Motions to Dismiss for Failure to State a Claim After *Iqbal*

Report to the Judicial Conference
Advisory Committee
on Civil Rules

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Executive Summary

This report presents the findings of a Federal Judicial Center study on the filing and resolution of motions to dismiss for failure to state a claim under Rule 12(b)(6) of the Federal Rules of Civil Procedure. The study was requested by the Judicial Conference Advisory Committee on Civil Rules. The study compared motion activity in 23 federal district courts in 2006 and 2010 and included an assessment of the outcome of motions in orders that do not appear in the computerized legal reference systems such as Westlaw. Statistical models were used to control for such factors as differences in levels of motion activity in individual federal district courts and types of cases.

After excluding cases filed by prisoners and pro se parties, and after controlling for differences in motion activity across federal district courts and across types of cases and for the presence of an amended complaint, we found the following:

- There was a general increase from 2006 to 2010 in the rate of filing of motions to dismiss for failure to state a claim (see *infra* section III.A).
- 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 (see *infra* section III.B.1).
- Only in cases challenging mortgage loans on both federal and state law grounds did we find an increase in the rate of grants of motions to dismiss without leave to amend. Many of these cases were removed from state to federal court. This category of cases tripled in number during the relevant period in response to events in the housing market (see *infra* section III.B.1). There is no reason to believe that the rate of dismissals without leave to amend would have been lower in 2006 had such cases existed then.
- There was no increase from 2006 to 2010 in the rate at which a grant of a motion to dismiss terminated the case (see *infra* section III.B.1).

I. Origin of the Study

In October 2009, the Judicial Conference Advisory Committee on Civil Rules asked the Federal Judicial Center to undertake an analysis of changes in the filing and resolution of motions to dismiss filed under authority of Federal Rule of Civil Procedure 12(b)(6). This request was prompted by two recent Supreme Court decisions—*Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007), and *Ashcroft v. Iqbal*, 556 U.S. _, 129 S. Ct. 1937 (2009)—that interpreted Rule 8(a) by stating that a plaintiff must present a "plausible" claim for relief. A number of commentators expressed concern about whether lower courts would apply *Twombly* and *Iqbal* to dismiss claims that, had discovery proceeded, would have been shown to be meritorious.[1]

This study was designed to assess changes in motions to dismiss and decisions on such motions over time in broad categories of civil cases. Of course, this study could not fully capture all of the factors affecting motions to dismiss. In particular, it could not fully reflect the appellate court case law that continues to develop and that provides specific guidance for district courts.

At the request of the Advisory Committee, the Administrative Office of the U.S. Courts (AO) developed a series of tables that track the numbers of motions to dismiss filed and decided across all federal courts.[2] These tables do not indicate a clear change in filing patterns or disposition patterns after *Twombly* or *Iqbal*. But they include all types of motions to dismiss[3] and do not permit a precise assessment of Rule 12(b)(6) motions to dismiss for failure to state a claim. They also do not distinguish between orders granting motions to dismiss with leave to amend and orders granting motions without leave to amend.

Three scholars have undertaken four empirical studies to assess changes in pleading practice following the *Twombly* and *Iqbal* Supreme Court decisions.[4]

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1. *See, e.g.*, Robert G. Bone, *Plausibility Pleading Revisited and Revised: A Comment on* Ashcroft v. Iqbal, 85 Notre Dame L. Rev. 849, 878–79 (2010) (expressing concern that plaintiffs will be unable to survive the pleading stage and have access to discovery when the defendant has critical information, especially in civil rights cases); Arthur R. Miller, *From* Conley *to* Twombly *to* Iqbal*: A Double Play on the Federal Rules of Civil Procedure*, 60 Duke L.J. 1, 14, 34 (2010) (*Twombly* and *Iqbal* may well have come at the expense of access to the courts and the ability of citizens to obtain adjudication of their claims' merits).

2. Statistical Information on Motions to Dismiss re *Twombly/Iqbal* (Rev. 12/3/10), http://www.uscourts.gov/uscourts/RulesAndPolicies/rules/NOS-Motions Quarterly December 031611.pdf. These tables are discussed in William M. Janssen, Iqbal *"Plausibility" in Pharmaceutical and Medical Device Litigation*, 71 La. L. Rev. 541, 575 (2011).

3. In addition to Rule 12(b)(6) motions to dismiss, the tables include other Rule 12(b) motions and Rule 12(c) motions. We are presently exploring the differences in the AO database and the databases developed for our study.

4. Kendall Hannon compared orders responding to motions to dismiss for failure to state a claim immediately before and soon after the *Twombly* decision. He found that such motions were more likely to be granted following *Twombly* in civil rights cases (41.7% prior to *Twombly*, 52.9% after *Twombly*), and that there was little change in other types of cases. *See* Kendall W. Hannon, *Much Ado About* Twombly, 83 Notre Dame L. Rev. 1811 (2008). This study did not distinguish between motions granted with leave to amend the complaint and those granted without leave to amend.

These four studies share two characteristics that limit their findings. First, each study was based on opinions appearing in the Westlaw database, which is likely to overrepresent orders granting motions to dismiss when compared with orders appearing on docket sheets.[5] Second, each of these studies reviewed district court orders decided soon after the Supreme Court decisions and before interpretation of the decisions by the courts of appeals. The courts of appeals have since reversed a number of the early district court decisions[6] and have issued a growing

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Joseph Seiner has published two studies focusing on the outcome of motions to dismiss for failure to state a claim in civil rights litigation. His first study examined employment discrimination cases before and after *Twombly* and found increases in the rate at which motions were granted that did not reach levels of statistical significance. *See* Joseph A. Seiner, *The Trouble With Twombly: A Proposed Pleading Standard for Employment Discrimination Cases*, 2009 U. Ill. L. Rev. 1011, 1032. Seiner's study of motions to dismiss was based on searches for cases appearing in the Westlaw database. Seiner's second study examined motions in cases alleging discrimination under Title 1 of the Americans with Disabilities Act. Again, he found an increase in motions granted that did not meet standards of statistical significance. *See* Joseph A. Seiner, *Pleading Disability*, 51 B.C. L. Rev. 95 (2010).

Patricia Hatamyar examined orders responding to motions to dismiss for failure to state a claim two years before *Twombly*, two years after *Twombly*¸ and immediately after *Iqbal*; she found an increase in motions granted (46% to 48% to 56%, respectively). The greatest increases were in motions granted with leave to amend. Orders granting motions in civil rights cases also increased during the three periods (50% to 53% to 58%, respectively, without distinguishing leave to amend). *See* Patricia W. Hatamyar, *The Tao of Pleading: Do* Twombly *and* Iqbal *Matter Empirically?*, 59 Am. U. L. Rev. 553, 607 (2010). Hatamyar also presented a series of multinomial regression models that appear to confirm this increase over time in the rate at which motions are granted with leave to amend while controlling for pro se status, circuit, and type of case.

In addition to these four studies, there have been a number of empirical studies of motions to dismiss that are not directly related to an assessment of the effects of *Twombly* and *Iqbal*. Alexander Reinert examined cases from the 1990s in which grants of Rule 12(b)(6) motions have been reversed by the courts of appeals. Reinert regards such cases as similar to cases that would be dismissed and affirmed on appeal after *Iqbal.* He determined that after remand, these cases were as likely to succeed as all civil cases terminated during that period. *See* Alexander A. Reinert, *The Costs of Heightened Pleading*, 86 Ind. L.J. 119 (2011). The strength of this analysis rests on the assumption that cases with motions reversed on appeal are comparable to all civil cases, including those in which a motion to dismiss was never filed. Adam Pritchard and Hillary Sale have examined the effects of the Private Securities Litigation Reform Act on motions to dismiss. *See generally* Adam C. Pritchard & Hillary A. Sale, *What Counts as Fraud? An Empirical Study of Motions to Dismiss Under the Private Securities Litigation Reform Act*, 2 J. Empirical Legal Stud. 125, 128 (2005).

5. *See* Stephen B. Burbank, *Vanishing Trials and Summary Judgment in Federal Civil Cases: Drifting Toward Bethlehem or Gomorrah?* 1 J. Empirical Legal Stud. 591, 604 (2004) (asserting that reliance on published cases alone results in a distorted assessment of case activity); Brian N. Lizotte, *Publish or Perish: The Electronic Availability of Summary Judgments by Eight District Courts*, 2007 Wis. L. Rev. 107, 130 (reporting differences in published and unpublished orders granting summary judgment motions). A preliminary assessment found some evidence that orders granting motions to dismiss may be overrepresented in orders appearing in the Westlaw database. *Infra* note 47.

6. *See, e.g.*, Gonzalez v. Kay, 577 F.3d 600 (5th Cir. 2009) (reversing dismissal of claimed violation of the Fair Debt Collection Practices Act), *cert. denied*, 130 S. Ct. 1505 (2010); Siracusano v. Matrixx Initiatives, Inc., 585 F.3d 1167 (9th Cir. 2009) (reversing dismissal of complaint alleging violation of federal security laws), *aff'd*, ___ S. Ct. ___, No. 09-1156, 2011 WL 977060,

body of case law that requires district courts to be cautious and context-specific in applying *Twombly* and *Iqbal*.[7] Both recent Supreme Court decisions[8] and emerging appellate case law may reassure those concerned about the impact of *Twombly* and *Iqbal*.

at *12 (March 22, 2011); Braden v. Wal-Mart Stores, Inc., 588 F.3d 585 (8th Cir. 2009) (reversing dismissal of claim that defendants violated fiduciary duties imposed by the Employee Retirement Income Security Act (ERISA)); Sanchez v. Pereira-Castillo, 590 F.3d 31 (1st Cir. 2009) (reversing the dismissal of the Fourth Amendment claims by a prisoner against two correctional officers and a doctor); Swanson v. Citibank, N.A., 614 F.3d 400 (7th Cir. 2010) (reversing in part, finding that plaintiff stated a claim for racial discrimination); DiFolco v. MSNBC Cable L.L.C., 622 F.3d 104 (2d Cir. 2010) (reversing in part, finding that plaintiff stated a claim for breach of contract and defamation); Speaker v. U.S. Dep't of Health & Human Servs. Ctrs. for Disease Control & Prevention, 623 F.3d 1371 (11th Cir. 2010) (reversing dismissal of claims under the Privacy Act); West Penn Allegheny Health Sys., Inc. v. UPMC, 627 F.3d 85 (3d Cir. 2010) (reversing dismissal of antitrust claims); Gee v. Pacheco, 627 F.3d 1178 (10th Cir. 2010) (reversing dismissal of pro se prisoner's claims of violations under 42 U.S.C. § 1983). These cases and others are summarized in Memorandum from Andrea Kuperman to Civil Rules Comm. and Standing Rules Comm., Review of Case Law Applying Bell Atlantic Corp. v. Twombly and Ashcroft v. Iqbal (December 15, 2010), available at http://www.uscourts.gov/uscourts/RulesAndPolicies/rules/Iqbal_memo_121510.pdf (last visited February 25, 2011).

7. *See Kuperman*, *supra* note 6.

8. *See* Skinner v. Switzer, ___ S. Ct. ___, No. 09-9000, 2011 WL 767703, at *6 (March 7, 2011) ("Because this case was resolved on a motion to dismiss for failure to state a claim, the question below was 'not whether [Skinner] will ultimately prevail' on his procedural due process claim, but whether his complaint was sufficient to cross the federal court's threshold, see Swierkiewicz v. Sorema N.A., 534 U.S. 506, 514, 122 S. Ct. 992, 152 L. Ed. 2d 1 (2002). Skinner's complaint is not a model of the careful drafter's art, but under the Federal Rules of Civil Procedure, a complaint need not pin plaintiff's claim for relief to a precise legal theory. Rule 8(a)(2) of the Federal Rules of Civil Procedure generally requires only a plausible 'short and plain' statement of the plaintiff's claim, not an exposition of his legal argument." (alteration in original) (internal citations omitted)); *see also* Matrixx Initiatives, Inc. v. Siracusano, ___ S. Ct. ___, No. 09-1156, 2011 WL 977060, at *12 (March 22, 2011) (unanimously affirming the circuit court's reversal of dismissal at the pleadings stage of a securities fraud class action).

II. Methodology

This study examined motion activity in 2006 and 2010. Using these periods allows an assessment that neither anticipates the decision in *Bell Atlantic Corp. v. Twombly* nor responds to the decision in *Ashcroft v. Iqbal* in the absence of appellate court guidance. This study also assessed changes in orders using records of the federal district courts rather than opinions published in computerized legal reference systems. We used the courts' CM/ECF codes indicating the filing of motions to dismiss and related orders to identify electronic documents with relevant motions and orders that were in PDF format and were linked to the civil case docket sheets. We then translated these documents into text format and searched electronically for terms that identified Rule 12(b)(6) motions and orders that respond to the merits of such motions.[9] This procedure is intended to be equivalent to identifying motions and orders through docket sheet entries and then reviewing documents linked to the docket entries. It provides a more complete assessment of motion activity than reliance on computerized legal reference systems.

We selected the 23 federal district courts to be included in the study by identifying the 2 districts in each of the 11 circuits with the largest number of civil cases filed in 2009. We also included the U.S. District Court for the District of Columbia. On occasion we were unable to obtain access to some of the courts' codes necessary to identify all of the relevant motions. In such cases, we chose the court in the circuit with the next greatest number of civil filings. These 23 district courts account for 51% of all federal civil cases filed during this period.

Two data sets were developed using these methods. To assess changes in filing patterns, we identified those cases with motions to dismiss for failure to state a claim filed in the first 90 days from among all civil cases filed in the selected districts from October 2005 through June 2006, and October 2009 through June 2010. To assess the changes in the outcomes of motions to dismiss for failure to state a claim, we identified orders responding to motions decided in January through June of 2006 and 2010. We coded these orders to identify the nature of the parties, whether the motion responded to an amended complaint, the presence of other Rule 12 motions, and judicial action taken in response to the motion. We 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. These last two categories were often combined in the analyses and we simply noted that the motion was granted. In those instances in which the court granted at least some of the relief requested by the motion, we 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.

9. We performed text searches using the following terms: "facts sufficient"; "sufficient facts"; "plausible claim"; "fails to state a claim"; "failed to state a claim"; and "failing to state a claim". We also searched for the phrase "12(b)(6)" with and without spaces separating the three elements of the phrase.

We excluded from these analyses all prisoner cases and cases with pro se parties.[10] We also excluded motions responding to counterclaims and affirmative defenses from the analysis of judicial actions on motions. The methodology and coding standards used in this study are described in greater detail in Appendices B and C.

10. We excluded prisoner cases because of the distinctive characteristics and procedural requirements of such litigation, and because they were concentrated in only 4 of the 23 districts included in this study. We also excluded pro se cases, which are governed by standards other than *Twombly* and *Iqbal*. Pro se pleadings are to be liberally construed, "however inartfully pleaded." Hughes v. Rowe, 449 U.S. 5, 9 (1980). The Supreme Court reaffirmed this standard soon after the *Twombly* decision. *See* Erickson v. Pardus, 551 U.S. 89 (2007). We were also concerned that our method for identifying motions to dismiss for failure to state a claim based on text searches would miss motions saved as static images in PDF format, which we suspect may be more likely to appear in prisoner and pro se filings. *See infra* note 46.

III. Results

Our assessment of the effect of *Twombly* and *Iqbal* on the filing and outcome of motions to dismiss was complicated by many changes that affected civil litigation between 2006 and 2010 in addition to the Supreme Court decisions. In 2008, the economy experienced a marked downturn that affected the housing market in particular. This change, along with many others, resulted in a shift in the case mix over this period. There was a general increase in cases challenging mortgages and other forms of financial debt instruments. Individual courts also experienced changes in filing patterns: most courts showed an overall increase in case filings. The courts in this study vary in size and contribute differently to the overall differences in activity from 2006 to 2010. We also found that the orders decided after *Iqbal* were different in nature from the orders decided before *Twombly*. Multiple motions to dismiss were resolved in 20% of the 2010 orders, down from 26% of the 2006 orders.[11] Previously amended complaints were considered in 48% of the 2010 motions, up from 38% of the 2006 orders.[12]

11. The resolution of multiple motions to dismiss for failure to state a claim by a single order is difficult to interpret, since the motions themselves are highly variable. One motion may be filed by multiple defendants and directed at multiple claims by one or more plaintiffs. Multiple motions may be filed by a single defendant, or multiple defendants may file separate motions attacking the same claim. For these reasons, we placed little weight on the drop in orders resolving multiple motions in 2010, and coded all motions resolved by a single order as though they were a single motion.

12. These differences achieved conventional levels of statistical significance ($p \leq 0.05$). Plaintiffs are likely to amend a complaint soon after a substantive change in pleading standards. Courts may be more likely to dismiss without leave to amend when a complaint has been amended to take new standards into account. Both before *Twombly* and after *Iqbal*, the number of times a plaintiff has amended the complaint is a factor a court considers in deciding whether to dismiss with prejudice. *See In re* Vantive Corp. Sec. Litig., 283 F.3d 1079, 1098 (9th Cir. 2002) ("In this case, the plaintiffs had three opportunities to plead their best possible case. It was therefore not unreasonable for the district court to conclude that it would be pointless to give the plaintiffs yet another chance to amend."), *abrogation on other grounds recognized by* South Ferry LP, No. 2 v. Killinger, 542 F.3d 776, 784 (9th Cir. 2008); Chudnovsky v. Leviton Mfg. Co., 158 F. App'x 312, 314 (2d Cir. 2005) ("Chudnovsky already has had one opportunity to amend his complaint. Moreover, in his motion for leave to amend below, Chudnovsky did not indicate that he could allege additional facts that would cure the deficiencies in his already-amended complaint. Therefore the complaint should be dismissed with prejudice."); Prasad v. City of New York, 370 F. App'x 163, 165 (2d Cir. 2010) (finding that the district court acted within its discretion in denying leave to amend after the plaintiffs had already amended once); Mann v. Brenner, 375 F. App'x 232, 240 n.9 (3d Cir. 2010) ("Mann suggests that the District Court should have granted him leave to amend his complaint. Because Mann was permitted to do so twice before the present motions to dismiss were filed, we think the District Court was well within its discretion in finding that allowing Mann a fourth bite at the apple would be futile."); Atkins v. City of Chicago, 631 F.3d 823, 832 (7th Cir. 2011) ("The plaintiff's lawyer has had four bites at the apple. Enough is enough."); Destfino v. Reiswig, 630 F.3d 952, 958–59 (9th Cir. 2011) ("Plaintiffs had three bites at the apple, and the court acted well within its discretion in disallowing a fourth."). In addition, a court's action on a motion responding to an unamended complaint soon after a substantive change in pleading standards may not provide a reliable indication of how courts will respond in the future. For these reasons, our statistical models control for the presence of an amended complaint.

These factors can affect the filing and resolution of motions to dismiss for reasons that are unrelated to the Supreme Court decisions themselves. To assess the effects of the Supreme Court decisions apart from these other factors, we developed a series of statistical models, presented in Appendix A, that attempt to control for these unrelated factors and identify those effects that may properly be attributed to reactions to the Supreme Court decisions. In this section we first present the straightforward comparisons of motion practice in 2006 and 2010. These comparisons reflect not only the effects of the Supreme Court decisions, but also changes in types of cases and the presence of an amended complaint. We then present the adjusted estimates of changes over time after controlling for factors unrelated to the Supreme Court decisions, as indicated by the statistical models in Appendix A. These later estimates offer the more accurate assessment of the federal district courts' reactions to the Supreme Court decisions.

A. Filing Rates for Motions to Dismiss for Failure to State a Claim

Motions to dismiss for failure to state a claim were more common in cases filed in late 2009 and 2010, after *Iqbal*, than in cases filed in late 2005 and 2006, before *Twombly*.[13] We identified motions filed within the first 90 days in cases either filed originally in federal court or removed from state court during the two nine-month periods ending in June 2006 and June 2010.[14] As indicated in Table 1, motions to dismiss for failure to state a claim were filed in 6.2% of all cases in 2009–2010, an increase of 2.2 percentage points over the filing rate for such motions in cases in 2005–2006.[15] This increase is especially notable in cases challenging financial instruments, which increased by more than five percentage points.[16]

In civil rights cases other than employment discrimination cases, the likelihood of a motion to dismiss increased 0.4% from 2005–2006 to 2009–2010. This increase did not reach conventional levels of statistical significance. Three-fourths of the cases in the civil rights category were designated on the cover sheet as

13. Our unit of analysis for this study of filing rates is an individual case. The figures resulting from our analysis understate the overall likelihood of motions to dismiss, since multiple motions may have been filed during this period and motions may be filed after the 90-day cutoff used in this study, often in response to amended complaints. We were limited to considering those motions filed within the first 90 days by our data collection timetable, which ended 90 days after the last case was filed on June 30, 2010. No meaningful differences were found in the length of time that elapsed from the filing of the case to filing of the motion to dismiss within the first 90 days; in 2009–2010, such motions were filed on average 40 days after the cases were filed or removed from state court, 2 days less than in 2005–2006.

14. This restriction excluded cases remanded from the courts of appeals, cases reopened or transferred from another district, and cases consolidated within the district as part of a multidistrict litigation proceeding. This restriction applied only to the study of motion filing rates.

15. Unless otherwise noted, the effects mentioned in this discussion are statistically significant at less than the 0.05 level using a two-tailed Goodman and Kruskal *tau*-b directional test with judicial action taken on the motion or motions as the dependent variable.

16. As indicated in Table 1, total case filings in these districts increased by 3,482 cases in 2010, and filings of financial instrument cases alone increased by 3,266 cases. Filings of contract cases also increased during this period, while filings of torts cases, civil rights cases, and "other" cases decreased. Filings of employment discrimination cases remained about the same.

"Other Civil Rights." We know from past research that many of these cases are brought under 28 U.S.C. § 1983, alleging constitutional violations. This narrower category of "Other Civil Rights" cases showed a statistically significant increase in the likelihood that a motion to dismiss for failure to state a claim would be filed, up from 10.5% of cases in 2006 to 12.4% of cases in 2010.[17]

The "Other" category includes the greatest number of cases. It combines a wide range of cases, typically based on statutory causes of action. Employee Retirement Income Security Act (ERISA) cases constitute 20% of the cases in this category. Other common types of cases include Social Security cases (14%), Fair Labor Standards Act cases (8%), trademark cases (6%), and copyright cases (6%). The remaining cases are scattered across a wide range of statutory actions.[18]

Table 1: Percentage of Civil Cases with a Motion to Dismiss for Failure to State a Claim Filed Within 90 Days of the Filing of the Case (Excluding Prisoner and Pro Se Cases)

	2005–2006 Percentage (and Number) of Cases	2009–2010 Percentage (and Number) of Cases	Difference
Total	4.0% (49,443)	6.2% (52,925)	+2.2%*
Contract	5.6% (8,651)	8.3% (9,139)	+2.7%*
Torts	2.3% (10,604)	4.1% (9,947)	+1.8%*
Employment Discrimination	6.9% (3,795)	9.0% (3,871)	+2.1%*
Civil Rights	9.7% (4,214)	10.1% (4,976)	+0.4%
Financial Instrument	4.3% (1,524)	9.6% (4,790)	+5.3%*
Other	2.5% (20,657)	4.1% (20,202)	+1.6%*

*$p < 0.01$.

Table 2 presents the adjusted estimates of changes in filing rates. The multivariate statistical models presented in Appendix A confirm an increase in the rate at which Rule 12(b)(6) motions were filed while controlling for overall differences

17. This difference just meets the conventional level of statistical significance ($p \leq 0.05$). Other types of cases in the civil rights category included cases brought under the Americans with Disabilities Act designated as "other" (14%) or designated as "employment" (7%). The remaining cases raised civil rights issues concerning accommodations (3.5%), voting (0.6%), and welfare (0.2%). None of these separate types of civil rights cases showed a statistically significant increase in filing rate from 2006 to 2010.

18. Another 14% of these cases were designated as "Other Statutory Action." No other specific case type constituted more than 5% of this category. A complete listing of case types that this category comprises is presented in Appendix B.

in filing rates across federal districts and across types of cases.[19] These adjusted estimates indicate that the probability of a motion to dismiss being filed in an individual case increased from a baseline of 2.9% of the cases in 2006 to 5.8% of the cases in 2010.[20] The table also shows a wide range of probabilities across types of cases.

Table 2: Adjusted Estimates of the Likelihood that a Motion to Dismiss for Failure to State a Claim Will Be Filed Within the First 90 Days

Type of Case	2006	2010
Torts	0.029	0.058
Contract	0.071	0.101
Civil Rights	0.117	0.127
Other	0.029[a]	0.046
Financial Instrument	0.053	0.104
Employment Discrimination	0.077	0.101

a. Estimated as the base rate in the absence of a significant effect for type of case.

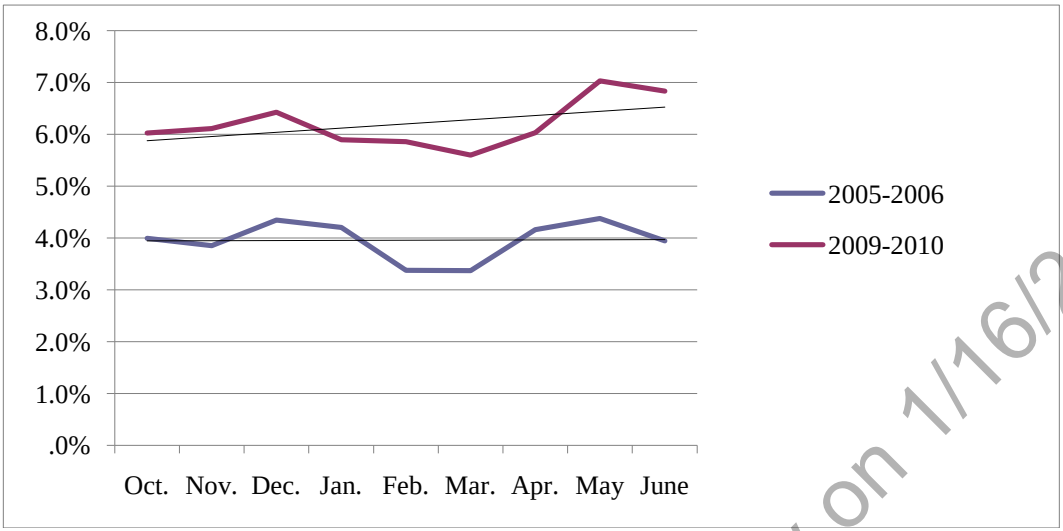
Confirmation of the increase in the rate at which motions were filed is also evident in the monthly trend in the percentage of cases with such motions. As indicated in Figure 1, the percentage of cases with one or more motions to dismiss for failure to state a claim was higher in each month of 2009–2010 than in each month of 2005–2006. Moreover, in 2009–2010 there appeared to be a modest increase over time in the percentage of cases with such motions. The trend line for the percentage of cases in 2005–2006 with motions to dismiss was flat over time at just under 4%.[21]

19. The results in Table 2 are based on the statistical model presented in Table A-1 in Appendix A. This model shows considerable variations in filing rates across federal district courts, controlling for year and type of case.

20. The baseline serves as an initial reference point for assessing changes over time and across types of cases in these statistical models. The baseline is distinct from the percentages listed in Table 1. This particular model uses as a baseline the likelihood that a motion is filed in a tort case in the District of Rhode Island, the Eastern District of Michigan, or the District of Maryland in 2006 (i.e., 2.9%). We chose torts cases for the baseline because of the low likelihood of a motion to dismiss. We chose to combine these three districts because they had few motions to dismiss. We chose 2006 so that increases over time would appear as a positive effect. The baseline rate was substituted for effect estimates where the model indicated that the case type did not depart from that rate. The adjusted estimate for torts cases in Table 2, which takes district and the presence of an amended complaint into account, shows an increase from 2.9% in 2006 to 5.8% in 2010. The effect of the statistical adjustment can be seen by comparing these figures with the unadjusted estimate for torts cases in Table 1, which shows an increase from 4.0% in 2006 to 6.2% in 2010.

21. These filing rates are lower than rates indicated by previous studies of federal courts that considered motions to dismiss filed after the 90-day period used in this study. *See* Paul Connolly & Patricia Lombard, Judicial Controls and the Civil Litigative Process: Motions (Federal Judicial Center 1980) (finding that around 15% of civil cases terminated in 1975 included motions to dis-

Figure 1. Trend in Cases Filed with Motions to Dismiss Filed Within 90 Days



Motions to dismiss were more likely to be filed in cases removed from state court to federal court. As indicated in Table 3, motions to dismiss were more common in cases removed from state courts than in cases originally filed in federal courts both before *Twombly* and after *Iqbal*. This difference was greater in cases filed in 2009–2010 than in cases filed in 2005–2006. But a supplemental analysis of removal rates from January 2005 through December 2009 found no increase in rates of removal to federal courts in states with notice pleading standards in comparison with rates of removal in states using fact pleading.[22]

Table 3: Cases with Motions to Dismiss for Failure to State a Claim in Original and Removed Filings

	2005–2006	2009–2010	Difference
Original Filing	3.4% (41,698)	5.0% (44,298)	+1.6%*
Removed Filing	7.2% (7,745)	12.4% (8,627)	+5.2%*

* $p < 0.01$.

miss for failure to state a claim); Thomas E. Willging, Use of Rule 12(b)(6) in Two Federal District Courts 8 (Federal Judicial Center 1989) (finding that around 13% of the cases terminated in two federal districts courts included motions to dismiss for failure to state a claim).

22. We have no way of determining if cases that would have been filed in the federal courts before *Twombly* have been diverted to state courts because of concern over pleading standards. However, a supplemental study failed to find evidence of an increased rate of removal of cases to federal court after *Twombly* and *Iqbal* from states with notice pleading standards, compared with the rate of removal from states with fact pleading standards. Memorandum from Jill Curry and Matthew Ward to James Eaglin, Comparing Rates by States: Are *Twombly* and *Iqbal* Affecting Where Plaintiffs File? (February 14, 2011) (on file with the authors).

Finally, we note the distinctive nature and marked changes over time in cases challenging financial instruments. The "financial instrument" category of cases combines nature-of-suit codes indicating case categories for negotiable instruments, foreclosure, truth in lending, consumer credit, and "other real property." The great majority of these cases involve claims by individuals suing lenders and/or loan servicing companies over the terms of either an initial residential mortgage or a refinance of an existing residential mortgage. These cases include federal claims under statutes such as the Truth in Lending Act, the Real Estate Settlement Procedures Act, and the Fair Debt Collection Practices Act. These cases typically also raise a number of state law claims, often including fraud, negligence, unfair business practices, breach of fiduciary duty, and wrongful foreclosure. Plaintiffs generally seek rescission of the mortgage or loan, damages, and declaratory or injunctive relief.

Cases challenging financial instruments increased by 214%, from 1,524 cases in 2006 to 4,790 cases in 2010, apparently due in large part to the economic downturn in the housing market.[23] Such cases were especially likely to be removed from state court, increasing from 12% of all such cases in 2006 to 16% in 2010. Those cases that were removed from state court showed an increase in the percentage of cases with motions to dismiss, rising from 9.1% of such cases in 2005–2006 to 27.7% of such cases in 2009–2010, the largest increase in filing rates detected.

B. Outcome of Motions to Dismiss for Failure to State a Claim

1. Motions Granted with Leave to Amend

We assessed the outcome of motions to dismiss for failure to state a claim by identifying and coding court orders responding to the merits of such motions filed in January through June of 2006 and 2010 in the same 23 federal district courts.[24] We recorded whether an order denied the motion to dismiss in its entirety, granted all of the relief requested by the motion, or granted some but not all relief requested by the motion.[25] A single order resolving motions to dismiss filed by dif-

23. This downturn was especially sharp in some of the districts included in this study, such as districts in California, Florida, Georgia, Illinois, and Michigan, which are among the top 10 states with the highest number of residential mortgage foreclosures. *See* http://www.statehealthfacts.org/comparetable.jsp?cat=1&ind=649 (last visited February 22, 2010).

24. Ideally, the database of motions that was discussed in the previous section would have been followed over time through the motions' resolution. Time constraints did not permit an adequate opportunity to obtain the orders resolving those motions. This second database of orders was developed instead.

25. The unit of analysis for our study of outcomes of motions is a written judicial opinion or order disposing of the merits of at least one motion to dismiss for failure to state a claim under Federal Rule of Civil Procedure 12(b)(6). Of course, a single motion to dismiss may be directed at multiple claims, and an order may resolve multiple motions. Coding conventions for multiple motions and motions in which only some of the relief was granted are discussed in Appendix C. In addition to excluding pro se cases and prisoner cases, for this analysis we excluded motions to dismiss for failure to state a claim filed in response to counterclaims and affirmative defenses. We implemented this limitation by excluding the 70 orders responding to motions filed by a party other than a defendant or directed toward claims raised by a party other than the plaintiff. Scholars are

ferent parties was coded as resolving a single motion. If the court allowed amendment of the complaint with regard to at least one claim that was dismissed, we coded the motion as granted with leave to amend.

As indicated in Table 4, it first appears that motions to dismiss for failure to state a claim were more likely to grant all or some of the relief requested in 2010 than in 2006. In 2010, 75% of the orders responding to such motions granted all or some of the relief requested by the motion, compared with almost 66% of the orders in 2006.[26] But closer inspection reveals that the increase extends only to motions granted with leave to amend. No increase was found in motions granted without leave to amend.

As indicated above, it would be misleading to attribute this overall change only to the Supreme Court decisions. The rate at which motions were granted differs by type of case, and the mix of types of cases changed from 2006 to 2010. For example, cases challenging financial instruments were far more common in 2010, and motions to dismiss in such cases were more likely to be granted. The rate at which motions were granted also varied by district court, and some of the districts with the highest grant rates were also the districts that showed the greatest increase in the number of orders. Orders in 2010 were also more likely to respond to motions directed toward amended complaints. Courts are generally more willing to grant motions to dismiss after a plaintiff has already amended the complaint. All of these factors may contribute to differences over time that are unrelated to the Supreme Court decisions.

An important reason for caution in interpreting these differences is that in 2010, orders granting motions to dismiss were far more likely to allow the plaintiff to amend the complaint, leaving open the possibility that the plaintiff might cure the defect in the complaint and the case might proceed to discovery. In 2010, 35% of the orders granted motions to dismiss with leave to amend at least some of the claims in the complaint, compared with 21% of the orders in 2006.[27] The percentage of orders granting the motion without an opportunity to amend the complaint declined in 2010 in all types of cases other than those challenging financial instruments. This shift toward an increase in grants with an opportunity to amend and a decrease in grants with no opportunity to amend suggests that these two outcomes should be assessed separately.

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only beginning to consider the effect of *Twombly* and *Iqbal* in such circumstances. *See, e.g.*, Melanie A. Goff & Richard A. Bales, *A "Plausible" Defense: Applying* Twombly *and* Iqbal *to Affirmative Defenses*, 34 Am. J. Trial Advoc. ___ (forthcoming Spring 2011); Joseph A. Seiner, Twombly, Iqbal, *and the Affirmative Defense*, available at http://ssrn. com/abstract=1721062 (last visited February 8, 2011).

26. This increase was due primarily to orders granting all relief sought by the motion, which increased from 36% of the orders in 2006 to 46% of the orders in 2010. Orders granting motions with regard to only part of the relief sought remained stable over time, constituting 30% of the orders in 2006 and 29% of the orders in 2010. Differences in the rates at which motions were denied were not entered into the table, but are the inverse of the rates at which motions were granted.

27. The increase in opportunity to amend complaints was almost entirely in orders granting all the relief requested by the motion (i.e., 19% in 2010 vs. 9% in 2006). This increase is especially notable, since, as indicated above, in 2010 the orders were more likely to respond to previously amended complaints.

Table 4: Outcome of Motions to Dismiss for Failure to State a Claim

	Action on Motion	2006	No. of Orders	2010	No. of Orders	Difference
Total	Denied	34.1%	(239)	25.0%	(305)	
	Granted All or Some Relief	65.9%	(461)	75.0%	(916)	+9.1%*
	With Amendment	20.9%	(146)	35.3%	(431)	+14.4%†
	Without Amendment	45.0%	(315)	39.7%	(485)	-5.3%
Contract	Denied	35.1%	(65)	33.6%	(81)	
	Granted All or Some Relief	64.9%	(120)	66.4%	(160)	+1.5%
	With Amendment	21.1%	(39)	30.3%	(73)	+9.2%†
	Without Amendment	43.8%	(81)	36.1%	(87)	-7.7%
Torts	Denied	30.0%	(21)	28.2%	(31)	
	Granted All or Some Relief	70.0%	(49)	71.8%	(79)	+1.8%
	With Amendment	21.4%	(15)	29.1%	(32)	+7.7%
	Without Amendment	48.6%	(34)	42.7%	(47)	-5.9%
Civil Rights	Denied	27.9%	(51)	22.0%	(51)	
	Granted All or Some Relief	70.3%	(121)	78.0%	(181)	+7.7%
	With Amendment	21.1%	(38)	32.8%	(76)	+11.7%
	Without Amendment	48.3%	(83)	45.3%	(105)	-3.0%
Employment Discrimination	Denied	32.6%	(31)	29.4%	(35)	
	Granted All or Some Relief	67.4%	(64)	70.6%	(84)	+3.2%
	With Amendment	17.9%	(17)	23.5%	(28)	+5.6%
	Without Amendment	49.5%	(47)	47.1%	(56)	-2.4%
Financial Instruments	Denied	52.9%	(9)	8.1%	(19)	
	Granted All or Some Relief	47.1%	(8)	91.9%	(216)	+44.8%*
	With Amendment	24.4%	(5)	54.9%	(129)	+30.5%
	Without Amendment	17.6%	(3)	37.0%	(87)	+19.4%
Other	Denied	38.5%	(62)	31.0%	(88)	
	Granted All or Some Relief	61.5%	(99)	69.0%	(196)	+7.5%
	With Amendment	19.9%	(32)	32.7%	(93)	+12.8%†
	Without Amendment	41.6%	(67)	36.3%	(103)	-5.3%

* $p \leq 0.01$, relative to the likelihood that the motion will be denied.
† $p \leq 0.05$, relative to the likelihood that the motion will be granted without leave to amend.

Motions granted with leave to amend leave open the questions whether the complaints were, in fact, amended; whether there were subsequent motions to dismiss; whether action was taken in response to the subsequent motions; and the extent to which these cases proceeded to discovery. We are presently undertaking a supplemental study to answer these questions.

Table 5 presents statistical estimates for the probability that Rule 12(b)(6) motions to dismiss would be granted in an individual case while controlling for factors unrelated to the Supreme Court decisions.[28] The baseline indicates that around 56% of the motions would be granted without leave to amend the complaint in torts cases in 2006 in the baseline districts.[29] The table lists only those districts in which the rate at which motions were granted, with or without the opportunity to amend the complaint, show a statistically significant difference from the baseline districts, as indicated in Table A-2 in Appendix A. Marked differences in grant rates and the opportunity to amend the complaint were found across the individual courts. Such motions were more likely to be granted with leave to amend in the Eastern and Northern Districts of California, and granted without leave to amend in the Eastern and Southern Districts of New York.[30]

Table 5: Estimated Values for Statistically Significant Variables in Multinomial Model Describing Whether a Motion Would Be Granted With or Without an Opportunity to Amend the Complaint

Variable	Deny	Grant and Amend	Grant and No Amend
Baseline	**0.298**	**0.145**	**0.557**
Districts			
Eastern District of California	0.149	0.613	0.238
Northern District of California	0.158	0.614	0.229
Middle District of Florida	0.358	0.449	0.193
Northern District of Illinois	0.409	0.266	0.324
Eastern District of New York	0.211	0.289	0.500
Southern District of New York	0.183	0.280	0.537
Eastern District of Pennsylvania	0.404	0.227	0.369
Northern District of Texas	0.461	0.254	0.285
Presence of Amended Complaint	0.244	0.115	0.641
Financial Instrument Cases in 2010	0.040	0.068	0.892

28. As indicated in Appendix A, we used multinomial logit and probit models to assess changes over time in the likelihood that motions to dismiss would be denied, granted with leave to amend, or granted without leave to amend. These models also allowed us to control for the differences across individual courts, for differences across types of cases, and for the presence of an amended complaint. Using the techniques described in the appendix, we then computed the adjusted estimates of effects presented in the table.

29. The baseline for the model is the outcome of an order deciding one or more Rule 12(b)(6) motions to dismiss filed in the District of Rhode Island, the Eastern District of Michigan, or the District of Maryland in 2006 in a tort case, responding to an unamended complaint.

30. The Eastern and Southern Districts of New York also had very low filing rates for motions to dismiss. A number of judges in these districts have procedures calling for premotion conferences at which the judges discuss with attorneys whether a motion will be appropriate.

Some of the significant differences over time indicated in Table 4 can be accounted for by controlling for differences across districts and the presence of an amended complaint. As shown in the last line of Table 5, we found that only in cases challenging financial instruments did the adjusted rate at which motions were granted without leave to amend increase in 2010. In such cases, the adjusted estimate indicates 90% of the motions were granted with regard to at least some of the relief requested, controlling for the effects of the other variables. We found no other significant increase over time in other types of cases in the adjusted rate at which motions were granted.[31]

The fact that cases with motions to dismiss granted with leave to amend remain unresolved is also reflected in the absence of a statistically significant increase in 2010 in the rate at which such cases terminated. We examined the percentage of cases that terminated after 30 days, 60 days, or 90 days following an order granting all or some of the relief requested by the motion to dismiss. Such orders may not address all of the claims in the litigation. Nevertheless, if the district courts were interpreting *Twombly* and *Iqbal* to significantly foreclose the opportunity for further litigation in the case, we would expect to see an increase in cases terminated soon after the order. However, as indicated in Table 6, we found no statistically significant increase in 2010 in the percentage of cases terminated in 30 days, 60 days, or 90 days after the order granting the motion. Nor did we find differences in termination rates across individual types of cases.

Table 6: Percentage of Cases Terminated 30, 60, and 90 Days After an Order Granting All or Some of the Relief Requested by a Motion to Dismiss

Percentage of Cases Terminated After:	**2006**	**2010**
30 days	26.6%	27.5%
60 days	30.6%	33.1%
90 days	34.2%	37.7%
Total orders	448 orders	897 orders

31. We also found that the presence of an amended complaint increased the likelihood that a motion would be granted without leave to amend. The details of the analysis are presented in Appendix A. Such an effect existed both before *Twombly* and after *Iqbal. See supra* note 12.

2. Motions Granted on All Claims Asserted by One or More Plaintiffs

Although we found no broad increase over time in the likelihood that a motion to dismiss would be granted without leave to amend, we also explored the possibility that, when granted, motions to dismiss may be more likely to exclude all claims by one or more plaintiffs, even if the litigation continues with claims by other plaintiffs.[32] As indicated in Table 7, in 2010, approximately 31% of the orders granting motions to dismiss appeared to eliminate all claims by one or more plaintiffs from the litigation, compared with approximately 23% of such orders in 2006.[33] The rate at which the grant of motions to dismiss eliminated some claims, but not all, by one or more plaintiffs increased by only one percentage point during this period. Of course, these figures include the effects of factors unrelated to the Supreme Court cases, such as differences across district courts, differences across types of cases, and differences in the presence of an amended complaint.

32. There was also a greater opportunity in 2010 to amend the complaint after the motion to dismiss was granted as to all claims by one or more plaintiffs (22% in 2006; 46% in 2010). We initially attempted to determine if the grant of a motion to dismiss had the effect of removing a defendant from the litigation, thereby limiting the opportunity for further discovery of that defendant under the standards of Rule 26. However, we had difficulty developing a reliable coding practice, especially in cases with multiple plaintiffs and defendants. Instead, we decided to focus on the effect of the motion on the ability of plaintiffs to continue in the litigation, which proved easier to study.

33. These figures include the effects of orders granted both with and without leave to amend the complaint. If the financial instrument cases are removed from the analysis, orders granting motions to dismiss that eliminate all claims by one or more plaintiffs increase to 28% in 2010. Unfortunately, we cannot determine what percentage of this increase is due to cases that involved only one plaintiff, thereby ending the case. Determining that a grant of a motion to dismiss for failure to state a claim excluded all claims by a plaintiff can be a difficult task. A plaintiff may have raised claims that were not challenged by the motion to dismiss and therefore not addressed by the order. Since our knowledge of the cases is limited to the single order that was included in the study, we must make a series of assumptions when determining that a grant of a motion to dismiss for failure to state a claim excludes all claims. Unless otherwise indicated in the order, we assumed that the motion to dismiss addressed all claims by a plaintiff, and that granting a motion as to all claims by a plaintiff would terminate the plaintiff's role in the litigation unless the plaintiff was permitted to amend the complaint. As a result, our analysis may overestimate the number of cases in which an order eliminates all claims by a plaintiff.

Table 7: Extent of Exclusion of Plaintiff Claims

	Action on Motion	2006	No. of Orders	2010	No. of Orders	Difference
Total	Denied	34.1%	(239)	25.0%	(305)	
	Granted All or Some Relief	65.9%	(461)	75.0%	(916)	+9.2%*
	Some Claims	43.3%	(303)	44.5%	(543)	+1.2%
	All Claims	22.6%	(158)	30.5%	(373)	+8.0%†
Contract	Denied	35.1%	(65)	33.6%	(81)	
	Granted All or Some Relief	64.9%	(120)	66.4%	(160)	+1.5%
	Some Claims	44.3%	(82)	40.7%	(98)	-3.7%
	All Claims	20.5%	(38)	25.7%	(62)	+5.2%
Torts	Denied	30.0%	(21)	28.2%	(31)	
	Granted All or Some Relief	70.0%	(49)	71.8%	(79)	+1.8%
	Some Claims	50.0%	(35)	47.3%	(52)	-2.7%
	All Claims	20.0%	(14)	24.5%	(27)	+4.5%
Civil Rights	Denied	27.9%	(51)	22.0%	(51)	
	Granted All or Some Relief	70.3%	(121)	78.0%	(181)	+6.2%
	Some Claims	44.2%	(69)	46.4%	(111)	+2.2%
	All Claims	25.1%	(52)	29.1%	(70)	+4.0%
Employment Discrimination	Denied	32.6%	(31)	29.4%	(35)	
	Granted All or Some Relief	67.4%	(64)	70.6%	(84)	+3.2%
	Some Claims	51.6%	(49)	43.7%	(52)	-7.9%
	All Claims	15.8%	(15)	26.9%	(32)	+11.1%
Financial Instruments	Denied	52.9%	(9)	8.1%	(19)	
	Granted All or Some Relief	47.1%	(8)	91.9%	(216)	+44.9%*
	Some Claims	29.4%	(5)	48.5%	(114)	+19.1%
	All Claims	17.6%	(3)	43.4%	(102)	+25.8%
Other	Denied	38.5%	(62)	31.0%	(88)	
	Granted All or Some Relief	61.5%	(99)	69.0%	(196)	+7.5%
	Some Claims	39.1%	(63)	40.8%	(116)	+1.7%
	All Claims	22.4%	(36)	28.2%	(80)	+5.8%

* $p \leq 0.01$, relative to the likelihood that the motion will be denied.
† $p \leq 0.05$, relative to the likelihood that the motion will be granted without leave to amend.

Table 8 presents statistical estimates for the rates at which granted motions dismiss some claims or all claims by a plaintiff (with or without leave to amend), while controlling for factors unrelated to the Supreme Court decisions. As indicated in Appendix B, we again used a similar multinomial probit model to control for other factors while assessing differences in the likelihood that motions to dismiss would be denied, granted to eliminate one or more plaintiffs/respondents

from the litigation,[34] or granted to eliminate only some claims while leaving all of the plaintiffs to pursue the remaining claims.

After using the multinomial probit model to control for differences across districts, types of case, and the presence of an amended complaint, we found that in 2010, only orders responding to motions in cases challenging financial instruments were more likely to be granted, both with respect to all claims by at least one plaintiff and with respect to only some claims, all else being equal. No statistically significant increase in the likelihood that motions would be granted was found for other types of cases. These results are consistent with the results in Table 7. There are differences across federal districts: the Northern and Eastern Districts of California were more likely to grant motions with regard to some claims, and the Southern District of New York was more likely to grant motions with regard to all claims by at least one plaintiff. Finally, responding to an amended complaint increased the likelihood of granting a motion with respect to some claims only, relative to those motions not based on an amended complaint.

Table 8: Estimated Values for Statistically Significant Variables in Multinomial Model of Whether a Motion Would Be Granted with Regard to Some or All Claims by At Least One Plaintiff

Variable	Deny	Grant as to Some Claims	Grant as to All Claims by at Least One Plaintiff
Baseline	**0.289**	**0.400**	**0.311**
Districts			
Eastern District of Arkansas	0.435	0.439	0.126
Eastern District of California	0.162	0.539	0.299
Northern District of California	0.171	0.494	0.335
Middle District of Florida	0.377	0.409	0.214
Southern District of New York	0.178	0.329	0.493
Eastern District of Pennsylvania	0.404	0.420	0.175
District of South Carolina	0.489	0.351	0.160
Northern District of Texas	0.464	0.343	0.193
Presence of Amended Complaint	0.246	0.493	0.261
Financial Instrument Cases in 2010	0.052	0.496	0.451

34. Such orders indicated that all claims raised by one or more plaintiffs were dismissed. We interpret this as dismissing all claims by the plaintiffs, but it is possible that the plaintiffs raised other claims that were not the subject of the motion to dismiss.

IV. Discussion and Conclusion

Assessing changes in the outcomes of motions that are attributable to *Twombly* and *Iqbal* is complicated. A thorough assessment must consider those cases that do not appear in computerized legal reference systems, since such databases may underrepresent cases in which motions have been denied. It is also necessary to take into account increases in case filings and changes in types of cases, which may vary across the federal district courts. Civil case filings themselves increased in the 23 federal district courts examined in this study by 7% in the past four years; more motions will be reported even without changes in motion practice. Changes in the case mix affect the types, numbers, and likely outcomes of motions to dismiss.

The data show a general increase in the rate at which motions to dismiss for failure to state a claim were filed in the first 90 days of the case. We found that motions were more likely to be filed across a wide range of case types, though the size of the increase depended on the type of case. We found the largest increase in filing rates of motions to dismiss in cases challenging financial instruments, such as mortgages and other loan documents. Such cases were rare in 2006, and this increase is most likely related to changes in the housing market and the increasing rate of foreclosure actions. We found no increase in filing rates over time in civil rights cases.

After controlling for identifiable effects unrelated to the Supreme Court decisions, such as differences in caseload across individual districts, we found a statistically significant increase in the rate at which motions to dismiss for failure to state a claim were granted only in cases challenging financial instruments. More specifically, we found an increase in this category of cases in motions to dismiss granted without leave to amend. We found no increase in the rate at which motions to dismiss were granted, with or without opportunity to amend, in other types of cases. We also found no increase in the rate at which motions to dismiss for failure to state a claim eliminated plaintiffs in other types of cases.

Again, the rise of cases challenging financial instruments and the increase in the rate at which motions were filed and granted in such cases appear to be due to changing economic conditions involving the housing market and are unrelated to the recent Supreme Court decisions. The prevalence of motions to dismiss in such cases and the high rate at which such motions are granted is often due to a failure to meet the pleading requirements established by federal statutes, not a failure to plead sufficient facts.[35] If such cases had existed in 2006, it is likely that such mo-

35. Courts in every circuit have dismissed homeowners' claims under the Truth in Lending Act (TILA), 15 U.S.C. § 1691 *et seq.*, and the Real Estate Settlement Procedures Act (RESPA), 12 U.S.C. § 2601, under Rule 12(b)(6) for various reasons unrelated to *Twombly* and *Iqbal*. *See, e.g.*, Jones v. ABN Amro Mortg. Grp., 606 F.3d 119, 125 (3d Cir. 2010) (affirming 12(b)(6) dismissal of a RESPA claim because the defendant was not subject to RESPA); Taggart v. Chase Bank USA, N.A., 375 F. App'x 266, 268–69 (3d Cir. 2010) (affirming dismissal of a TILA claim on *res judicata* grounds after a 12(b)(6) dismissal on limitations grounds in a previous case filed by the plaintiff); Heil v. Wells Fargo Bank, N.A., 298 F. App'x 703, 705–07 (10th Cir. 2008) (affirming dismissal of TILA claims on limitations grounds); Frazile v. EMC Mortg. Corp., 382 F. App'x

tions would have been filed and granted in such cases at rates similar to those in 2010.

We also found that motions were more likely to be granted without leave to amend when they were directed at an amended complaint. This was true both before and after the Supreme Court decisions. This finding is unsurprising; courts take earlier amendments into account in deciding motions to dismiss. Motions directed to amended complaints were more common in 2010 than in 2006.

Even if the rate at which motions are granted remains unchanged over time, the total number of cases with motions granted may still increase. The 7% increase in case filings combined with the increase in the rate at which motions are filed in 2010 may result in more cases in recent years with motions granted, even though the rate at which motions are granted has remained the same. Such cases are especially likely to find their way into computerized legal reference systems and published reports, resulting in the impression that the rate at which motions are granted is increasing. But these increases can be largely a result of increases in filing rates for cases and motions, and not due to an increase in the rate at which courts are granting motions after *Twombly* and *Iqbal*.

This study has several limitations worth noting. Most important, our study did not examine the substantive law that formed the basis of the court orders resolving the motions. This study must be interpreted in the context of ongoing development of the case law in both the Supreme Court and the lower courts.[36]

This study did not take into account changes in pleading practice. Survey data indicate that plaintiffs may be including more factual allegations in their com-

833, 838–39 (11th Cir. 2010) (approving 12(b)(6) dismissal of some, but not all, TILA claims on limitations grounds); Wienke v. Indymac Bank FSB, No. CV 10-4082, 2011 WL 871749, at *7–8 (N.D. Cal. Mar. 14, 2011); Franz v. BAC Home Loans Servicing, LP, Civ. No. 10-2025, 2011 WL 846835, at *2–4 (D. Minn. Mar. 8, 2011) (dismissing under 12(b)(6) because the RESPA defendant was not a "servicer" under the Act, because the finance charges complied with TILA, and because TILA does not allow offensive assertion of a recoupment claim); Gordon v. Home Lone Ctr., LLC, No. 10-10508, 2011 WL 795037, at *3 (E.D. Mich. Feb. 28, 2011); Koehler v. Wells Fargo Bank, No. 10-1903, 2011 WL 691583, at *2 (D. Md. Feb. 18, 2011) (dismissing TILA and RESPA claims on limitations grounds); Davis v. GMAC Mortg., LLC, No. H-11-09, 2011 WL 677359, at *3 (S.D. Tex. Feb. 16, 2011) (dismissing a TILA claim based on limitations); Obi v. Chase Home Fin., LLC, No. 10 C. 5747, 2011 WL 529481, at *3–4 (N.D. Ill. Feb. 8, 2011); Cebrun v. HSBC Bank USA, N.A., No. C10-5742BHS, 2011 WL 321992, at *2 (W.D. Wash. Feb. 2, 2011) (dismissing RESPA claim because the defendant was the trustee, not the servicer); Morris v. Bank of Am., No. C 09-02849 SBA, 2011 WL 250325, at *5 (N.D. Cal. Jan. 26, 2011) (dismissing RESPA claim because the allegations showed that the defendant timely responded to the plaintiff's qualified written letter); Mantz v. Wells Fargo Bank, N.A., Civ. A. No. 09-12010-JLT, 2011 WL 196915, at *3–4 (D. Mass. Jan. 19, 2011); Wheatley v. Reconstruct Co. NA, No. 3:10CV00242 JLH, 2010 WL 4916372, at *4 (E.D. Ark. Nov. 23, 2010) (dismissing TILA claims on limitations grounds and dismissing a RESPA claim because the defendant was not subject to the Act); Hughes v. Abell, __ F. Supp. 2d __, 2010 WL 4630227, at *10–11 (D.D.C. 2010) (dismissing TILA claims on limitations grounds); Done v. HSBC Bank USA, No. 09-CV-4878 (JFB) (ARL), 2010 WL 3824142, at *1–2 & n.5 (E.D.N.Y. Sept. 23, 2010) (dismissing TILA and RESPA claims on limitations grounds).

36. *See* Kuperman, *supra* note 6, at 4.

plaints, at least in employment discrimination cases.[37] We examined motions only if they were filed within the first 90 days of a case, and we cannot determine if the increase in motions filed during this period would be sustained throughout the duration of the cases. We were not able to study certain case types. For example, our study found only 21 orders involving antitrust litigation, and we were not able to develop a statistical model that would test for changes in so few cases. Our study included motions that challenged claims for reasons other than the sufficiency of the factual pleadings, and a more focused study of these types of cases may reveal changes that our study failed to detect.

Finally, the prevalence of motions granted with leave to amend requires further study. Our follow-up on the outcome of cases in which the plaintiff had an opportunity to amend the complaint has just begun. This effort may provide a more precise assessment of the extent to which complaints that are amended are challenged by subsequent motions to dismiss, and the extent to which those motions are granted without leave to amend.

37. Emery G. Lee III & Thomas E. Willging, Attorney Satisfaction with the Federal Rules of Civil Procedure: Report to the Judicial Conference Advisory Committee on Civil Rules 12 (Federal Judicial Center March 2010) (Seventy percent of plaintiffs' attorneys who had filed employment discrimination cases after *Twombly* indicated that they have changed the way they structure complaints in employment discrimination cases. Almost all of those attorneys (94%) indicated that they include more factual allegations in the complaint than they did prior to *Twombly*. Seventy-five percent indicated that they have had to "respond to motions to dismiss that might not have been filed prior to *Twombly*/*Iqbal*." Seven percent of those attorneys indicated that they had cases dismissed for failure to state a claim under the standard announced in *Twombly* and *Iqbal*.

Appendix A: Multivariate Statistical Models

In order to understand the impact of the *Twombly* and *Iqbal* decisions on the filing and outcome of Rule 12(b)(6) motions for failure to state a claim, we developed two separate data sets, both of which excluded all prisoner cases and cases with pro se parties. The means by which we developed these two data sets are described in Appendices B and C.

A. Filing of Motion to Dismiss for Failure to State a Claim

The first data set examined civil cases filed in 23 federal district courts in the months October 2005 through June 2006, and October 2009 through June 2010. From among these we identified cases with one or more Rule 12(b)(6) motions to dismiss for failure to state a claim filed within the first 90 days after the case was either filed originally in federal court or removed from state court.

Table A-1 presents the results of a logit model predicting the presence of a motion to dismiss given the year the case was filed, the district, and the type of case. As indicated in the table, there is great variation in motion activity across federal district courts and across types of cases. For the combined two periods, the Northern District of California, the District of Columbia, and the Northern District of Illinois all have higher filing rates than the baseline districts (Rhode Island, Eastern Michigan, and Maryland combined). The districts in the baseline are a combination of typical districts and those with too few cases to merit a separate variable. A number of courts have lower combined filing rates; the Eastern and Southern Districts of New York have especially low filing rates.[38]

As indicated by the predicted probabilities, motions to dismiss were more likely to be filed in 2010, when we controlled for type of case and federal district; these motions doubled from an adjusted estimate of 2.9% in 2006 to 5.8% in 2010. Filing rates also differed greatly across types of cases. Contract cases were more than twice as likely as torts cases to have motions filed; torts cases set the baseline for case types. Civil rights cases had the highest level of filing activity, with an overall adjusted estimate of 11.7%. In 2010, this rate rose to 12.7%, which suggests a leveling off in the rate of filing of motions in civil rights cases. Motions in employment discrimination cases increased from 7.7% to 10.1%.

38. While the filing rates in the Eastern and Southern Districts of New York are very low, the likelihood that motions would be granted without leave to amend in these districts was among the highest of the districts. We believe this may be due to pretrial practices in these districts, in which the judges confer with the attorneys early in the case and provide an indication of the likelihood of success of a motion to dismiss. Such a practice would be similar to the practices of many judges in these districts who require a pretrial conference prior to the filing of a motion for summary judgment. *See, e.g.*, Individual Practices of Judge John G. Koeltl 2, http://www.nysd.uscourts.gov/cases/show.php?db=judge_info&id=385 (last visited February 22, 2011) (requiring a premotion conference before making a motion for summary judgment).

Table A-1: Presence of a Motion to Dismiss for Failure to State a Claim Within 90 Days of Case Filing

Variable	Coefficient	Standard Error	Predicted Probability
			Baseline = 0.029
Eastern District of Arkansas	**-0.489**	0.153	0.018
Northern District of California	**0.163**	0.069	0.033
Eastern District of California	0.024	0.083	0.029
District of Colorado	-0.044	0.092	0.029
District of the District of Columbia	**0.704**	0.086	0.056
Middle District of Florida	0.058	0.067	0.029
Northern District of Georgia	-0.081	0.082	0.029
Northern District of Illinois	**0.185**	0.060	0.034
Southern District of Indiana	**-0.342**	0.108	0.021
District of Kansas	**-0.254**	0.129	0.022
District of Massachusetts	0.092	0.086	0.029
District of Minnesota	**-0.703**	0.092	0.014
District of New Jersey	**-0.626**	0.080	0.016
Eastern District of New York	**-2.001**	0.134	0.004
Southern District of New York	**-1.258**	0.082	0.008
Southern District of Ohio	0.093	0.089	0.029
Eastern District of Pennsylvania	0.106	0.065	0.029
District of South Carolina	0.070	0.089	0.029
Northern District of Texas	**-0.291**	0.093	0.022
Southern District of Texas	**-0.247**	0.077	0.022
Year 2010	**0.740**	0.083	0.058
Contract	**0.956**	0.081	0.071
Civil Rights	**1.507**	0.085	0.117
Other	0.029	0.080	0.029
Financial Instrument	**0.635**	0.144	0.053
Employment Discrimination	**1.050**	0.093	0.077
Contract x 2010	**-0.354**	0.103	0.101
Civil Rights x 2010	**-0.647**	0.109	0.127
Other x 2010	**-0.262**	0.101	0.046
Financial Instrument x 2010	0.090	0.161	0.104
Employment Discrimination x 2010	**-0.442**	0.120	0.101
Constant	-3.533	0.079	0.029

Note: N = 102,368; PCP = 95%. Statistically significant effects ($p < 0.05$) appear in bold print. The baseline for the model is a tort case filed in the District of Rhode Island, the Eastern District of Michigan, or the District of Maryland in 2006. The baseline probability sets all variables to zero. PCP is the percentage correctly predicted by the model and is an estimate of model fit. Where the variables were not statistically significant we list the predicted probability as the same as the value for the baseline, with one exception. For financial instruments in 2010, the predicted probability includes the main effect for these two significant variables. We also employed a rare event analysis, and the results were unchanged.

B. Outcome of Motions to Dismiss for Failure to State a Claim

The second data set examined the outcome of motions to dismiss for failure to state a claim as indicated by court orders responding to the merits of such motions issued from January through June in 2006 and 2010. Again, we removed all orders in cases involving prisoners and pro se parties. We also removed orders responding to Rule 12(b)(6) motions in which the movant and respondent were not the original defendant and plaintiff, respectively, which resulted in the elimination of orders involving counterclaims and affirmative defenses.

We modeled the outcome of the order in two ways. First, we modeled the choice of granting some or all of the relief requested by the motion, either with or without leave to amend. Second, we modeled the choice of granting all or some of the relief requested by the motion with respect to either some but not all claims by one or more plaintiffs, or all claims by one or more plaintiffs.

1. Motions Granted With or Without Leave to Amend

These models implicitly assume that judges are making decisions from among three outcomes. In this first model, the judges are choosing from among denying the motion, granting the motion with leave to amend, and granting the motion without leave to amend. Using a multinomial probit model, we predicted the outcome of the motion given the year in which the order was filed, the district, the type of case, and if the motion responded to an amended complaint. The multinomial probit model allows us to assume that the introduction of a third choice does not draw judges proportionately from the other two choices (i.e., giving the judges the choice of granting the motion with leave to amend does not draw evenly from those who would grant with no leave to amend and those who would deny the motion). Judges choose whether to grant or deny the motion, and if they choose to grant, then they decide whether to allow leave to amend the complaint or not. The two choices of granting the motion are clearly similar to each other, and substantially different from denying the motion. Multinomial probit models account for those differences. In fact, statistical tests show that this is the appropriate model for these data.[39]

As indicated in Table A-2, there was great variation across districts in the probability of granting the motion with leave to amend. The Eastern District of California, the Northern District of California, the Middle District of Florida, the Eastern District of New York, and the Southern District of New York all had a higher probability of granting *with* leave to amend than the baseline districts did, all else being equal. On the other hand, the Middle District of Florida, the Northern District of Illinois, the Eastern District of Pennsylvania, and the Northern Dis-

39. One might also think of this decision making as a nested or conditional process. Judges make the decision to grant or deny, and then if they decide to grant, they decide the issue of giving leave to amend. While this model is certainly possible, its estimation requires some difference in the independent variables used in the analysis. Here the variables are the same, making multinomial probit the appropriate model for this analysis. We also ran logit models on subsets of variables and obtained the same results.

trict of Texas were all less likely than the baseline districts to grant *without* leave to amend, all else being equal.

Additionally, we found that orders filed in 2010 responding to motions in cases challenging financial instruments had a higher probability of being granted without leave to amend than those filed in 2006, all else being equal. We found no significant difference in the outcomes of motions in other types of cases and no other significant interactions between type of case and year of order. Finally, responding to an amended complaint increased the probability that the motion would be granted without leave to amend, all else being equal.

Table A-2: Multinomial Probit Model of Granting All or Some of the Relief Requested by the Motion With and Without Opportunity to Amend the Complaint

Variable	Grant and Amend		Grant and No Amend	
	Coefficient	**Std. Error**	**Coefficient**	**Std. Error**
Eastern District of Arkansas	-0.068	0.469	-0.668	0.391
Northern District of California	**1.625**	0.274	-0.191	0.243
Eastern District of California	**1.589**	0.250	-0.260	0.212
District of Colorado	-0.300	0.436	-0.519	0.329
District of the District of Columbia	-0.657	0.663	0.146	0.405
Middle District of Florida	**0.704**	0.256	**-0.983**	0.221
Northern District of Georgia	0.639	0.359	-0.054	0.304
Northern District of Illinois	0.179	0.283	**-0.709**	0.238
Southern District of Indiana	-0.363	0.420	-0.266	0.306
District of Kansas	0.274	0.357	-0.500	0.303
District of Massachusetts	0.160	0.467	0.251	0.364
District of Minnesota	0.206	0.400	-0.063	0.324
District of New Jersey	0.269	0.305	0.060	0.245
Eastern District of New York	**0.748**	0.329	0.157	0.279
Southern District of New York	**0.825**	0.376	0.324	0.324
Southern District of Ohio	0.217	0.333	-0.064	0.270
Eastern District of Pennsylvania	0.072	0.318	**-0.596**	0.261
District of South Carolina	-1.085	0.651	-0.626	0.395
Northern District of Texas	0.044	0.376	**-0.909**	0.333
Southern District of Texas	-0.200	0.416	-0.318	0.322
Year 2010	0.235	0.337	-0.115	0.300
Contract	-0.223	0.313	-0.289	0.272
Other	-0.545	0.320	-0.346	0.275
Civil Rights	-0.066	0.314	0.008	0.273
Financial Instrument	-0.163	0.540	-1.075	0.556
Employment Discrimination	-0.202	0.354	-0.049	0.303
Amended Complaint	-0.006	0.102	**0.283**	0.095
Contract x 2010	0.040	0.396	0.005	0.354
Other x 2010	0.335	0.397	0.077	0.353
Civil Rights x 2010	0.190	0.401	0.225	0.358
Financial Instrument x 2010	0.836	0.604	**1.828**	0.615
Employment Discrimination x 2010	0.104	0.454	0.126	0.399
Constant	**-0.752**	0.345	**0.636**	0.286

Note: N = 1,915. Statistically significant effects ($p < 0.05$) appear in bold print. The baseline for the model is an order deciding one or more Rule 12(b)(6) motions to dismiss filed in the District of Rhode Island, the Eastern District of Michigan, or the District of Maryland in 2006 in a tort case, responding to an un-amended complaint.

To understand the substantive impact of these factors, we estimated marginal effects. Table A-3 shows the results of these effects.

Table A-3: Marginal Effects Estimates for Multinomial Probit Model (Deny vs. Grant with Leave to Amend vs. Grant Without Leave to Amend)

Variable	Deny	Grant and Amend	Grant and No Amend
Baseline	**0.298**	**0.145**	**0.557**
Districts			
Eastern District of California	-0.149	0.468	-0.319
Northern District of California	-0.140	0.469	-0.328
Middle District of Florida	0.060	0.304	-0.364
Northern District of Illinois	0.111	0.121	-0.233
Eastern District of New York	-0.087	0.144	-0.057
Southern District of New York	-0.115	0.135	-0.020
Eastern District of Pennsylvania	0.106	0.082	-0.188
Northern District of Texas	0.163	0.109	-0.272
Amended Complaint	-0.054	-0.030	0.084
Financial Instrument x 2010	-0.258	-0.077	0.335

Table A-3 indicates the marginal effects of individual variables when other variables were held constant. These effects estimates allow for an assessment of the impact of each of the variables by adding the baseline probability of each outcome and the effects estimate for each variable that was statistically significant. For example, while the probability of orders granting a motion with leave to amend was only 15% (i.e., 0.145) in the baseline districts, the probability of orders granting motions with leave to amend in the Eastern and Northern Districts of California was 61% (0.145 + 0.468 in the Eastern District of California and 0.145 + 0.469 in the Northern District of California), when other variables were held constant. While granting motions without leave to amend was the most likely outcome (56% adjusted baseline probability), orders responding to motions challenging financial instruments had an 89% adjusted probability of being granted without leave to amend in 2010 (0.557 + 0.335). Responding to an amended complaint increased the adjusted probability of granting a motion without leave to amend to 64% (0.557 + 0.084).

2. Motions Granted with Respect to Only Some or All of the Claims of a Plaintiff

Motions may also be granted with respect to only some claims by plaintiffs, or with respect to all claims by at least one plaintiff, thereby eliminating one or more plaintiffs from the case (at least with respect to the issues addressed by the order). Table A-4 shows the results of the model estimating these two outcomes.

Table A-4: Multinomial Probit Model of Granting Motion with Respect to Some or All Claims by a Plaintiff

Variable	Grant with Respect to Claims Only		Grant with Respect to All Claims of at Least One Plaintiff	
	Coefficient	Std. Error	Coefficient	Std. Error
Eastern District of Arkansas	-0.251	0.389	**-0.974**	0.480
Eastern District of California	**0.675**	0.241	0.387	0.252
Northern District of California	**0.559**	0.212	**0.438**	0.221
District of Colorado	-0.429	0.340	-0.431	0.364
District of the District of Columbia	0.062	0.417	-0.053	0.440
Middle District of Florida	-0.193	0.218	**-0.489**	0.234
Northern District of Georgia	0.267	0.307	-0.001	0.330
Northern District of Illinois	-0.397	0.241	-0.453	0.255
Southern District of Indiana	-0.140	0.312	-0.454	0.345
District of Kansas	-0.375	0.314	-0.140	0.321
District of Massachusetts	0.315	0.371	0.110	0.393
District of Minnesota	0.074	0.332	-0.073	0.352
District of New Jersey	0.031	0.253	0.194	0.260
Eastern District of New York	0.343	0.284	0.308	0.296
Southern District of New York	0.198	0.337	**0.733**	0.335
Southern District of Ohio	0.088	0.277	-0.123	0.294
Eastern District of Pennsylvania	-0.226	0.264	**-0.687**	0.295
District of South Carolina	-0.535	0.406	**-0.911**	0.465
Northern District of Texas	-0.508	0.333	**-0.737**	0.363
Southern District of Texas	-0.120	0.327	-0.486	0.361
Year 2010	-0.044	0.298	0.138	0.328
Contract	-0.251	0.271	-0.247	0.304
Other	-0.504	0.276	-0.278	0.307
Civil Rights	-0.204	0.275	0.256	0.301
Financial Instrument	-0.796	0.520	-0.439	0.564
Employment Discrimination	0.002	0.302	-0.278	0.347
Amended Complaint	**0.297**	0.093	-0.015	0.100
Contract x 2010	0.002	0.351	0.041	0.387
Other x 2010	0.186	0.351	0.138	0.385
Civil Rights x 2010	0.330	0.357	0.019	0.387
Financial Instrument x 2010	**1.311**	0.580	**1.429**	0.624
Employment Discrimination x 2010	-0.010	0.397	0.327	0.443
Constant	0.302	0.289	-0.082	0.315

Note: N = 1,916. Statistically significant effects ($p < 0.05$) appear in bold print. The baseline for the model is an order deciding one or more Rule 12(b)(6) motions to dismiss filed in the District of Rhode Island, the Eastern District of Michigan, or the District of Maryland in 2006 in a tort case, responding to an un-amended complaint.

Using the same baseline discussed above, we found that the Eastern and Northern Districts of California were again more likely than the baseline districts to grant motions with respect to some of the claims by a plaintiff. The Northern District of California and the Southern District of New York were also more likely than the baseline districts to grant one or more motions with respect to all claims by one or more plaintiffs. On the other hand, the Eastern District of Arkansas, the Middle District of Florida, the Eastern District of Pennsylvania, the District of South Carolina, and the Northern District of Texas were less likely than the baseline districts to grant motions with respect to all claims by one or more plaintiffs.

Similarly, in 2010, orders responding to motions in cases challenging financial instruments were more likely to be granted, both with respect to all claims by at least one plaintiff and with respect to only some claims, all else being equal. As before, we found no statistically significant increase in the likelihood that motions were granted for other types of cases. Finally, responding to an amended complaint increased the likelihood of granting a motion with respect to claims only.

Table A-5 shows the marginal effects of these models. While granting a motion with respect to claims only was the most likely of the three outcomes overall, none of the baseline outcomes had a probability over 50%. Again, this effect varies by district. In the Eastern and Northern Districts of California, the probability of granting a motion with respect to claims only was approximately 50% (0.399 + 0.137 in the Eastern District of California, and 0.399 + 0.095 in the Northern District of California). Granting motions with respect to claims was also a more likely outcome in the Middle District of Florida and the Eastern District of Pennsylvania, though still not as likely as it was in the Eastern and Northern Districts of California. In the Northern District of Texas, denials of motions were more common than the other two outcomes. Orders filed in 2010 responding to motions challenging financial instruments had a higher probability of being granted in both categories, all else being equal. Finally, responding to an amended complaint increased the probability of granting a motion with respect to claims by approximately 49%.

Table A-5: Marginal Effects Multinomial Probit Model (Deny vs. Grant of Motion Dismissing Claims Only vs. Grant of Motion Dismissing All Claims of At Least One Plaintiff)

Variable	Deny	Only Claims	All Claims by a Plaintiff
Baseline	**0.289**	**0.400**	**0.311**
Districts			
Eastern District of Arkansas	0.146	0.039	-0.185
Eastern District of California	-0.127	0.139	-0.012
Northern District of California	-0.118	0.094	0.024
Middle District of Florida	0.088	0.009	-0.097
Southern District of New York	-0.111	-0.071	0.182
Eastern District of Pennsylvania	0.115	0.020	-0.136
District of South Carolina	0.200	-0.049	-0.151
Northern District of Texas	0.175	-0.057	-0.118
Amended Complaint	-0.043	0.093	-0.050
Financial x 2010	-0.237	0.096	0.140

C. Summary

Together these three analyses indicate that the likelihood of a motion to dismiss for failure to state a claim being filed has increased since 2006 across a wide range of types of cases. After controlling for differences across districts and the presence of an amended complaint, we found that motions to dismiss were more likely to be granted without an opportunity to amend the complaint in cases challenging financial instruments. Motions in such cases were rarely denied in 2010, and were split almost evenly between motions granted with respect to all claims by at least one plaintiff and motions granted with respect to only some claims by plaintiffs. We found no increase in the likelihood that motions to dismiss for failure to state a claim would be granted across other broad case types. The presence of an amended complaint also increased the likelihood that the motion would be granted without an opportunity to amend the complaint, and granted with regard to only some claims by a plaintiff.

Appendix B: Identification of Cases and Designation of Case Types

This study examined the filing and resolution of Rule 12(b)(6) motions to dismiss for failure to state a claim as revealed in orders filed in 23 federal district courts in January through June of 2006 and 2010. The courts included in this study represent each of the 12 federal circuits, often including the 2 districts in the circuits with the greatest number of civil filings in 2009.[40] The districts included in this study are listed in Table B-1.

Table B-1: Orders Resolving the Merits of Rule 12(b)(6) Motions

District	Order Year		Total
	2006	2010	
Eastern District of Arkansas	14	13	27
Eastern District of California	33	204	237
Northern District of California	100	238	338
District of Colorado	23	19	42
District of the District of Columbia	9	17	26
Middle District of Florida	84	124	208
Northern District of Georgia	47	13	60
Northern District of Illinois	44	86	130
Southern District of Indiana	24	28	52
District of Kansas	26	29	55
District of Massachusetts	14	23	37
District of Maryland	8	13	21
Eastern District of Michigan	38	58	96
District of Minnesota	16	31	47
District of New Jersey	45	71	116
Eastern District of New York	35	47	82
Southern District of New York	16	38	54
Southern District of Ohio	27	55	82
Eastern District of Pennsylvania	58	31	89
District of Rhode Island	0	7	7
District of South Carolina	9	18	27
Northern District of Texas	14	30	44
Southern District of Texas	16	29	45
Total	700	1,222	1,922

40. Several of the largest districts in some of the circuits were excluded because of problems in collecting the data necessary to conduct the study. Characteristics of the districts are found in the Administrative Office of the U.S. Courts publication Federal Court Management Statistics, http://www.uscourts.gov/Statistics/FederalCourtManagementStatistics.aspx (last visited February 6, 2011).

We wanted to examine motion practice during periods that neither anticipated a change in pleading practice nor reacted to the Supreme Court opinions in the absence of appellate court guidance. January through June of 2006 was selected as a period of stable motion practice before the Supreme Court decision in *Bell Atlantic Corp. v. Twombly* in May 2007. January through June of 2010 was selected as a period after which each of the circuits had had a chance to publish at least one appellate court opinion interpreting *Ashcroft v. Iqbal* and offering guidance to the district courts. This analysis does not address motion activity in the interim period from July 2006 through December 2009.

This study is unlike other recent studies of motions to dismiss for failure to state a claim that rely on cases that appear in the computerized legal reference systems.[41] This study identified judicial orders resolving the merits of such motions in each of the selected districts by first identifying orders responding to one or more general motions to dismiss, as indicated by codes entered by the court clerks of the individual districts into the CM/ECF database.[42] These codes relate to the entries on the docket sheets of individual cases and point to documents related to the docket entry. Using a Structured Query Language (SQL) program, we identified all orders responding to all motions to dismiss filed in the selected district courts for the designated dates.[43] Next, we ran a Practical Extraction and Report Language (PERL) program to identify text indicating that the order resolved at least one Rule 12(b)(6) motion to dismiss for failure to state a claim.[44] This process identified 4,725 orders that included variations on the search terms and that were included in the coding task.[45] The PERL program was unable to convert certain types of non-text documents, such as PDF documents stored as static images, and we were unable to identify orders resolving motions to dismiss in such documents.[46] We believe this procedure is equivalent to identifying motions to dismiss on the docket sheets, then searching the text of the motions and responding orders to identify motions to dismiss for failure to state a claim.

A variation on this methodology was used to identify Rule 12(b)(6) motions to determine changes in filing rates. We expanded the case selection window to include cases filed as early as October 1, 2005, for the 2006 cohort, and as early as October 1, 2009, for the 2010 cohort. Again, we used the CM/ECF codes and an SQL program to identify motions to dismiss filed within three months of the case

41. *See supra* note 4 and accompanying text.

42. Our study relied on data in a backup database in order to avoid disrupting CM/ECF service.

43. We excluded all sealed records and other documents that were unavailable on the courts' electronic public access system (PACER).

44. *See supra* note 8.

45. As a result of an early error in framing the search request, a few hundred of these were cases that included only the term "pro se" without other terms indicating the presence of a Rule 12(b)(6) motion. These cases were identified and removed from the sample.

46. We presently do not know the extent to which motions and orders are stored as static images, and are not able to estimate the extent to which we may have failed to identify such motions and orders in our text search. However, we believe such images are more common in motions than in orders, and are more common in submissions by prisoners and pro se parties than in other cases.

being filed in federal court. We then used a PERL program to identify text indicating that the motion was brought under authority of Rule 12(b)(6).

This is the first time we are aware of that this particular research methodology has been used. We believe this methodology for identifying Rule 12(b)(6) motions and related orders represents an improvement over methods that rely on computerized legal reference systems, since this method relies on data prepared by the district courts to identify all orders responding to all motions to dismiss in all cases, and thereby includes cases that do not appear in the computerized legal reference systems.[47] We believe this methodology is also an improvement over methods that identify such motions on the basis of only the text of docket entries, since such docket entries often combine all Rule 12 motions and motions for voluntary dismissal under a single general docket entry.

However, this technique also has some disadvantages. These programs cannot convert motions and orders that appear as a non-text scanned image into searchable text. Also, the programs that convert the PDF formatted motions and orders into searchable text on occasion have difficulty recognizing relevant text, especially where the quality of the PDF document is poor. For example, we found a few instances in which the program overlooked a relevant motion or order because it read the text "12(b)(6)" as "12(b1(6)." We have not estimated the extent of these problems, but we believe they do not affect the accuracy of these results, since the text misinterpretations would not be related to the outcome of the motions. In other words, we believe such errors would be equally likely in orders granting motions and orders denying motions; in contrast, computerized legal reference systems are less likely to include a routine order denying a motion to dismiss.[48]

47. We found that the presence of 12(b)(6) orders in the Westlaw database varied greatly across federal districts. We searched in the Westlaw "allfeds" database for 30 to 40 Rule 12(b)(6) orders in each of three federal district courts: the Eastern District of Arkansas, the District of Colorado, and the District of Kansas. For the Eastern District of Arkansas, we found 87% of the orders on Westlaw, and for the District of Colorado, we found 82% of the orders. However, for the District of Kansas, we found only about 18% of the orders on Westlaw. These findings suggest that Westlaw may publish the majority of orders for some districts, but far less than the majority for other districts. In addition, whether an order was granted or denied may be related to its likelihood of publication. In the Eastern District of Arkansas, 65% of published orders were granted, and 100% of unpublished orders were granted (though there were only 4 unpublished orders). In the District of Colorado, 86% of published orders were granted, while only 62% of unpublished orders were granted. In the District of Kansas, about 71% of published and unpublished orders were granted. A search of Westlaw for a particular term or type of order may not present an accurate picture of the number or disposition of those cases in the district. We interpret these differences in publication rates and differences in grant rates as indicating a need for caution in basing conclusions regarding court practices on studies of orders appearing in the Westlaw federal court databases.

48. *See supra* note 5.

We linked the cases we identified with records from the Administrative Office of the U.S. Courts[49] to allow further specification of the origin and type of case. These origin codes allowed us to restrict our analyses to cases filed as an original proceeding or removed from the state court to the district court. In doing so, we excluded from our analyses cases remanded from the courts of appeals, reopened or reinstated for additional action, transferred from another federal district court, or transferred as part of a multidistrict litigation proceeding, as well as appeals from a magistrate judge's decision.

We also relied on data from the Administrative Office to identify types of cases. The AO data include a "Nature of Suit" code that is designated by the party filing the case or removing the case to federal court. We then combined these codes into seven categories for purposes of analysis. Table B-2 presents the number and types of cases included in each of the categories for the full database.

49. *See* Administrative Office of the U.S. Courts, Federal Court Cases: Integrated Database Series, available at http://www.icpsr.umich.edu/icpsrweb/NACJD/series/00072. These are administrative data prepared by the clerks in the individual federal district courts. For critiques of the usefulness of this data set for research purposes, see Theodore Eisenberg & Margo Schlanger, *The Reliability of the Administrative Office of the U.S. Courts Database: An Initial Empirical Analysis*, 78 Notre Dame L. Rev. 1455, 1460 (2003) (finding errors in recorded award amounts in torts and prisoner civil rights cases); Gillian K. Hadfield, *Exploring Economic and Democratic Theories of Civil Litigation: Differences Between Individual and Organizational Litigants in the Disposition of Federal Civil Cases*, 57 Stan. L. Rev. 1275, 1309–11 (2005) (problems with codes indicating voluntary and other dismissals); and Gillian K. Hadfield, *Where Have All the Trials Gone? Settlements, Non-Trial Adjudications, and Statistical Artifacts in the Changing Disposition of Federal Civil Cases*, 1 J. Empirical Legal Stud. 705 (2004) (finding other coding errors).

Table B-2: Classification of Nature of Suit Codes into Broad Case Types

Case Types		2006	2010	Total
Contract	Insurance	37	43	80
	Marine Contract Actions	0	3	3
	Miller Act	1	0	1
	Stockholders Suits	5	5	10
	Other Contract Actions	100	152	252
	Contract Product Liability	1	6	7
	Franchise	2	3	5
	Securities, Commodities, Exchange	39	29	68
	Total	185	241	426
Torts	Torts to Land	2	5	7
	Airplane Product Liability	0	3	3
	Assault, Libel, and Slander	4	6	10
	Federal Employers Liability	0	1	1
	Marine Personal Injury	2	2	4
	Motor Vehicle Personal Injury	1	3	4
	Motor Vehicle Product Liability	1	1	2
	Other Personal Injury	16	24	40
	Medical Malpractice	2	1	3
	Personal Injury—Product Liability	9	27	36
	Other Fraud	29	19	48
	Other Personal Property Damage	3	12	15
	Property Damage—Product Liability	1	7	8
	Total	70	111	181
Civil Rights	Other Civil Rights	150	209	359
	Civil Rights Voting	1	1	2
	Civil Rights Accommodations	8	3	11
	Americans with Disabilities Act Employment	4	10	14
	Americans with Disabilities Act Other	9	9	18
	Total	172	232	404

Table B-2: Classification of Nature of Suit Codes into Broad Case Types (continued)

Case Types		2006	2010	Total
Employment Discrimination	Civil Rights Jobs	95	119	214
	Total	95	119	214
Financial Instrument	Negotiable Instruments	0	64	64
	Foreclosure	2	49	51
	Other Real Property Actions	3	35	38
	Truth in Lending	5	34	39
	Consumer Credit	7	53	60
	Total	17	235	252
Other	Overpayments & Enforcement of Judgment	2	2	4
	Overpayments Under the Medicare Act	0	1	1
	Recovery of Overpayments of Vet Benefits	2	0	2
	Rent, Lease, Ejectment	0	2	2
	Antitrust	7	9	16
	Bankruptcy Withdrawal 28 U.S.C. § 157	0	6	6
	Banks and Banking	2	9	11
	Interstate Commerce	2	1	3
	Other Immigration Action	0	1	1
	Civil (RICO)	15	25	40
	Cable and Satellite TV	1	4	5
	Other Forfeiture and Penalty Suits	0	1	1
	Fair Labor Standards Act	4	15	19
	Labor/Management Relations Act	4	7	11
	Railway Labor Act	2	0	2
	Other Labor Litigation	7	13	20
	Employee Retirement Income Security Act	28	42	70
	Copyright	11	11	22
	Patent	7	19	26
	Trademark	8	16	24
	Social Security Disability Claim	0	1	1
	Tax Suits	2	2	4
	Other Statutory Actions	49	79	128
	Agricultural Acts	1	0	1
	Environmental Matters	6	13	19
	Freedom of Information Act of 1974	1	1	2
	Constitutionality of State Statutes	0	4	4
	Total	161	284	445
Grand Total		700	1,222	1,922

Appendix C: Coding and Analysis of Motions and Orders

We loaded relevant orders resolving Rule 12(b)(6) motions to dismiss for failure to state a claim into a FileMaker Pro database, along with identifying information and Administrative Office data related to the case. We assigned the cases random numbers, then sorted the cases by those numbers to ensure that coding assignments would be randomly assigned to coders across groups and districts. On two occasions we added additional cases to the database following the same randomization procedure.

A team of 10 recent law school graduates reviewed the judicial orders. Relying on remote access to the FileMaker Pro database, they coded information contained in the order indicating the nature and resolution of the motion.[50] The FileMaker Pro database allowed the coder to link to the relevant document and directly enter codes into the database. In reviewing the motions, the coders first confirmed that the order resolved the merits of at least one motion to dismiss for failure to state a claim under Federal Rule of Civil Procedure 12(b)(6), noted characteristics of the movant and respondent, and indicated judicial action taken in response to the motion. If the order granted all or some of the relief requested by the motion, the coder indicated whether the order appeared to exclude all claims by one or more plaintiffs, and whether the order indicated that the respondent would have an opportunity to amend the complaint. Intercoder reliability checks for 25 orders revealed that the coders agreed on 89% to 97% of the coding choices, depending on the nature of the specific question. A copy of the code sheet appears as Figure C-1.

The coding instructions resolved a number of difficult questions. We excluded a number of cases in which Rule 12(b)(6) motions were granted for reasons other than a failure to state a claim. For example, we excluded cases in which motions were granted on the basis of sovereign or qualified immunity, which we regarded as a jurisdictional issue and which was usually raised as an affirmative defense. When a respondent failed to file a timely response and the court granted the Rule 12(b)(6) motion, thereby dismissing the claim, we coded the order as resolving the merits of the Rule 12(b)(6) motion, since we regarded the failure to respond in a timely manner as an admission that the respondent was unable to state a claim.

Coders often encountered circumstances in which a single order resolved more than one motion, or a single motion was directed at multiple claims. We also found multiple motions by multiple defendants directed at a single claim. For our purposes, we counted *all* Rule 12(b)(6) motions resolved by a single order as resolving a single 12(b)(6) motion addressing multiple claims.

50. The coders were former law review students who had recently graduated from the University of Oklahoma School of Law. The coders underwent a three-hour training program, and used a 12-page coding manual to aid in the process. E-mail exchanges, with copies to all members of the group, allowed coders to raise questions and seek clarification throughout the process. Steven Gensler, a professor of the University of Oklahoma School of Law and a member of the Judicial Conference Advisory Committee on Civil Rules, participated in the orientation program and supervised the coding process on-site.

Figure C-1: Code Sheet for Recording Action on Rule 12(b)(6) Motion

Oklahoma FRCivP 12(b)(6) Coding

SEQUENCE NUMBER : _____

CODER: _____ **DATE:** _____ **ORDER LINK:** _____

Show Document

1. DOCKET NUMBER: _____ **ORDER DATE:** _____

2. Order resolves the merits of at least one 12(b)(6) motion:

- ○ Yes
- ○ No (go to next order)
- ○ Unclear (go to next order)

3. Order resolves the merits of more than one 12(b)(6) motion:

- ○ Yes
- ○ No
- ○ Unclear

4. Order resolves the merits of <u>other</u> Rule 12 motions: ○ Yes ○ No

5. Rule 12(b)(6) motion directed to <u>amended</u> complaint: ○ Yes ○ No

6. Movant is Original:

○ Pl ○ Def ○ Third Party **Pro Se:** ○ Yes ○ No

○ Only Indiv(s) ○ Corp ○ Govt ○ Multip/Other **(specify)** _____

7. Respondent is Original:

○ Pl ○ Def ○ Third Party **Pro Se:** ○ Yes ○ No

○ Only Indiv(s) ○ Corp ○ Govt ○ Multip/Other **(specify)** _____

8. Judicial Action On Motion ○ Deny (go to next order)

○ Grant **Opportunity to Amend** ○ Yes ○ No

○ Grant in part **Opportunity to Amend** ○ Yes ○ No

○ Uncertain/Other **Specify:** _____

9. If the 12(b)(6) order is granted in whole or in part, does it:

- ○ No plaintiff is eliminated by way of a Rule 12(b)(6) ruling.
- ○ One or more but not all plaintiffs are eliminated by way of a Rule 12(b)(6) ruling.
- ○ All plaintiffs are eliminated by way of a Rule 12(b)(6) ruling.
- ○ Other **Specify:** .....

.....

Rule 12(b)(6) motions directed toward multiple claims often were granted as to some claims and denied as to others. If an order granted any relief requested by the motion, we coded the motion as being granted as to some claims and then determined whether the order indicated an opportunity to amend the complaint with regard to the dismissed claims. Similarly, if the order resolved multiple Rule 12(b)(6) motions by granting some motions and denying others, the multiple motions were regarded as a single Rule 12(b)(6) motion for our purposes and coded as granting some of the relief requested. If an order granting any relief requested by a motion allowed an opportunity to amend the complaint, we coded the order as allowing an opportunity to amend.

If the order granted any relief sought by the Rule 12(b)(6) motion, the coder indicated whether the grant appeared to eliminate all claims by one or more plaintiffs, thereby excluding those plaintiffs from the litigation. If an order dismissed some but not all claims by a plaintiff, then the coder indicated that no plaintiff was eliminated by way of the ruling. This coding was somewhat imprecise, since the breadth of the litigation was sometimes difficult to interpret in the context of the order alone. The categories listed as responses in Question 9 on the code sheet were developed after pilot work revealed inconsistencies in our attempt to code for the effect of the motion on defendants. Unfortunately, after we changed the response categories, the language of the question no longer fit the revised categories. This fact was called to the attention of the coders, and we agreed that the question would be interpreted as asking how an order that granted at least some of the relief requested would affect the role of one or more plaintiffs.

Coding was reviewed by Center staff for completeness and consistency on an ongoing basis. Responses designated as "unclear," "uncertain," and "other" were reviewed and resolved in discussion with the coder. Data were then loaded into the SPSS (version 17) statistical analysis program. Multivariate statistical models were analyzed using STATA 11 SE. CLARIFY was used to estimate the predicted probabilities for the logit models.

The Federal Judicial Center

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