its implications include the following:

- If the parties are economically rational, there will be no cases of the MA, SA, DA, DM, or DS types.
- Of the eleven remaining types of cases that are consistent with economic rationality, only the AA, MM, SS, and DD types involve no party selection.

138. With further assumptions, one can make further predictions. For example, it is possible to rule out the presence of any SD or SM cases by assuming that the switch from Conley to Twombly/Iqbal causes the plaintiff’s net expected gains from litigating to fall at least as much as the defendant’s net expected costs from litigating fall. Under such an assumption, settlement surplus cannot fall, so parties would always settle under Twombly/Iqbal if they would settle under Conley. This assumption might hold in some cases, and it might even be reasonable in most. But it is a real restriction on the way the parties’ beliefs change as a result of switching from Conley to Twombly/Iqbal.
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- In four economically rational types of cases—AM, MD, MS, and SM—MTDs are filed under one pleading standard but not the other.
- There may be other forms of party selection, too—AD, AS, and SD—which involve both plaintiff selection (AD) and settlement selection (AS and SD).
- Various gross effects of selection will cause the number of:
  - cases filed to rise (SM cases);\textsuperscript{139}
  - cases filed to fall (AD and MD cases);
  - MTDs filed to rise (AM and SM cases);
  - MTDs filed to fall (MS and MD cases).

In addition, as I discuss in the next Part, there will be distinct selection effects that cause the number of MTDs granted to rise and also to fall. Thus, economic rationality of party behavior is consistent with observing any pattern of net changes in the numbers of cases filed, the number of MTDs filed, and the number of MTDs granted. This observation is the central problem that makes comparing grant rates across pleading regimes problematic, a point to which I turn in Part IV.

\textbf{IV. WHAT COMPARING GRANT RATES ACROSS PLEADING REGIMES MISSES}

If we could separate MM cases from other cases in which we observe MTDs filed, it would be simple to determine their judicial behavior effect. As Section II.B showed, we could do so by subtracting the MTD grant rate among those MM cases that are actually adjudicated under the \textit{Conley} pleading standard from the MTD grant rate for those MM cases that are actually adjudicated under the \textit{Twombly/Iqbal} pleading standard. That is, if it were possible to isolate only MM cases for consideration, the difference in MTD grant rates across pleading regimes would tell us the judicial behavior effect for these cases. But given the fundamental evaluation problem discussed in Part II—that we cannot observe both potential outcomes for any case—it will be impossible to distinguish MM cases from others that actually have MTDs filed under whatever regime is in place. For example, among cases facing MTDs under

\textsuperscript{139} The SM case category includes cases that would settle under \textit{Conley} but be filed and face MTDs under \textit{Twombly/Iqbal}. Because some such cases would be settled before the plaintiff files a complaint, switching pleading standards causes them to be filed and thus increases the number of cases filed.
Conley, some may be MM cases and others MD; among cases facing MTDs under Twombly/Iqbal, some may be MM cases and others AM.

One “solution” to this problem is to ignore selection, assuming away the possibility of having any MS, MD, AM, or SM cases to distinguish. If this assumption were correct, then all cases with MTDs actually filed in either pleading regime would be MM cases. Consequently, differences in grant rates across pleading regimes would reveal the judicial behavior effect for MM cases. But the discussion in Section III.C quite strongly suggests that there will be party selection in response to perceived changes in pleading standards. Indeed, empirical evidence showing a substantively large increase in the proportion of cases that have MTDs filed indicates that there likely is considerable defendant selection, at the very least.140

Unfortunately, as I show in this Part, the simple possibility that party selection exists renders comparisons of MTD grant rates across pleading regimes an unreliable measure of judicial behavior effects. A simple way to demonstrate this fact is to show that for a given judicial behavior effect size among MM cases, the MTD grant rate can rise, fall, or remain unchanged following a switch from Conley to Twombly/Iqbal. Table 1 provides three simple numerical examples that prove this claim. In all three examples, I reuse the numbers from the example in Panel (a) of Figure 3: there are twenty \( M_G \) cases, twelve \( M_D \) cases, and eight \( M_GM_D \) cases. In each example, then, the judicial behavior effect of switching from Conley to Twombly/Iqbal is to cause an additional 20% of MM cases to have MTDs granted.

In Example 1, there are no other relevant types of cases. Thus, as the bottom part of Table 1 shows, there are twenty MTDs filed under Conley and twenty-eight granted under Twombly/Iqbal. The observed MTD grant rates, in percentage terms, are 50% under Conley and 70% under Twombly/Iqbal. In Example 1, then, all is well: the cross-pleading-regime difference in MTD grant rates is twenty percentage points (70% minus 50%), exactly equal to the judicial behavior effect among MM cases.

---

140. See supra text accompanying note 94.
Table 1.
THREE NUMERICAL EXAMPLES ILLUSTRATING THE SENSITIVITY OF CROSS-PLEADING
REGIME DIFFERENCES IN MTD GRANT RATES TO PARTY SELECTION

<table>
<thead>
<tr>
<th></th>
<th>Example 1: Grant Rate Rises</th>
<th>Example 2: Same Grant Rate</th>
<th>Example 3: Grant Rate Falls</th>
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</thead>
<tbody>
<tr>
<td><strong>Non-Selection (MM)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M_eM_g</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>M_eM_d</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>M_dM_g</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>MM Total</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>JUD. BEH. EFFECT</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

| **Defendant Selection Cases** |                    |                             |                             |
| M_gD                   | 0                            | 7                           | 3                           |
| M_dD                   | 0                            | 23                          | 27                          |

| **Plaintiff Selection Cases** |                    |                             |                             |
| M_eD                   | 0                            | 5                           | 5                           |
| M_dD                   | 0                            | 5                           | 5                           |

| **Settlement Selection Cases** |                    |                             |                             |
| M_eS                   | 0                            | 0                           | 0                           |
| M_dS                   | 0                            | 0                           | 0                           |
| SMe                    | 0                            | 0                           | 0                           |
| SMD                    | 0                            | 0                           | 0                           |

<table>
<thead>
<tr>
<th>Actual Pleading Standard</th>
<th>Conley</th>
<th>Twombly/Iqbal</th>
<th>Conley</th>
<th>Twombly/Iqbal</th>
<th>Conley</th>
<th>Twombly/Iqbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Granted</td>
<td>20</td>
<td>28</td>
<td>25</td>
<td>35</td>
<td>25</td>
<td>31</td>
</tr>
<tr>
<td>Filed</td>
<td>40</td>
<td>40</td>
<td>50</td>
<td>70</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>Grant Rate</td>
<td>50%</td>
<td>70%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>44%</td>
</tr>
</tbody>
</table>
In Example 2, I assume there is some defendant selection. There are a total of thirty AM cases—those that (i) would have answers filed under Conley but (ii) would have MTDs filed under Twombly/Iqbal. Of these, seven are AMG cases, which means that MTDs would be filed and granted in these cases under Twombly/Iqbal, and the remaining twenty-three are AMD cases, which means that in these cases MTDs would be filed and denied under Twombly/Iqbal. In addition, Example 2 involves some plaintiff selection. There are five MG cases, those in which (i) under Conley, the plaintiff would file suit and defendants would file MTDs that judges would grant, and that (ii) under Twombly/Iqbal, plaintiffs would drop. There are another five MD cases, whose MTDs in condition (i) would be denied under Conley, rather than granted. For simplicity, I assume there is no settlement selection, which is why I have assumed that there are no MG, MD, SMG, or SMMD cases.

How many MTDs are actually granted under Conley in Example 2? There are the twenty grants in MG cases, and there are an additional five grants in MD cases, so there are twenty-five total grants under Conley. What about MTD filings? There are forty MM cases with MTD filings under Conley (twenty MG plus twelve MD plus eight MG), and there are another ten MD cases with filings under Conley (five each in MD and MD cases). Thus, we will observe a total of fifty MTD filings under Conley. The MTD grant rate among these cases is therefore 50% (twenty-five out of fifty). What about actually observed filings and grants under Twombly/Iqbal? There are twenty MG cases and eight MD cases, and there are another seven AMG cases, so thirty-five MTDs would actually be granted under Twombly/Iqbal. There would be seventy MTDs actually filed under Twombly/Iqbal—forty MM cases, plus seven AMG cases plus twenty-three AMD cases. With thirty-five actual grants out of seventy actual filings, the MTD grant rate actually observed under Twombly/Iqbal in Example 2 would be 50%—the same as would actually be observed under Conley. Example 2 has a difference in grant rates across pleading regimes equal to zero, even though both examples have the same judicial behavior effect among MM cases.

Now consider Example 3. The only difference between it and Example 2 is that I have switched four cases from the AMG row to the AMD row: there are now three AMG cases rather than seven, and twenty-seven AMD cases rather than twenty-three. As a result of this tinkering, we now have only thirty-one MTDs granted when Twombly/Iqbal governs, out of seventy actual filings. The MTD grant rate actually observed under Twombly/Iqbal thus falls to 44%—six percentage points below the grant rate of 50% observed under Conley. And yet the judicial behavior effect among MM cases remains 20%.

Why does the difference in grant rates across pleading regimes fail to track the judicial behavior effect among MM cases in Examples 2 and 3? Because the
composition of cases that actually have MTDs filed differs across the two pleading regimes. Look again at Example 2, where defendant selection causes thirty AM cases to enter the set of cases with MTDs filed. Of these thirty cases, only seven—or 23%—actually have MTDs granted under Twombly/Iqbal. This is far below the 70% grant rate among MM cases. It is this discrepancy in Twombly/Iqbal MTD grant rates among defendant-selection and MM cases that drives down the MTD grant rate. That is how compositional changes due to party selection confound our ability to measure judicial behavior effects using the difference in actual MTD grant rates across pleading regimes.\footnote{Consider a further tweak to Example 2, in which twenty-one of the thirty AM cases in Example 2 would have MTDs granted under Twombly/Iqbal, rather than seven. In that event, there would be forty-nine MTDs actually granted under Twombly/Iqbal (twenty-eight MM plus twenty-one AM), implying an actual MTD grant rate of 70%. This modification illustrates something that can be proved using tedious algebra: the presence of selection will not prevent us from measuring judicial behavior effects when, and only when, the selected cases would have the same MTD grant rates as MM cases under the pleading regime in which the selected cases actually have MTDs filed. There is no reason to believe this condition will hold in practice. Indeed, the economic model of litigation suggests good reasons to believe that cases that do not always have MTDs filed will have different MTD grant rates than cases that do when we hold constant the pleading regime actually in place.}

These three simple numerical examples support an important and powerful general conclusion. Without more information about party behavior, neither the direction nor the magnitude of the difference in MTD grant rates across pleading regimes tells us anything about the magnitude of any judicial behavior effects. On its face, then, the existing empirical literature on Twombly/Iqbal cannot tell us much about judicial behavior effects.\footnote{Of course, authors working in this literature might have other objectives than measuring judicial behavior effects as I have defined them. But I am unaware of any who have clearly stated an alternative object of study, and my reading of the literature is that judicial behavior effects are the object of estimation.}

As dark a cloud as this analysis casts, it does have an ironic silver lining: given that there is party selection, judicial behavior effects would be an inadequate measure of the impact of switching from Conley to Twombly/Iqbal in any case. Consider a case in which the defendant expects she will bear $250,000 dollars in net costs if she answers a complaint. If the defendant’s perceived probability of winning at the MTD stage is 10% under Conley, she reduces her expected net costs by $25,000 (10% of $250,000) if she files the MTD. If it costs $26,000 to litigate a motion to dismiss, the defendant will file an answer rather than a motion to dismiss under Conley. But if the defendant’s perceived probability of winning at the MTD stage is 14% under Twombly/Iqbal, filing the
MTD reduces her expected net costs by $35,000. Therefore, she will file an MTD under \textit{Twombly/Iqbal}, so hers is an AM case. Suppose the defendant is correct that her case has a 14\% probability of dismissal under \textit{Twombly/Iqbal}. And now imagine that there are 999 other cases just like our defendant's, whose defendants have the same beliefs she does. Roughly 140 of these cases (14\% of 1000) will have MTDs granted under \textit{Twombly/Iqbal}, compared to zero of them that would have MTDs granted under \textit{Conley}.

Even if we could measure the judicial behavior effect among MM cases, then, stopping there would disregard the dismissal under \textit{Twombly/Iqbal} of roughly 140 AM cases, all of which would have been answered under \textit{Conley}. This example illustrates that there are other channels besides judicial behavior effects through which a switch from \textit{Conley} to \textit{Twombly/Iqbal} affects the parties. The same overall point applies to cases in which plaintiff selection and settlement selection operate. Any measure of \textit{Twombly/Iqbal}'s effects should take account of effects operating through such channels.

\textbf{V. WHAT CAN BE MEASURED: BOUNDS ON THE NEGATIVELY AFFECTED SHARE OF TWOMBLY/IQBAL MTD CASES}

In this Part, I focus on the set of cases that would face MTDs under \textit{Twombly/Iqbal}. For short, I will refer to these cases as “\textit{Twombly/Iqbal} MTD cases.” This set of cases does not vary with the actual pleading regime in place, a feature I have argued is critical to avoiding selection-induced compositional problems. Moreover, unlike the set of MM cases, the set of \textit{Twombly/Iqbal} MTD cases is observable: cases that \textit{would} face MTDs under \textit{Twombly/Iqbal} actually \textit{do} face MTDs when the \textit{Twombly/Iqbal} pleading standard is in place.

In Section A of this Part, I define a new measure of \textit{Twombly/Iqbal}'s effects, the negatively affected share of \textit{Twombly/Iqbal} MTD cases. The negatively affected share accounts not only for judicial behavior effects among MM cases, but also for cases affected through the party-selection channels I discussed at the end of Part IV. Like the judicial behavior effect, the negatively affected share has the rather unfortunate problem of being impossible to observe when party selection occurs. But unlike judicial behavior effects, the negatively affected share can be meaningfully bounded using observable data, even when there is party selection of unknown types and magnitudes.

In Section B, I provide some numerical examples that illustrate how the negatively affected share, and my lower bound on it, are related to various types of party selection. In Section C, I discuss the relationship between the negatively affected share and the discovery-prevented share. The discovery-prevented share, which measures the share of \textit{Twombly/Iqbal} MTD cases that miss discovery as a
result of switching from Conley to Twombly/Iqbal, is of interest given the central role that discovery-related issues have played in the debate over Twombly/Iqbal.

In Section D, I relate the lower bound on the negatively affected share to the difference in grant rates across pleading regimes used in previous work. I then show that the difference in grant rates across pleading regimes will always lie below my lower bound when the number of MTDs actually filed rises after the switch from Conley to Twombly/Iqbal. One can thus view the difference between my lower bound and the cross-pleading-regime grant-rate difference as a partial correction for net party selection into MTD filing.\footnote{When we come to Part VI, we will see that even this partial correction is empirically substantial. This correction is only partial because, when there is either plaintiff or settlement selection, my lower bound is less than the negatively affected share itself.}

A. The Negatively Affected Share Among Twombly/Iqbal MTD Cases

We saw at the end of Part IV that switching to heightened pleading affects case outcomes not only through changes in judicial behavior, but also through party selection. Consider again Example 2 from Table 1. In that example, switching from Conley to Twombly/Iqbal induces eight M_D M_G cases to have MTDs granted as a result of changes in judicial behavior, while seven A_M_G cases have MTDs granted as a result of defendant selection. A good measure of the effects of Twombly/Iqbal should account not only for the first set of affected cases, but also for the second. After all, both sets of cases wind up with MTDs granted as a result of the change in pleading standards. Thus, both types of cases miss discovery as a result of the switch in pleading standards.

These discovery-prevented cases are not the only cases that have MTDs granted as a result of switching from Conley to Twombly/Iqbal. The switch to heightened pleading also makes plaintiffs worse off in SM_G cases, even though plaintiffs are not prevented from reaching discovery in these cases. Under Conley, plaintiffs receive settlements in these cases, and the plaintiffs do not have to litigate a motion to dismiss. But under Twombly/Iqbal, these plaintiffs must pay to litigate MTDs, which result in the dismissal of the plaintiffs’ claims. Thus, M_D M_G, A_M_G, and SM_G cases all involve harm to plaintiffs caused by switching from Conley to Twombly/Iqbal. Together, M_D M_G, A_M_G, and SM_G cases constitute the set of Twombly/Iqbal MTD cases in which plaintiffs are negatively affected by the switch from Conley to Twombly/Iqbal.\footnote{All three of these types of cases are Twombly/Iqbal MTD cases. In addition, there are no other types of cases in this set that would have MTDs granted under Twombly/Iqbal but not under Conley (recall that there will be no D M_G cases if plaintiffs are rational, see supra}
A natural way to measure the negative effects of *Twombly/Iqbal* on plaintiffs would be to compute the ratio of (i) the number of $M_D M_G$, $A M_G$, and $S M_G$ cases to (ii) the total number of *Twombly/Iqbal* MTD cases. This ratio is the negatively affected share of *Twombly/Iqbal* MTD cases. As I noted above, an important feature of the set of *Twombly/Iqbal* MTD cases is that, since this set is defined in terms of what would happen if the *Twombly/Iqbal* standard did govern, it is the same regardless of which pleading standard actually does govern. Consequently, the negatively affected share of *Twombly/Iqbal* MTD cases is immune to selection-induced compositional problems.

### B. Numerical Examples Illustrating the Negatively Affected Share

To make all of this concrete, consider Table 2. Its first column repeats the made-up data on case types that I used in Example 2 of Table 1. Because there are eight $M_D M_G$ cases, seven $A M_G$ cases, and zero $S M_G$ cases in this example, there are a total of fifteen negatively affected cases, as indicated in the row of Table 2 labeled “Number of Negatively Affected Cases.” Under *Twombly/Iqbal*, MTDs are filed in seventy cases—forty in MM cases, and thirty in AM cases. Thus, the negatively affected share is fifteen divided by seventy, or 21%, as the “Negatively Affected Share” row displays.

Unfortunately, we cannot use observable data to calculate the negatively affected share, because we cannot separate $M_D M_G$, $A M_G$, and $S M_G$ cases from $M_G M_G$ cases—*M_D M_G* cases observed under *Twombly/Iqbal* do not come with a docket entry stating that they would have had MTDs filed, much less filed and granted, had the *Conley* pleading standard been in place. But all is not lost, because the difference in the number of motions that are actually granted does provide important information.

Section III.C). Thus, the negatively affected share is the right measure of the relative importance of these cases among *Twombly/Iqbal* MTD cases. Recall, in addition, that my focus on the *Twombly/Iqbal* MTD cases necessarily entails ignoring all cases that do not involve a motion to dismiss filed under *Twombly/Iqbal*.

145. Formally, this share is given by

$$NAS = \frac{M_D M_G + A M_G + S M_G}{MTD_{TI}}$$

where MTD$_{TI}$ is the number of MTDs filed under *Twombly/Iqbal*.

146. This is another example of the fundamental evaluation problem discussed above: it is not possible to observe the same case simultaneously subjected to two different pleading regimes. See supra text accompanying note 120.
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Table 2.
EXAMPLES ILLUSTRATING THE NEGATIVELY AFFECTED SHARE, THE LOWER BOUND ON THE NEGATIVELY AFFECTED SHARE, AND THE DISCOVERY-PREVENTED SHARE

<table>
<thead>
<tr>
<th></th>
<th>Example 2</th>
<th>Example 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Selection (MM) Cases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$M_G$</td>
<td>$M_D$</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>$M_G$</td>
<td>$M_D$</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>$M_G$</td>
<td>$M_D$</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td><strong>MM Total</strong></td>
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<tr>
<td><strong>Judicial Behavior Effect</strong></td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Defendant Selection Cases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$AM_G$</td>
<td>$AM_D$</td>
</tr>
<tr>
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<td>7</td>
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<td>$AM_G$</td>
<td>$AM_D$</td>
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<tr>
<td></td>
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<td>23</td>
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<tr>
<td><strong>Plaintiff Selection Cases</strong></td>
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<td>$M_D$</td>
</tr>
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<tr>
<td><strong>Settlement Selection Cases</strong></td>
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<td></td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td><strong>Observed MTD Grant Rates</strong></td>
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<td>$TWOMBLY/IQBAL$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CROSS-PLEADING REGIME GRANT-RATE DIFFERENCE</td>
<td>50</td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Negatively Affected Share</strong></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>NUMBER OF NEGATIVELY AFFECTED CASES</td>
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</tr>
<tr>
<td></td>
<td>NUMBER OF TWOMBLY/IQBAL MTD CASES</td>
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</tr>
<tr>
<td></td>
<td>NEGATIVELY AFFECTED SHARE</td>
<td>21%</td>
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<tr>
<td><strong>Lower Bound on Negatively Affected Share</strong></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>MTD GRANTS UNDER TWOMBLY/IQBAL</td>
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</tr>
<tr>
<td></td>
<td>MTD GRANTS UNDER CONLEY</td>
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<td></td>
<td>DIFFERENCE</td>
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<td>NUMBER OF TWOMBLY/IQBAL MTD CASES</td>
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<td>LOWER Bound on Negatively Affected Share</td>
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<tr>
<td><strong>Discovery-Prevented Share</strong></td>
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<td></td>
<td>NUMBER OF DISCOVERY-PREVENTED CASES</td>
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<tr>
<td></td>
<td>NUMBER OF TWOMBLY/IQBAL MTD CASES</td>
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<tr>
<td></td>
<td>DISCOVERY-PREVENTED SHARE</td>
<td>21%</td>
</tr>
</tbody>
</table>

The number of MTDs actually granted under Conley equals the number of $M_GM_G$, $M_GD_G$, and $M_GS_G$ cases, while the number actually granted under Twombly/Iqbal equals the number of $M_GM_G$, $AM_G$, and $SM_G$ cases. When we subtract the number of MTDs actually granted under Conley from the number

---

147. Recall that the discussion in Section III.C established that there will be no MA cases, and thus no $M_GA$ cases, if defendants are rational.
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actually granted under *Twombly/Iqbal*, the result thus equals (i) the number of $M_GM_G$, $AM_G$, and $SM_G$ cases minus (ii) the number of $M_GD$ and $M_GS$ cases.\footnote{Formally, the number of grants under *Twombly/Iqbal* equals $M_GM_G + M_GD + AM_G + SM_G$, and the number of grants under *Conley* equals $M_GM_G + M_GD + M_GS$. When we subtract the latter from the former, the number of $M_GM_G$ cases drops out, and we are left with\[\Delta A Grant = MDMG + AMG + SMG - (MGD + MSG)\].}

Thus, the cross-pleading regime difference in the number of grants does not isolate the number of negatively affected cases, given by (i), because we cannot avoid subtracting the number of $M_GD$ and $M_GS$ cases in (ii) when we compute cross-pleading regime difference. However, we do know one very important additional fact: the number of $M_GD$ and $M_GS$ cases must always be at least zero. Therefore, if there are any $M_GD$ or $M_GS$ cases, subtracting (ii) has the effect of forcing the cross-pleading regime difference in the number of MTDs actually granted to take on a value less than the number of $M_GM_G$, $M_GD$, and $M_GS$ cases. In other words, the change in the observed number of MTD grants is a lower bound on the number of negatively affected cases. This is my key result, because the ratio of the cross-pleading regime difference in the number of MTDs actually granted to the number of MTDs actually filed under *Twombly/Iqbal* is therefore a lower bound on the negatively affected share of *Twombly/Iqbal* MTD cases.\footnote{Formally, my lower bound may be written as\[NAS_{LB} = \frac{\Delta A Grant}{MTD_{TI}}\].}

At this point it is useful to look again at the first column of Table 2. In the block labeled “Lower Bound on Negatively Affected Share,” we see that there are thirty-five cases with MTDs actually granted under *Twombly/Iqbal*, and twenty-five under *Conley*, yielding a difference in MTD grants across pleading regimes equal to ten. Dividing ten by the number of cases with MTDs actually filed under *Twombly/Iqbal*, which is seventy, we have our lower bound on the negatively affected share—14\%, which is less than the 21\% negatively affected share for Example 2, as promised. It would be better to be able to determine

\[\Delta A Grant = MDMG + AMG + SMG - (MGD + MSG)\]

\[NAS_{LB} = \frac{\Delta A Grant}{MTD_{TI}}\]

The fact that it is a lower bound means that $NAS_{LB} \leq NAS$, where $NAS$ is the negatively affected share defined in note 145. When there are no $M_GS$ or $M_GD$ cases, my lower bound exactly equals the negatively affected share. Thus, the lower bound and the negatively affected share are equal when there is no settlement selection, which rules out $M_GS$ cases, and no plaintiff selection, which rules out $M_GD$ cases.
this 21% figure, of course. But the lower bound of 14% is a lot closer to 21% than the difference in the cross-pleading regime grant-rate difference—which is zero in Example 2.

C. The Relationship Between the Discovery-Prevented Share and the Negatively Affected Share

Now consider Example 4, which appears in the second column of Table 2. This example differs from Example 2 only in that it has some settlement selection. In Example 4, there are a total of thirty SM cases—those that would be settled under Conley but have MTDs filed under Twombly/Iqbal. Of these, nine are SMG cases that would have MTDs granted under Twombly/Iqbal, and the other twenty-one are SMG cases, which would have their defendants’ motions denied.

The calculations in the “Lower Bound on Negatively Affected Share” block of Table 2 show that the actual negatively affected share of Twombly/Iqbal MTD cases in this Example is 24%,150 while the lower bound is 19%.151 But the main point of interest in comparing Example 2 and Example 4 has to do with the rows concerning the discovery-prevented share. The number of discovery-prevented cases equals the number of MMD and AMG cases, of which there are fifteen in Example 2. Thus, the actual discovery-prevented share in Example 2 is fifteen divided by seventy, or 21%.152 In Example 2, my lower bound on the negatively affected share is 14%, less than the discovery-prevented share. This is not surprising, since there are no SMG cases in Example 2, which means that all negatively affected cases are discovery-prevented cases.153

150. There are 24 negatively affected cases: 8 MMDG, 7 AMG, and 9 SMG. There are 100 cases with MTDs filed under Twombly/Iqbal (40 MM, 30 AM, and 30 SM), and 24 out of 100 amounts to 24%.

151. There are 44 MTDs actually granted under Twombly/Iqbal, and 25 under Conley. The difference between these numbers is 19, which amounts to 19% of the 100 Twombly/Iqbal MTD cases.

152. The discovery-prevented share equals

\[
\text{DFS} = \frac{MMD + AMG}{MTD_{T1}}
\]

153. Note that the discovery-prevented share can be written as
By comparison, there are nine SM\textsubscript{G} cases in Example 4, so not all negatively affected cases are discovery-prevented. The discovery-prevented share in Example 4 equals 15%—fifteen AM\textsubscript{G} cases out of one hundred total \textit{Twombly/Iqbal} MTD cases. This is less than my lower bound on the negatively affected share, which was 19% in Example 4. It can be shown that the cross-pleading regime difference in the number of MTD grants will be less than the number of discovery-prevented cases (M\textsubscript{D}M\textsubscript{G} and AM\textsubscript{G}) if and only if the number of SM\textsubscript{G} cases—settlement selection cases that add to the number of actual MTD grants under \textit{Twombly/Iqbal}—is less than the combined number of M\textsubscript{G}D and M\textsubscript{G}S cases, which are cases that, as a result of switching from \textit{Conley} to \textit{Twombly/Iqbal}, exit the status of having MTDs granted.\textsuperscript{154} This condition holds in Example 2, since there are no SM\textsubscript{G} cases, and there are five M\textsubscript{G}D cases. The condition does not hold in Example 4, since there are nine SM\textsubscript{G} cases, five M\textsubscript{G}D cases, and no M\textsubscript{G}S cases. In sum, we cannot say that my lower bound on the negatively affected share is always a lower bound on the discovery-prevented share.

There is a simple condition under which there will be no SM cases at all. That would imply there will be no SM\textsubscript{G} cases, which in turn is a sufficient condition for my lower bound on the negatively affected share to be a lower bound on the discovery-prevented share. But the condition that rules out SM cases is not innocuous, and I am pessimistic that it could be verified empirically.\textsuperscript{155} So, whether my lower bound on the negatively affected share should also be interpreted as a lower bound on the discovery-prevented share is really one for individual readers to answer for themselves, based on the assumptions they are comfortable making.

\[\text{DPS} = \frac{\text{NAS} - \text{SM}\textsubscript{G}}{\text{MTD}_{\text{TI}}}.\]

and since SM\textsubscript{G}=0 in this example, DPS=NAS.

\textsuperscript{154} The difference across pleading regimes in the number of grants can be written as 
\[M\textsubscript{D}M\textsubscript{G}+AM\textsubscript{G}+[SM\textsubscript{G} - \{M\textsubscript{G}D+M\textsubscript{G}S}\}.\] 
Thus, we will have \(\Delta\text{Grants} \leq M\textsubscript{D}M\textsubscript{G}+AM\textsubscript{G}\) whenever 
\(SM\textsubscript{G} \leq M\textsubscript{G}D+M\textsubscript{G}S\). Dividing both sides by MTD\textsubscript{TI} then yields the result that \(\text{NAS}_{\text{LB}} \leq \text{DPS}\).

\textsuperscript{155} See supra note 138.
D. Relating My Lower Bound to the Difference in Grant Rates Across Pleading Regimes

In this Section, I show that the difference in grant rates across pleading regimes and my lower bound on the negatively affected share have a simple relationship. Recall that my lower bound is the ratio of the observed change in actual MTD grants, Δ MTD Grants for short, to the number of MTDs actually filed under Twombly/Iqbal. It follows that the lower bound can be expressed as (i) the MTD grant rate under Twombly and Iqbal, minus (ii) the actual number of MTD grants under Conley, divided by the actual number of MTDs filed under Twombly and Iqbal. The ratio in (ii) can be shown to equal (a) the MTD grant rate actually observed under Conley, times the ratio of (b) the number of MTDs filed under Conley to (c) the number of MTDs filed under heightened pleading. Finally, by adding and subtracting the Conley MTD grant rate, I obtain the result that my lower bound can be written as

156. That is, since ΔMTD Grants = MTD Grants_{TI} - MTD Grants_{Conley}, we have the following equation:

\[ \text{NAS}_{LB} = \frac{\Delta \text{MTD Grants}}{\text{MTD}_{TI}} = \frac{\text{MTD}_{TI}}{\text{MTD}_{TI}} - \frac{\text{MTD}_{Conley}}{\text{MTD}_{TI}}, \]

which can be rewritten as

\[ \text{NAS}_{LB} = \frac{\text{MTD}_{Conley}}{\text{MTD}_{TI}}, \]

where the subscripts “Conley” and “TI” indicate the Conley and Twombly/Iqbal regimes, respectively.

157. This claim follows by multiplying and dividing the final term in note 156 by the number of MTDs filed under Conley and rearranging, i.e.,

\[ \frac{\text{Grants}_{Conley}}{\text{MTD}_{TI}} = \frac{\text{Grants}_{Conley}}{\text{MTD}_{Conley}} \times \frac{\text{MTD}_{Conley}}{\text{MTD}_{TI}} = \frac{\text{MTD}_{Conley}}{\text{MTD}_{TI}}, \]

since the first ratio on the right hand side of the top equation is the Conley MTD grant rate.

158. To get this result, combine the results from notes 156 and 157 to obtain

\[ \frac{\Delta \text{MTD Grants}}{\text{MTD}_{TI}} = \frac{\text{MTD}_{Conley}}{\text{MTD}_{TI}} - \frac{\text{MTD}_{Conley}}{\text{MTD}_{TI}} \].
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\[ \Delta \text{GrantRate} + \text{GrantRate}_{\text{Conley}} \times \frac{\text{MTD}_{\text{TI}} - \text{MTD}_{\text{Conley}}}{\text{MTD}_{\text{TI}}} \]  \hspace{1cm} (1)

The first term, \( \Delta \text{GrantRate} \), is the difference in grant rates—which is the measure that other studies use. The term GrantRate\(_{\text{Conley}} \) is the observed MTD grant rate under Conley. The term MTD\(_{\text{TI}} \) is the number of MTDs filed during the Twombly/Iqbal period, and the term MTD\(_{\text{Conley}} \) is the number of MTDs filed during the Conley period.

Thus, my lower bound on the negatively affected share of Twombly/Iqbal MTD cases equals the difference in grant rates across pleading regimes—which is what previous authors have used to measure Twombly and Iqbal’s effects—plus the following correction term:

\[ \text{GrantRate}_{\text{Conley}} \times \frac{\text{MTD}_{\text{TI}} - \text{MTD}_{\text{Conley}}}{\text{MTD}_{\text{TI}}} \]  \hspace{1cm} (2)

There is an intuitive explanation for the particular form of the second factor in the correction term in (2). Suppose there were defendant selection (AM cases), but no other forms of party selection. Since that would mean there were no M\(_G\)D or M\(_G\)S cases, my lower bound on the negatively affected share would exactly equal the negatively affected share itself. Therefore, the correction term linking my lower bound on the negatively affected share to the difference in grant rates across pleading regimes also would link the grant-rate difference exactly to the negatively affected share. So, when there is defendant selection only, the lower bound correction term fully corrects for selection.

\[ \frac{\Delta \text{MTD Grants}}{\text{MTD}_{\text{TI}}} = \text{g}_{\text{TI}} - \text{g}_{\text{Conley}} + \text{MTD}_{\text{Conley}} \]  \hspace{1cm} \text{Adding and subtracting g}_{\text{C}} \text{ then yields}

\[ \frac{\Delta \text{MTD Grants}}{\text{MTD}_{\text{TI}}} = \text{g}_{\text{TI}} - \text{g}_{\text{Conley}} + \text{g}_{\text{Conley}} \left(1 - \frac{\text{MTD}_{\text{Conley}}}{\text{MTD}_{\text{TI}}} \right), \]

or

\[ \frac{\Delta \text{MTD Grants}}{\text{MTD}_{\text{TI}}} = \left[\text{g}_{\text{TI}} - \text{g}_{\text{Conley}} \right] + \text{g}_{\text{Conley}} \left(\frac{\text{MTD}_{\text{TI}} - \text{MTD}_{\text{Conley}}}{\text{MTD}_{\text{TI}}} \right), \]

where I have used the fact that the ratio of MTD\(_{\text{TI}}\) to itself equals 1. The right hand side of this final equation is the expression in the main text, with \( \Delta \text{GrantRate} = \text{g}_{\text{TI}} - \text{g}_{\text{Conley}} \), GrantRate\(_{\text{Conley}} = \text{g}_{\text{Conley}} \), and \( \Delta \text{MTDs Filed} = \text{MTD}_{\text{TI}} - \text{MTD}_{\text{Conley}} \).
In addition, if there were only defendant selection, the difference across pleading regimes in the numbers of MTDs actually filed would exactly equal the number of AM cases. Therefore, the ratio in the correction term in (2) would exactly equal the share of Twombly/Iqbal MTDs that are filed as a causal result of the switch from Conley to Twombly/Iqbal. It is easy to see that this relationship does not generally hold when there is either plaintiff or settlement selection.\textsuperscript{159}

In sum, it makes intuitive sense to think of the ratio in the correction term in (2) as a partial correction for defendant selection. In the special case when there is only defendant selection, the correction term fully accounts for this selection. When there is also plaintiff or settlement selection, the correction term in (2) will include some effects related to these form of selection. The less selection there is of non-defendant selection types, the more accurate this partial correction will be. But holding constant the amounts of other forms of selection, the correction term will tend to be greater the greater is the amount of defendant selection.\textsuperscript{160}

Finally, consider the sign of the correction term in (2). Both GrantRate\textsubscript{Conley} and MTD\textsubscript{T1} are necessarily positive. This means that the correction term will be positive if the number of MTDs actually filed rises between the Conley and Twombly/Iqbal periods. Because the FJC MTD report shows that the number of MTDs actually filed did increase,\textsuperscript{161} the correction term is positive as an empirical matter. It follows immediately that my lower bound on the negatively affected share will exceed the difference in grant rates across pleading regimes. Empirically, then, the difference in grant rates across pleading regimes must be an even lower bound than the one I derived in equation (1). I now turn to the empirical task of calculating how much the difference between these measures matters.

\textbf{VI. EMPIRICAL RESULTS}

In this Part, I estimate the lower bound on the negatively affected share for each of three nature-of-suit case categories. In Section VI.A, I discuss the data I use, which come from the two FJC reports I discussed in Section I.C. I then

\textsuperscript{159} See the examples in Table 2 \textit{supra}.

\textsuperscript{160} Note that if we knew that the only form of settlement selection was through SM cases—settlement-prevented cases—then we could say the same thing about these as well.

\textsuperscript{161} See Cecil \textit{et al.}, \textit{supra} note 10, at 9 tbl.1.
report and discuss the resulting lower bound estimates. In Section VI.B, I discuss possible threats to the validity of my estimates.

A. The FJC Data

In its original report, the FJC collected data on case filings, MTD filings, and MTD grant rates; it studied the rate at which movants ultimately prevailed in its updated study. In this Section, I first describe the statistics that I use from the filing data set. I then discuss the statistics concerning the party that prevails, which come from the grants data set as augmented in the updated FJC report.

1. The FJC’s Filing Data Set

As I discussed in Section I.C, the original FJC report lists the number of cases plaintiffs filed in twenty-three U.S. district courts during each of two windows: October 1, 2005, through June 30, 2006, and October 1, 2009, through June 30, 2010, to which I refer respectively as the “Conley” and “Iqbal” study periods. For these cases, the FJC then counted the number of Rule 12(b)(6) MTDs defendants filed within the first ninety days of each case’s filing.

Table 3 presents the numbers of case filings, Rule 12(b)(6) MTD filings, and the implied Rule 12(b)(6) MTD filing rates from the FJC’s filing data set for the three nature-of-suit categories I consider here. The first row contains data for all types of cases pooled together, except those that the FJC coded as involving financial instruments, employment discrimination cases, or civil rights cases.

I will refer to this category as the category of “total other cases.” I exclude financial-instruments cases because the FJC MTD report shows that there was an enormous spike in the number of financial-instruments cases filed over the FJC’s study period, and this spike presumably is due to increases in the underlying number of controversies in this category resulting from the

162. See supra Section I.C.
163. See id. Note that I used the term “Iqbal study period” rather than “Twombly/Iqbal study period” since the FJC data do not include cases filed or MTDs adjudicated in the period between Twombly and Iqbal.
164. See Appendix A for details concerning these data.
165. I provide raw case counts by category in Appendix A Table 1 and Appendix A Table 3.
166. See Cecil et al., supra note 10, at 9 tbl.1.
financial and housing crises rather than to changes in pleading standards. I exclude civil rights and employment discrimination cases from the total other cases category since I examine these two nature-of-suit categories separately. The second row of Table 3 provides figures for employment discrimination cases, and the third row provides figures for civil rights cases. These figures differ somewhat from those that appear in the FJC report’s Table 1 because, unlike the FJC, I have excluded ADA cases from this category due to changes in ADA substantive law enacted by the 2008 ADA Amendments.\footnote{167}

Column (1) of my Table 3 provides the numbers of cases that were filed during the \textit{Conley} period. Column (4) provides the corresponding counts for the \textit{Iqbal} period. These figures imply that the number of total other cases filed fell by 1.6% over the FJC’s study period. The figures also imply that the number of employment discrimination and civil rights cases grew 2% and 7%, respectively. All three of these figures are consistent with the model of selection I discussed in Part III.\footnote{168}

\begin{table}
\caption{DATA CONCERNING CASE AND MTD FILINGS}
\begin{tabular}{|l|l|}
\hline
\textbf{CONLEY PERIOD} & \textbf{IQBAL PERIOD} \\
\hline
\end{tabular}
\end{table}

\footnote{167. The FJC included ADA cases together with civil rights cases (while analyzing Title VII employment discrimination cases separately, as I do here). As I explain above, see supra note 69, including ADA cases will conflate behavioral responses to pleading-regime change with the 2008 ADA Amendments’ broadening of ADA coverage. This broadened coverage plausibly would lead to increases in the number of filed ADA cases for reasons wholly unrelated to changes in pleading standards. As with financial-instruments cases, then, ADA cases should be excluded from the analysis. I am able to exclude ADA cases only because of the very generous efforts of Joe Cecil, lead author of the FJC reports, who kindly provided me with several supplemental tables. These tables show that the number of ADA employment cases filed increased from 268 to 378 between the \textit{Conley} and \textit{Iqbal} study periods, while the number of other ADA cases increased from 449 to 851. These increases are very large—41% and 89%, respectively—so it is important to exclude these cases from consideration. I am very grateful to Cecil for his assistance. See discussion in Appendix A for more details on the figures in Table 3.}

\footnote{168. The drop in case filings for total other cases is consistent with the presence of either or both plaintiff selection effects and settlement selection effects. The increase in case filings for civil rights and employment discrimination cases requires the presence of some SM cases that would be settled before case filing under \textit{Conley} but that, under \textit{Twombly} and \textit{Iqbal}, are instead filed by plaintiffs and attacked with MTDs by defendants. There could also be plaintiff selection so long as it is outweighed by the kind of settlement selection just described.}
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<table>
<thead>
<tr>
<th>CASE TYPE</th>
<th>(1) CASES</th>
<th>(2) NUMBER</th>
<th>(3) RATE (PERCENT)</th>
<th>(4) CASES</th>
<th>(5) NUMBER</th>
<th>(6) RATE (PERCENT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL OTHER CASES</td>
<td>39,912</td>
<td>1241</td>
<td>3.1</td>
<td>39,288</td>
<td>1968</td>
<td>5.0</td>
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<td>EMPLOYMENT DISCRIMINATION</td>
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<tr>
<td>CIVIL RIGHTS</td>
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<td>10.8</td>
<td>3747</td>
<td>454</td>
<td>12.1</td>
</tr>
</tbody>
</table>

Notes:
• See Appendix A Table 1 concerning figures in columns (1) and (4).
• See Appendix A Table 3 concerning figures in columns (2) and (5).
• Figures in column (3) are rounded ratios of column (2) to column (1).
• Figures in column (6) are rounded ratios of column (5) to column (4).

Columns (3) and (6) of Table 3 provide the fraction of filed cases in which the FJC reports that the defendant filed MTDs in each period. For all three nature-of-suit categories, the Rule 12(b)(6) MTD filing rate increased between the FJC’s two study periods. Among total other cases, the filing rate increased from 3.1% to 5.0%. For employment discrimination and civil rights cases, the 12(b)(6) MTD filing rate increased from 6.9% to 9.0 percent, and from 10.8% to 12.1%, respectively.

2. The FJC’s Grants Data Set

The grants data in the original FJC report included data on 1921 judicial orders. Some of these involved grants with leave to amend. As I discussed in Section I.C, when a Rule 12(b)(6) MTD is granted with leave to amend, the plaintiff may file an amended complaint, which the defendant may challenge with a new Rule 12(b)(6) MTD, and so on. The FJC’s original report shows that MTDs are granted with leave to amend in a nontrivial share of cases, and it also shows that the with-leave-to-amend disposition category became more common between the Conley and Iqbal study periods.

My methodological discussion, on the other hand, focuses on MTD grants that terminate a plaintiff’s claim, leaving open the question of how to deal with MTDs that are granted with leave to amend. The FJC’s updated report answers this question by following all cases that had a Rule 12(b)(6) motion granted

169. See CECIL ET AL., supra note 10, at 14 tbl.4.
170. See supra text accompanying notes 114-119.
with leave to amend to determine a definitive resolution to the MTD stage of litigation. The FJC was able to do so in all but eighty of the cases represented in the original report’s grants data set. 171

Table A-1 of the updated report provides data on the party who “ultimately prevailed” in cases in which the FJC read and coded an order resolving a motion to dismiss. 172 According to the FJC’s coding scheme, the movant prevailed when a court “granted the last motion to dismiss in whole or in part and no opportunity to amend the complaint remained.” 173 This definition covers both (i) grants without leave to amend and (ii) cases in which the court gave leave to amend but in which the respondent did not file a timely amended complaint. 174 The FJC coded the respondent as prevailing when “the last motion to dismiss was denied, or [when] . . . the respondent submitted an amended complaint and the movant chose not to respond with an additional motion to dismiss.” 175

When the movant prevails according to the FJC’s definition, the respondent’s claim is terminated, eliminating all access to discovery and future litigation costs for the claims involved. And when the respondent prevails, she will have access to discovery. 176 As such, the FJC’s definition of a movant’s having prevailed corresponds directly to the conceptual role that an MTD grant played in the methodological discussion in Parts II-V. Consequently, I will use the movant’s rate of prevailing as my measure of the grant rate for purposes of estimating my lower bound on the negatively affected share of Twombly/Iqbal MTD cases.

It is important to emphasize that the FJC codes a movant as prevailing if she prevailed on any of the claims she challenged via an initial Rule 12(b)(6)

171. The updated report explains that fifty-two of the orders in the grants data set corresponded to cases represented more than once in the original grants study, due to an earlier MTD granted with leave to amend that was “followed by an amended complaint, a motion to dismiss the amended complaint, and an order resolving the motion.” Cecil et al., supra note 11, at 3 n.4. Thus, there were actually 1869 unique cases represented in the original report’s grant study.
172. Id. at 7 tbl.A-1.
173. Id. at 3.
174. Id.
175. Id.
176. Of course, the movant could try to limit or eliminate discovery access via the same set of Rule 26 procedures as are available in the absence of MTDs.
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MTD.\textsuperscript{177} This is the right definition of “prevailing” to use empirically. To see why, just consider \emph{Iqbal}. As Justice Kennedy noted, John Ashcroft and Robert Mueller were only two of many defendants whom Javaid Iqbal sued in his complaint alleging twenty-one causes of action.\textsuperscript{178} The Supreme Court’s holding in \emph{Iqbal} thus eliminated only defendants Ashcroft and Mueller from the litigation, and Justice Kennedy’s opinion explicitly disclaimed any opinion as to “the sufficiency of respondent’s complaint against the defendants who are not before us.”\textsuperscript{179} Thus, \emph{Iqbal} itself falls into the category of cases in which the Rule 12(b)(6) MTD was granted as to only some of the plaintiff’s claims.

I list statistics concerning the percentage of cases in which the movant prevails in Table 4.\textsuperscript{180} The first two columns show this percentage for the \emph{Conley} and \emph{Iqbal} study periods, and the third column shows the change across pleading regimes. The movant prevailed in 55.2\% of total other cases under \emph{Conley}, a figure that rose to 56.3\% under \emph{Twombly} and \emph{Iqbal}. Roughly speaking, then, there was no change in the observed share of cases whose claims all ultimately reached discovery despite having faced a Rule 12(b)(6) MTD. Recall, though, that in the presence of defendant selection, even such a null finding need not contradict the hypothesis that \emph{Twombly} and \emph{Iqbal} have harmed plaintiffs or reduced discovery access.\textsuperscript{181}

\begin{table}
\centering
\caption{PERCENTAGE OF CASES IN WHICH MOVANT PREVAILS}
\begin{tabular}{|c|c c|}
\hline
\textbf{CASE TYPE} & \textbf{CONLEY} & \textbf{IQBAL} & \textbf{CHANGE} \\
\hline
TOTAL OTHER CASES & 55.2 & 56.3 & 1.1 \\
EMPLOYMENT DISCRIMINATION & 60.9 & 61.1 & 0.2 \\
CIVIL RIGHTS & 60.3 & 68.1 & 7.8 \\
\hline
\end{tabular}
\end{table}

\textsuperscript{177} The FJC could have instead coded movants as prevailing only if they prevailed on \emph{all} claims challenged.


\textsuperscript{179} Id. at 1952.

\textsuperscript{180} For the employment discrimination cases, these figures come from the “Movant” row of Table A-1 of the FJC’s updated report. Cecil et al., supra note 11, at 7 tbl.A-1. For the civil rights cases and total other cases categories, the reported figures are my own calculations based on that table and on supplemental tables kindly provided by Joe Cecil to allow me to exclude (the small number of) orders relating to ADA cases. I provide the raw count of cases represented in each category in Appendix A. See infra Appendix A tbl.4.

\textsuperscript{181} See Example 2, supra Table 1 and Table 2, on exactly this point.
Table 4’s second row presents the movant’s rate of prevailing in employment discrimination cases. In each period, roughly 61% of movants prevailed in employment discrimination cases after filing a Rule 12(b)(6) MTD. Finally, the results for civil rights cases show that after Twombly and Iqbal had taken effect, there was about an eight-point uptick in the percentage of cases in which movants prevailed after filing Rule 12(b)(6) MTDs.

3. Calculating the Lower Bound

I now use data from Table 3 and Table 4 to calculate the correction term from equation (2). Column (1) of Table 5 reports the change in the number of MTDs filed between the Conley and Iqbal study periods. For each nature-of-suit category, this change equals the column (5) entry from Table 3 minus the column (2) entry from Table 3; for example, there were 727 more MTDs among total other cases in the Iqbal period than during the Conley period. Column (2) of Table 5 reports the number of MTDs that were filed in each nature-of-suit category during the Iqbal period.
Table 5.
CALCULATING THE CORRECTION TERM

<table>
<thead>
<tr>
<th>CASE TYPE</th>
<th>(1) CHANGE IN MTD FILINGS</th>
<th>(2) NUMBER OF MTD FILINGS, IQBAL PERIOD</th>
<th>(3) RATIO OF (1) TO (2)</th>
<th>(4) MOVANT-PREVAILED RATE UNDER CONLEY</th>
<th>PRODUCT OF (3) AND (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL OTHER CASES</td>
<td>727</td>
<td>1968</td>
<td>0.37</td>
<td>55.2</td>
<td>20.4</td>
</tr>
<tr>
<td>EMPLOYMENT DISCRIMINATION CASES</td>
<td>87</td>
<td>349</td>
<td>0.25</td>
<td>60.9</td>
<td>15.2</td>
</tr>
<tr>
<td>CIVIL RIGHTS CASES</td>
<td>78</td>
<td>454</td>
<td>0.17</td>
<td>60.3</td>
<td>10.3</td>
</tr>
</tbody>
</table>

Table 5’s column (3) is the ratio of the table’s column (1) to its column (2). This ratio is the part of the correction term I discussed in detail at the end of Section V.D. Other things equal, larger values of this ratio tend to indicate the presence of more defendant selection. The larger the ratio is, other things equal, the greater will be the correction term that must be added to the difference in grant rates across pleading regimes in order to estimate my lower bound on the negatively affected share. The ratio equals 0.37 for total other cases, 0.25 for employment discrimination cases, and 0.17 for civil rights cases. That suggests we can expect the correction term from equation (2) to be greatest for total other cases and least for civil rights cases.

In column (4) of Table 5, I repeat the Conley-period rate at which movants prevail, which I also reported in the first column of Table 4. The correction term in equation (2) is the product of this rate and the ratio in column (3) of Table 5. This term is what we must add to the difference in the movant-prevails rate to obtain the lower bound on the negatively affected share. I report the product of columns (3) and (4) for each nature-of-suit category in the final column of Table 5, which shows that the correction term is 20.4 percentage points for total other cases, 15.2 points for employment discrimination cases, and 10.3 points for civil rights cases. As predicted, then, the correction term rises with the ratio in column (3). The greater the apparent amount of selection into MTD filing, the greater is the term necessary to

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182. Or also, possibly, more settlement selection of the SM form.
correct for it in bounding the negatively affected share of Twombly/Iqbal MTD cases.

In Table 6, I report the components necessary to calculate my lower bounds on the negatively affected share. The first column repeats the difference across pleading regimes in the rate at which movants prevail, which I originally reported in Table 4. The second column of Table 6 reports the correction term just calculated in Table 5. Finally, the third column of Table 6 reports the sum of the first two columns. For each of the three nature-of-suit categories, this sum is my lower bound on the negatively affected share of Twombly/Iqbal MTD cases.

### Table 6.
**LOWER BOUNDS ON THE NEGATIVELY AFFECTED SHARE OF CASES AMONG THOSE WITH MTDs FILED UNDER TWOMBLY AND IQBAL**

<table>
<thead>
<tr>
<th>CASE TYPE</th>
<th>CHANGE IN THE MOVANT-PREVAILS SHARE</th>
<th>CORRECTION TERM</th>
<th>IMPLIED LOWER BOUND ON NEGATIVELY AFFECTED SHARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL OTHER CASES</td>
<td>1.1</td>
<td>20.4</td>
<td>21.5</td>
</tr>
<tr>
<td>EMPLOYMENT DISCRIMINATION CASES</td>
<td>0.2</td>
<td>15.2</td>
<td>15.4</td>
</tr>
<tr>
<td>CIVIL RIGHTS CASES</td>
<td>7.8</td>
<td>10.3</td>
<td>18.1</td>
</tr>
</tbody>
</table>

The estimated lower bounds are large. For total other cases, the lower bound is 21.5 percentage points. This suggests that the switch from Conley to Iqbal caused MTD movants to prevail—and thus plaintiffs to be negatively affected—on one or more claims in at least 21.5% of cases in which MTDs were adjudicated in the FJC’s Iqbal study period. Recall from Table that movants prevailed in 56.3% of MTDs filed against total other cases in the FJC’s Iqbal period. So another way to interpret my lower bound is that nearly two-fifths (21.5 ÷ 56.3 = 0.38) of cases with MTDs granted in the Iqbal period as to some

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183. This estimate is statistically significant, as are the estimates of my lower bound for the employment discrimination and civil rights case categories, discussed infra. For details, see Appendix B, available at http://www.yalelawjournal.org/images/documents/gelbach_appendix_b.pdf
claims would not have had MTDs granted had the pleading regime not changed. 184

For employment discrimination cases, my lower bound on the negatively affected share is 15.4 percentage points. Thus, at least a fourth of the 61.1% of employment discrimination cases in which movants prevail in the Iqbal period had plaintiffs who were negatively affected as a result of the switch from Conley to Twombly/Iqbal. Among civil rights cases, the lower bound on the negatively affected share is 18.1 percentage points. The movant-prevails rate in the Iqbal period was 68.1% for civil rights cases, so—as with employment discrimination cases—at least a fourth of civil rights cases in which movants prevailed under Twombly/Iqbal had MTDs granted because of the switch from Conley to Twombly/Iqbal.

Why are my lower bounds so much greater than simple differences in grant rates across pleading regimes? Because there is so much selection. What drives the large correction terms in Table 5 is the fact that the increases in the number of MTDs filed were sizable relative to the number of MTDs filed in the Iqbal period. As I discussed at the end of Section V.D, the cross-pleading regime differences will be particularly far below my lower bound on the negatively affected share when this happens.

Interestingly, the correction term is smallest for civil rights cases, and smaller for employment discrimination cases than for total other cases. This pattern suggests less selection for civil rights and employment discrimination cases. One explanation for this finding is that these case types had greater MTD filing rates than did other cases under Conley. Table 3 shows that the MTD filing rate for employment discrimination cases under Conley was more than double the rate for total other cases, while the corresponding rate for civil rights cases was more than triple that for total other cases. Perhaps, then, there was simply less room for a large defendant selection effect among civil rights and employment discrimination cases than among others, since defendants were already challenging the sufficiency of these cases relatively frequently. Whatever the reason for the pattern of results, though, they leave open the possibility that civil rights and employment discrimination cases have not been more negatively affected than other cases.

184. It is critical to remember, from Part III, that some of these negatively affected cases would not have faced MTDs at all had the Conley pleading standard governed instead.


B. Potential Threats to the Validity of My Empirical Results

In this Section, I discuss two ways my methodology might go wrong as an empirical matter. The first is that the number of underlying controversies might have grown, or other characteristics might have changed. The second has to do with the way the FJC collected its data. I discuss these issues in turn.

1. Instability or Growth in the Set of Underlying Controversies

There are exogenous and endogenous ways that the set of underlying controversies might have changed between the Conley and Iqbal study periods. On the exogenous side, perhaps the number of underlying controversies just grows at a fixed rate every year (say, due to population or economic growth). In this case, I would tend to overstate the correction term in equation (2). That is true because the number of MTDs filed in the Iqbal period would rise simply due to the passage of time, rather than because of party selection effects, inflating my correction term.\(^{185}\)

Perhaps some of the increase in the number of MTDs filed in employment discrimination and civil rights cases might come from such an exogenous-growth source.\(^{186}\) But it seems very unlikely that exogenous growth in controversies can explain much of the lower bound for the total other cases nature-of-suit category. For this category, the rate at which MTDs were filed increased from 3.1% to 5.0% of case filings,\(^{187}\) which is more than a 60% increase,\(^{188}\) while the overall number of cases filed in the total other cases category actually fell slightly between the Conley and Iqbal study periods.\(^{189}\)

\(^{185}\) To see this, recall that the correction term equals the product of the Conley grant rate and the ratio of the change in the number of MTDs filed to the number of MTDs filed under Iqbal. The Conley grant rate would not be affected by an across-the-board increase in the number of controversies. But such an increase would cause the latter ratio to rise, causing me to overstate my correction term.

\(^{186}\) For these nature-of-suit categories, the number of cases filed did actually rise. See supra text accompanying note 168. One interesting possibility is that case filings respond to the business cycle, which swung down substantially between 2005-2006 and 2009-2010; see Siegelman & Donohue, supra note 130, for a discussion of the cyclical aspects of employment discrimination litigation.

\(^{187}\) See supra Table 3.

\(^{188}\) That is, 5.0% - 3.1% = 1.9%, and 1.9% ÷ 3.1% = 0.613.

\(^{189}\) See supra Table 3.
This pattern seems to suggest party selection, not exogenous growth, as the primary driver of my results.

In principle, my results could also be affected by changes in the number of controversies that result from endogenous primary-behavior responses to changes in pleading policy. After the switch from Conley to Twombly/Iqbal, repeat-player defendants—like, say, large employers—might believe themselves less likely to face lawsuits, and less likely to have to bear discovery burdens when they do. They might thus engage in more discrimination, or be less vigilant in policing any unlawful behavior of supervisors, or worry less about strike suits. Such primary-behavior responses would induce additional lawsuits over and above what would happen in the primary-behavior baseline.

One of the facts of life for nonexperimental empirical research, though, is that there are always such potential counterexplanations. At present I do not know of a good way to test either the exogenous or endogenous growth stories. Perhaps future research will be able to address them.

2. Are the FJC’s Data Useful?

In commenting on the original FJC MTD report, the then-Chair of the Advisory Committee on the Federal Rules, Judge Mark Kravitz, suggested that results from the FJC’s filing and grants data sets should not be used together:

A succinct but potentially misleading statement of the central finding would be that the rate of filing 12(b)(6) motions has increased, while the rate of granting the motions [has] held constant. A natural conclusion would be that a constant rate of granting an increased number of motions means that more cases are dismissed for failure to state a claim. But the comparison is made between two data sets, and it is difficult to confirm or deny this possible conclusion.¹⁹⁰

But the fact that two data sets are involved does not by itself suggest there is any problem with using the FJC’s data together. Empirical researchers make comparisons using multiple data sets all the time—across time, across surveys, across geographical areas, and so on. While there could be fatal inconsistencies between data sets, I do not believe the two FJC MTD reports contain any concrete reasons for concern.

In personal communication with me, the lead author of the FJC reports, Joe Cecil, has stated that the FJC does “regard these data sets as too inconsistent to yield a valid estimate of a combined effect.” In their concern here presumably is that its grant study is based on a cross section of judicial orders filed during a fixed window of time, rather than a cohort study of orders that flow from the set of cases and Rule 12(b)(6) MTDs filed during the periods corresponding to the filing study. For such differences in data collection methods to be important, there would have to be substantial compositional differences between the sets of cases that are filed in the nine months following October 1 and those cases that are at risk of having a judicial order issued in the six months after the following January. But the FJC does not provide any concrete reason to think this is actually the case.

An additional potential problem is that some cases with MTDs adjudicated in the Iqbal period might have been filed before Iqbal, or even before Twombly, if the cases have had enough amended complaints. Consequently, the cross section of orders that the FJC analyzed might not fully represent the steady state that will ultimately develop over time. These are standard concerns when one compares cross sections of dynamic processes that are sampled on either side of a policy change.

I would certainly prefer a cohort-based measure that followed a fixed set of cases from their filing, to the filing of initial Rule 12(b)(6) MTDs, and then over the period necessary to determine who ultimately prevails on these initial motions. But given that no such measure currently exists, I believe that the comprehensive and representative nature of the FJC’s cross section is the best currently available alternative. In addition, my hunch is that whatever the compositional mismatch in the cases represented by the FJC’s cross section of orders and its cohort of filed cases, it is unlikely to greatly affect my lower bounds’ values.

For a large amount of such mismatch to occur, the characteristics of cases in the cross section on which the FJC’s grants study is based must look very different from the characteristics of cases that would appear in a longitudinal sample of cases with judicial orders resolving Rule 12(b)(6) MTDs. Given that most MTD adjudication will happen early in a case’s lifetime, such

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191. E-mail from Joe Cecil, Lead Author, FJC Report, to author (Dec. 5, 2011, 11:22 AM EST) (on file with author).

192. Rule 12(a)(1) states that in the absence of a contrary rule or federal statute, a defendant “must serve an answer: (i) within 21 days after being served with the summons and complaint.” Fed. R. Civ. P. 12(a)(1)(A). If the defendant has timely waived service under Rule 4(d), then this period extends to 60 days after the request for a waiver (90 days if such
differences seem unlikely. Of course, I could be wrong about the facts. The FJC could provide some guidance on this point by releasing some information about the filing dates of cases included in its grants study. Fortunately, Cecil has told me that the FJC plans to release its data within the next several months.

Finally, I must say that I find the FJC’s position on this issue puzzling. Does the FJC really believe that the cross sections from which its grants data were drawn are importantly unrepresentative of the cohorts of cases filed before and after Twombly/Iqbal? If so, why did the FJC commence work on its reports in the first place? And why did it release either report to the public? The original report declares that “this study was designed to assess changes in motions to dismiss and decisions on such motions over time in broad categories of civil cases.” How can one “assess changes” from a data set if the observations it contains on the two time periods it covers cannot be compared?

In sum, while I of course respect both Judge Kravitz’s and the FJC’s position on these points, I do not believe that either has made a convincing

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193. On this point, Cecil informed me as part of our e-mail communication that “many of the orders [the FJC uses] to estimate the post-Iqbal grant rate were from cases filed before Iqbal was decided, and even more were filed before the appellate court provided guidance to the district courts.” E-mail from Joe Cecil to author, supra note 191. Unfortunately, I do not know how many “many” is, which is important because the FJC’s post-Iqbal sample is quite large, containing 1200 orders. Moreover, this is problematic only to the extent that amendment behavior, and subsequent MTD filing, differs importantly as a result of Twombly and Iqbal. Cecil has suggested to me that party selection effects of the type I consider in this Note can be expected to change amendment and subsequent MTD-filing behavior following Twombly and Iqbal. Perhaps. But these points of conjecture can be settled only with data that only the FJC has as of this writing.

194. Id.

argument against using the data from the FJC’s two studies in the way that I do. I will certainly be prepared to revise my view should future reasons or evidence come to light on this point, and I look forward to having a chance to assess the FJC’s full data set firsthand.

VII. QUESTIONS FOR FUTURE INVESTIGATION

By taking party selection seriously, this Note begins to fill an important gap in the existing empirical literature on Twombly and Iqbal. A key remaining question concerns the merits of cases in which plaintiffs have been negatively affected due to Twombly and Iqbal. A substantial negatively affected share might be socially desirable, if affected cases have low enough merit. This would especially be true if affected cases tend to involve the kind of substantial discovery expense that motivated the Supreme Court’s Twombly and Iqbal opinions.

I hope to use data on the adjudication of defense summary-judgment motions to attack the low-merit question. One can view Twombly, and Iqbal by extension, as asking judges to forecast the results of discovery and thus the likely outcome of defense summary-judgment motions. If judges are successful at this task, then cases that would have gone through discovery and been dismissed pursuant to defense summary-judgment motions under Conley will now be dismissed before discovery at the MTD stage. This culling of weak cases will tend to reduce defendants’ win rate in summary judgment motions. Thus, determining whether this win rate has fallen, and if so by how much, might provide important evidence on the quality of cases affected by Twombly and Iqbal. Future conceptual and empirical work based on summary judgment motions might well bear fruit, and this is a topic on which I am currently engaged.

196. Justice Souter said as much in Twombly: “Asking for plausible grounds to infer an [illegal non-compete] agreement . . . calls for enough fact to raise a reasonable expectation that discovery will reveal evidence of illegal agreement.” Bell Atl. Corp. v. Twombly, 550 U.S. 544, 556 (2007). For an example of this idea in action, see Matrixx Initiatives, Inc. v. Siracusano, 131 S. Ct. 1309, 1309 (2011), which held that plaintiffs had “adequately pleaded materiality” in the securities fraud context because their complaint’s allegations “suffice to ‘raise a reasonable expectation that discovery will reveal evidence’” that the defendant firm had failed to disclose information that a reasonable investor would want to know, which would be sufficient to establish the plaintiffs’ claim if unrebutted. Id. at 1322–23 (quoting Twombly, 550 U.S. at 556).
That said, as scholars and policymakers debate possibilities for further pleading reform, it is important to keep in mind that empirical evidence can tell one only so much. This is true partly because not every positive question can be answered with data, and partly because many of the key judgments about access to discovery, and the resulting balance of power between plaintiffs and defendants, are fundamentally normative. Even so, it would be a mistake to look at the positive and normative questions in isolation. When considering potential reforms to pleading and discovery, we must understand which types of plaintiffs will be able to cross the threshold to discovery, and which will find its door barred.

CONCLUSION

In this Note, I discuss the interplay between party selection effects, changes in MTD grant rates, and heightened pleading. A key negative result is that the conventional focus on changes in MTD grant rates after Twombly and Iqbal tells us relatively little about how Twombly and Iqbal have affected fixed sets of cases. While others have pointed out the possibility of party selection effects, few observers of Twombly and Iqbal seem to have grasped the empirical importance of accounting for party selection when measuring the impact of changes in pleading standards. Moreover, selection does not just complicate judicial-behavior-effect measurement—it has direct effects, too.

On the positive side of the ledger, this Note makes several constructive contributions. First, I develop a measure of the share of cases that face MTDs under Twombly/Iqbal in which plaintiffs are negatively affected by the switch from Conley to Twombly/Iqbal. Negatively affected cases are those that do not get to discovery following a Rule 12(b)(6) MTD filing under Twombly/Iqbal, given that these cases either would have gotten to discovery or would have settled had the Conley pleading regime been in place. Second, I show how to use real-world data to calculate a lower bound on this measure, even though the measure itself is unobservable.

Third, I actually estimate this lower bound for each of three nature-of-suit categories. My estimates imply that, among cases not involving financial instruments, civil rights, or employment discrimination, Twombly and Iqbal negatively affected at least 21.5% of cases that faced a Rule 12(b)(6) MTD during the post-Iqbal period. Estimated lower bounds for employment discrimination and civil rights cases are a bit lower, at 15.4% and 18.1% respectively. These would be substantial effects in their own right, and the fact that they are lower bounds tells us that the full effects may be even greater.
### APPENDIX A: RAW CASE COUNTS

Appendix A Table 1 lists the numbers of cases filed by plaintiffs in each of the FJC’s filing study periods, by detailed nature-of-suit category.

**Appendix A, Table 1.**

**NUMBER OF CASES FILED BY PLAINTIFFS**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>49,443</td>
<td>52,925</td>
</tr>
<tr>
<td>Financial Instruments</td>
<td>1524</td>
<td>4790</td>
</tr>
<tr>
<td><strong>Employment Discrimination</strong></td>
<td><strong>3795</strong></td>
<td><strong>3871</strong></td>
</tr>
<tr>
<td>Civil Rights as defined in FJC reports</td>
<td>4212</td>
<td>4976</td>
</tr>
<tr>
<td>Sum of ADA Civil Rights</td>
<td>717</td>
<td>1229</td>
</tr>
<tr>
<td>ADA – Employment</td>
<td>268</td>
<td>378</td>
</tr>
<tr>
<td>ADA – Other</td>
<td>449</td>
<td>851</td>
</tr>
<tr>
<td><strong>Sum of non-ADA Civil Rights</strong></td>
<td><strong>3495</strong></td>
<td><strong>3747</strong></td>
</tr>
<tr>
<td>Civil Rights – Welfare</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Civil Rights – Voting</td>
<td>35</td>
<td>18</td>
</tr>
<tr>
<td>Civil Rights – Accommodations</td>
<td>169</td>
<td>153</td>
</tr>
<tr>
<td>Civil Rights – Other</td>
<td>3282</td>
<td>3567</td>
</tr>
<tr>
<td>Sum of “Financial Instruments,” “Employment Discrimination,” &amp; all “Civil Rights”</td>
<td>9531</td>
<td>13,037</td>
</tr>
<tr>
<td><strong>Total, excluding “Financial Instruments,” “Employment Discrimination,” &amp; all “Civil Rights”</strong></td>
<td><strong>39,912</strong></td>
<td><strong>39,288</strong></td>
</tr>
</tbody>
</table>
Notes to Appendix A, Table 1:

- Figures for the following rows come from supplemental tables provided to author by Joe Cecil (on file with author): ADA – Employment; ADA – Other; Civil Rights – Accommodations; Civil Rights – Voting; Civil Rights – Welfare; Civil Rights – Other.
- Figures in rows with bold font—“Employment Discrimination,” “Sum of Non-ADA Civil Rights,” and “Total, excluding ‘Financial Instruments,’ ‘Employment Discrimination’ & all ‘Civil Rights’”—are those used in columns (1) and (4) of Table 3 of the main text.
- Note that Cecil et al., supra note 10, at 9 tbl. 1, states that there are 4214 rather than 4212 cases in the FJC’s “Civil Rights” category for the earlier period.

Appendix A Table 2 constructs the implied number of Rule 12(b)(6) MTDs filed in the FJC’s “Total” category and in the financial instruments category. I use these figures subsequently in Appendix A Table 3.
Appendix A, Table 2.

DERIVING THE IMPLIED NUMBER OF CASES WITH RULE 12(b)(6) MTDs FILED BY DEFENDANTS WITHIN FIRST 90 DAYS OF CASE FILING, SELECT CATEGORIES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NUMBER OF CASES PLAINTIFFS FILED</td>
<td>SHARE WITH 12(b)(6) MTDs</td>
</tr>
<tr>
<td>TOTAL</td>
<td>49,443</td>
<td>4.0%</td>
</tr>
<tr>
<td>FINANCIAL INSTRUMENTS</td>
<td>1524</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

Notes to Appendix A, Table 2:

- Entries in columns titled “Number of Cases Plaintiffs Filed” and “Share with 12(b)(6) MTDs” come from Cecil et al., supra note 10, at 9 tbl.1.
- Entries in columns titled “Implied Number of MTDs” are products of entries in corresponding “Number of Cases Plaintiffs Filed” and “Share with 12(b)(6) MTDs” columns.

Appendix A Table 3 lists the number of cases, either actual or implied from other data, that have Rule 12(b)(6) MTDs filed by defendants within the first 90 days of case filing.
Appendix A, Table 3.
NUMBER OF CASES WITH RULE 12(b)(6) MTDS FILED BY DEFENDANTS WITHIN FIRST 90 DAYS OF CASE FILING

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1978</td>
<td>3281</td>
</tr>
<tr>
<td>Financial Instruments</td>
<td>66</td>
<td>460</td>
</tr>
<tr>
<td>Employment Discrimination</td>
<td>262</td>
<td>349</td>
</tr>
<tr>
<td>Civil Rights as defined in FJC reports</td>
<td>409</td>
<td>505</td>
</tr>
<tr>
<td>Sum of ADA Civil Rights</td>
<td>33</td>
<td>51</td>
</tr>
<tr>
<td>ADA – Employment</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>ADA – Other</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>Sum of non-ADA Civil Rights</td>
<td>376</td>
<td>454</td>
</tr>
<tr>
<td>Civil Rights – Welfare</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Civil Rights – Voting</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Civil Rights – Accommodations</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Civil Rights – Other</td>
<td>358</td>
<td>444</td>
</tr>
<tr>
<td>Sum of “Financial Instruments,” “Employment Discrimination,” &amp; all “Civil Rights”</td>
<td>737</td>
<td>1313</td>
</tr>
</tbody>
</table>
Notes to Appendix A, Table 3:

- Figures in rows with bold font—“Employment Discrimination,” “Sum of Non-ADA Civil Rights,” and “Total, excluding ‘Financial Instruments,’ ‘Employment Discrimination’ & all ‘Civil Rights’”—are those used in main text.
- Figures for “Total” and “Financial Instruments” rows come from column labeled “Implied Number, MTDs” in Appendix A Table 2.

Appendix A Table 4 lists the number of cases with Rule 12(b)(6) MTDs in which each party ultimately prevailed, among cases with judicial orders resolving Rule 12(b)(6) MTDs filed during the FJC’s study periods. All figures are based on supplemental tables provided to author by Joe Cecil on December 7, 2011 (on file with author).¹⁹⁷

¹⁹⁷ Figures for “Total,” “Employment Discrimination,” and “Financial Instruments” columns are also reported in Cecil et al., supra note 11, at 7 tblA-1. There is one substantial discrepancy between Table A-1 of the updated FJC report and the figures Cecil provided me: Table A-1 of the updated report lists 216 financial-instruments cases in which the movant prevails, whereas the December 7, 2011, tables list 151 instead. Cecil has specifically confirmed that the 151 figure is correct. See E-Mail from Joe Cecil, Lead Author, FJC Report, to author (Jan. 26, 2012, 2:48 PM EST) (on file with author).
### Appendix A, Table 4.

**Number of Cases with Rule 12(b)(6) MTDS in Which Movant or Respondent Ultimately Prevailed, Among Cases with Judicial Orders Resolving Rule 12(b)(6) MTDS Filed Between January 1 to June 30 of Indicated Year**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>297</td>
<td>384</td>
<td>681</td>
<td>414</td>
<td>697</td>
<td>1111</td>
</tr>
<tr>
<td>Financial Instruments</td>
<td>10</td>
<td>6</td>
<td>16</td>
<td>39</td>
<td>151</td>
<td>190</td>
</tr>
<tr>
<td>Employment Discrimination</td>
<td>36</td>
<td>56</td>
<td>92</td>
<td>44</td>
<td>69</td>
<td>113</td>
</tr>
<tr>
<td>“Civil Rights” as defined in FJC reports</td>
<td>70</td>
<td>99</td>
<td>169</td>
<td>69</td>
<td>140</td>
<td>209</td>
</tr>
<tr>
<td>Sum of ADA Civil Rights</td>
<td>8</td>
<td>5</td>
<td>13</td>
<td>8</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>ADA – Employment</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>ADA – Other</td>
<td>6</td>
<td>3</td>
<td>9</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Non-ADA Civil Rights</td>
<td>62</td>
<td>94</td>
<td>156</td>
<td>61</td>
<td>130</td>
<td>191</td>
</tr>
<tr>
<td>Sum of “Financial Instruments,” “Employment Discrimination,” &amp; all “Civil Rights”</td>
<td>116</td>
<td>161</td>
<td>277</td>
<td>152</td>
<td>360</td>
<td>512</td>
</tr>
<tr>
<td>Total, excluding “Financial Instruments,” “Employment Discrimination,” &amp; all “Civil Rights”</td>
<td>181</td>
<td>223</td>
<td>404</td>
<td>262</td>
<td>337</td>
<td>599</td>
</tr>
</tbody>
</table>
Notes to Appendix A, Table 4:

- Figures in rows with bold font—“Employment Discrimination,” “Non-ADA Civil Rights,” and “Total, excluding ‘Financial Instruments,’ ‘Employment Discrimination’ & all ‘Civil Rights’”—are those used to calculate the rate at which movants ultimately prevail, reported in Table 4 of main text.
- Figures reported in Table 4 of main text are ratio of “Movant” column of the present table to the corresponding “Total” column of the present table. For example, the present table shows that employment discrimination movants prevailed in 56 of 92 orders, for a rate of 56 divided by 92, or 60.1%, which is the figure reported in the bottom left cell of Table 4 of the main text.