

What You Need to Know About *Twombly*: The Use and Misuse of Economic and Statistical Evidence in Pleadings

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I. INTRODUCTION

n *Bell Atlantic v. Twombly*² the Supreme Court clarified what plaintiffs must plead for their complaints to pass muster. It retired the *Conley*³ rule that a court should not dismiss a complaint unless "it appears beyond doubt that the plaintiff can prove no set of facts in support of his claim which would entitle him to relief." The new rule is based on whether the complaint states a set of facts that, assuming their truth, makes it "plausible" that the plaintiff has a claim which would entitle her to relief. Although *Twombly* involved an antitrust conspiracy claim, most commentators agree that it modified general pleading standards for all cases and that has been confirmed in the Supreme Court's May 2009 ruling in *Ashcroft v. Iqbal.*⁴ Lower courts have cited *Twombly* more than 12,000 times in a wide range of cases since it came down in May 2007.⁵ These cases involve a wide area of claims including the full gamut of antitrust cases. Defendants now routinely seek to dismiss complaints on the grounds that they do not state a plausible claim. This article explores what sorts of economic and statistical evidence help establish that a claim is plausible and what do not.

II. THE TWOMBLY DECISION

Twombly concerned economic evidence of a conspiracy to restrain trade in violation of Section 1 of the Sherman Act. The plaintiffs, led by William Twombly, were subscribers of local telephone and high-speed Internet services. The defendants were the major regional telephone companies, including Bell Atlantic, which later became part of Verizon. The Baby Bells, as they are sometimes called, were required to allow other telephone companies to use their networks for various purposes. The plaintiffs claimed

¹ The author was the lead author of the *Brief by Amici Curiae Economists* in Bell Atlantic v. William Twombly which 25 leading academic economists signed, *see infra* note 8. He is Lecturer, University of Chicago and Executive Director, Jevons Institute for Competition Law and Economics, Visiting Professor, University College London. He would like to thank Howard Chang, Lubomira Ivanova, and Daniel Garcia-Swartz for very helpful comments and Marina Danilevsky for excellent research assistance.

² Bell Atlantic Corp. v. Twombly, 127 S. Ct. 1955 (2007).

³ Conley v. Gibson, 355 U.S. 41 (1957).

⁴ "Our decision in *Twombly* expounded the pleading standard for "all civil actions,", and it applies to antitrust and discrimination suits alike." *See*, Ashcroft v. Iqbal, No. 07-1015 (U.S. S. Ct. May 18, 2009), at 20, available at http://www.supremecourtus.gov/opinions/08pdf/07-1015.pdf (last accessed July 23, 2009). For further discussion of Iqbal, *see* Caroline Mitchell & David Wallach, *Ashcroft v. Iqbal: Taking Twombly a Step Further*, 7(2) GCP MAGAZINE (Jul-09), available at http://www.globalcompetitionpolicy.org/index.php?&id=1780&action=907.

⁵ A search run on LexisNexis on July 23, 2009 turned up more than 12, 000 decisions which cited *Twombly*.

that the Baby Bells conspired to keep other's telephone networks out of their regions and not enter each other's regions. The main evidence of this conspiracy was the existence of "parallel conduct": that competition was limited in all the regions of the Baby Bells and none of the Baby Bells offered service in the territories of any of the other Baby Bells.

The District Court dismissed the complaint on the grounds that parallel conduct was not enough. The plaintiffs needed evidence that "tended to exclude independent self-interest conduct as an explanation for defendants' parallel behavior." The Second Circuit Court of Appeals said, in reversing, that the court "would have to conclude that there is no set of facts that would permit a plaintiff to demonstrate the particular parallelism asserted was the product of collusion rather than coincidence." The problem with that conclusion, which follows from *Conley*, is that it would permit conspiracy complaints against numerous firms in a wide range of settings. As a group of 25 academic economists noted in their amicus brief,

Virtually all firms in the economy will be at risk under [the "parallel behavior is enough" standard]. Incumbents will have changed price in parallel in response to demand and cost changes. Firms may have all lowered price when significant entry occurred. They will have relied on the same information and analysis of the same business conditions, to enter markets, choose business locations, design products, invest in innovation, and make other decisions that affect market outcomes—including not availing themselves of a myriad of possible business opportunities and therefore taking no action at all.8

The Supreme Court agreed with this reasoning as well as with the concern expressed by those economists that the "parallel behavior is enough" standard would impose significant costs on the economy through unnecessary discovery, the settlement of frivolous lawsuits, and the chilling of legitimate competitive behavior to avoid litigation. It therefore agreed with the District Court that a conspiracy claim needs more than just parallel behavior; it needs something to exclude routine competition as an explanation.

Twombly would be mainly of interest to antitrust lawyers who specialize in conspiracy cases if the Supreme Court had ended its analysis there. In fact, several other Circuit Courts of Appeal required plaintiffs to have more than parallel behavior to survive a motion to dismiss for a Sherman Section 1 case. But the Supreme Court used the opportunity to reverse its 1957 decision in *Conley* which many courts had relied on to

⁶ Bell Atlantic Corp v Twombly, *supra* note 2, at 5.

⁷ Id. at 6.

⁸ Baumol, William J., Boskin, Michael J., Crandall, Robert W., Elzinga, Kenneth G., Evans, David S., Faulhaber, Gerald R., Fisher, Franklin M., Froeb, Luke M., Gilbert, Richard J., Joskow, Paul L., Katz, Michael L., Milgrom, Paul R., Moore, Thomas G., Ordover, Janusz A., Porter, Robert H., Scherer, Frederic M., Schmalensee, Richard, Schwartz, Marius, Sibley, David S., Smith, Vernon L., Snyder, Edward A., Spence, A. Michael, Spiller, Pablo T., Sykes, Alan O., Teece, David J. & Whinston, Michael D., Brief of Amici Curiae Economists in Support of Petitioners, Bell Atlantic V. Twombly(April 6, 2006), at 11, available at http://ssrn.com/abstract=1330591.

allow complaints to move forward with little if any plausible evidence in the complaint that the plaintiff was entitled to relief. It thus changed the pleading standards for effectively all Rule 8 federal cases, and hence the thousands of citations that have followed in the two years since the decision came down.⁹

III. TWOMBLY MEETS REVEREND BAYES

Professor Robert Bone has provided a way of looking at *Twombly* that helps identify what the courts will look for in a plaintiff's complaint. He argues that *Twombly* requires that the "allegations describe a state of affairs that differs significantly from a baseline of normality and supports a probability of wrongdoing greater than the background probability for situations of the same general type." This standard helps explain two Supreme Court decisions that some commentators have argued reflect ambiguity in where the Court has come out on pleading.

In *Swierkiewicz v. Sorema N.A*¹¹ the Court, in 2002, reversed a lower court ruling that dismissed a complaint in an employment discrimination matter. Swierkiewicz was a Hungarian employee of a French company in the United States. The company replaced him with a native French employee. The plaintiff provided details on the dates of various actions and the nationalities of company employees that made various decisions related to him. Putting these details aside, a French company replacing an employee with a French native speaker in the United States would appear far enough away from the norm that it would appear plausible that employee could have a valid claim.

Fifteen days after issuing *Twombly* the Supreme Court, in *William Erickson v. Barry J. Pardus et al.*¹², reversed a lower court dismissal of a complaint by a prisoner that his constitutional rights had been violated as a result of the denial of medication. To the confusion of some readers of *Twombly* the court emphasized the importance of liberal pleading standards and noted, citing *Twombly*, that a plaintiff is only required to present a short and plain statement that he is entitled to relief. But in this case the plaintiff claimed the he had started a year-long program for the treatment of Hepatitis C and that the prison decided to withdraw its treatment from him even though he was in need of it. (During treatments for some of the prisoners a syringe had been found in the trash and

⁹ Rule 8(a)(2) of the Federal Rules of Civil Procedure, which provides the general rules of pleading, requires a complaint "to provide a "short and plain statement of the claim showing that the pleader is entitled to relief." *See* FED. R. CIV. P. 8(A)(2). Cases subject to more stringent pleading requirements than Rule 8 are likely unaffected by *Twombly*. Rule 9(b), which covers pleading requirements for cases involving fraud or mistakes, states a "particularity" requirement for the pleadings not generally applicable under Rule 8. In addition, there are cases brought under statutes with specific and more stringent statutory pleading requirements, such as the Private Securities Litigation Reform Act (PSLRA) of 1995. In addition, cases that are brought *pro se* also generally allow more latitude for the plaintiff and may not have been affected by *Twombly*.

¹⁰ Robert Bone, *Twombly, Pleading Rules, and the Regulation of Court Access* 6-7 (Boston University School of Law Working Paper No. 08-34, 2008), *available at* http://www.bu.edu/law/faculty/scholarship/workingpapers/2008.html.

¹¹ Swierkiewicz v. Sorema N.A., 534 U.S. 506 (2002).

¹² Erickson v. Pardus, 127 S. Ct. 2197 (2007).

the prison officials concluded that it was used for dispensing illegal drugs. They suspected Erickson.) It is unusual for doctors to withdraw treatment from patients with serious diseases. Thus it was plausible that Erickson had a valid claim for relief.

Common experience tells us that the claims in *Swierkiewicz* and *Erickson* were plausible. They described situations that differed from the routine enough to make the Supreme Court believe that there could be something there. A lay observer might say the same thing about *Twombly*. The Supreme Court, however, has long experience with antitrust conspiracy cases and has mastered some economics through its analysis of antitrust matters. The Court was well aware that firms routinely act in parallel for purely competitive reasons such as responding to changes in demand; and it has decided firms do not violate Section 1 of the Sherman Act even when they consciously act in parallel to maintain prices and profits. The academic economists who submitted an amicus brief in support of reversing the Second Circuit emphasized these points as well. Section 1 requires a conspiracy which, in turn, entails communication among the firms. The plaintiffs therefore need facts that, taken as true, would indicate that such a conspiracy was plausible. Parallel behavior did not, because it is normal conduct among businesses in the same market.

Statistical theory provides a helpful way to think about the role of facts in meeting the *Twombly* plausibility standard. Reverend Thomas Bayes, an early 18th century mathematician, is the intellectual father of a branch of statistics that examines how information changes one's estimates of whether something is likely. If it had never snowed in Los Angeles in June most people would expect that it would not snow in Los Angeles this coming June. If last June it had snowed for the first time people would update their prior beliefs and conclude that it was at least possible that it could snow this coming June.

The Supreme Court's plausibility test starts with the prior belief that before examining the complaint the plaintiff does not have a cause of action. The purpose of the complaint is to provide facts that, taken as true, would change that expectation to some degree. That is consistent with the liberal pleading standards reaffirmed in *Erickson* two weeks after *Twombly*. The court has to take the facts in the complaint as true. It then has to determine whether those facts move the needle from neutral (the plaintiff is no different from other individuals or businesses that are not entitled to relief) to positive (the plaintiff has presented some facts that make it plausible that she is titled to relief). In *Twombly* the "parallel behavior" evidence left the needle on neutral while the facts pled in *Erickson* and *Swierkiewicz* moved the needle in the plaintiffs' direction in the Court's mind.

IV. HOW FAR MUST PLAINTIFFS MOVE THE NEEDLE?

Of course one man's "plausible" is another man's "give me a break." That leaves

the question of how far plaintiffs must move the needle to fend off a motion to dismiss. In *Twombly* the plaintiffs had a bit more than the bald claim of parallel behavior, such as a letter from a Congressman to the U.S. Department of Justice complaining about a conspiracy and a newspaper article that quoted a Baby Bell executive in a way that the plaintiffs claimed pointed to a conspiracy. In *Swierkiewicz* one could argue that a French company viewing a native French employee as better than an American (or an Hungarian-American) is not so surprising. But in any event *Twombly* did not have enough for seven of the Supreme Court Justices.

An interesting question is whether "how far the needle must move" depends on the case. The Supreme Court expressed a concern in *Twombly* that a too lenient pleading standard would unleash massive and expensive discovery and could result in a settlement just to avoid the cost of a nuisance case. The Baby Bells would have been subject to discovery of information on their dealings with each other and with potential entrants over a decade. The plaintiffs sought to certify a class that would include a large portion of the American population. If the case survived certification—a hardly unusual event for Section 1 cases—the Baby Bells would have been subject to massive financial exposure and would have likely settled even if they were likely to prevail at trial or on appeal. (The flip side of this is that if the plaintiffs did have a valid claim for relief the defendants' actions probably cause substantial ongoing harm.)

Whether the courts say so or not, one can imagine the courts requiring the needle to move farther in allowing a case to proceed that will impose substantial costs on the defendant and the court system, thus resulting in settlement that is not based on the merits, and demanding the needle to move less far in allowing a case to proceed that will not impose significant costs, or has other extenuating circumstances. Both *Swierkiewicz* and *Erickson* were single-plaintiff cases. William Erickson filed without counsel and the Supreme Court insisted on greater latitude for pleadings for a motion filed *pro se*.

V. MEETING THE PLAUSIBILITY TEST

Twombly and Iqbal serve notice to plaintiffs that while a short plain statement of their case is all that is needed, that statement better say something that persuades a court that the plaintiffs have a plausible case. It also provides a roadmap to defendants who want a shot at getting a case tossed before running up significant legal bills. Economic and statistical evidence will often play a role in these considerations especially in antitrust and employment discrimination cases.

VI. ANTITRUST

The courts rely extensively on economic reasoning as reflected in the spate of Supreme Court decisions in the last five years, especially those cases involving singlefirm conduct. Modern economics has identified circumstances in which it is possible that business practices reduce consumer welfare, which is the touchstone of modern antitrust. But it has also demonstrated that much behavior that was viewed as suspect can be explained on the grounds of economic efficiency. Courts may be more reluctant, following *Twombly*, to allow antitrust complaints that do not plead something that would allow the court to distinguish anticompetitive from pro-competitive behavior.

The plaintiff in *Port Dock*, for example, claimed that the defendant's vertical integration and subsequent refusal to deal was anticompetitive.¹³ The Second Circuit thought it was *possible* that vertical integration could lead to a claim that deserved relief. It noted

there may be special circumstances in which a monopolist's vertical expansion could be anticompetitive, such as where the monopolist uses the vertical integration to facilitate price discrimination, to avoid government regulation of price at one level, or to preserve its production monopoly by putting up entry barriers to new competitors seeking to enter at the production level.

But the plaintiff had not pled any facts to make the claim *plausible*. In upholding the lower court's dismissal of this Sherman Section 2 case, the Second Circuit noted that the plaintiff failed to allege "any such circumstance that would make [the defendant's] vertical integration and refusal to deal with it anticompetitive." To succeed with their complaints, antitrust plaintiffs must start with a viable anticompetitive theory and plead facts that support it.

Twombly and Port Dock point to a general lesson. An antitrust plaintiff has to show that the defendant engaged in practices that firms do not ordinarily engage in. Importantly, for Section 2 cases, modern economics has shown that many previously suspect acts are commonly undertaken by competitive firms. It is now well-known that firms without significant market power engage in price discrimination, tie and bundle, offer price discounts, and enter into exclusive arrangements. They do so because these practices benefit their customers, lower costs, or solve other economic problems such as the recovery of fixed costs. Since firms without market power engage in these practices, the fact that a firm has market power and engages in these practices should not by itself move the needle. As it was with the Baby Bell parallel behavior, conduct that is consistent with competitive conduct should not be the basis for relief.

A question is how far the courts will go in allowing evidence of competitive conduct. The Supreme Court has recognized in *Independent Ink*¹⁴ that tying is commonplace. One could argue that a plaintiff pursuing a tying claim should have to show not only that the defendant has market power and engaged in tying but also that there is significant demand to offer the tying product separately from the tied product and that its behavior does not make economic sense. There may be other situations,

¹³ Port Dock & Stone Corp. v. Oldcastle Northeast, Inc., 507 F.3d 117 (2d Cir. 2007).

¹⁴ Illinois Tool Works, Inc. v. Independent Ink, Inc., 125 S.Ct. 2937 (2005).

however, in which the courts have not recognized that certain behavior is commonplace. It remains to be seen how far the courts will go in allowing defendants to submit evidence at the motion to dismiss stage—for example an affidavit from an economist—that the behavior is routine.

Antitrust plaintiffs can overcome these hurdles by presenting "plus factors" that move the needle sufficiently far. Economics can help here as well. Footnote 4 of *Twombly* even provided some pointers. Quoting the defendants' brief, the Court noted that the parties agreed that a conspiracy was plausible when there was evidence of "complex and historically unprecedented changes in pricing structure made at the very same time by multiple competitors, and made for no other discernible reason." The plaintiffs in *In re Graphics Processing Units Antitrust Litigation* recovered from the granting of a motion to dismiss by filing an amended complaint that pointed to this sort of evidence. The district court let them through the gate the second time.

VII. EMPLOYMENT DISCRIMINATION

Statistical evidence is commonly used in employment discrimination cases, especially those that are destined for class certification. As with antitrust cases the key question is whether plaintiffs have pled enough facts to make the claim for relief plausible. Two examples, one made up and the other real, illustrate how *Twombly* affects the use of statistical evidence for plaintiffs and defendants.

Consider a company that has 50 regional districts. A small group of plaintiffs belonging to a protected minority group argues that there is a pattern and practice of discrimination against the minority group because, in the last 5 years, no minority promotions from the district-manager position to the division-manager position have taken place in 5 districts. Is this enough in light of *Twombly?* A lay person might think so and the courts have pointed to the "inexorable zero"¹⁷ as evidence of nefarious goings on. To a statistician, however, those facts by themselves do not move the needle at all.

The fact that there are 5 districts with no minority promotions could be due to a number of factors—among them, it is at least possible that no promotions whatsoever were made in some districts and, furthermore, even if some were made, it is possible that no minority candidates for promotion were available at the time. Plaintiffs should present enough factual evidence to demonstrate, even qualitatively, that that there were enough promotions and enough minority candidates to make it likely that there would be statistically significant disparities. When plaintiffs do not present enough evidence, there is an opening for defendants to the extent the statistical evidence is central to the complaint.

¹⁵ Bell Atlantic Corp v Twombly, *supra* note 2, footnote 4 at 9.

¹⁶ In re Graphics Processing Units Antitrust Litig., 483 F.Supp.2d 1356 (Jud. Pan.Mult.Lit. 2007).

¹⁷ Teamsters v. United States, 431 U.S. 324 (1977).

Plaintiffs often present evidence of gross statistical disparities in the work force composition or wage disparities as part of their complaint. For example, in the *WalMart* employment litigation in the Ninth Circuit the plaintiffs presented evidence of the fact that two-thirds of Wal-Mart employees were female but only one-third of Wal-Mart managers were female. They interpreted this fact as evidence of discrimination. The district court certified a very large class of plaintiffs. The Ninth Circuit upheld the class on appeal. A member of the appeals panel, Judge Kleinfeld, wrote a dissenting opinion which echoed considerations that are important post- *Twombly.*¹⁸ He pointed out that plaintiffs' statistics did not compare all women who wanted to become managers at Wal-Mart with all men who wanted to become managers at Wal-Mart. The one-third/two-thirds comparison just focused on all male and female employees, whether they desired management jobs or not. These sorts of gross statistical comparisons did not have any implication for whether there was or was not gender discrimination. In our language, they did not move the needle in terms of plausibility.

As a general matter, one could argue under *Twombly* that plaintiffs have to present evidence on the work force that shows that discrimination in particular practices is plausible. Based on general labor market data and experience, the fact that managers were less likely to be women than were employees overall should not surprise us. As of 2000, women comprised 46.8 percent of the civilian labor force but only 26.3 percent of general and operational managers. Whether the particular breakdown at WalMart should surprise us would depend on the precise occupational mix and other factors such as the qualifications for being a store clerk versus being a manager. Evidence that other similar retailers have a higher proportion of women in managerial positions would, on the other hand, surprise us and make the claim of class-wide discrimination more plausible.

VIII. CONCLUSION

Plaintiffs have to present facts in their complaint that make it plausible that they are entitled to relief. That means stating facts that are different enough from routine behavior and that support the claim for relief. Lawyers should consider the use of economic and statistical evidence carefully in fashioning their complaints and in seeking the dismissal of complaints. Disciplines such as economics and statistics provide frameworks for establishing whether facts are far enough away from "neutral" to make it plausible that the plaintiff has a valid claim.

¹⁸ Dukes et al. v. Wal-Mart, Inc. Nos. 04-16688, 04-16720 2007 9th Cir. WL 329022 (Feb. 6, 2007).

¹⁹ U.S. Bureau of the Census, 2000. Calculated using the EEO Data Tool.