

Washington and Lee Law Review

Volume 64 | Issue 4 Article 14

Fall 9-1-2007

The Predatory Pricing Puzzle: Piecing Together a Unitary Standard

Kimberly L. Herb

Follow this and additional works at: https://scholarlycommons.law.wlu.edu/wlulr



Part of the Antitrust and Trade Regulation Commons

Recommended Citation

Kimberly L. Herb, The Predatory Pricing Puzzle: Piecing Together a Unitary Standard, 64 Wash. & Lee L. Rev. 1571 (2007).

Available at: https://scholarlycommons.law.wlu.edu/wlulr/vol64/iss4/14

This Note is brought to you for free and open access by the Washington and Lee Law Review at Washington and Lee University School of Law Scholarly Commons. It has been accepted for inclusion in Washington and Lee Law Review by an authorized editor of Washington and Lee University School of Law Scholarly Commons. For more information, please contact christensena@wlu.edu.

The Predatory Pricing Puzzle: Piecing Together a Unitary Standard

Kimberly L. Herb*

Table of Contents

I.	Introduction	1572
II.	Overview of Antitrust Law and Predatory Pricing	1576
III.	Predatory Pricing in Practice—Spirit Airlines, Inc. and AMR Corp. A. Spirit Case History	1581
IV.	The Economics of Predation—Evaluating Below-Cost Pricing	1589 1591
V.	Do the Spirit and AMR Corp. Holdings Constitute a Circuit Split?	1599
VI.	 A New Test for Predation	1604 1607 1610

^{*} Candidate for J.D., Washington and Lee University School of Law, May 2008; B.A., University of Virginia, January 1999. I would like to thank Rory Gray, Meredith Abernathy, Professor Margaret Howard, and Helena Gardner for their insight and feedback. I also wish to thank my mother, Janet W. Herb, for her support and my brother, Steven Herb, who served as my reference for everything related to the airline industry.

VII.	Criticisms	. 1614
VIII.	Conclusion	.1616

"[P]redatory pricing schemes are rarely tried, and even more rarely successful."

I. Introduction

Americans live in a Wal-Mart age, an age in which many of us engage in the never ending search for the lowest price and the best deal. We drive hours to outlet malls, the land of permanent sales and discounts. We google and ebay until there is nary a website left unturned. And we line-up in the pre-dawn hours the day after Thanksgiving to rush down store aisles like children tearing through wrapping paper on Christmas morning. Yet, with some particular products and services, our search yields no results. In industries from gasoline to tobacco and airlines to soft drinks, a few providers control decisions related to the price, quantity, and quality of the good or service.

These economic anomalies frequently have economic explanations. For instance, there may be insufficient demand to support more than a few producers or too little revenue to entice additional players. Sometimes, however, the lack of competition derives from systemic failures in the market. Sometimes companies seem to prevail by brute force, using questionable means to prevent the formation of, or quickly quashing, any competition. Antitrust law was designed to address situations like these.

No area of law seems more in line with the Wal-Mart age than antitrust. After years debating whether antitrust law serves economic or social goals, American courts clearly recognize economics and the preservation of competition and efficiency as antitrust's primary focus.² Practically speaking, this means antitrust laws seek to discipline anticompetitive behavior that results in higher prices, reduced output, or lowered innovation³—goals undoubtedly shared by Wal-Mart. Without such laws, firms might take advantage of their

^{1.} Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 589 (1986).

^{2.} See Fred S. McChesney, Talking 'Bout My Antitrust Generation: Competition for and in the Field of Competition Law, 52 EMORY L.J. 1401, 1407 (2003) ("[T]he debate over whether antitrust is to pursue economic or social goals is finished: economics has won.").

^{3.} See Jonathan B. Baker, The Case for Antitrust Enforcement, 17 J. ECON. PERSP., Autumn 2003, at 27, 27 (describing the "central role" of antitrust as "protecting consumers against anticompetitive conduct that raises prices, reduces output, and hinders innovation and economic growth").

market power, which can distort competition and cause long-term consumer harm.⁴ In fact, studies have shown that, in the absence of antitrust enforcement, the unchecked exercise of market power and anticompetitive conduct costs the American economy more than \$100 billion annually.⁵

Federal antitrust law began with the Sherman Act. While the Sherman Act usually is invoked to address collective and collusive behavior by two or more firms, Section 2 of the Act also addresses conduct by individual organizations. The language governing this conduct is surprisingly austere, prohibiting monopolization or attempted monopolization without further definition or clarification. Yet, over the course of more than a century, courts have interpreted and clarified its terms and placed a number of activities under the Section 2 umbrella. This Note looks at one such activity—predatory pricing.

Predatory pricing occurs when a business charges less for its product or service than it cost to produce (below-cost pricing).¹⁰ It is conducted by businesses with monopoly power—organizations with some degree of control over the price of its product or service.¹¹ The goal of such conduct is to drive rival competitors, particularly more efficient competitors, from the market.¹² Once the business eliminates its rivals, it can raise prices and resume receiving

^{4.} See id. at 38 ("[W]ithout antitrust, firms can and do exercise market power, to the detriment of consumers and other buyers.").

^{5.} See id. at 45 ("[T]he costs to the economy from the exercise of market power could readily be at least 1 percent of national product, or in excess of \$100 billion annually, notwithstanding the antitrust laws.").

^{6. 15} U.S.C. § 1 (2000); see also ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 19 (The Free Press 1993) (1978) ("Federal antitrust policy began when President Benjamin Harrison signed . . . the Sherman Act.").

^{7.} See 15 U.S.C. § 2 (prohibiting monopolization or attempted monopolization).

^{8.} See id. (declaring "[e]very person who shall monopolize, or attempt to monopolize . . . guilty of a felony").

^{9.} See RICHARD A. POSNER, ANTITRUST LAW 193 (2d ed. 2001) (describing the "exclusionary practices" falling under Section 2).

^{10.} See Alexander C. Larson & William E. Kovacic, Predatory Pricing Safeguards in Telecommunications Regulation: Removing Impediments to Competition, 35 St. Louis U. L.J. 1, 3 (1990) (declaring "pricing its services at levels below their economic costs" to be the aim of predatory pricing).

^{11.} See Thomas F. Cotter, Note, Cargill, Inc v. Monfort of Colorado, Inc.: The Supreme Court Restricts Private Antitrust Challenges to Horizontal Mergers, 1987 Wis. L. Rev. 503, 522 (1987) ("To engage successfully in . . . predatory activity, however, a firm must possess . . . 'market power,' which is to say that the firm enjoys some degree of control over the price that prevails on the market").

^{12.} See Larson & Kovacic, supra note 10, at 3 (indicating that rivals are driven from the market as a result of below-cost pricing).

monopoly profits.¹³ Thus, while price cuts ordinarily are desirable, predatory pricing actually harms consumers by stifling competition, increasing prices over the long-term, eliminating choices between providers, and reducing incentives to innovate and improve efficiency.¹⁴

In Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., ¹⁵ the Supreme Court set a high threshold for predatory pricing claims. ¹⁶ On one hand, the Court sought to address activity that hinders competition. ¹⁷ On the other hand, the Court expressed skepticism that firms can successfully engage in predatory pricing, which the Court reasoned reduced the necessity of legal rules. ¹⁸ The Court weighed these factors and declared an exacting standard, a standard which even the Court admitted would be hard to meet. ¹⁹

In practice, the *Brooke Group* standard has proven difficult to satisfy. Commentators predicted predatory pricing would be a "dead letter in federal antitrust cases" in the wake of the Court's holding.²⁰ After years of failed government and civil predatory pricing litigation, practitioners declared that prediction largely true.²¹ In fact, in the fifteen years since the Court announced its decision in *Brooke Group*, no plaintiff has ultimately prevailed on a predatory pricing claim.²²

^{13.} See Cotter, supra note 11, at 523 (stating that the purpose of predatory pricing is to eliminate competition so the company can "subsequently recoup[] its short-term losses by charging supracompetitive prices").

^{14.} See Frank X. Schoen, Note, Exclusionary Conduct After Trinko, 80 N.Y.U. L. REV. 1625, 1628 (2005) (describing the harm to consumers from a failure to address predatory pricing).

^{15.} See Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 222–24 (1993) (concluding that a predatory pricing claim under Section 2 of the Sherman Act requires: (1) the plaintiff establish the alleged predator priced below its costs; and (2) the alleged predator had the prospect of recouping losses sustained during the predation period).

^{16.} See id. at 226 (noting the difficulty of establishing a cause for recovery).

^{17.} See id. at 222 (stating that Sherman claims address acts "with an object to eliminate or retard competition and thereby gain and exercise control over prices in the relevant market").

^{18.} See id. at 226–27 (reaffirming earlier statements that predatory pricing is rarely proven and that erroneous findings of predation could hamper competition).

^{19.} See id. at 226 ("These prerequisites to recovery are not easy to establish.").

^{20.} Kenneth L. Glazer, *Predatory Pricing and Beyond: Life After* Brooke Group, 62 ANTITRUST L.J. 605, 606 (1994).

^{21.} See James R. Weiss, Kirkpatrick & Lockhart Preston Gates Ellis LLP, New Life for Predatory Pricing Claims, Nov. 29, 2005, http://www.klgates.com/newsstand/Detail.aspx? publication=3264 (last visited Mar. 7, 2007) (describing the case history as "suggest[ing] the near impossibility of winning a predatory pricing case") (on file with the Washington and Lee Law Review).

^{22.} See Aaron S. Edlin, Stopping Above-Cost Predatory Pricing, 111 YALE L.J. 941, 941 (2002) ("Since 1993, when the Supreme Court decided Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., no predatory pricing plaintiff has prevailed in a final determination

The failure of plaintiffs to prosecute alleged predatory pricing is particularly noteworthy given increasing evidence that predatory pricing exists. Economic theory recognizes the rationality and plausibility of predatory pricing. Furthermore, economists and antitrust experts have examined cases and discovered instances of predation. Commentators accordingly state that there is a disconnect between judicial skepticism... [that] assumes that predation is extremely rare, [and] sound empirical and experimental studies, as well as modern economic theory, [which] do not justify this assumption.

Despite the significant hurdles to success, parties continue to file predatory pricing claims.²⁷ This Note explores two recent cases involving the airline industry: *United States v. AMR Corp.*²⁸ and *Spirit Airlines, Inc. v. Northwest Airlines, Inc.*²⁹ The latter case represents a significant departure from the failures of recent predation claims. In *Spirit*, the Sixth Circuit found evidence of predation and the plaintiff survived a motion for summary judgment.³⁰ One commentator declared that *Spirit* "will encourage potential plaintiffs to reconsider a cause of action that may have been left for dead."³¹

This Note argues that *Spirit*, in fact, can serve as a model for plaintiffs alleging predatory pricing. While most plaintiffs attempting to prove predatory

in the federal courts."). While one scholar stated that there have been more recent victories, the cases cited do not support the proposition that predatory pricing has been conclusively shown. Daniel A. Crane, *The Paradox of Predatory Pricing*, 91 CORNELL L. REV. 1, 4 (2005). The cited cases include one settled before appeal and a second case where the majority opinion rejected earlier characterizations of the claim as one of predatory pricing. *See id.* at 4 n.12 (listing the recent predatory pricing "victories").

- 23. See Patrick Bolton et al., Predatory Pricing: Strategic Theory and Legal Policy, 88 GEO. L.J. 2239, 2244-45 (2000) (describing incidents of predatory pricing).
- 24. See Robert D. Joffe, Antitrust Law and Proof of Consumer Injury, 75 ST. JOHN'S L. REV. 615, 625 (2001) ("[S]cholars have embraced the scholarship of economists who have developed models that suggest that predatory pricing is a rational and plausible strategy.").
- 25. See Bolton et al., supra note 23, at 2246 (presenting studies of predatory pricing claims, including one which found predatory pricing in twenty-seven of forty litigated cases).
 - 26. Id. at 2249.
- 27. See Crane, supra note 22, at 4-5 (stating plaintiffs "continue to file a significant number of federal predatory pricing cases").
- 28. See United States v. AMR Corp., 335 F.3d 1109, 1120-21 (10th Cir. 2003) (holding that the government failed to establish below-cost pricing).
- 29. See Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 921 (6th Cir. 2005) (holding that a reasonable trier of fact could find sufficient evidence of predatory pricing, rendering the grant of summary judgment inappropriate).
- 30. See id. at 921 (finding that "a reasonable trier of fact could conclude that Northwest engaged in predatory pricing").
 - 31. Weiss, supra note 21.

pricing will present the trier of fact with abstract economic theories and assumptions about costs, revenues, and how these factors affect business decisions, the *Spirit* court eschewed this mechanical approach. Instead, the Sixth Circuit employed a practical approach. It examined the data and information used by the defendant in making its business decisions and declared that predation could be shown based on this evidence. This Note contends that a similar approach should be used in all predation cases.

Part II of this Note explores the foundations of antitrust law and predatory pricing. Part III presents the factual background of both the *Spirit* and *AMR Corp*. cases as an illustration of the conduct and issues involved in predatory pricing cases. Part IV describes the information that is relevant in determining whether a firm engaged in predatory pricing. It also provides information on how both the *Spirit* and *AMR Corp*. courts applied these rules. Next, Part V searches for commonalities in these two cases, which appear on the surface to contradict one another. Part VI then explains factual differences between these two cases. It proposes a new test for below-cost pricing that can be used in future cases and explores the *AMR Corp*. record to reconcile this case with the holding in *Spirit*. Furthermore, it argues that this Note's proposed test can be applied outside of the context of the airline industry. Finally, Part VII examines possible criticisms of this Note's proposal.

II. Overview of Antitrust Law and Predatory Pricing

The Sherman Act of 1890 is the foundation of American antitrust law.³² While some have debated the ultimate goals of the Sherman Act and other antitrust laws,³³ Congress passed the statute to protect competition during an era of increasing resentment of opportunistic and monopolistic business

^{32.} See POSNER, supra note 9, at 33 (calling the Sherman Act the "basic federal antitrust law"); see also 1 The LEGISLATIVE HISTORY OF THE FEDERAL ANTITRUST LAWS AND RELATED STATUTES 1 (Earl W. Kintner ed., 1978) [hereinafter The LEGISLATIVE HISTORY] ("The Sherman Act provides the basic pronouncement of American antitrust policy").

^{33.} See Robert H. Lande, Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged, 34 HASTINGS L.J. 65, 67-70 (1982) (discussing Congress's intent in enacting antitrust laws and whether its motives were solely economic, namely the protection of efficiency and competition, or also included broader social goals); see also John H. Shenefield & Irwin M. Stelzer, The Antitrust Laws: A Primer 10-11 (4th ed. 2001) ("The language of the statutes, the history of their enactment, and their subsequent interpretation by courts and commentators provide several major themes, but no unanimity. The precise definition of the goals of antitrust appears to depend on which antitrust statute is being analyzed, by whom, and for what purpose.").

practices.³⁴ The Supreme Court declared: "The heart of our national economic policy long has been faith in the value of competition. In the Sherman and Clayton Acts, as well as in the Robinson-Patman Act, 'Congress was dealing with competition, which it sought to protect, and monopoly, which it sought to prevent.'"³⁵

Much of antitrust law concerns itself with relationships between business organizations, specifically collusion between these organizations that can result in the restraint of trade.³⁶ Section 2 of the Sherman Act, however, addresses businesses' efforts to exclude competition, acts known as exclusionary practices.³⁷ This section specifically prohibits monopolization or attempted monopolization related to trade and commerce.³⁸ Among the most common acts prohibited by Section 2 are "tying, predatory price cutting, vertical mergers, exclusive dealing, and refusals to deal."³⁹

Predatory pricing, one of the prohibited Section 2 acts, is distinguishable from ordinary price cuts. Antitrust laws do not generally impose limits on price competition or impose price floors. In fact, "lower prices... are the inevitable result of competition; indeed if competition did not have that effect it would be of little use." Firms may, however, set prices at an unreasonably low rate. Such low rates are intended to eliminate or intimidate competition, allowing the alleged predator to raise prices once competition is deterred and ultimately recoup any short-term losses. The law restricts such behavior

^{34.} See The Legislative History, supra note 32, at 11 (noting that "the accumulation and use of vast economic power by . . . various business organizations . . . caused great public hostility" and stating that "many Americans resented the often ruthless manner in which many businesses were operated"); Posner, supra note 9, at 33 (stating that the Congress enacted the Sherman Act "against a background of perceived cartelization and monopolization of the American economy").

^{35.} Standard Oil Co. v. FTC, 340 U.S. 231, 248–49 (1951) (quoting A.E. Staley Mfg. Co. v. FTC, 135 F.2d 453, 455 (7th Cir. 1943)).

^{36.} See 15 U.S.C. § 1 (2000) (prohibiting contracts and conspiracies in the restraint of trade).

^{37.} See id. § 2 (prohibiting monopolization and attempted monopolization).

^{38.} See id. (prohibiting monopolization and attempted monopolization of any part of trade or commerce).

^{39.} Posner, supra note 9, at 193.

^{40.} See 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 723(a) (2d ed. 2002) (stating that while "antitrust law is not usually concerned with" limiting prices, such action can have "anticompetitive effects").

^{41.} W. Dennis Cross, What's Up with Section 2?, 18 ANTITRUST, Fall 2003, at 8, 8.

^{42.} See id. at 11 (stating that some "low prices may have anticompetitive effects").

^{43.} See Areeda & Hovenkamp, supra note 40, \P 723(a) (indicating that rates are intended to "destroy rivals or intimidate them from selling at a lower price than the defendant charges").

^{44.} See id. (arguing that a "recoupment" period follows the period of predation, during

because "[a] firm that drives out, excludes, or disciplines rivals by selling at nonremunerative prices is not competing on the merits."⁴⁵

A plaintiff alleging a violation of Section 2 must show two elements. First, the plaintiff must demonstrate that the alleged predator possesses monopoly power in the relevant market. 46 Second, the alleged predator must have willfully acquired or maintained that power and that power must not be the result of "a superior product, business acumen, or historic accident."⁴⁷ In Brooke Group, the Supreme Court provided an analytical framework for how these two elements apply in predatory pricing cases. ⁴⁸ A plaintiff must prove: (1) the alleged predator's prices were "below an appropriate measure of its rival's costs;" and (2) that the suspected predator had a "dangerous probability[] of recouping its investment in below-cost prices."⁴⁹ The second element has also been characterized as requiring a "market structure that makes predation plausible."50 This essentially requires an organization to have the ability to control prices during and after the period of predation, recouping losses sustained during the predation period by increasing prices after competition abandons the market.⁵¹ The trial court will consider the alleged predator's ability to absorb losses, its market capacity, degree of monopoly power, and any barriers preventing other competitors from entering the market post-predation.⁵²

which the predator can recover losses sustained during the predatory period).

- 45. *Id*.
- 46. See United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966) (stating that the first element requires "the possession of monopoly power in the relevant market").
- 47. See id. (stating that the second element requires that the alleged predator engaged in "the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident").
- 48. See infra text accompanying notes 49–50 (describing the Supreme Court's holding in Brooke Group).
- 49. Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 222-24 (1993).
- 50. AREEDA & HOVENKAMP, supra note 40, ¶ 724(a) (characterizing the test in predatory pricing claims as requiring "both a market structure that makes predation claims possible . . . and prices below the relevant measure of cost ").
- 51. See id. ¶ 724(b) ("Recoupment requires not merely that post-predation monopoly prices be maintainable, but that they be of sufficient duration and magnitude to offset the costs of predation, even after the costs are adjusted for the risk and time value of the earlier investment in predation."). But see POSNER, supra note 9, at 195 (arguing that while many courts require a showing of "market power" to satisfy the first element of the predatory pricing test, the use of the term is confusing and misleading and, accordingly, proposing the use of the term "monopoly power").
- 52. See Cargill, Inc. v. Monfort of Colo., Inc., 479 U.S. 104, 110 (1986) (indicating the evidence necessary to succeed on a predatory pricing claim).

Some commentators argue that predatory pricing is never rational because it is nearly, if not entirely, impossible to prevent the entry of, or profit from the exclusion of, market competition.⁵³ The so-called "Chicago School" is largely credited with this view, which is predicated on the belief that an organization can never recoup losses sustained during the predatory period.⁵⁴ Given this impossibility, members of this school argue that rules regarding predatory pricing are unnecessary.⁵⁵ Others, however, believe that companies do engage in these practices, albeit rarely, in an effort to maximize profits.⁵⁶

While the Supreme Court does not appear to have adopted either viewpoint, the Court has consistently expressed skepticism regarding the likelihood of predatory pricing.⁵⁷ One of its more significant cases on predatory pricing cites the work of Judge Bork, one of the founders of the Chicago School.⁵⁸ In that case, the Court noted, with seeming approval, then-Professor Bork's view that organizations face significant hurdles in their efforts to recoup losses, making such a strategy "inherently uncertain." The Court then stated that "there is a consensus among commentators that predatory pricing schemes

^{53.} See POSNER, supra note 9, at 194 ("Some economists believe that it is virtually impossible for a firm or group of firms ever to exclude competitors or potential competitors from the market").

^{54.} See Jonathan B. Baker, Predatory Pricing After Brooke Group: An Economic Perspective, 62 ANTITRUST L.J. 585, 585–86 (1994) (describing the Chicago School's theory regarding predatory pricing).

^{55.} See BORK, supra note 6, at 154 (arguing that predatory pricing does not exist, or only rarely exists, and that courts trying to address such behavior would have a difficult time distinguishing lawful from unlawful practices, resulting in "much more harm than good").

^{56.} See Posner, supra note 9, at 194 ("Although documented cases of genuinely exclusionary practices are rare, they do exist, and economic theory points to conditions occasionally encountered in which they are a rational profit-maximizing tactic.").

^{57.} See infra text accompanying notes 62-65 (discussing the Court's concerns regarding predatory pricing claims).

^{58.} See Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 589 (1986) (including an excerpt from Judge Bork's *The Antitrust Paradox* in its discussion of predatory pricing).

^{59.} See id. (citing Judge Bork for the proposition that predatory pricing is unlikely). The Court stated:

As [Bork's] explanation shows, the success of such schemes is inherently uncertain: the short-run loss is definite, but the long-run gain depends on successfully neutralizing the competition. Moreover, it is not enough simply to achieve monopoly power, as monopoly pricing may breed quick entry by new competitors eager to share in the excess profits. The success of any predatory scheme depends on *maintaining* monopoly power for long enough both to recoup the predator's losses and to harvest some additional gain.

are rarely tried, and even more rarely successful."⁶⁰ That said, the Court acknowledged in another case that, while rare, predatory pricing does occur.⁶¹

Brooke Group is one of the Court's more recent attempts to address predatory pricing. It stated that the fact "[t]hat below-cost pricing may impose painful losses on its target is of no moment to the antitrust laws if competition is not injured: It is axiomatic that the antitrust laws were passed for 'the protection of competition, not competitors.'"⁶² Furthermore, the Court noted the difficulty of distinguishing truly anticompetitive behavior from behavior that stimulates competition and benefits consumers, ⁶³ and it said that an erroneous finding of predation could actually deter beneficial competition. ⁶⁴ A high standard, therefore, is necessary because "[i]t would be ironic indeed if the standards for predatory pricing liability were so low that antitrust suits themselves became a tool for keeping prices high." ⁶⁵ Despite this seeming skepticism, however, the Court established the standards for predatory pricing claims previously mentioned. ⁶⁶

III. Predatory Pricing in Practice-Spirit Airlines, Inc. and AMR Corp.

The following cases—Spirit Airlines, Inc. v. Northwest Airlines, Inc. and United States v. AMR Corp.—involve allegations of predatory pricing. Both cases arise out of competition between dominant and low-cost airlines.⁶⁷ They illustrate the type of conduct at issue in predation cases, as well as the questions facing courts.

^{60.} Id.

^{61.} See Cargill, Inc. v. Monfort of Colo., Inc., 479 U.S. 104, 121 (1986) ("While firms may engage in the practice [of predatory pricing] only infrequently, there is ample evidence suggesting that the practice does occur.").

^{62.} Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 224 (1993) (quoting Brown Shoe Co. v. United States, 370 U.S. 294, 320 (1963)).

^{63.} See id. at 226 ("'[T]he mechanism by which a firm engages in predatory pricing—lowering prices—is the same mechanism by which a firm stimulates competition '" (quoting Cargill Inc. v. Monfort of Colo., Inc., 479 U.S. 104, 122 n.17 (1986))).

^{64.} See id. at 226 (discussing how an erroneous finding "chill[s] the very conduct the antitrust laws are designed to protect").

^{65.} Id. at 226–27.

^{66.} See supra notes 48-51 and accompanying text (discussing the Brooke Group Court's analytical framework for the evaluation of predatory pricing claims).

^{67.} Predatory pricing is more plausible in the airline industry given high barriers to entry.

A. Spirit Case History

In November 1995, Spirit Airlines—a low-cost airline founded in 1980⁶⁸—announced the initiation of service from Detroit to Philadelphia.⁶⁹ Published fares ranged from \$49 to \$89 one-way.⁷⁰ Spirit founder Ned Homfeld drew attention to the flexibility and competitive nature of this service.⁷¹ He indicated that tickets purchased twenty-four hours prior to travel cost almost \$800 on traditional carriers, while Spirit offered its low fare regardless of the time of purchase.⁷²

Spirit's Detroit-Philadelphia route proved profitable, and Spirit was sufficiently encouraged to further expand its service.⁷³ In February 1996, Spirit announced a new service from Detroit to Boston, which would begin in April. The flights targeted not only recreational but also business travelers.⁷⁴ Spirit noted that its flight schedule, with a daily flight arriving in Boston at 9:35 a.m. and departing at 5:15 p.m., was "extremely 'business friendly.'" One-way fares ranged from \$69 to \$159.

In 1995, when it began increasing its service, Spirit employed roughly 450 employees and served less than 600,000 passengers per year. Spirit's modest size stood in sharp contrast to that of Northwest Airlines. At that time, Northwest was the fourth largest domestic air carrier, serving more than 50

^{68.} Spirit Airlines, Inc., Spirit Airlines History, http://www.spiritair.com/welcome.aspx? pg=aboutspirit&code=history (last visited Mar. 7, 2007) (on file with the Washington and Lee Law Review).

^{69.} Spirit to Launch Detroit-Philadelphia Service, 322 AVIATION DAILY, Nov. 20, 1995, at 282, 282.

^{70.} Id.

^{71.} See Spirit Adds Flights to Philadelphia Via Metropolitan Airport for Only \$49, P.R. NEWSWIRE, Nov. 19, 1995 (providing the Spirit press release announcing its new routes and fares) (on file with the Washington and Lee Law Review).

^{72.} Id.

^{73.} See Airline Competition: Hearings Before the Subcomm. on Transportation & Related Agencies of the S. Comm. on Appropriations, 105th Cong. 111-23 (1998) [hereinafter 1998 Appropriations Hearing] (statement of Mark Kahan, Executive Vice President and General Counsel, Spirit Airlines, Inc.) (discussing Spirit's success with service to Philadelphia and initiation of service to Boston).

^{74.} See Spirit Airlines Throws Its Own 'Tea Party' With Flights to Boston For Only \$69; New Flights to Beantown Begin April 15, P.R. NEWSWIRE, Feb. 22, 1996 (announcing Spirit's service from Detroit to Boston).

^{75.} See id. (advertising its new Boston service as being "for business travelers and vacationers alike").

^{76.} Spirit Airlines, Inc. v. Nw. Airlines, Inc., No. 00-71535, 2003 WL 24197742, at *23 (E.D. Mich. Mar. 31, 2003).

^{77.} Id. at *2 n.2.

million passengers annually.⁷⁸ Moreover, it was the dominant carrier in Detroit—"control[ing] 64 of Detroit Metro's 86 gates in 1995 and account[ing] for 78 percent of the passenger seats into or out of" Detroit.⁷⁹ It also controlled 70% of the nonstop air traffic from Detroit to Philadelphia and approximately 90% of such traffic from Detroit to Boston.⁸⁰

While Spirit provided nonstop Detroit-Philadelphia service for fares ranging from \$49 to \$89, Northwest charged considerably more. Northwest's lowest one-way, restricted fare for the same flight was \$125, and its lowest unrestricted rate was \$355. Northwest did not initially alter these rates in the wake of Spirit's entry into the market. Within a few months, though, Northwest lowered fares on its Detroit-Philadelphia flights, matching Spirit's \$49 one-way fare. ⁸³

Spirit experienced an "immediate and precipitous decline in bookings" following Northwest's decision to lower its fares. On its Detroit-Philadelphia service, Spirit's load factor—the number of seats used divided by the number of seats available—fell from 87% in May 1996 to 43% by July. Spirit, which

^{78.} Id. at *2.

^{79.} *Id*.

^{80.} Id. at *3-4.

^{81.} Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 923 (6th Cir. 2005).

^{82.} Id.

^{83.} Id. at 924.

^{84.} Id. at 922-24.

^{85.} Id. at 923-24.

^{86.} See id. (noting that Northwest's reduced fare was available "on all of its flights").

^{87.} See id. at 923-24 (reciting Northwest's capacity expectations prior to Spirit's initiation of service and its actual capacity increases following Spirit's entry into the market).

^{88.} Spirit Airlines, Inc. v. Nw. Airlines, Inc., No. 00-71535, 2003 WL 24197742, at *3 (E.D. Mich. Mar. 31, 2003).

^{89.} See infra notes 96–99 and accompanying text (discussing the impact of Northwest's fare changes on Spirit service from Detroit to Philadelphia and Boston).

^{90.} Spirit Airlines, Inc., 2003 WL 24197742, at *3.

had added a second flight to Philadelphia in June, cancelled that flight in late August 1996. By September, Spirit's load factor on this segment fell even further to 31%. Spirit cancelled all of its service from Detroit to Philadelphia on September 29, 1996. With regard to its Detroit-Boston service, Spirit faced significant price competition from the onset of operations, and as a result, its load factor peaked at a mere 31% and fell as low as 17%. Spirit cancelled plans to add a second flight on this route given poor sales and then abandoned the Detroit-Boston route altogether in September 1996.

Following Spirit's cancellation of its Detroit-Philadelphia and Detroit-Boston flights, Northwest increased its fares on both routes. ⁹⁶ Northwest charged, on average, \$152 for a one-way fare on its Detroit-Philadelphia flights in November 1996 while it was competing with Spirit, with actual fares ranging from as low as \$179 for an unrestricted ticket to \$149 for a restricted ticket. ⁹⁷ Early the next year, this fare increased to \$268. ⁹⁸ On its Detroit-Boston flights, Northwest's one-way fare averaged more than \$270 by January 1997, ⁹⁹ a huge increase over the \$69 fare offered a few months before.

Spirit characterized Northwest's actions as monopolistic in the months and years following Spirit's cancellation of its Detroit-Philadelphia and Detroit-Boston routes. In fact, a Spirit executive made this claim at three separate congressional hearings.¹⁰⁰ Several other low-cost carriers complained about

^{91.} See id. (describing the addition of a second Detroit-Philadelphia flight and its cancellation after Northwest's fare change).

^{92.} Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 924 (6th Cir. 2005).

^{93.} Id.

^{94.} Id.

^{95.} Spirit Airlines, Inc. v. Nw. Airlines, Inc., No. 00-71535, 2003 WL 24197742, at *4 (E.D. Mich. Mar. 31, 2003).

^{96.} See infra notes 98-99 (detailing Northwest's fare increases in the wake of Spirit's exit from the Philadelphia and Boston markets).

^{97.} Spirit Airlines, Inc., 2003 WL 24197742, at *3.

^{98.} Id.

^{99.} Id. at *4.

^{100.} See State of Competition in the Airline Industry: Hearing Before the H. Judiciary Comm., 105th Cong. 196–229, 251 (1998) (statement of Mark S. Kahan, Vice Chairman and Chief Operating Officer, Spirit Airlines, Inc.) ("I don't think it's unreasonable to consider Northwest a monopolist in the Detroit/Boston market."); Airline Industry Competition: Hearing Before the Subcomm. on Aviation of the H. Comm. on Transportation and Infrastructure, 105th Cong. (1998) (statement of Mark S. Kahan, Vice Chairman and Chief Operating Officer, Spirit Airlines, Inc.) ("If Northwest's actions in throwing us out of those markets [Detroit-Boston and Detroit-Philadelphia] is not [predation], then there is no such thing as predation."); 1998 Appropriations Hearing, supra note 73, at 114 (characterizing Northwest's actions on the Detroit-Boston and Detroit-Philadelphia routes as "predatory conduct" that was "remarkably blatant").

similar efforts by Northwest and other major carriers, actions which the low-cost carriers believed were designed to eliminate competition. The U.S. Department of Justice responded by investigating four major air carriers. The U.S. Department of Transportation also tried to tackle the issue—proposing new guidelines that would restrict the ability of major air carriers to lower fares and add flight capacity to drive its smaller competitors from the market. 103

Two years later, however, the government had failed to address competition between low-cost and major air carriers. As of 2000, the Department of Transportation guidelines were still in their proposed form and thought by many in the industry to have died "a quiet death." Furthermore, the Department of Justice had yet to take decisive action against Northwest, despite filing a suit against American Airlines. As a result, Spirit opted to pursue the matter independently—it filed suit against Northwest Airlines in March 2000. Spirit alleged that Northwest's actions related to its service to both Philadelphia and Boston constituted multiple violations of the Sherman

^{101.} See Gerry Volgenau, Northwest Rate Low: Frequent Fliers Complain About Prices and Delays, DETROIT FREE PRESS, Apr. 8, 1998, at A1 (stating that Northwest was one of the likely targets of regulation and investigation by the Department of Transportation related to airline competition); see also Maria Recio, U.S. Plans Crackdown on Airline Price Wars, DETROIT FREE PRESS, Apr. 7, 1998, at A1 ("Several small airlines have complained to the Justice Department that unfair competition from Northwest has run them off several routes.").

^{102.} See Charles Boisseau, Has Freedom Resulted in Fairness; Airline Measure's Effects at Issue; Small Carriers Say Majors Use Market Clout Improperly, HOUSTON CHRON., Mar. 31, 1998, at Business 1 ("[T]he Justice Department has launched an antitrust investigation of the four largest carriers—United, American, Delta and Northwest—to look into allegations of 'predatory or exclusionary conduct among airlines at major hub airports,' a spokesman said.").

^{103.} See First Public Comments Show Support for DOT Competition Policy, AVIATION DAILY, Apr. 30, 1998, at 179, available at 1998 WLNR 2171248 ("DOT proposes to impose sanctions against major carriers defending hubs against new entrants if the majors take losses through price cutting and capacity expansion that appear rational only on the expectation that the niche carrier is driven from the market or folds.").

^{104.} See DOT Could Resurrect Contentious Airline Competition Guidelines, 10 WORLD AIRLINE NEWS, Oct. 13, 2000, available at 2000 WLNR 356970 (stating that "[m]any in the industry... surmised that the all-out lobbying against the [Department of Transportation's proposed guidelines] by major airlines succeeded in burying it," but noting that the proposal could be revived).

^{105.} See John Gallagher, Spirit Sues Northwest in Detroit: Discounter Calls Giant Predatory, DETROIT FREE PRESS, Mar. 30, 2000, at C1 (stating that "[t]he Justice Department sued American in May 1999" for alleged monopolization, and noting that Northwest had received an "information request . . . regarding its conduct on routes where it competed with Spirit"); see also supra Part III.B (discussing the AMR Corp. case).

^{106.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., No. 00-71535, 2003 WL 24197742, at *1 (E.D. Mich. Mar. 31, 2003) ("Plaintiff Spirit Airlines, Inc. commenced this suit on March 29, 2000 ").

Act. 107 It sought treble damages and an injunction preventing Northwest from engaging in similar "anticompetitive conduct." 108

B. AMR Corp. Case History

In *United States v. AMR Corp.*, the Tenth Circuit considered a case factually analogous to *Spirit*. AMR Corporation is the parent company of American Airlines, Inc. (American). American is the predominant carrier at the Dallas-Fort Worth International Airport, serving more than 70% of passengers boarding in Dallas. In fact, on all of its routes, American carried between 60% and 100% of passengers traveling to and from Dallas during the 1990s.

In the mid-1990s, several low cost carriers assumed a stronger presence in Dallas, "creat[ing] a new market dynamic" by lowering the cost of flying on some routes. American studied the impact of these carriers and concluded they "posed a serious threat to American's revenues. In a second study, American outlined its strategy to address increased competition from low-cost carriers, which included matching prices and increasing capacity. While this report acknowledged that it would be hard to predict the impact of these measures on the revenue of American's competitors, it noted that American's response "would definitely be very expensive in terms of [American's] short term profitability.

^{107.} See id. (stating Spirit's allegations that Northwest violated Section 2 of the Sherman Act).

^{108.} See id. ("Spirit seeks an award of treble damages amounting to tens of millions of dollars, as well as an order enjoining Northwest from engaging in any further anticompetitive conduct.").

^{109.} American Airlines, AMR Corporation, http://www.aa.com/content/amrcorp/corporate Information/facts/amr.jhtml (last visited Nov. 11, 2007) (on file with the Washington and Lee Law Review).

^{110.} United States v. AMR Corp., 140 F. Supp. 2d 1141, 1149 (D. Kan. 2001).

^{111.} Id.

^{112.} See id. at 1144 ("[L]ow cost carriers created a new market dynamic, charging markedly lower fares on certain routes.").

^{113,} Id. at 1152.

^{114.} *Id.* (presenting the second American study, in which American stated it could compete "by implementing strategies of capacity additions... and strong matching on price and availability").

^{115.} *Id*.

Based on these studies, American formed a "Strategy Working Group." The group met once a month for more than two years to examine competition with low-cost carriers and its impact on American. While much of American's work in this regard was confined to monitoring and evaluating competition, the district court believed the studies and working group laid a foundation for efforts to drive competition out of Dallas. The court stated, "American viewed its [Dallas] [s]trategy as an investment. It also cited a statement by an American executive who indicated that, if aggressive price cuts did not make certain routes profitable, profits would return to the routes when competition was driven from the market.

American's competitive efforts were not limited, however, to studies and strategies. In fact, the government alleged American engaged in predation on numerous routes, including the Dallas-Wichita route. American provided nonstop jet service on this route until the early 1990s. In 1992, however, American began experiencing financial trouble and replaced its jet service with turboprop service, which is more fuel and cost-efficient but significantly slower and less well regarded by consumers. Then, American stopped jet service to Wichita altogether in 1994.

In March 1995, Vanguard Airlines—a low-cost carrier that began flying in 1994—announced it would begin operating two nonstop jet flights from Dallas to Wichita beginning in April 1995. Vanguard's one-way, unrestricted fares on this route ranged from \$39 to \$69. American responded to Vanguard's entry by offering one-way fares that were \$20 more than Vanguard's, though it matched Vanguard's fares for round trip travel. As a result of the increased fare competition between Vanguard and American, the number of passengers

^{116.} See id. at 1152-53 (describing the formation of the Strategy Working Group).

^{117.} See id. at 1153-54 (describing the efforts of the Strategy Working Group).

^{118.} See id. (describing American's Strategy Group and its efforts).

^{119.} Id. at 1154.

^{120.} See id. (recounting American's CEO responding to a comment that aggressive price competition would not aid profitability with the statement that "[i]t will when [the competition] is gone").

^{121.} See id. at 1145 (indicating that the plaintiff primarily alleged predation on seven routes).

^{122.} Id. at 1157.

^{123.} Id.

^{124.} *Id*.

^{125.} Id.

^{126.} *Id*.

^{127.} Id.

flying from Dallas to Wichita doubled, and the average fare for that route fell from \$105 to \$70 in a single year. 128

Despite American's efforts to compete on the price of Dallas to Wichita flights, Vanguard remained competitive because it offered jet, as opposed to turboprop, plane service. Vanguard had captured 46% of the Dallas-Wichita market share by mid-1995, while American's share dropped from 70% to 44% in the first few months of 1995. ¹²⁹ In light of its success on this route, Vanguard increased the number of nonstop jet flights serving the Dallas-Wichita route to four. ¹³⁰

In 1996, American began to compete more aggressively with Vanguard on this route. Though it stopped offering a discount on Vanguard's one-way fares, American matched Vanguard's fares and increased the number of seats available at those rates in May. American increased the number of its roundtrip flights from ten to twelve in August, and it opted to substitute jet service for turboprop service on five of those trips. In the wake of these changes, Vanguard's market share on the Dallas-Wichita route fell to 29% and it eliminated one of its daily flights. In November 1996, Vanguard announced its exit from the Dallas-Wichita route effective in December. Following Vanguard's retreat from this market, American's fares increased from \$70 to \$117, and the number of passengers traveling this route fell substantially.

Vanguard was not the only low-cost air carrier targeted by American. Western Pacific Airlines competed with American on the Dallas-Colorado Springs route, and SunJet Airlines challenged American on flights from Dallas to Long Beach. In these and other cases, American lowered its prices, improved capacity, and increased the number of seats available at the lower fare. The result was the same in each case: "[T]he competing [low-cost airline] failed to establish a presence, moved its operations, or ceased its

^{128.} Id.

^{129.} Id.

^{130.} Id. at 1158.

^{131.} Id.

^{132.} Id.

^{133.} Id. at 1160.

^{134.} Id.

^{135.} Id. at 1161.

^{136.} See id. at 1163-64 (describing other competitors).

^{137.} See United States v. AMR Corp., 335 F.3d 1109, 1112 (10th Cir. 2003) (indicating that American responded to competition by matching prices, adding capacity, and increasing the availability of low fares).

separate existence entirely."¹³⁸ Furthermore, American subsequently decreased its capacity and increased prices following the exit of its competitors. ¹³⁹

In light of the airline's conduct, the Department of Justice brought suit against American. The government argued that American responded to increased competition by increasing capacity and lowering fares, resulting in below-cost pricing for the added passengers. In particular, the government alleged that American's actions were designed to "add unprofitable capacity in order to deprive [competitors] of sufficient passengers to survive on the routes." The government's suit alleged predatory pricing in violation of Section 2 of the Sherman Act. Unlike Spirit, however, where Northwest allegedly engaged in predatory pricing on two routes, the government argued that American Airlines engaged in predation on seven primary routes and, to a lesser degree, on more than thirty additional routes.

IV. The Economics of Predation—Evaluating Below-Cost Pricing

In predatory pricing cases, the plaintiff must examine the defendant's costs and revenues. If the former exceed the latter, the plaintiff has made a preliminary showing of predatory pricing. There are, however, a number of different ways to examine costs and revenues, and commentators have debated, in particular, how to measure the cost component. 145

Before discussing the mechanism used by courts to determine whether a predator has engaged in below-cost pricing, it is helpful to define the various factors that can be included in a firm's costs. Fixed costs are those costs that do not change as output increases or decreases. 146 Overhead and equipment are

^{138.} Id.

^{139.} See id. ("Once the [competition] ceased . . . American generally resumed its prior marketing strategy, reducing flights and raising prices").

^{140.} See id. at 1113 (describing the government's complaint of predatory pricing against American).

^{141.} See United States v. AMR Corp., 140 F. Supp. 2d 1141, 1174 (D. Kan. 2001) (recounting the government's allegations).

^{142.} Id. at 1180-81.

^{143.} See id. at 1144 ("[P]laintiff United States alleges that [American] . . . participated in a scheme of predatory pricing . . . in violation of Section 2 of the Sherman Act.").

^{144.} See id. at 1192 (recounting the total number of flights on which the government alleged predatory pricing).

^{145.} See Alfred E. Kahn, Telecommunications: The Transition from Regulation to Antitrust, 5 J. Telecomm. & High Tech. L. 159, 173 (2006) (stating that the calculation of cost remains a "hotly contested, unfortunately still-critical issue").

^{146.} See Phillip Areeda & Donald F. Turner, Predatory Pricing and Related Practices

examples of fixed costs because the business incurs these costs whether it produces little or lots of its product. In the airline industry, the cost of insurance, administration, sales, maintenance, and advertising are considered fixed costs. The cost of the airplane itself is also traditionally considered a fixed cost. The cost of the airplane itself is also traditionally considered a fixed cost. The cost of the airplane itself is also traditionally considered a fixed cost. The cost of the airplane itself is also traditionally considered a fixed cost.

Variable costs are costs that increase with output. ¹⁴⁹ For airlines, variable costs include costs that rise with the addition of each passenger—such as ticket processing, in-flight food, and liability insurance—as well as expenses that increase with each additional flight—such as pilot, flight attendant, and fuel expenses; takeoff and landing fees; and aircraft maintenance. ¹⁵⁰ Average variable cost is calculated by adding all the variable cost components and dividing it by the total output. ¹⁵¹ While average variable cost estimates the cost for all output, marginal cost calculates the cost of producing a particular component or additional unit of output. ¹⁵² Marginal cost is also known as incremental cost. ¹⁵³

A. Overview of the Economics of Predation

In *Brooke Group*, the Court seemed to accept that below-cost pricing is necessary for a predatory pricing claim. It argued its past decisions "suggest[ed] that only below-cost prices should suffice, and we have rejected elsewhere the notion that above-cost prices that are below general market or the costs of a firm's competitors inflict injury to competition cognizable under the

Under Section 2 of the Sherman Act, 88 HARV. L. REV. 697, 700 (1975) ("Fixed costs are costs that do not vary with changes in output.").

^{147.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., No. 00-71535, 2003 WL 24197742, at *5 (E.D. Mich. Mar. 31, 2003) (providing examples of Northwest's fixed costs).

^{148.} See United States v. AMR Corp., 335 F.3d 1109, 1118 n.12 (10th Cir. 2003) (stating that airplane cost "is traditionally considered a fixed cost in the airline industry").

^{149.} See Areeda & Turner, supra note 146, at 700 (defining variable cost and providing examples of such costs).

^{150.} See Spirit, 2003 WL 24197742, at *5 (detailing passenger variable costs, which include the cost of ticketing and boarding, in-flight food and beverages, liability insurance, and "the incremental cost of the fuel needed to carry each passenger"); see also Areeda & Turner, supra note 146, at 700 (describing variable costs as costs that vary with changes in output).

^{151.} See Areeda & Turner, supra note 146, at 700 ("The average variable cost is the sum of all variable costs divided by output.").

^{152.} See id. ("Marginal cost is the increment to total cost that results from producing an additional increment of output.").

^{153.} See id. (defining marginal cost as the cost associated with an incremental change in output, thereby linking the terms).

antitrust laws."¹⁵⁴ Additionally, the Court indicated that antitrust laws do not protect above-cost pricing because such pricing either: (1) exhibited that the predator has sufficiently low costs to price competitively, or (2) left a court without a discernable standard with which to judge the conduct, which in turn could hamper competition by deterring price cuts.¹⁵⁵ To further support its proposition, the Court cited a well-known treatise and article suggesting that below-cost pricing is necessary to recover under the antitrust laws.¹⁵⁶

While the Court required that predatory pricing be pricing below cost, it declined to resolve questions as to how that should be calculated. It acknowledged that there was a conflict in the appellate courts regarding the appropriate measure of cost in the first element of its predatory pricing test. Because the parties in *Brooke Group*, however, agreed that average variable cost was the appropriate measure of cost, the Court declined to resolve the conflict. 158

Professors Phillip Areeda and Donald Turner—the leading experts on the subject of below-cost pricing—have argued that businesses consider "incremental effects on revenues and costs" when deciding whether to increase or decrease output. ¹⁵⁹ Thus, they conclude the relevant measure of cost is "marginal cost." That said, Professors Areeda and Turner also acknowledge that marginal cost is often difficult to ascertain. ¹⁶¹ As a result, they suggest that average variable cost may be used in its place. ¹⁶²

^{154.} Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 223 (1993).

^{155.} See id. (arguing that antitrust laws should not cover above-cost pricing since it "either reflects the lower cost structure of the alleged predator, and so represents competition on the merits, or is beyond the practical ability of a judicial tribunal to control without courting intolerable risks of chilling legitimate price cutting").

^{156.} See id. at 223-24 (citing Areeda & HOVENKAMP, supra note 40, ¶ 714 and Areeda & Turner, supra note 146, at 708-09).

^{157.} See id. at 222 n.1 (recognizing a "conflict among the lower courts over the appropriate measure of cost").

^{158.} See id. ("Because the parties in this case agree that the relevant measure of cost is average variable cost... we again decline to resolve the conflict among the lower courts over the appropriate measure of cost.").

^{159.} See Areeda & Turner, supra note 146, at 701–02 ("[1]n deciding whether it would increase or decrease output, the firm looks to the incremental effects on revenues and costs.").

^{160.} See id. at 702 (discussing measures of cost).

^{161.} See id. at 716 (stating that there are "administrative impediments" that prevent ascertaining marginal cost since most organizations do not record such costs).

^{162.} See id. (noting that since most "business accounts... go no further than showing observed average variable cost... it may well be necessary to use... [this] as an indicator of marginal cost").

B. Evaluation of Cost and Revenue in Spirit

Northwest moved for summary judgment at the completion of discovery. In its motion, Northwest outlined its arguments in seeming agreement with the "Areeda-Turner view" of predatory pricing. It presented information on two different ways to examine costs, arguing that its revenue exceeded costs under both formulas; thus, it did not engage in predatory pricing. First, Northwest argued that when it subtracted its average variable cost for all passengers from its average revenue, the result was positive. Average revenue includes passenger revenues, cargo revenue (freight and mail), and miscellaneous revenues such as alcohol sales and fees. Additionally, Northwest argued its average revenue minus average variable costs for local passengers—non-connecting passengers—was also positive. 167

Spirit initially agreed that average variable cost was the appropriate standard of cost to apply in this case but later argued that average total cost could also be used. It claimed that prices below average variable cost would be presumed predatory, though the defendant could offer evidence to rebut this presumption. If the price exceeded average variable cost but fell below average total cost, Spirit argued this pricing would be presumed lawful and the plaintiff would then have the burden of proving otherwise.

^{163.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 925 (6th Cir. 2005) (providing the procedural history).

^{164.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., No. 00-71535, 2003 WL 24197742, at *15-16 (E.D. Mich. Mar. 31, 2003) (presenting a report from Northwest's expert regarding the calculation of costs).

^{165.} See id. at *12, *15-16 (stating that Northwest's expert advocated for an average variable cost analysis, and then finding that the report of Northwest's expert "establishes without contradiction that Northwest's revenues in these markets [Detroit-Boston and Detroit-Philadelphia] exceeded the airline's average variable costs under a variety of measures of these two values").

^{166.} See id. at *5 ("[R]evenue includes gross passenger revenues, cargo revenue (freight and mail), and other miscellaneous revenues such as alcohol sales, excess baggage fees, and cancellation and re-booking fees, minus commissions paid to travel agents.").

^{167.} See id. at *16 ("Northwest's expert states without contradiction that the airline's 'true local' revenues exceeded the cost component . . . during each month of the period of alleged predation.").

^{168.} See id. at *12-13 ("Spirit expressly stated that the experts on both sides agree that average variable cost is the appropriate measure of cost in the predation analysis. . . . Despite all this, Spirit's counsel suggested . . . that average total cost is another relevant measure." (internal quotations omitted)).

^{169.} See id. at *13 (arguing that "prices below average variable cost give rise to a prima facie case of predatory pricing, with the burden then shifting to the defendant to prove that their prices were justified despite their potentially destructive effect upon competitors").

^{170.} See id. at *13 ("If the defendant prices are above average variable cost but below

Spirit also presented information on two different ways to conduct the below-cost test. ¹⁷¹ It urged the court to take revenue for a subset of local passengers—those paying the lowest fares offered by Northwest following Spirit's entry into the market—and subtract average variable costs for all local and connecting passengers. ¹⁷² Alternatively, it suggested a formula equal to revenue for "price-sensitive" passengers—passengers who paid fares in the lower of two fare clusters—minus average variable costs for all local and connecting passengers. ¹⁷³

After considering the parties' arguments, the district court concluded that "a comparison of Northwest's average variable costs and revenues in the 'all passenger' and 'true local passenger' [Detroit-Philadelphia] and [Detroit-Boston] markets reveals that Northwest did not engage in below-cost pricing during the period of the alleged predation." With regard to Spirit's methodology, the court outlined a number of concerns. First, the court noted that the plaintiff's own experts argued that it could be misleading to base the predatory pricing analysis on prices charged in a narrow segment of the market. Second, the court found that during "period[s] of intense competition," it is difficult to distinguish between price-sensitive and price-insensitive passengers, as the latter are less willing to pay higher fares when low fares are available. Additionally, the court stated that even if it was appropriate to examine a subset of Northwest's low-cost passengers, those revenues should be compared to costs for that same market and not average

average total cost, this pricing scheme is presumed lawful, but the plaintiff still has the opportunity to prove through other evidence that the defendant acted with a predatory motive.").

^{171.} See id. at *16-17 ("In apparent recognition of this [the court's finding that Northwest 'did not engage in below-cost pricing during the period of alleged predation'], Spirit and its experts propose two alternative measures of Northwest's relevant costs and revenues.").

^{172.} See id. at *17 ("Under the first of Spirit's proposed formulations, Northwest's average variable costs are compared to the revenues derived from passengers who paid the *lowest fares* offered by Northwest following Spirit's entry into the relevant markets ").

^{173.} See id. ("Spirit's second proposed measure is somewhat more complex, and . . . should be computed solely by reference to its price-sensitive passengers—i.e., those passengers who Northwest 'solicited in response to Spirit's entry.'").

^{174.} Id.

^{175.} See id. at *18 (noting that "Spirit's proposed measures raise a number of... concerns...").

^{176.} See id. ("Spirit's own experts have elsewhere suggested that it is potentially misleading to perform a price/cost comparison in only one portion of a market.").

^{177.} See id. (stating that Northwest's expert was explaining the obvious when he stated that "even if price-insensitive passengers are willing to pay some premium for the ability to book a seat at the last minute, they are not willing to do so if they can book a last minute seat at a much lower price than the price offered by the incumbent carrier").

costs for all passengers combined.¹⁷⁸ The court reasoned that Spirit's argument "would be tenable only if it were assumed that per-passenger costs remain relatively constant... [and] there is considerable evidence in the record that this assumption is unwarranted."¹⁷⁹ In light of this, the court discounted Spirit's proposed methodologies and found that "an alleged predator's prices and costs must be measured in the relevant market in its entirety, and under the terms by which this firm actually competes in this market."¹⁸⁰

The United States Court of Appeals for the Sixth Circuit reversed the district court's holding in December 2005.¹⁸¹ The court found the evidence submitted by Spirit compelling and ruled that a reasonable trier of fact could find: (1) distinct leisure and business passenger markets on the contested routes; (2) average variable costs were equivalent to the marginal cost of serving the leisure passengers; and (3) Northwest had sufficient opportunity to recoup losses sustained during the period of alleged predation.¹⁸² Furthermore, the court indicated that a reasonable jury could find predation even if Northwest priced its service above its costs.¹⁸³

The Sixth Circuit began its opinion by citing studies of the value of low-cost air carriers.¹⁸⁴ It noted that fares are lower, passenger volume increases, and competition improves when low-cost carriers enter a market.¹⁸⁵ Before engaging in its analysis of Section 2 of the Sherman Act, the court also recounted evidence of questionable statements and writings by Northwest and its officials.¹⁸⁶ Though not directly related to Spirit's expansion into the

^{178.} See id. at *19 ("[I]f it is appropriate to consider a 'price-sensitive' or 'lowest fare' market, it surely follows that the revenues from this market must be compared solely to the costs in this same market.").

^{179.} *Id*.

^{180.} Id. at *20.

^{181.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 921 (6th Cir. 2005) (holding that summary judgment was inappropriate because "a reasonable trier of fact could conclude that Northwest engaged in predatory pricing").

^{182.} See id. at 921, 945 (stating that the trier of fact could find submarkets within the passengers traveling on those flights, that costs were roughly the same for all passengers, and that Northwest sought to force Spirit from the market and had the means to recoup its losses once Spirit did so).

^{183.} See id. at 953 ("[E]ven if the jury were to find that Northwest's prices exceeded an appropriate measure of average variable costs, the jury must also consider the market structure... to determine if Northwest's deep discounts... [and] the expansion of its capacity... injured competition...").

^{184.} See id. at 926-27 (citing the benefits of low-cost carriers).

^{185.} See id. at 926 (citing a study, which found "low-fare air carriers provide important service and competitive benefits: fare levels are much lower and traffic levels are higher").

^{186.} See id. at 929 (recounting Spirit's evidence related to Northwest's strategy in responding to competition from low-cost carriers).

Philadelphia and Boston markets, Northwest officials had previously referred to the Detroit airport as a "unique strategic asset," which required protection "at almost all cost[s]."¹⁸⁷ Northwest also conducted a study prior to this litigation that estimated carriers such as Spirit could cost it \$250–\$375 million in revenue annually. The most damning document cited by the court, however, was a 1987 article from a Northwest executive on the airline's response to low-cost carriers. The Northwest executive stated that Northwest's reaction to this competition would be to "'[m]atch, or better yet, beat the new entrant's lowest restricted fare'" and "'leave no traveler with either a price or a schedule incentive to fly the new entrant.'" He further acknowledged that "'[t]he incumbent will not operate profitably under such conditions especially, if, as is usually the case, it is a higher-cost airline than its competitor.'"

The court began its Section 2 analysis against this backdrop. First, it considered whether the relevant market for the price-cost comparison was all passengers, as Northwest argued, or a passenger subset of leisure travelers, as Spirit argued. The Sixth Circuit noted that Supreme Court opinions approved the use of submarkets. In this case, the court found that reasonable trier of fact could find that Spirit and Northwest both recognize 'leisure' or 'discretionary' or 'price-sensitive' passengers as a distinct market...." It was persuaded by Northwest's own documents, which indicated distinct fares for business and leisure travelers. Additionally, in separate litigation, Northwest had acknowledged that business travelers constituted an individual class.

^{187.} See id. ("Northwest's Chief Executive Officer deemed the Detroit Metro Airport to be Northwest's 'most unique strategic asset' that must be protected 'at almost all cost.'").

^{188.} See id. ("Northwest studied low fare carriers and estimated... [they] could cost Northwest \$250-\$375 million in annual revenue at its hubs. This study expressly identified Spirit as one such low-cost carrier.").

^{189.} See id. (providing an excerpt of an article written by Northwest's Executive Vice President, Michael Levine, recounting its strategy in dealing with low-cost carriers).

^{190.} Id. (citation omitted).

^{191.} Id. (citation omitted).

^{192.} See id. at 933–35 (discussing the applicable "service market").

^{193.} See id. at 933 (citing the Supreme Court for the proposition that a product or service might have submarkets, which is to be determined by "focus[ing] on the economic realities or industry practice").

^{194.} Id.

^{195.} See id. at 933-34 ("Northwest's internal documents on pricing and passenger fares reflect Northwest's distinction between business and leisure travel.").

^{196.} See id. at 934 (recounting that, in a case against American Airlines, an expert for Northwest "'recognized that business travelers constitute a distinct market in the airline industry'").

Despite its careful analysis of the relevant market and strong language supporting the use of the leisure market subclass in the predation analysis, the Sixth Circuit took a curious detour from this standard when applying it to the case at hand. Spirit's experts calculated the cost of providing service to the leisure subset of passengers by adding all of Northwest's various cost factors and then dividing this number by the "total number of passengers traveling on that segment during the relevant time period." Essentially, Spirit's calculations used Northwest's average variable cost and not its marginal cost.

Spirit justified its failure to differentiate costs for leisure from business passengers by arguing that certain "non-passenger variable costs such as crew, fuel and possibly aircraft do not vary with passengers because the same service is provided to both sets of passengers." Furthermore, Northwest's data system, which monitored revenue and costs, did not differentiate between leisure and business travelers. Earlier in the opinion, however, the court emphasized testimony from a Northwest expert, in an earlier suit, that costs do vary between passenger subsets. The Northwest expert stated that while costs are measured for passengers as a whole, "it may be useful to determine costs separately for "business" service and "leisure" service. He further said, "[I]t is not accurate to say, even within a specific class, that . . . seats provide the same service or have the same cost. Nonetheless, the Sixth Circuit ruled that the trier of fact could find Spirit's calculation persuasive, and this created a factual dispute that rendered summary judgment inappropriate. 202

While the Sixth Circuit argued that there was sufficient evidence for a finding that Northwest engaged in predation by pricing below cost, ²⁰³ it also indicated that the trier of fact could find predation even if Northwest priced above its cost. ²⁰⁴ In the beginning of its opinion, the court cited several studies

^{197.} See id. at 940 (stating that Spirit's expert calculated the cost of Northwest's service to the leisure market "'by dividing the various cost factors for each route... by the total number of passengers traveling on that segment during the relevant time period'").

¹⁹⁸ Id at 945

^{199.} See id. at 944 (providing the opinion of a Northwest expert in its suit against American Airlines).

^{200.} Id. (emphasis omitted).

^{201.} Id. (emphasis omitted).

^{202.} See id. at 945 (arguing that a reasonable trier of fact could find the explanation put forth by Spirit for its calculation of cost convincing, which in turn "creates material factual disputes . . . so as to preclude an award of summary judgment").

^{203.} See id. at 931 ("[A] reasonable trier of fact could conclude that by dropping its prices below its costs as well as by quickly expanding capacity, Northwest engaged in anti-competitive conduct ").

^{204.} See id. at 953 (stating that even if the jury found Northwest's prices exceeded costs, "the jury must also consider the market structure" and determine whether Northwest's actions

that discussed harm to competitors in this type of situation. One study found that airlines have competitive tools beyond price, such as frequent flier programs, the number and timing of flights, and other amenities.²⁰⁵ Another study argued that low prices, even if not lower than cost, can harm competition.²⁰⁶ The court then adopted a modified version of the traditional below-cost test. The traditional below-cost test solely examines costs and revenues and does not consider other evidence.²⁰⁷ Under the modified test, however, the court looks at factors beyond cost and at "'what a rational firm would have expected its prices to accomplish.'"²⁰⁸

The clash between the district court and court of appeals in this case is not an isolated phenomenon. In the years since *Brooke Group*, courts have been divided as to the appropriate measure of cost. *Spirit* and *AMR Corp*. add several new issues to the debate, however, including whether average variable cost can be compared to marginal revenue and what evidence should be considered in conducting that analysis.

C. Evaluation of Cost and Revenue in AMR Corp.

Because marginal cost is difficult to determine, the government offered the district court four alternative tests to show predation.²⁰⁹ The first alleged American engaged in predation by dedicating resources to flights into and out of Dallas and forgoing higher profits on other routes.²¹⁰ The second test examined American's long-run costs, instead of only those costs incurred during the alleged predatory period, while the third test looked at the long-term

[&]quot;injured competition by causing Spirit's departure," which "allow[ed] Northwest to recoup its losses and to enjoy monopoly power as a result").

^{205.} See id. at 927 (citing the Oster-Strong study of "Multiple Competitive Tools," which argued that "airlines don't compete solely on the basis of the price of the ticket").

^{206.} See id. at 936 (stating that "[a] firm can deter aggressive competition with a low price" and thus "competition can be harmed . . . even if those prices are not below the price-cutter's cost").

^{207.} See id. at 937-38 (finding that "the Sixth Circuit adopted a modified version of the Ninth Circuit's test" for the appropriate measure of cost).

^{208.} *Id.* (quoting William Inglis v. ITT Cont'l Baking Co., 668 F.2d 1014, 1034 (9th Cir. 1981)).

^{209.} See United States v. AMR Corp., 140 F. Supp. 2d 1141, 1179-80 (D. Kan. 2001) (stating the plaintiff's expert offered "alternative measures which might suggest predation" and then outlining the four tests offered).

^{210.} See id. at 1179 (arguing the first test shows predation by alleging the predator forwent "the possibility of 'better profit performance' elsewhere").

profitability of certain routes.²¹¹ Finally, the fourth test examined the incremental costs and revenues of capacity American added in response to competition from low-cost carriers; it essentially argued below-cost pricing using marginal costs and revenues.²¹²

The district court began its analysis by discussing the implications of *Brooke Group*. It recounted that the *Brooke Group* Court's skepticism regarding predatory pricing claims was rooted in its concern that predatory conduct is difficult to distinguish from aggressive, yet lawful, competition and that erroneous findings of predation could hamper competition. The district court stated that *Brooke Group* declares above-cost pricing an "absolute safe harbor" from claims of predation. Additionally, the court repeatedly stressed that the *Brooke Group* test is an objective one, free from consideration of the alleged predator's intent. 215

With regards to the appropriate measure of cost, the district court discussed both marginal and average variable cost at length. The court cited several treatises and court opinions arguing that either average variable or marginal cost can serve as the measure of cost under *Brooke Group*. Nevertheless, it concluded that the allegations in this case must use average variable cost, which "enjoys not only the weight of authority," but is "congruent with the goal of the Sherman Act." The court also called average variable cost the "only appropriate, credible measure of costs in the present action." It then concluded that the government failed to establish predation using average variable cost on any of American's routes. It dismissed all four of the tests

^{211.} See id. (describing the second and third tests).

^{212.} See id. at 1180 (indicating the government's expert sought to show predation by "calculat[ing] directly incremental revenues and costs associated with capacity additions" on particular routes).

^{213.} See id. at 1195-96 (requiring predation claims to meet the Brooke Group standard and detailing the issues discussed in that case, including concerns related to false findings of predation).

^{214.} Id. at 1196

^{215.} See id. at 1196-97 ("[F]orceful dicta in [Brooke Group] indicates that a predatory price requires objective evidence ").

^{216.} See id. at 1197-99 (examining the appropriate measure of cost in predation claims).

^{217.} See id. at 1198–99 (citing AREEDA & HOVENKAMP, supra note 40; Areeda & Turner, supra note 146; and various court cases that argue either marginal or average variable costs can serve as the appropriate measure of cost).

^{218.} Id. at 1199.

^{219.} Id. at 1196.

^{220.} See id. at 1199 ("The . . . facts establish . . . American did not price fares below . . . costs.").

proffered by the government.²²¹ The court rejected the first and fourth tests because they measured "whether a company has sacrificed some level of profit to compete more effectively," an approach which "has been rightly rejected by the courts." The court refused to apply tests two and three because they used average total cost as the measure of cost, which the court said contradicted prevailing law. ²²³

The Tenth Circuit began its analysis by addressing the debate over the likelihood of predation.²²⁴ The court felt *Brooke Group*'s strict standards for predation reflected the Supreme Court's adoption of the Chicago School view, which argued predation does not occur because a company cannot guarantee it will recoup losses sustained during the predatory period.²²⁵ However, the court also noted that more recent scholarship has questioned the Chicago School view.²²⁶ The court concluded that, given the changing tide of research in this area, it would "approach[] the matter with caution, [but not] with the incredulity that once prevailed."²²⁷

The court next addressed the district court's conclusion that average variable cost is the appropriate measure of cost in a predation case. The court appeared to overrule this portion of the district court ruling. It argued that the predatory analysis requires flexibility and that "sole reliance on [average variable cost] . . . may obscure the nature of a particular predatory scheme." Let decided that, "contrary to what is suggested by the district court, we do not favor [average variable cost] to the exclusion of other proxies for marginal cost." 229

The Tenth Circuit finally examined the four tests offered by the government to show predation. The court agreed with the district court that tests two and three failed to measure marginal or incremental costs and thus could not be used to determine predation. ²³⁰ The court also affirmed the district

^{221.} See id. at 1200-04 (discussing the flaws in the government's four tests for predation).

^{222.} Id. at 1201

^{223.} See id. at 1203 (declaring the second and third tests "legally insufficient because such tests ultimately rest on American's total costs").

^{224.} See United States v. AMR Corp., 335 F.3d 1109, 1114–15 (10th Cir. 2003) (discussing academic views of predation, from the Chicago School to more recent theories).

^{225.} See id. at 1114 (arguing "the Supreme Court adopted the skepticism of Chicago scholars" in Brooke Group).

^{226.} See id. ("Recent scholarship has challenged the notion that predatory pricing schemes are implausible and irrational.").

^{227.} Id. at 1115.

^{228.} Id. at 1116.

^{229.} Id.

^{230.} See id. at 1117-18 (concluding that tests two and three are invalid because they "rely

court's finding that test one was inappropriate because it based predation on an assessment of whether the company sacrificed profits, which could result in false findings of predation.²³¹ The *AMR Corp*. court, however, disagreed with the district court that test four suffered from the same malady.²³²

Instead, the Tenth Circuit ruled that test four was inapplicable because the government failed to identify the marginal costs of American's price decreases and capacity increases. The government argued it could show predation using marginal costs and revenue. The actual costs presented to the court, however, included some elements of average variable cost and costs attributable to the route as a whole. Thus, the government failed to pinpoint only those costs associated with serving the passengers added due to the capacity increases and fare decreases. The court, therefore, concluded that the government failed to satisfy its burden because its predation analysis did not compare marginal revenue to marginal cost but instead compared marginal revenue to "a measure of both average variable cost and average [marginal] cost."

V. Do the Spirit and AMR Corp. Holdings Constitute a Circuit Split?

A. Both Courts Tacitly Accept Marginal Cost

While the Tenth and Sixth Circuits reached opposite results, both courts seem to accept one of the central arguments in each case—that marginal cost can serve as the appropriate measure of cost in a predation case. The parties in both cases contested this issue sharply, and the courts' willingness to accept this argument reflects changing judicial sentiments that predation does occur and that differing economic analysis can uncover such conduct.

on cost measures that are not . . . variable or avoidable").

^{231.} See id. at 1118-19 ("We conclude that Test One is invalid as a matter of law.").

^{232.} See id. at 1119 ("Test Four does not appear to suffer from this flaw").

^{233.} See id. at 1119–20 (agreeing with the district court that test four was invalid because the government failed to "'identif[y] the actual costs associated with the capacity additions'" (quoting United States v. AMR Corp., 140 F. Supp. 2d 1141, 1202 (D. Kan. 2001))).

^{234.} See id. at 1119 ("Test Four attempts to reveal American's predatory conduct by measuring and comparing the incremental costs incurred by American when it added capacity....").

^{235.} See id. (finding that the cost factor used by the government "include[s] variable costs American incurs with respect to all its operations at [Dallas]" and thus are not limited to the marginal cost of the capacity additions).

^{236.} See id. at 1120 ("Test Four does not measure only the . . . cost of the capacity additions and cannot be used to satisfy the government's burden in this case.").

^{237.} Id.

In Spirit, the Sixth Circuit built a strong case for a predation analysis that only examined "leisure" or "low-cost" travelers. The court stated that both parties recognized a distinction between this class of passengers and price-insensitive or business travelers. ²³⁸ It also noted that federal studies of the airline industry maintained a distinction between the two classes. ²³⁹ The Sixth Circuit ultimately concluded there was sufficient proof that a distinct leisure market existed in the contested routes that Spirit could appropriately argue predation based on the marginal cost of serving those passengers. ²⁴⁰

While the Tenth Circuit did not explicitly accept marginal cost as the appropriate measure of cost, it seemed to implicitly do so. The Tenth Circuit stated that "the ideal measure of cost would be marginal cost," though it also acknowledged the difficulties associated with acquiring such data. ²⁴¹ Furthermore, the court rejected test four—the only test examining marginal cost—because of the manner in which the government applied the test, rather than on economic grounds. ²⁴² In fact, an economist from the Department of Justice stated that "[t]he Tenth Circuit's tacit acceptance" that predation may be established using incremental costs and revenues "lends some support to the use of incremental analysis in future cases. "²⁴³

The Spirit and AMR Corp. courts' conclusion that marginal cost can be the appropriate measure of cost in the predation analysis is economically appropriate. Predatory pricing analysis seeks to distinguish anticompetitive behavior from normal, rational responses to market conditions. Professors Areeda and Turner argue that decisions regarding whether to increase or decrease output help to distinguish the former from the latter: A rational company—one "responding to acceptable economic incentives . . . [and] not engaging in predatory behavior"—seeks to "maximize profits or minimize losses."

Thus, if a company can show that its increase in output was

^{238.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 929 (6th Cir. 2005) ("[T]he factual record reflects that Northwest's internal documents... recognize the 'low price... traveler' or 'leisure traveler' as a distinct and relevant market....").

^{239.} See id. (stating federal studies "found a distinct market for low fare or price sensitive or leisure travelers").

^{240.} See id. at 946 ("[W]here reasonable economic proof justifies a relevant market, the appropriate measure of costs... is for the particular good or service in that market, not all products or services sold....").

^{241.} United States v. AMR Corp., 335 F.3d 1109, 1116 (10th Cir. 2003).

^{242.} See id. at 1120 (concluding that the government's tests are "fatally flawed in their application").

^{243.} Gregory J. Werden, The American Airlines Decision: Not with a Bang but a Whimper, 18 ANTITRUST, Fall 2003, at 32, 35.

^{244.} Areeda & Turner, supra note 146, at 701.

designed to increase profits, then a court should presume the conduct to be within the bounds of normal competition and not a violation of Section 2 of the Sherman Act.

Companies such as Northwest maximize profits, according to Professors Areeda and Turner, at the point where an increase in output would cost more—because the increased production is straining resources—than it would add in revenue. ²⁴⁵ In practice, the firm would look at the proposed increase in output and weigh the impact of that change on revenues and costs. ²⁴⁶ This examination is essentially looking at marginal revenue and cost, which experts define as the change in revenues and cost respectively from the addition of one unit of output. ²⁴⁷ As such, Areeda and Turner conclude that the relevant measure of cost in predation analysis is marginal cost. ²⁴⁸

While Professors Areeda and Turner argue that marginal cost should be used to evaluate predatory conduct, they acknowledge that marginal cost is often difficult to calculate. They argue, "[t]he incremental cost of making and selling the last unit cannot readily be inferred from conventional business accounts" and that most businesses do not keep these figures. As an alternative, they state that average variable cost can be used as a surrogate for marginal cost. However, others have argued that average variable cost is not a comparable substitute for marginal cost. Judge Posner, for instance, stated that "[a]lthough marginal costs are a function of variable rather than fixed costs . . . marginal cost and variable cost are not synonyms." He provides an example that aptly demonstrates that a finding of predation could depend on which standard is used, despite the fact that the conduct at issue is exactly the same. Professors Areeda and Hovenkamp—authors of one of the most cited

^{245.} See id. (describing the "profit-maximizing" output as that in which an "increase in output would add more to costs than to revenues").

^{246.} See id. at 701–02 ("[I]n deciding whether it would increase or decrease output, the firm looks to the *incremental* effects on revenues and costs.").

^{247.} See id. at 700 (defining "marginal cost" and "revenue").

^{248.} See id. at 702 ("[T]he relevant cost is marginal cost.").

^{249.} Id. at 716.

^{250.} See id. ("[I]t may well be necessary to use [average variable cost] as an indicator of marginal cost.").

^{251.} RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 311 (6th ed. 2003).

^{252.} See id. (demonstrating the practical differences between the use of average variable and marginal cost). Posner provides an example that illustrates this distinction:

Suppose the labor and materials and other variable costs of producing 100 widgets are \$100, and would be \$99 if 99 units were produced, so that the firm's marginal cost at an output of 100 is \$1. But suppose further that if output is increase to 101 units, straining the firm's existing capacity, its total variable cost for its entire output will shoot up to \$110. Its average variable cost will therefore be \$1.09

antitrust treatises—even state that in "a case involving excess capacity and lower prices to marginal customers, the theoretically correct benchmark is short-run marginal cost with respect to the low-price customers."²⁵³

Finally, it is worth mentioning that some courts accept a marginal cost test. The district court in *AMR Corp*. cited several Tenth Circuit opinions sanctioning the use of average or marginal cost in the predation analysis. ²⁵⁴ The Supreme Court also intimated that marginal cost could be the appropriate measure of cost, as the *Brooke Group* opinion references "incremental" cost. ²⁵⁵ Professors Areeda and Hovenkamp conclude that "[b]ecause this is essentially a marginal cost test, and because average variable cost is used principally as a surrogate for marginal cost . . . *Brooke* might be read as endorsing average variable cost as well as marginal cost predatory pricing tests and rejecting an average total cost test."

B. Calculation of Marginal Cost

While the Sixth and Tenth Circuits seem to accept that marginal cost can serve as the measure of cost in a predation case, their holdings appear to disagree on its calculation. Both plaintiffs argued predation based on marginal or incremental cost, but both included elements of average variable cost in the actual analysis. The *Spirit* court accepted the plaintiff's analysis, despite this shortcoming, while the *AMR Corp.* court rejected a similar formulation. And the server of the spirit court accepted the plaintiff's analysis, despite this shortcoming.

^{(\$110[/]101).} But its marginal cost will be \$10.

Id. Under Posner's example, a firm that priced its product at \$2 would not be engaged in predatory pricing if the court used average variable cost because \$2 is greater than \$1.09. However, if marginal cost is used, predation would be found because the \$2 price is significantly less than the marginal cost of \$10. Id.

^{253.} AREEDA & HOVENKAMP, supra note 40, ¶ 723(a).

^{254.} See United States v. AMR Corp., 140 F. Supp. 2d 1141, 1198-99 (D. Kan. 2001) (citing two Tenth Circuit opinions sanctioning the use of either marginal or average variable cost and another case in which the district court had "previously made use of a marginal cost test").

^{255.} See Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 223 (1993) (referring to the below-cost pricing analysis as examining "when the pricing . . . is above some measure of incremental cost").

^{256.} AREEDA & HOVENKAMP, supra note 40, ¶ 723(d)(2).

^{257.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 925 (6th Cir. 2005) ("In Spirit's experts' opinions, the appropriate measure of costs is Northwest's incremental costs for providing the additional capacity"); United States v. AMR Corp., 335 F.3d 1109, 1119 (10th Cir. 2003) ("Test Four attempts to reveal American's predatory conduct by measuring and comparing the incremental costs incurred by American when it added capacity").

^{258.} See Spirit Airlines, Inc., 431 F.3d at 945 (finding that a reasonable trier of fact could

examination of the facts illuminates a critical distinction between these cases, one that could serve as a benchmark going forward.

The Sixth Circuit acknowledged that Spirit Airlines did not confine its predation analysis to the cost of serving leisure passengers, but instead included costs attributable to all passengers. Spirit offered an explanation for its broad calculation of cost and the court concluded that a reasonable trier of fact could find this argument persuasive. Furthermore, and most significantly, the court noted that "[t]he evidence reflects that in its data system, Northwest did not consider any meaningful differences to exist in the average variable costs for different passengers." The Sixth Circuit found that Northwest had relied on the same data used by Spirit's experts, possibly leading the trier of fact to the conclusion that Spirit's estimates were "reasonably accurate."

The Tenth Circuit opinion stated that marginal cost is "notoriously difficult to measure" and recognized the necessity of surrogates. It acknowledged that the government's surrogate sought to compare the incremental costs associated with the capacity additions to incremental revenue. The court ultimately rejected the comparison, however, because it found that the government's data included costs that were not solely attributable to this added capacity. As a result, the court felt it was being asked to compare marginal revenue with a cost factor that included elements of average variable and marginal cost. Essentially, the court saw the government's analysis as comparing apples to oranges: Because the government argued it could show predation based on marginal cost and revenue, the court was forced to reject data that failed to fit into this categorical description. Second

accept Spirit's "calculation of Northwest's incremental costs"); AMR Corp., 335 F.3d at 1120 (rejecting the government's fourth test).

^{259.} See Spirit Airlines, Inc., 431 F.3d at 944 ("Spirit's cost analysis included cost measures that were not specifically linked to price-sensitive passengers, but common to all passengers.").

^{260.} See id. (stating that "a reasonable trier of fact could... conclude that the costs attributable to all customers is a reasonable proxy" for the marginal costs of the added capacity).

^{261.} Id.

^{262.} See id. at 944-45 (discussing Northwest's "Price-Out Model").

^{263.} United States v. AMR Corp., 335 F.3d 1109, 1116 (10th Cir. 2003).

^{264.} See id. at 1119 ("Test Four attempts to reveal American's predatory conduct by measuring and comparing the incremental costs... [of] added capacity to... incremental revenue it received from the additional capacity.").

^{265.} See id. at 1120 ("Test Four does not measure only . . . incremental cost of the capacity additions").

^{266.} See id. (concluding the fourth test "does not measure only . . . incremental cost").

^{267.} See id. (indicating that the fourth test argued a theory of predation, that the court was

VI. A New Test for Predation

The Tenth Circuit took a mechanical approach to the below-cost test. What if it was given a more flexible standard, one that did not require that the parties meet a theoretical formulation of costs and revenues but instead looked at the factors that were actually used by the alleged predator in making its capacity and pricing decisions? The AMR Corp. court indicated that it limited its examination of the case to determining whether the government's assertion of predation based on marginal costs and revenues was, in fact, correct.²⁶⁸ The court stated that the question of whether the data presented "provide[d] businesses with reliable data to evaluate business decisions" was irrelevant.²⁶⁹ This Note argues that this question is entirely relevant to predation analysis.

In the nearly fifteen years of post-*Brooke Group* debate over predatory pricing, there is a clear tension between an intent-based standard, which examines a company's motives, and a conduct standard, which limits a court's consideration to an economic analysis of the alleged predator's revenues and costs. There must be some middle ground. In predatory pricing cases, courts should engage in some objective financial analysis, but they should also consider whether the alleged predator knew, or reasonably should have known, that the effect of its conduct would be anticompetitive.

A. Proposed Rule and Its Benefits

Through discovery, plaintiffs alleging predatory pricing gain access to the defendant's financial and data systems. Under current standards, the plaintiffs typically employ expert witnesses—usually economists—to calculate various cost and revenue factors. These factors are then evaluated using the *Brooke Group* standard, which looks at whether a company prices its product below its cost to determine if the defendant engaged in predation.

At its core, this process is based on economic theory rather than business practices. In fact, "[e]conomic theory is pervasive in the debate over and articulation of Section 2 conduct standards...."

This led the Supreme Court to question the value of expert testimony in one predatory pricing case:

limited to "determin[ing] whether that assertion is correct," and that the government failed to live up to its assertions).

^{268.} See id. (stating that the court was limited to deciding whether the government's assertions were correct).

^{269.} Id

^{270.} Gregory G. Wrobel, Commentary, New Clothes for the Emperor? Tailoring Section 2 Standards for Predatory and Exclusionary Conduct, 18 ANTITRUST, Fall 2003, at 26, 30.

"The relevant study is not based on actual cost data; rather, it consists of expert opinion based on a mathematical construction that in turn rests on assumptions about petitioners' costs."

The practical result is that parties dedicate significant time and resources to debating abstract assumptions and methodologies rather than the financial data and information actually used by the parties.

Furthermore, the jury must then draw conclusions based on this debate, including whether the parties' economic assumptions and characterizations are appropriate. Professor Hovenkamp stated that "too often the judge who feels unqualified to assess the basic rationality of an expert's methodology hands the job off to the one decision maker in the courtroom who is even less qualified than he is, namely the jury."²⁷² The inability of judges and juries to weigh revenue and cost evidence is one of the most significant impediments to accurate outcomes in predatory pricing cases.²⁷³

Rather than rely on theoretical formulations of cost and revenues, this Note proposes a "Practical Test" for claims of predatory pricing. Under the Practical Test, the below-cost pricing analysis should examine the financial records, data, and information held by the alleged predator. The inquiry should focus on reconstructing the business's calculations of revenues and costs, given the information available to the company at the time, and the business decisions made based upon that information. Every business keeps financial records with this evidence, and thus it is readily available.

Companies must, for their own self-preservation, examine the financial impact of business changes. In many cases, a business considering a pricing or capacity change will consider a number of alternatives in order to determine which change will be most profitable or will attract the highest consumer response. Even in cases like *Spirit* and *AMR Corp*., where the airlines matched their competitor's price and may not have considered many alternative prices,

^{271.} Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 594 n.19 (1986).

^{272.} HERBERT HOVENKAMP, THE ANTITRUST ENTERPRISE 9 (2005).

^{273.} See Wrobel, supra note 270, at 27 (arguing that the AMR case "highlights a broader concern about the ability of courts to effectively identify predatory pricing conduct using cost-based standards").

^{274.} Professor Dennis Keithly argues that plaintiffs should be able to use the "airline's internal measure of cost." See generally Dennis J. Keithly, To Trap the White Tiger and Unicorn, the Government Needs Better Traps: An Examination of the Viability of Predatory Pricing Claims in the Airline Industry, 69 J. AIR L. & COM. 837, 862–64 (2004). This approach is too limited, however. The alleged predator's calculation of revenue and price is also relevant, as is information related to consumer behavior and practices and estimates related to recoupment, including whether recoupment is possible and the period of time necessary to recover losses.

the company will nonetheless consider how that individual change will impact its profits. In cases where the company anticipates the change will result in a loss, it will also need to study the extent of that loss, how long it can be sustained, and what factors could impact it.

It is particularly important for companies to undertake a financial analysis before engaging in predatory conduct. Judge Posner argues that companies price below-cost to not only address the particular incident of competition, but also to deter future competition.²⁷⁵ If a company does not perform a financial analysis before engaging in this conduct, however, it could compromise its future financial stability and even risk insolvency, in which case the deterrence of future competition would be unnecessary. This led one court to conclude: "Few firms cut price unaware of what they are doing You cannot be a sensible business executive without understanding the link among prices, your firm's success, and other firms' distress."²⁷⁶

Under this Note's proposed Practical Test, all financial information and data possessed by the alleged predator could be potentially relevant. Most cases will likely focus on data relating to costs and revenues because this is the crux of the predatory analysis. Nonfinancial information, however, may also be relevant. For instance, it might be useful for a plaintiff to access studies conducted by the alleged predator indicating consumer reaction to certain changes or consumer behavior and preferences in relation to a particular product. The defendant may have used this information to determine the revenue or loss forecasts for a proposed change or in its examination of recoupment.

The Practical Test will enable juries to more effectively evaluate predatory pricing claims. Juries can more readily assess testimony grounded on actual data than on theoretical models using that data. Theoretical formulations related to predatory pricing require jurors to grasp the assumptions used in making a calculation and the theory underlying that assumption. On the other hand, a jury looking at the data and information actually possessed by a company only needs to determine whether the company used it in the manner it claimed or if the decisions based on that information were reasonable. While the plaintiff and defense experts are likely to disagree as to how this information should be interpreted, even in cases using real-world data and information, this dispute will be significantly more accessible and understandable to a jury.

^{275.} Posner, supra note 251, at 308-14 (describing the deterrent effect of predatory behavior).

^{276.} A.A. Poultry Farms, Inc. v. Rose Acre Farms, Inc., 881 F.2d 1396, 1401–02 (7th Cir. 1989).

Another significant problem associated with the current theoretical standard for the measure of cost is that it fails to provide businesses with adequate warning of wrongdoing. Currently, "businesses are left without clear guidance about how they can lawfully engage in perhaps the most intrinsic attribute of a market economy—setting the price for one's own products or services."

The Practical Test, however, could provide some measure of certainty. Because businesses have access to the data and information that may be used against them in litigation, they can better anticipate and respond to instances where price falls below cost. As then-Chief Judge Breyer stated, the rules governing antitrust "must be clear enough for lawyers to explain them to clients" and "designed with the knowledge that firms ultimately act, not in precise conformity with the literal language of complex rules, but in reaction to what they see as the likely outcome of court proceedings."

B. Application to Spirit and AMR Corp.

Though the plaintiffs in both *Spirit* and *AMR Corp*. used a cost formulation that included elements of variable cost and compared this to marginal revenue—essentially making an apples to oranges comparison²⁷⁹—the courts in those cases reached different results. The Tenth Circuit rejected the comparison of marginal revenue to average variable cost,²⁸⁰ while the Sixth Circuit allowed it.²⁸¹ Despite this inconsistency, the facts of these cases demonstrate an important distinction in how the courts gathered and used this data. The Practical Test proposed by this Note explains these seemingly contradictory results.

The Sixth Circuit recognized that its application of the predatory pricing test was asymmetrical.²⁸² The plaintiff explained its failure to distinguish the cost of serving leisure travelers from other passengers. In its motion for summary judgment, Northwest argued that Spirit mischaracterized Northwest's

^{277.} Wrobel, *supra* note 270, at 30.

^{278.} Town of Concord, Mass. v. Boston Edison Co., 915 F.2d 17, 22 (1st Cir. 1990).

^{279.} See Aaron Edlin, Comment, Roundtable Discussion: Recent Developments in Section 2, 18 ANTITRUST, Fall 2003, at 15, 18 (declaring the problem with the AMR Corp. decision to be that it compares price to marginal cost, which he characterizes as "comparing apples and oranges").

^{280.} See supra Part III.A (describing Spirit's case history).

^{281.} See supra Part III.B (describing AMR Corp.'s case history).

^{282.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 944 (6th Cir. 2005) (acknowledging that "Spirit's cost analysis included cost measures that were not specifically linked to price-sensitive passengers, but [were] common to all passengers").

costs and misinterpreted the data.²⁸³ The appellate court, however, noted that "Northwest did not consider any meaningful differences to exist in the average variable costs for different passengers."²⁸⁴ Thus, when Northwest estimated its costs and revenues and made price and capacity decisions, it used the same information Spirit presented to the court. Given this fact, the Sixth Circuit concluded that the trier of fact could decide that average variable costs were a sufficient proxy for the marginal cost of serving leisure travelers.²⁸⁵

The Spirit court's holding that average variable cost can be compared to its marginal revenue is consistent with an application of the proposed Practical Test. While Northwest's expert characterized the disagreement with the Spirit expert on this issue as an "intellectual disagreement," the court looked past the theoretical classification of the data. Instead, the court examined the data and information available to Northwest and how Northwest used that information in practice. If this same practical approach is applied to the seemingly contrary holding in AMR Corp., it becomes clear that the Tenth Circuit and Sixth Circuit opinions are actually consistent.

The Tenth Circuit rejected the government's arguments based on a formulistic approach to predation analysis. In its decision, the court stated that it was not looking at how the financial data accorded with business decisions. ²⁸⁷ Instead, the government said it could show below-cost pricing based on a particular formula, and the court indicated it was confined to determining whether the government did so. ²⁸⁸ The Tenth Circuit then found that the government failed to meet its burden because it compared marginal revenue to a cost calculation that measured "only the avoidable or [marginal] cost of the capacity additions"²⁸⁹

^{283.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., No. 00-71535, 2003 WL 24197742, at *19 (E.D. Mich. Mar. 31, 2003) (presenting the arguments of Northwest's expert, who examined Spirit's evidence and argued that it indicated the marginal cost of serving leisure passengers varied from the average variable cost for all passengers).

^{284.} Spirit Airlines, Inc., 431 F.3d at 944.

^{285.} See id. at 944 (stating that the trier of fact could find "costs attributable to all customers [are] a reasonable proxy for the costs associated with price-sensitive passengers only").

^{286.} Id. at 945.

^{287.} See United States v. AMR Corp., 335 F.3d 1109, 1120 (10th Cir. 2005) ("[T]his court is not presented with the question of whether cost allocation . . . provides businesses with reliable data to evaluate business decisions.").

^{288.} See id. ("Because the government asserts that Test Four measures average avoidable cost, this court must instead determine whether that assertion is correct.").

^{289.} Id.

If the court had applied the proposed Practical Test, however, it would have reached the same result. While the plaintiff in *Spirit* used Northwest's internal financial data, the government in *AMR Corp*. reformulated American's figures and created a new measure of costs. 290 American developed a complex accounting system designed to provide the information that is used to make business decisions, such as price and capacity choices. This system calculated flight and route performance, revenues, and costs. Rather than use this data, however, the government proposed a revised formulation of cost that included the pre-tax cost of the airplanes. The government then used this revised calculation of American's costs to argue that American priced below its cost. It did so because the inclusion of fixed costs in the predatory analysis makes flights less profitable, 295 and thus less likely to survive the traditional price below-cost test.

The Sixth Circuit's decision in *Spirit* is entirely consistent with the Tenth Circuit's opinion in *AMR Corp*. under the proposed Practical Test. In *Spirit*, the plaintiff produced evidence that the defendant's own accounting and financial information indicated that it had engaged in below-cost pricing. The plaintiff in *AMR Corp*., however, was unable to show predation using the defendant's accounting system.²⁹⁶ Thus, each court achieved the correct result:

^{290.} See United States v. AMR Corp., 140 F. Supp. 2d 1141, 1174-75 (D. Kan. 2001) (stating that "[t]he government has proposed its own measure of American's variable earnings," which factored American's costs of aircraft ownership in the cost component).

^{291.} See id. (describing American's "decision measures," which "are used for decision making rather than financial reporting").

^{292.} See id. (outlining American's various decision measures).

^{293.} See id. at 1199 & n.13 (stating that the government's cost measure included the "pretax costs of aircraft ownership," which the court said were "more appropriately viewed as fixed [costs]").

^{294.} See id. at 1180 (presenting the government's fourth test, which used the reformulated cost measure and argued cost exceeded price for marginal passengers).

^{295.} See id. at 1199 ("The effect of adding these costs, of course, is to reduce the apparent profitability of American's routes.").

^{296.} While there was some evidence that American overrode its capacity planning model in adding additional flights to several routes, there is no evidence this resulted in below-cost pricing for the added capacity. See id. at 1159–60, 1182 (recounting that capacity additions for flights from Dallas to Wichita and Colorado Springs required an override of American's capacity planning model). The airline evaluated its decision to add capacity and found that the added flights increased air travel on those routes but nonetheless impacted profitability. See id. at 1181 (recounting that American's investigation of its added capacity found that "[t]raffic generation... generally does not compensate for the loss in price premium and profitability is significantly impacted"). This certainly suggests that the decision to add capacity reduced profitability, but there is no evidence in the record that profitability fell below cost. In fact, American's capacity planning model specifically is used to "maximize system profitability" and to "indicat[e] the most profitable allocations of its fleet." Id. Under a system designed to

A reversal of the grant of summary judgment in favor of Northwest in *Spirit*, ²⁹⁷ and the affirmance of the motion for summary judgment in favor of American in *AMR Corp*. ²⁹⁸

C. Application Beyond the Airline Industry

Though the two cases primarily discussed in this Note involve the airline industry, every plaintiff, regardless of industry, alleging predatory pricing must meet the *Brooke Group* standard. Thus, any plaintiff could seek to apply the proposed Practical Test. In fact, several district courts have taken a similar, albeit more limited, approach in cases involving industries ranging from health care to manufacturing.

In a case between health insurance companies, ²⁹⁹ the plaintiff alleged that the defendants engaged in predatory pricing by underbidding on a health insurance contract for a local employer. ³⁰⁰ The district court rejected the notion that the defendants engaged in below-cost pricing. ³⁰¹ In part, the court relied on the plaintiff's failure to examine the defendants' internal accounting data. ³⁰² The court noted that the defendants used a standardized accounting system to monitor revenues and costs as a "decisionmaking tool." ³⁰³ It derided the plaintiff for failing to base its finding of below-cost pricing on the information

maximize profits, even profitable capacity additions could require an override if the added capacity could produce more profit elsewhere in the system.

^{297.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 921 (6th Cir. 2005) ("[W]e reverse the grant of summary judgment in favor of Northwest and remand the case to the district court for further proceedings").

^{298.} See United States v. AMR Corp., 335 F.3d 1109, 1111 (10th Cir. 2003) (affirming the district court's grant of summary judgment in favor of American because "the record is void of evidence" of a "material conflict").

^{299.} See Coventry Health Care of Kan., Inc., v. Via Christi Health Sys., Inc., 176 F. Supp. 2d 1207, 1210 (D. Kan. 2001) (holding that the plaintiff failed to establish predatory pricing).

^{300.} See id. at 1210 (recounting the plaintiff's claim that "defendants engaged in a scheme... [to] underbid on a contract to provide health insurance to the employees" of a corporation).

^{301.} See id. at 1236 ("The evidence does not establish that the . . . bid was based upon pricing below an appropriate measure of cost.").

^{302.} See id. at 1232 ("[T]he court has found that contemporaneous records from [the defendants] demonstrate that defendants believed they were pricing above their average variable costs.").

^{303.} See id. at 1223 (discussing the defendants' alleged below-cost pricing and their accounting procedures).

collected by the defendant's accounting system, which it called "a more credible basis for assessing [the defendant's] variable costs." 304

Another cased involved two parties engaged in the manufacture of ratchet wrenches. 305 The plaintiff's expert examined the defendant's financial records and concluded that that the defendant "sold in the vicinity of average variable cost," but did not engage in below-cost pricing. 306 The district court accepted this reasoning and concluded that the defendant did not engage in predatory pricing. 307 On appeal, the plaintiff argued that the below-cost test should be based on "economists' definition of variable and fixed costs," rather than on the accountant's. 308 The appellate court rejected this contention, declining to apply "rigid categories of variable and fixed costs," thus permitting a "fact-specific, tailored inquiry." 309

These cases are just two examples of instances outside the airline industry where courts were presented with internal financial or accounting data. In these two cases, the courts used this information to aid their consideration of belowcost pricing. They clearly illustrate that the proposed Practical Test can be applied to a variety of contexts and industries.

D. Proposal Consistent with the Purpose of Section 2 and Reflects the Shifting Understanding of Predatory Pricing

The essence of a Sherman Act, Section 2 claim is that a business is not competing on the merits. Under normal market conditions, even in cases of monopoly or near monopoly power, a company can lawfully change its business practices by, for example, increasing capacity, improving production or its product, "charg[ing] as high a price for its product as the market will accept," or even a price that only covers its production costs. ³¹⁰ Section 2

^{304.} Id. at 1224.

^{305.} See D.E. Rogers Assocs., Inc. v. Gardner-Denver Co., 718 F.2d 1431, 1433 (6th Cir. 1983) (describing the facts of the case); *id.* at 1439 (holding that the plaintiff failed to provide evidence the defendant engaged in predatory pricing).

^{306.} Id. at 1437.

^{307.} See id. (recounting the district court's acceptance of this information as evidence the defendant did not price below cost).

^{308.} See id. (outlining the plaintiff's argument on appeal).

^{309.} Ia

^{310.} SHENEFIELD & STELZER, supra note 33, at 40–41 (discussing what a company that has attained a monopoly status must do to still be lawful).

claims, however, target the one type of conduct that is not permissible—pricing aimed to hinder or suppress legitimate competition.³¹¹

In Brooke Group, the Supreme Court stated that Sherman violations arise from the notion that "[a] business rival has priced its products in an unfair manner with an object to eliminate or retard competition and thereby gain and exercise control over prices in the relevant market." Then-Judge Breyer also stated that when a court examines whether the alleged predator engaged in anticompetitive conduct, it will look at whether the firm "went beyond the needs of the ordinary business dealings, beyond the ambit of ordinary business skill, and 'unnecessarily excluded competition' from the . . . market." In the predatory pricing context, Judge Breyer indicated that this examination is necessary because there are "circumstances in which a price cut will make consumers worse off, not better off." The court in AMR Corp. stated that "[a]nti-competitive acts violate the Sherman Act if 'they impair opportunities of rivals . . . or are more restrictive than reasonably necessary," while acts that serve "a legitimate business justification" are not anti-competitive.

Though the Supreme Court sought to limit unlawful competition, courts and commentators were concerned that antitrust rules designed to aggressively catch and punish companies could actually impede competition. Then-Professor Easterbrook stated that "unless [courts] have some powerful tools to separate predation from its cousin, hard competition, any legal inquiry is apt to lead to more harm than good." While the importance of protecting consumers might initially outweigh concerns about false positives, the *Brooke Group* Court also seemed to accept the Chicago School's notion that predatory pricing rarely occurs. These factors emboldened the Supreme Court to develop an economic formulation, requiring below-cost pricing for predatory conduct. The Court intended that this standard, which has been described as having "exacting requirements of proof," give courts some means to distinguish

^{311.} See id. at 41 ("What the lawful monopolist may not do, however, is to attempt to suppress competition on the merits.").

^{312.} Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 222 (1993).

^{313.} Barry Wright Corp. v. ITT Grinnell Corp., 724 F.2d 227, 230 (1st Cir. 1983) (quoting Greyhound Computer Corp. v. Int'l Bus. Machs. Corp., 559 F.2d 488, 498 (9th Cir. 1977)).

^{314.} Id. at 231.

^{315.} United States v. AMR Corp., 140 F. Supp. 2d 1141, 1193 (D. Kan. 2001).

^{316.} Frank H. Easterbrook, *Predatory Strategies and Counterstrategies*, 48 U. CHI. L. REV. 263, 266–67 (1981).

^{317.} See Bolton et al., supra note 23, at 2257 ("The Court's exacting requirements of proof appear to be driven partly by the assumption that predatory pricing rarely occurs...").

between legitimate and unlawful acts.³¹⁸ It thus developed an "objective standard," under which "non-objective evidence will not transform above-cost pricing into illegal predatory conduct."³¹⁹

Parties involved in antitrust litigation continue to be concerned that the objective Section 2 standard will be replaced by a more subjective one. In a case decided by the Supreme Court in February 2007 involving predatory bidding, the United States Solicitor General's Office argued for "clear, objective, and easily administrable rules to govern pricing behavior." The government also stated that a subjective standard would result in "vague and standardless jury instructions" that would render juries unable to "distinguish[] predation from aggressive competition"³²¹

Though *Brooke Group*'s objective, yet formalistic, standard was well intentioned, many believe it has silenced legitimate predatory pricing claims. Recent scholarship contends that predatory pricing is plausible, and even rational, in some circumstances. In fact, some have argued that predation is actually occurring in markets like the airline industry. Spirit and AMR Corp. reflect this changing opinion. In both cases, the courts noted the consumer benefits of low-cost carriers and expressed skepticism of the Chicago School

^{318.} See AMR Corp., 140 F. Supp. 2d at 1195 ("The rationale for cost-based analysis rests in the limited ability of courts to accurately separate real-world predation from vigorous but lawful competition, and the inherent threat to competition that a failure to make such a recognition creates.").

^{319.} Id. at 1196. But see Areeda & Hovenkamp, supra note 40, ¶ 738(a) ("For courts that (erroneously, in our opinion) use average total cost as a benchmark for establishing predation, intent seems important because the price itself is not a reliable signpost.").

^{320.} Brief for the United States as Amicus Curiae Supporting Petitioner at 25, Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber, Inc., 127 S. Ct. 1069 (2007) (No. 05-381), available at http://www.usdoj.gov/atr/cases/f217900/217988.pdf (last visited Jan. 24, 2008).

^{321.} Brief for the United States as Amicus Curiae Supporting Petition for a Writ of Certiorari at 20, Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber, Inc., 127 S. Ct. 1069 (2007) (No. 05-381), available at http://www.usdoj.gov/atr/cases/f216400/216422.pdf (last visited Jan. 24, 2008).

^{322.} See Bolton et al., supra note 23, at 2241 (noting that, despite an academic consensus that predation occurs, "[j]udicial enforcement is at a low level following the Supreme Court's most important predatory pricing decision in" Brooke Group).

^{323.} See Joffe, supra note 24, at 625 ("[S]cholars have embraced the scholarship of economists who have developed models that suggest that predatory pricing is a rational and plausible strategy.").

^{324.} See Bolton et al., supra note 23, at 2245-46 (presenting instances of predation, as well as studies examining the frequency of actual predation in litigated cases).

^{325.} See supra notes 183-85 and accompanying text (recounting the Spirit court's statements on the benefits of low-cost carriers); see also United States v. AMR Corp., 140 F. Supp. 2d 1141, 1150-51 (D. Kan. 2001) (presenting evidence that American's fares were higher

notion that predation is impossible.³²⁶ One commentator argued, "A powerful tension has arisen between the foundations of current legal policy and modern economic theory," as courts adhere to the Chicago School view of predatory pricing that "most economists no longer accept."³²⁷

The proposed Practical Test adheres to the rationale underlying the Section 2 claim. It maintains the *Brooke Group* objective test requirement that below-cost pricing is necessary for a finding of predation. Courts and juries will continue to use data to determine whether the alleged predator engaged in below-cost pricing under the practical standard. The Practical Test does, however, change the data relevant to the inquiry by allowing parties to base a claim on the internal accounting or financial data used by the alleged predator, rather than on a theoretical understanding of costs and revenue.

At the same time, the proposed test allows some claims to go forward that might otherwise fail, as *Spirit* shows. If the Sixth Circuit had applied a mechanical, theoretical based below-cost test, it would have been forced to uphold the dismissal of Spirit's claim. The court acknowledged that "Spirit's cost analysis included cost measures that were not specifically linked to price-sensitive passengers, but common to all passengers," despite Spirit's claim that it could show predation using evidence of the costs and revenues of serving these price sensitive passengers. By applying a more flexible and practical test rooted in the defendant's internal use of revenue and cost data, the Sixth Circuit was able to allow the claim to go forward. Without departing from the *Brooke Group* standard, the Practical Test gives plaintiffs greater flexibility in proving predation, which, in turn, could begin to move judicial practice more in line with modern economic thinking.

VII. Criticisms

The first major concern with a practical approach could be the same issue that has hampered the use of marginal cost: Businesses may not generate data that would enable a court to reconstruct a company's pricing or capacity decision. One way to address this lack of data, however, would be to "devise

when it did not face competition from low-cost carriers, who have lower costs).

^{326.} See Spirit Airlines, Inc. v. Nw. Airlines, Inc., 431 F.3d 917, 958 (6th Cir. 2005) (Moore, J., concurring) (concluding that "a reasonable trier of fact could find... [that] Northwest did engage in predatory pricing"); see also supra notes 201–04 and accompanying text (presenting the AMR Corp. court's views on the changing perception of predatory pricing).

^{327.} Bolton et al., supra note 23, at 2242.

^{328.} Spirit Airlines, Inc., 431 F.3d at 944.

burden-shifting presumptions that incentivize market participants to generate such evidence in the ordinary course of business."³²⁹ If the defendant produced internal financial or accounting information that showed it priced above its costs, the burden of proof could shift to the plaintiff to show that such evidence is inaccurate, incomplete, or otherwise improper for use in the below-cost pricing test.

Another concern associated with a practical, fact-oriented approach to the measure of cost is that competitors would take actions without reviewing their economic cost, leaving the court with no data from which to determine whether the company knew or should have known it was engaging in below-cost pricing. This is unlikely. Pricing below cost is only rational if a business can remain viable in the market following the predatory period. Furthermore, "[t]he recoupment returns for the aspiring monopolist must be . . . for a longer period than the time" of predation if the monopolist seeks to recover the losses from predation because "a dollar invested today requires more than a dollar in future profits because of the time value of money." Accordingly, a company must stay in business following predatory pricing and for long enough to recoup its losses if the strategy has any possibility of succeeding.

To ensure it can recover its losses over a sustained period of time, firms must analyze the data behind their pricing and capacity decisions. "A business firm presumably has some . . . internal rate of return, it expects to earn before it will 'sign-on' to any investment project. Signing on for a predatory pricing strategy conceptually is no different." One of the experts for Spirit acknowledged this very thing: "[I]f the firm could not recover its losses, it was difficult to make a case for antitrust Market forces would discipline the firm." This led Judge Posner to conclude that mere threats of below-cost sales are not ordinarily credible. He stated that "[t]he victim of the threat would know that the threatener would be restrained by his self-interest from carrying it out, because it is so costly to sell below cost." Thus, below-cost pricing only succeeds if

^{329.} Wrobel, supra note 270, at 30.

^{330.} Joint Section 2 Hearings on Predatory Pricing: Hearing Before the Dep't of Justice Antitrust Div. & the Fed. Trade Comm'n, at 2 (June 23, 2006), available at http:www.ftc.gov/os/sectiontwohearings/docs/ElzingaPredationforDOJ-FTCConference.pdf (last visited Jan. 24, 2008) (statement of Kenneth G. Elzinga, Robert C. Taylor Professor of Economics, University of Virginia).

^{331.} Id. at 3.

^{332.} Id. at 2

^{333.} See POSNER, supra note 251, at 309 ("A threat to sell below cost would ordinarily not be credible.").

^{334.} Id.

businesses believe the alleged predator has the means to put its threat into action, and this requires an assessment of the financial implications of the threat.

A final concern might be that a practical standard could result in too many false positives, which predicated the Supreme Court's objective below-cost test. While the *Brooke Group* Court was concerned about protecting competition, it also expressed doubt concerning the likelihood and frequency of actual predation. Given these doubts, the Court struck a balance that weighed towards preventing false findings of predatory pricing.

That rationale, however, counsels against a standard based solely on intent. The proposed Practical Test retains the below-cost test and only changes the information relevant to that test. Plaintiffs would still have to demonstrate that the alleged predator priced its product below cost, but they would do so using the alleged predator's own data, rather than an economist's recasting of that data based on theoretical assumptions. Furthermore, a practical standard might actually reduce the number of false positives. Professor Hovenkamp argued that if courts were to allow above-cost predation, juries might have difficulty analyzing the data and make erroneous findings of predation. This concern applies to cases using the current below-cost pricing standard. The testimony and data is often so complex that it fails to give juries manageable standards. The Practical Test, however, eliminates theoretical examinations of cost and revenue and replaces it with a real world standard, which juries will likely find more accessible and easier to evaluate.

VIII. Conclusion

Predatory pricing is a complex and technical area of law. While courts can readily apply most legal standards, the *Brooke Group* predatory pricing test introduces economics and complicated mathematical calculations into the analysis. This requires judges to consider issues with which they are less familiar than traditional legal matters. Further complicating the analysis, plaintiffs present courts with complicated theoretical assumptions and methodologies, rather than real-world data, as the basis of their predatory pricing claims. Courts thus look at this evidence on one hand and *Brooke Group*'s warning that legal and illegal conduct are difficult to distinguish on the other hand. In weighing the two, courts consistently err on the side of caution and find insufficient evidence of predation.

^{335.} See Herbert Hovenkamp, Economic Experts in Antitrust Cases, in 1 MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY § 10:10 (David J. Fargman ed., 2006) (arguing that such claims "invite[] juries to consider complex data about pricing strategies where they are prone to make serious error").

A significant tool in the antitrust arsenal has been rendered moot given current application of the *Brooke Group* below-cost pricing test. Predatory pricing—designed to protect competition and efficiency, as well as the low prices, improved innovation, and consumer choice that result from competition and efficiency—has not been successfully prosecuted in more than fourteen years. This is particularly alarming in light of significant evidence that predation occurs. The Sixth Circuit's holding in *Spirit*, however, illustrates a way to resurrect predatory pricing and preserve the goals it serves.

This Note's proposed Practical Test is based on the Sixth Circuit's holding in *Spirit*. The Practical Test maintains the *Brooke Group* below-cost pricing test, but it enables courts and juries to use real-world evidence in conducting this analysis. It allows the trier of fact to look at the data and information actually possessed by a company and then determine whether the alleged predator knew, or reasonably should have known, that it was engaging in predatory pricing. As such, the Practical Test recognizes the emerging consensus that predatory pricing exists without abandoning years of court precedent.