

DEFINING EXCLUSIONARY CONDUCT: SECTION 2, THE RULE OF REASON, AND THE UNIFYING PRINCIPLE UNDERLYING ANTITRUST RULES

MARK S. POPOFSKY*

I. INTRODUCTION

The antitrust community is engaged in a renewed debate over the legal test for exclusionary conduct under Section 2 of the Sherman Act. We are mired, it is said, in a fierce “exclusionary conduct ‘definition’ war.”¹ Sparked by notable decisions in *Trinko*,² *Microsoft*,³ and *LePage’s*,⁴ this struggle has produced no shortage of combatants.

Indeed, scholars, economists, and notable practitioners have advanced numerous proposed general definitions of “exclusionary” conduct, the critical conduct element of Section 2’s monopolization offense.⁵ These tests include: (1) assessing net effects on consumer welfare (or net competitive effects)⁶; (2) engaging in a weighted comparison of competitive effects⁷; (3) determining if the defendant’s conduct involved a “profit-

* Member California and District of Columbia Bars; Adjunct Professor, Georgetown University Law Center. I would like to thank Jonathan Jacobson, Kenneth Glazer, A. Douglas Melamed, M. Laurence Popofsky, Steven Salop, Christopher Sprigman, Phil Weiser, Gregory Werden, and the Editors of this Journal, for their helpful comments.

¹ Andrew I. Gavil, *Exclusionary Distribution Strategies By Dominant Firms: Striking a Better Balance*, 72 ANTITRUST L.J. 3, 5 (2005).

² *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004).

³ *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (en banc) (per curiam).

⁴ *LePage’s Inc. v. 3M Corp.*, 324 F.3d 141 (3d Cir. 2003) (en banc), *cert. denied*, 124 S. Ct. 2932 (2004).

⁵ *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 605 (1985).

⁶ Steve C. Salop, *Exclusionary Conduct, Effect on Consumers, and the Flawed Profit-Sacrifice Standard*, *supra* this issue, 73 ANTITRUST L.J. 311, 313, 329–30 (2006) (“This competitive effect-based antitrust standard essentially would compare the beneficial and harmful competitive aspects of the alleged exclusionary conduct in order to determine the overall impact on consumers.”).

⁷ See 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 651a, at 72 (2d ed. 2002) (conduct is exclusionary if it “produce[s] harms disproportionate to benefits”); Herbert Hovenkamp, *Exclusion and the Sherman Act*, 72 U. CHI. L. REV. 147, 148 (2005); *see also* Gavil, *supra* note 1, at 78–79 (arguing that balancing, although required in principle,

sacrifice” or made “no economic sense” absent maintaining or enhancing market power⁸; (4) assessing whether the defendant’s conduct excluded “equally efficient” rivals⁹; and (5) applying rules of per se legality and illegality depending on whether the conduct harmed rivals “only” through efficiency.¹⁰ Many of these tests, their proponents urge, supply a “one size fits all” framework within which the legality of all rival-impeding conduct can be assessed.¹¹

My purpose is to step back from the contest among these positions and examine the legal basis by which courts adopt Section 2 liability tests. If unifying principles that guide the selection of appropriate Section 2 tests can be identified, such principles may pragmatically assist courts in choosing among often very different proposed tests, a task that the federal courts undoubtedly will confront in the coming years.

The stakes in the outcome are high. Except for a few well-defined classes of conduct, the meaning of “willful” acquisition or maintenance of monopoly power is largely up for grabs. Many firms with putative monopoly power operate in industries where preserving incentives to innovate is crucial in order to produce significant contributions to consumer welfare. Section 2 liability tests that wrongly curb a monopolist’s incentive to compete or that improperly enable a monopolist to impede or vanquish would-be rivals threaten significant and lasting harm to both competition and consumers.

is rarely necessary because the fact finder is unlikely to credit both the plaintiff’s and defendant’s evidence).

⁸ See, e.g., A. Douglas Melamed, *Exclusionary Conduct Under the Antitrust Laws: Balancing, Sacrifice, and Refusals to Deal*, 20 BERKELEY TECH. L.J. 1247, 1255–62 (2005); Gregory J. Werden, *The “No Economic Sense” Test for Exclusionary Conduct*, 31 J. CORP. L. 7 (forthcoming) [hereinafter *The “No Economic Sense” Test*]; Gregory J. Werden, *Identifying Exclusionary Conduct Under Section 2: The “No Economic Sense” Test*, *supra* this issue, 73 ANTITRUST L.J. 413, 414 (2006) [hereinafter *Identifying Exclusionary Conduct*]. See generally Salop, *supra* note 6, at 318–20 & nn.34, 36 (citing notable formulations of the profit-sacrifice test). Except where otherwise specifically indicated, I will use the “profit-sacrifice” and “no economic sense” tests interchangeably because I understand the “profit-sacrifice” test not to require a separate recoupment period.

⁹ See RICHARD A. POSNER, ANTITRUST LAW 194–95 (2d ed. 2001).

¹⁰ See Einer Elhauge, *Defining Better Monopolization Standards*, 56 STAN. L. REV. 253, 323, 330 (2003).

¹¹ See, e.g., Melamed, *supra* note 8, at 1267 (“The sacrifice test can provide a sound unifying antitrust principle for analyzing all exclusionary conduct that has efficiency benefits.”); *id.* at 1260 (arguing that even naked exclusionary conduct involves a profit sacrifice although conceding that “naked exclusion” can “be condemned as anticompetitive conduct without need for the sacrifice test”); Salop, *supra* note 6, at 313–14; Elhauge, *supra* note 10, at 330 (advocating “mainly” employing the proposed rules of per se legality and illegality). The U.S. Department of Justice, although formally maintaining the position that the “no economic sense” test might not govern all conduct under Section 2, see *infra* note 203 (discussing Solicitor General’s merits brief in *Trinko*), has “consistently advocated the no economic sense test in all its Section 2 cases.” Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 413.

In what follows, I explain that Section 2 is not “one size fits all.” Rather, the few clear guideposts in Section 2 case law demonstrate that courts properly apply different Section 2 legal tests to different conduct. The unifying principle is that each Section 2 legal test reflects a specific expression of the same underlying “rule of reason.” Although courts usually describe the rule of reason as a particular step-wise test for assessing the legality of concerted action, the rule of reason more generally provides a *principle* for generating antitrust liability tests in a common-law fashion. This is, after all, the lesson of particularized legal tests courts have crafted under Section 1 (such as per se rules), all of which implement the rule of reason.

Section 2’s rule of reason, so understood, asks: For the type of conduct at issue, which *legal test* likely maximizes consumer welfare over the long run? Applicable considerations in selecting the appropriate test include not only the likely consumer harms and benefits from the conduct, but also the risks of false positives, false negatives, and legal process costs. As settled Section 2 rules (such as the cost-based predatory pricing rule) illustrate, the appropriate test need not assess net competitive effects *in a specific case*. Rather, the assessment of net competitive effects is first performed at a “systemic” level: the point at which the appropriate legal test is selected. Put differently, although Section 2 directs courts to apply a single underlying principle—maximize long-term consumer welfare—that principle need not, and indeed cannot, find expression in a single operational legal command.

This understanding of Section 2’s rule of reason provides a foundation for courts to select among competing legal tests when confronted, as Section 2 courts often are, with conduct not governed by a settled liability rule. This is not to suggest that courts should create refined categories of conduct in wasteful litigation over characterization. Section 2 courts can develop practical and administrable tests, just as antitrust courts have for over a century in numerous other contexts. Moreover, focusing on the impact of applying different legal tests will sharpen, rather than obscure, the underlying analysis. What is required, as the Supreme Court has explained in a different context, is an “enquiry meet for the case.”¹² The stakes are too high to embark instead on a quest for a “universal test for section 2 liability,” a “‘holy grail’ that may never be precisely located.”¹³

¹² Cal. Dental Ass’n v. FTC, 526 U.S. 756, 781 (1999).

¹³ R. Hewitt Pate, The Common Law Approach and Improving Standards for Analyzing Single Firm Conduct, Address Before Fordham Corp. L. Inst. 8 (Oct. 23, 2003, revised Mar. 9, 2004), available at <http://www.usdoj.gov/atr/public/speeches/202724.pdf>.

II. SECTION 2 AND THE RULE OF REASON

A. IS SECTION 2 DOCTRINE INCOHERENT?

Over a century since the Sherman Act's passage, and some forty years since the Supreme Court held that Section 2 condemns the "willful" acquisition or maintenance of monopoly power,¹⁴ great uncertainty persists as to the test for liability under Section 2 of the Sherman Act.¹⁵ It is settled that Section 2, as applied to rival-impeding conduct, condemns only "exclusionary" conduct and does not invalidate monopoly power acquired or maintained through superior skill, foresight, or industry.¹⁶ Yet the federal reporters are replete with cases that repeat this distinction, reach outcomes, but fail to articulate a clear principle or operational legal test that separates lawful from unlawful conduct.¹⁷

The Supreme Court in *Aspen*¹⁸ came closest to specifying a general test for exclusionary conduct. Quoting Professor Areeda, the Court stated: "Thus, 'exclusionary' comprehends at the most behavior that not only (1) tends to impair the opportunity of rivals, but also (2) either does

¹⁴ *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966).

¹⁵ *See, e.g., Gavil, supra* note 1, at 3-5.

¹⁶ *See Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 605 (1985). Section 2 also condemns actual or attempted monopolization through horizontal conduct, such as mergers to monopoly, *see, e.g., Grinnell*, 384 U.S. at 571, or offers to allocate markets, *see, e.g., United States v. Am. Airlines, Inc.*, 743 F.2d 1114, 1122 (5th Cir. 1984). Section 2 also condemns conspiracies to monopolize, which can involve exclusionary or collusive conduct. *See, e.g., Perington Wholesale, Inc. v. Burger King Corp.*, 631 F.2d 1369, 1377 (10th Cir. 1980). This article examines the legal test(s) for exclusionary conduct under Section 2. However, that Section 2 also condemns certain non-exclusionary conduct supports the general point that Section 2 tests must be appropriate for the conduct in question.

¹⁷ Notable attempts to articulate a general framework for exclusionary conduct before *Aspen*, discussed below, include: *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 429-31 (2d Cir. 1945) (L. Hand, J.) (opining that a firm does not unlawfully monopolize if "monopoly [is] thrust upon it" and that liability for monopolization can result from employment of "honestly industrial" maneuvers that were not economically inevitable); *United States v. United Shoe Mach. Corp.*, 110 F. Supp. 295, 342 (D. Mass. 1953) (Wyzanski, J.) (explaining that three competing interpretations of unlawful monopolization include (1) acquiring or maintaining monopoly power "as a result of using an unreasonable 'restraint of trade' in violation of Sec. 1 of the Sherman Act"; (2) wielding monopoly power through use of "any exclusionary practice"; and (3) obtaining or maintaining monopoly through some method other than "superior skill," a legal license, economies of scale, and the like), *aff'd*, 347 U.S. 521 (1954) (per curiam); and *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 275-76 (2d Cir. 1979) (holding that a firm monopolizes by *using* monopoly power to exclude rivals and suggesting that this concept is limited to "actions [that] are possible or effective only if taken by a firm that dominates its smaller rivals" and does not include "gains that accrue to any integrated firm, regardless of its market share").

¹⁸ *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985).

not further competition on the merits or does so in an unnecessarily restrictive way.”¹⁹ But this statement, as commentators observe, raises more questions than it answers.²⁰ Indeed, advocates of rival Section 2 tests treat *Aspen* as a mirror, reflecting support for their favored doctrine.

For example, some read the phrase “or does so in an unnecessarily restrictive way” to imply a test comparing (or assessing net) pro- and anticompetitive effects akin to the “full” rule of reason under Section 1.²¹ The Court’s reasoning, however, does not compel this reading. The Court framed the issue as whether the jury was entitled to find “that there were no valid business reasons” for terminating a profitable joint venture.²² The Court held that “the evidence supports an inference that Ski Co. was not motivated by efficiency concerns and that it was willing to sacrifice short-run benefits and consumer goodwill in exchange for a perceived long-run impact on its smaller rival.”²³ Because the defendant failed to *establish* a justification, the Court did not reach whether a proven justification triggered an assessment of net competitive effects.

Indeed, the *Aspen* Court’s treatment of the “valid business reason” defense is taken by others to support a very different test: that a profit sacrifice is a necessary condition to impose liability under Section 2.²⁴ Proponents of the profit-sacrifice test emphasize the Court’s rejection of the defendant’s proffered justification on the ground that it engaged in a profit sacrifice and the Court’s invocation of Robert Bork for the proposition that “[i]f a firm has been ‘attempting to exclude rivals on some basis other than efficiency,’ it is fair to characterize its behavior as predatory.”²⁵ But because the Court rejected the justification offered, *Aspen* did not reach the question of whether unprofitable conduct is *necessary* for finding a Section 2 violation. Put simply, “*Aspen* does not

¹⁹ *Id.* at 605 n.32 (quoting 3 PHILLIP E. AREEDA & DONALD F. TURNER, *ANTITRUST LAW* ¶ 626b, at 78 (1978)).

²⁰ See Gavil, *supra* note 1, at 20–22; Elhauge, *supra* note 10, at 263–65.

²¹ See Steven C. Salop & R. Craig Romaine, *Preserving Monopoly: Economic Analysis, Legal Standards, and Microsoft*, 7 *GEO. MASON L. REV.* 617, 650–51 (1999); Salop, *supra* note 6, at 335.

²² *Aspen*, 472 U.S. at 605.

²³ *Id.* at 610–11.

²⁴ See Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 423; see also A. Douglas Melamed, *Exclusive Dealing Agreements and Other Exclusionary Conduct—Are There Unifying Principles?*, *supra* this issue, 73 *ANTITRUST L.J.* 375, 390 (2006) (arguing that *Aspen* apparently “explicitly embraced” the profit-sacrifice test). This is how the DOJ construed *Aspen* in the *Microsoft* case. See Brief of Appellees United States at 47–48, *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (Nos. 00-5212, 00-5213), available at <http://www.usdoj.gov/atr/cases/f7200/7230.pdf>.

²⁵ *Aspen*, 472 U.S. at 605 (quoting ROBERT H. BORK, *ANTITRUST PARADOX* 138 (1978)).

directly answer the question” of “what is the proper approach to assessing dominant firm conduct under Section 2 when it produces *both* anticompetitive effects on rivals and consumers (i.e., inefficiencies) *and* procompetitive effects for the alleged excluding firm (i.e., efficiencies).”²⁶

The Supreme Court’s failure in *Aspen* and in its subsequent decisions in *Kodak* and *Trinko*²⁷ to specify an operational legal test has led some to deride current Section 2 doctrine as “incoherent”²⁸ or “truly vacuous.”²⁹ To the extent this criticism means that the Supreme Court has failed to provide a crisp test for distinguishing lawful from unlawful conduct, the criticism is surely valid. *Aspen* typifies the difficulties of deriving from many Section 2 cases operational legal tests that decide other cases.

But the criticism is unfounded in a crucial respect. The absence of an articulated general test for exclusionary conduct does not mean that a unifying principle cannot be found in the cases. Section 2 is not an entirely uncharted mysterious sea where reference points are completely lacking. After all, *some* Section 2 cases *do* articulate legal tests. Moreover, for at least some categories of conduct, the boundaries of liability are implicit in cases’ outcomes. By examining these beacons of relative clarity in otherwise murky waters, a coherent underlying legal principle that

²⁶ Gavil, *supra* note 1, at 21. Some read *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 767 (1984), to preclude applying a consumer welfare effects (or balancing) test in Section 2 cases. *See, e.g.*, Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 428–29. *Copperweld* merely reiterates that “Congress authorized Sherman Act scrutiny of single firms” only when the conduct threatens monopoly power. 467 U.S. at 768 (“Judging unilateral conduct in this manner reduces the risk that the antitrust laws will dampen the competitive zeal of a single aggressive entrepreneur.”). The Court did not opine on how, if at all, the conduct element of a Section 2 offense is otherwise different from that of Section 1. At the most, *Copperweld* stands for the proposition that a consumer welfare effects test is not appropriate in all Section 2 cases, *see id.* at 775 (“Subjecting a single firm’s *every action* to judicial scrutiny for reasonableness would threaten to discourage the competitive enthusiasm that the [Sherman Act] seek[s] to promote.” (emphasis added)), a proposition I embrace.

²⁷ In *Kodak*, the Court repeated the formula of *United States v. Griffith*, 334 U.S. 100, 107 (1948), that it is unlawful to use monopoly power to “foreclose competition, to gain a competitive advantage, or to destroy a competitor.” *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 482–83 (1992) (citation omitted). *Kodak*, like *Aspen*, was a “one-sided” case: the Court held that a jury could find that the defendant’s conduct caused actual anticompetitive effects and that its justification was pretextual. *See id.* at 483–85. In *Trinko*, as will be explained, the Court found a refusal to deal by a regulated monopolist not to fall within recognized exceptions to the *Colgate* doctrine and held that “traditional antitrust principles” did not warrant creating a new exception. *See infra* text accompanying notes 89–93. “But the Court neither enumerated the circumstances where there is a ‘duty to aid competitors’ nor articulated a standard for identifying such cases.” Werden, *The “No Economic Sense Test,” supra* note 8.

²⁸ Elhauge, *supra* note 10, at 267.

²⁹ *Id.* at 261.

At one end of the spectrum is conduct that the federal courts deem essentially per se lawful (or “privileged”) under Section 2. An example is merely charging either a monopoly price³¹ or an above-cost limit price (a price set below the level entrants could profitably charge and lower than the defendant would charge absent an entry-detering strategy).³² Also privileged is “superior skill, foresight, and industry” or “competition on the merits.”³³ Although what falls within that category is subject to debate,³⁴ the irreducible core appears to include conduct that impedes rivals *only* because it improves the perceived quality of the defendant’s product, or investments in new product development directed at such improvements.³⁵

Moving along the spectrum, a more interventionist test applies to pricing. Pricing low is lawful unless it is both below some measure of cost and there is a reasonable prospect of recoupment through enhanced or maintained monopoly power.³⁶ Critically, the predatory pricing rule generally excludes opportunity costs (that is, forgone profits) in calculating whether a price is below cost.³⁷ Instead, the rule only condemns

³¹ See, e.g., *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004) (“The mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system.”); *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 294 (2d Cir. 1979) (“Setting a high price may be a use of monopoly power, but it is not in itself anticompetitive.”). Although it has been long settled that the Sherman Act does not condemn “monopoly in the concrete,” *Standard Oil Co. v. United States*, 221 U.S. 1, 62 (1911), it was not inevitable that the *exercise* of such power would be held lawful. Cf. *Griffith*, 334 U.S. at 107 (“Hence the existence of power ‘to exclude competition when it is desired to do so’ is itself a violation of § 2, provided it is coupled with the purpose or intent to exercise that power.”).

³² See *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 234 (1st Cir. 1983). Decisions suggesting that above-cost limit pricing can violate Section 2, see, e.g., *Transamerica Computer Co. v. IBM*, 698 F.2d 1377, 1387 (9th Cir. 1983), have effectively been overruled by *Brooke Group v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209 (1993).

³³ See, e.g., *Berkey*, 603 F.2d at 274–76, 281. See generally Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 418 & n.21 (citing cases).

³⁴ See Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 419 n.23 (“Though never defined, the [Supreme] Court has often referred to the concept of ‘competition on the merits’”); Hovenkamp, *supra* note 7, at 149 (listing conduct defined as competition on the merits).

³⁵ See, e.g., *Berkey*, 603 F.2d at 281 (explaining that because “a monopolist is permitted, and indeed encouraged, by § 2 to compete aggressively on the merits, any success that it may achieve through the process of invention and innovation is clearly tolerated” (citation and internal quotations omitted)). See also *infra* text accompanying notes 60–63 (discussing *Microsoft’s* privileging of Microsoft-specific Java and free provision of the Internet Explorer Access Kit). See also Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 419 (“[C]ourts have refused to entertain the notion that merely introducing a new product” could “violate Section 2.”).

³⁶ See *Brooke Group*, 509 U.S. at 222–24; *Barry Wright*, 724 F.2d at 233–36.

³⁷ See *United States v. AMR Corp.*, 335 F.3d 1109, 1118–19 (10th Cir. 2003).

pricing below some measure of actual costs.³⁸ Therefore, under the predatory pricing rule, a price cut may be lawful even if undertaken by a monopolist solely to drive out rivals and enable the monopolist to secure monopoly power.³⁹

Next along the spectrum is conduct subject to the so-called profit-sacrifice test, which sometimes is articulated as the no economic sense test. Under this test, conduct is unlawful if it makes sense only because of the prospect of excluding rivals and augmenting market power.⁴⁰ The test, its proponents urge, ensures that leading firms retain an incentive to compete vigorously by condemning conduct only when an anticompetitive objective is unambiguous, because the conduct would not have been undertaken absent the prospect of obtaining or maintaining market power.⁴¹ The test is more interventionist than the predatory pricing test because (1) the no economic sense test examines the profitability of incremental conduct; by contrast, the predatory pricing test gauges the overall profitability of selling a particular good or service⁴²; and (2) some conduct, as explained, might fail the no economic sense test but pass the predatory pricing test because the no economic sense test can include opportunity costs that the predatory pricing rule excludes.⁴³

Several courts have employed the profit-sacrifice test, as influentially formulated by Robert Bork, to define “predatory conduct.”⁴⁴ Moreover,

³⁸ See *id.* (rejecting as inconsistent with *Brooke Group* a test that the court perceived as including opportunity costs and, thus, in effect was “a short-run profit-maximization test”). *But cf.* Gregory J. Werden, *The American Airlines Decision: Not with a Bang but a Whimper*, ANTITRUST, Fall 2000, at 34 n.35 (arguing that the court mischaracterized this test).

³⁹ See *Barry Wright*, 724 F.2d at 233–36.

⁴⁰ See generally Melamed, *supra* note 8, at 1255 (“[T]he sacrifice test asks whether the allegedly anticompetitive conduct would be profitable for the defendant and would make good business sense even if it did not exclude rivals and thereby create or preserve market power for the defendant.”); Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 415 (“[T]he test is whether the conduct likely would have been profitable if the existing [or nascent] competitors were not excluded and monopoly was not created [or maintained].”).

⁴¹ See Melamed, *supra* note 24, at 392–93.

⁴² Compare Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 420 (“Often the proper ‘but for’ scenario [for applying the no economic sense test] is precisely what actually occurred with the exception of the challenged incremental conduct.”), with *Spirit Airlines, Inc. v. Northwest Airlines, Inc.*, 429 F.3d 190, 219–20 (6th Cir. 2005) (explaining that “the proper measure of costs for a predatory pricing claim is for the particular good or service in that market”).

⁴³ See *supra* notes 37–39 and accompanying text.

⁴⁴ See ROBERT H. BORK, *THE ANTITRUST PARADOX* 144 (1978) (“Predation may be defined, provisionally, as a firm’s deliberate aggression against one or more rivals through the employment of business practices that would not be considered profit maximizing except for the expectation either that (1) rivals will be driven from the market . . . or (2) rivals will be chastened sufficiently to abandon competitive behavior the predator finds inconvenient or threatening.”). Cases articulating variations on this test, some of which

the Department of Justice has advocated applying this test in many circumstances, including when evaluating a refusal to deal with a rival.⁴⁵ Although the Supreme Court in *Trinko* declined to declare that a profit sacrifice is required to condemn a monopolist's unilateral refusal to deal with a rival, the Court distinguished *Aspen* as (unlike *Trinko*) involving a profit sacrifice and termination of a prior course of dealing.⁴⁶ On this basis, some courts have read *Trinko* to require a plaintiff challenging a similar refusal to deal to prove a profit sacrifice.⁴⁷

Moving along the spectrum from unilateral refusals to deal with rivals, we come to other unilateral conduct (such as product design) and rival-impeding agreements. The Section 2 legal test that applies to such conduct is largely unsettled. However, the D.C. Circuit's en banc decision in *United States v. Microsoft Corp.*⁴⁸ suggests that courts judge agreements more sternly than unilateral conduct under Section 2.

In *Microsoft*, the D.C. Circuit articulated a step-wise "general rule" for assessing the legality of conduct under the Sherman Act:

- First, the plaintiff "must demonstrate that the monopolist's conduct indeed has the requisite anticompetitive effect"; that is, an effect that "harm[s] the competitive *process* and thereby harm[s] consumers."
- Second, the defendant may rebut this prima facie case by offering a procompetitive justification—"a nonpretextual claim that its conduct is indeed a form of competition on the merits because it involves, for example, greater efficiency or enhanced consumer appeal"—which "shifts [the burden] back to the plaintiff to rebut" the efficiency claim.

suggest it supplies a general standard for defining "exclusionary" conduct and not just "predation," include, among others: *Stearns Airport Equip. Co. v. FMC Corp.*, 170 F.3d 518, 524 (5th Cir. 1999); *Neumann v. Reinforced Earth Co.*, 786 F.2d 424, 427 (D.C. Cir. 1986) (Bork, J.); and *Trace X Chem., Inc. v. Canadian Indus., Ltd.*, 738 F.2d 261, 268 (8th Cir. 1984).

⁴⁵ See *supra* note 11.

⁴⁶ See *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 408–10 (2004).

⁴⁷ See, e.g., *Covad Communications Co. v. Bell Atl. Corp.*, 398 F.3d 666, 673, 675–76 (D.C. Cir. 2005) (dismissing refusal-to-deal claim in the absence of allegations that defendant would have dealt with rival absent "statutory compulsion" but refusing to dismiss claim based on alleged "predatory" (that is, short-run money-losing) refusal to deal with customers); *Metronet Servs. Corp. v. Qwest Corp.*, 383 F.3d 1124, 1134 (9th Cir. 2004) (terminating refusal-to-deal claim among other reasons because of the absence of "a sacrifice of short-term profits for long-term gain from the exclusion of competition").

⁴⁸ 253 F.3d 34, 50 (D.C. Cir. 2001) (en banc) (per curiam).

- Third, “if the monopolist’s procompetitive justification stands un rebutted, then the plaintiff must demonstrate that the anticompetitive harm of the conduct outweighs the procompetitive benefit.”⁴⁹

This framework is virtually indistinguishable from the test courts employ under Section 1’s rule of reason.⁵⁰ Indeed, *Microsoft* invoked the seminal rule of reason case, *Standard Oil Co. v. United States*,⁵¹ for the proposition that the rule of reason supplies “the proper inquiry under both sections of the Act.”⁵² For this reason, some read *Microsoft* to mandate applying in Section 2 cases a Section 1-like rule of reason test that assesses net effects on consumer welfare of the conduct in question.⁵³

Microsoft, however, does not *compel* courts to assess net competitive effects. The court actually compared effects *only* when analyzing Microsoft’s restrictions on computer manufacturers’ modifications of the Windows start-up screens. This conduct, which impeded rivals but the court found justified by substantial efficiencies, involved agreements also subject to Sherman Act Section 1’s rule of reason.⁵⁴ By contrast, when analyzing Microsoft’s unilateral “product design” conduct—for instance, Microsoft’s alteration of Windows “to override the user’s choice of a default browser in certain circumstances”⁵⁵ and Microsoft’s commingling of operating system and browser code—the court, while using the language of comparing effects, in fact *avoided* that inquiry. Rather than compare effects, the court found in some instances no anticompetitive effect, in some no justification, and in others no rebuttal to the

⁴⁹ *Id.* at 58–59.

⁵⁰ The *Microsoft* court’s test does not expressly discuss less-restrictive alternatives. However, that step of the analysis likely is implicit in the rebuttal of an efficiency claim.

⁵¹ 221 U.S. 1 (1911).

⁵² *United States v. Microsoft Corp.*, 253 F.3d 34, 59 (D.C. Cir. 2001) (en banc) (per curiam) (emphasis added). *See id.* (“[W]hen the second section [of the Sherman Act] is thus harmonized with . . . the first, it becomes obvious that the criteria to be resorted to in any given case for the purpose of ascertaining whether violations of the section have been committed, is the rule of reason guided by the established law.” (quoting *Standard Oil*, 221 U.S. at 61–62 (alterations in original))).

⁵³ Salop, *supra* note 6, at 333–34.

⁵⁴ *Microsoft*, 253 F.3d at 63 (holding that “a shell that automatically prevents the Windows desktop from ever being seen by the user is a drastic alteration of Microsoft’s copyrighted work, and outweighs the marginal anticompetitive effect of prohibiting the OEMs from substituting a different interface automatically upon the completion of the initial boot process”). Some assert that the balance of demonstrated effects was so lopsided that *Microsoft* did not really “proceed to apply that balancing step” and, thus, “offers little specific guidance on how that balance should be struck.” Gavil, *supra* note 1, at 22–23 & n.95. The critical point, however, is that the *Microsoft* court only balanced when analyzing conduct already subject to a balancing test under Section 1.

⁵⁵ *Microsoft*, 253 F.3d at 67.

justification.⁵⁶ This is consistent with how earlier courts treated product design decisions. Although some decisions framed the inquiry in terms of “reasonableness,” in practice courts subjected product design conduct to a no economic sense test,⁵⁷ found the conduct privileged superior skill foresight and industry because it harmed rivals only through increasing product quality,⁵⁸ or concluded that the conduct lacked any efficiency justification.⁵⁹

Revealingly, the *Microsoft* court also appeared to protect certain conduct as essentially per se lawful. First, the court rejected the plaintiffs’ argument that Microsoft’s development of its IE Access kit (IEAK) made no sense except to preserve monopoly power because “a monopolist does not violate the Sherman Act simply by developing an attractive product.”⁶⁰ Second, the court held lawful Microsoft’s configuring of its Java Virtual Machine (JVM) to be incompatible with Sun’s JVM while condemning other Microsoft conduct that advanced Microsoft-specific Java.⁶¹ Although again using the language of balancing (or comparing effects), the court did not balance. Instead, the court held that creating a superior version of Java, one that “allows Java applications to run faster on Windows than does Sun’s JVM,” had no *anticompetitive* effect.⁶² In

⁵⁶ See *id.* at 66–68 (explaining that Microsoft “proffer[ed] no justification for two of the three challenged actions that it took in integrating IE into Windows—excluding IE from the Add/Remove Programs utility and commingling browser and operating system code” but that the plaintiffs failed to rebut Microsoft’s justification for designing Windows to override a user’s preference for another browser in certain circumstances).

⁵⁷ See, e.g., *In re IBM Peripheral EDP Devices Antitrust Litig.*, 481 F. Supp. 965, 1003, 1007 (N.D. Cal. 1979) (holding IBM’s elimination of a selector channel lawful because “IBM had no further need for the selector” although stating the general test as whether “the design choice [was] unreasonably restrictive of competition”), *aff’d*, 698 F.2d 1377 (9th Cir. 1983).

⁵⁸ See *Cal. Computer Prods. v. IBM Corp.*, 613 F.2d 727, 744 (9th Cir. 1979) (holding that “IBM, assuming it was a monopolist, had the right to redesign its products to make them more attractive to buyers whether by reason of lower manufacturing cost and price or improved performance” and that “the reasonableness of IBM’s conduct in this regard did not present a jury issue”); *In re IBM Peripheral EDP Devices*, 481 F. Supp. at 1004 (holding that an interface design change was lawful because “[i]t was adopted by IBM because it was a product improvement, and even if its effect was to injure competitors, the antitrust laws do not contemplate relief in such situations.”).

⁵⁹ See *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1382–83 (Fed. Cir. 1998) (jury entitled to find proffered reasons for modifying device to make it incompatible with rival’s replacement needles pretextual; evidence suggested that the modification had “no effect on gun or needle performance”); *In re IBM Peripheral EDP Devices*, 481 F. Supp. at 1008 (IBM’s degradation of system performance to preclude competition unlawful).

⁶⁰ *Microsoft*, 253 F.3d at 68 (citing *United States v. Grinnell Corp.*, 384 U.S. 563, 571 (1966) (“[G]rowth or development as a consequence of superior product [or] business acumen is no violation” (alteration in original))).

⁶¹ *Id.* at 74–75.

⁶² *Id.* at 75.

other words, the court determined that impeding rivals through conduct deemed to reflect only efficiency was, in effect, protected “superior skill, foresight, and industry.”⁶³

Microsoft, like *Aspen*, thus raises more questions than its answers, but three points appear clear: (1) the court compared competitive effects in the case of vertical agreements; (2) the court avoided comparing effects in the case of *Microsoft*’s unilateral conduct; and (3) the court recognized that, when conduct reflects “competition on the merits,” balancing effects on consumers or rivals is inappropriate.⁶⁴

Rounding out the spectrum—at the interventionist end—are cases that have condemned conduct as (1) nakedly anticompetitive (in the sense that the conduct was reasonably likely to cause anticompetitive effects and lacked any justification); or (2) nearly per se illegal under Section 2. A notable example of the first category is *Conwood Company, L.P. v. United States Tobacco Co.*⁶⁵ There, the defendant monopolist removed its rival’s point-of-sale advertising.⁶⁶ The defendant could not justify conduct that had no purpose except to advantage its own product by impeding rivals. Because the conduct was anticompetitive, lacked an efficiency justification, and entrenched the monopolist’s position, the court held it unlawful.⁶⁷ The second category differs from *Conwood* in that no defense is permitted; the conduct, if shown likely to contribute to monopoly power, violates Section 2.⁶⁸ Such conduct includes bad-

⁶³ Cf. Hovenkamp, *supra* note 7, at 153 (explaining that “[w]hile this definition” of exclusionary conduct given by the *Microsoft* court “is elaborate, it is also fairly unfocused, in that it does not specify criteria for harm to competition or the competitive process”).

⁶⁴ See also Popofsky, *supra* note 30, at 578–79 & n.73. *Trinko* supports *Microsoft*’s implicit distinction between the treatment of unilateral (balancing likely not permitted) and concerted (balancing likely permitted) action. See *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 416 (2004) (explaining that the Sherman Act “does not give judges *carte blanche* to insist that a monopolist alter its way of doing business whenever some other approach might yield greater competition.”).

⁶⁵ 290 F.3d 768 (6th Cir. 2002).

⁶⁶ *Id.* at 788.

⁶⁷ *Id.* at 788–91. Certain refusal-to-deal cases can also be viewed as “easy” cases of unjustified exclusion. See, e.g., *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951); *United States v. Dentsply Int’l, Inc.*, 399 F.3d 181 (3d Cir. 2005).

⁶⁸ The rule is not quite per se because the plaintiff must still show that the conduct had a connection to the acquisition or maintenance of monopoly power; as the *Microsoft* court put it, that the conduct “‘reasonably appear[s] capable of making a significant contribution’” to such power. *United States v. Microsoft Corp.*, 253 F.3d 34, 79 (D.C. Cir. 2001) (en banc) (per curiam) (quoting 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 651c, at 78 (1996)). Indeed, the Supreme Court has reserved the question whether there can be per se Section 2 violations. See *Walker Process Equip., Inc. v. Food Mach. & Chem. Corp.*, 382 U.S. 172, 178 (1965). The legal tests that govern this conduct could be viewed as *less* interventionist than the profit-sacrifice test because, in some circumstances, conduct could fail the profit-sacrifice test yet be deemed lawful.

faith enforcement of invalid patents,⁶⁹ sham litigation,⁷⁰ and assertion of patents obtained by fraud on the PTO.⁷¹

C. EXPLAINING THE SPECTRUM: SECTION 2 LEGAL TESTS AS EXPRESSIONS OF THE RULE OF REASON

Sorting these relatively few “guidepost” decisions from least to most interventionist is illuminating. The spectrum demonstrates that Section 2 is not “incoherent” and that an underlying principle is indeed at work. Courts select the legal test that assertedly maximizes long-term consumer welfare or, put in the language of balancing, is on balance best for consumers. The appropriate test—the level of intervention—does not necessarily ask whether the conduct produces net anticompetitive effects *in a particular case*. Rather, courts determine at the step of selecting the appropriate legal test whether the proposed test itself is better for consumers than other liability tests.

1. *Distinct Section 2 Legal Tests Reflect Courts Employing Decision Theory to Adopt Appropriate Liability Tests*

Put more precisely, each Section 2 legal test represents an attempt to minimize two sets of long-run costs from applying legal tests: error costs and legal process costs. Legal process costs stem from the process of adjudication. For example, a firm plotting a business strategy must consider whether its program will face a costly court challenge or agency investigation. Error costs, by contrast, arise from imperfect information.⁷² Such costs include “false positives” (in the case of antitrust, costs from wrongly condemning conduct that benefits consumers) and “false negatives” (costs from wrongly exonerating conduct that harms consumers).⁷³

See infra text accompanying notes 149–50. The conduct nevertheless is placed on the “interventionist” end of the spectrum here because (1) the applicable inquiry is qualitatively different from the profit-sacrifice test; (2) not every actionable fraud on the Patent Office (or instance of sham litigation) need involve a profit sacrifice, *see infra* text accompanying notes 151–53 and note 153; and (3) the doctrine is more interventionist in the sense that, once the conduct is demonstrated to meet the legal test, no defense is permitted. There is no justification for fraud.

⁶⁹ *See, e.g.,* *Handgards, Inc. v. Ethicon, Inc.*, 601 F.2d 986, 993 (9th Cir. 1979) (Section 2 violation when patentee initiated litigation knowing patent invalid because of on-sale bar).

⁷⁰ *See* *Prof'l Real Estate Investors, Inc. v. Columbia Pictures Indus., Inc.*, 508 U.S. 49, 60–61 (1993).

⁷¹ *See Walker Process*, 382 U.S. at 178. The classic case of a monopolist torching a rival's factory also belongs in this category.

⁷² C. Frederick Beckner III & Steven C. Salop, *Decision Theory and Antitrust Rules*, 67 ANTITRUST L.J. 41, 43–45 (1999).

⁷³ *See generally id.* at 43–51. Error costs (and false positives and negatives) thus can stem from (1) legal tests that, even if perfectly applied, reach sub-optimal outcomes (i.e., the

Error and enforcement costs may create over- or under-deterrence. Error costs can cause deviations from optimal deterrence because “a decision by a court will not only bind the litigating parties, but will also serve as precedent by which future conduct will be judged.”⁷⁴ For example, inconsistent applications of a particular legal test may deter firms from engaging in conduct that benefits consumers.⁷⁵ By contrast, other legal tests may systematically permit some conduct that harms consumers, resulting in under-deterrence.⁷⁶ Legal process costs can deter conduct that may be desirable, or prevent challenges to undesirable conduct, because invoking the legal system imposes a “tax” on challenging or defending such conduct.⁷⁷

Economists have long applied this framework, known as decision theory, to evaluate legal tests in the presence of imperfect information.⁷⁸ The optimal legal test minimizes the sum of expected error and legal process costs because that legal test can be expected to minimize deviations from optimal deterrence.⁷⁹ The upshot is that error and

test is the “wrong” test, which might be corrected by additional information respecting outcomes under other tests); and (2) the misapplication of a legal test. *See* Salop, *supra* note 6, at 343–45. Error costs can be both “ex ante” (i.e., some other legal standards produce greater expected benefits for consumers) and “ex post” (i.e., the standard’s assumptions about the expected results of the conduct proved inaccurate). It is generally recognized that antitrust tests should focus on *expected* outcomes, both to achieve optimal deterrence and because firms should not be penalized for making mistakes. *See id.* at 342–43; Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 416; *cf.* Summit Health, Ltd. v. Pinhas, 500 U.S. 322, 330 (1991) (explaining that “proper analysis focuses, not upon actual consequences, but rather upon the potential harm that would ensue if the conspiracy were successful”).

⁷⁴ Beckner & Salop, *supra* note 72, at 51.

⁷⁵ *See* Richard Craswell & John E. Calfee, *Deterrence and Uncertain Legal Standards*, 2 J.L. ECON. & ORG. 279, 279–80 (1986) (explaining that uncertainty in the application of a legal principle “can give even risk-neutral parties an incentive to ‘overcomply’” and in some circumstances undercomply with the law). How the form of a legal test can affect error and legal process costs is discussed *infra* Part III.

⁷⁶ Beckner & Salop, *supra* note 72, at 51 (“In antitrust, for example, over-deterrence might involve deterring welfare enhancing cooperation or innovations by firms that fear a finding of liability even when their conduct does not reduce consumer welfare. Under-deterrence might involve firms being overly aggressive in the expectation that their conduct may escape punishment.”).

⁷⁷ *See* Melamed, *supra* note 24, at 383 & n.16.

⁷⁸ *See, e.g.,* Isaac Ehrlich & Richard A. Posner, *An Economic Analysis of Legal Rulemaking*, 3 J. LEGAL STUD. 257, 272 (1974); Salop & Romaine, *supra* note 21, at 653–60 (employing decision theory to evaluate candidate Section 2 legal standards); Beckner & Salop, *supra* note 72, at 49–52 (generally explaining decision theory’s application to judicial decision making); Craswell & Calfee, *supra* note 75, at 279–80; *see also* Ken Heyer, *A World of Uncertainty: Economics and the Globalization of Antitrust*, 72 ANTITRUST L.J. 375, 386–92 (2005). *See generally* David McGowan, *Between Logic & Experience: Error Costs & United States v. Microsoft Corp.*, 20 BERKELEY TECH. L.J. 1185, 1195–96 (2005).

⁷⁹ *See* Beckner & Salop, *supra* note 72, at 49–50; Ehrlich & Posner, *supra* note 78, at 272; Melamed, *supra* note 24, at 383 & n.15.

enforcement costs supply a reason to apply a Section 2 legal test that does not make a case-specific assessment of anticipated competitive effects. In the absence of such costs, long-run consumer welfare would be maximized by applying a case-specific net welfare (or competitive effects) test. As one commentator has observed: "If economic actors and legal factfinders were omniscient, such balancing tests would make good sense. Courts and agencies could readily identify anticompetitive conduct, and firms in real time would be able to predict whether the possibly long-run competitive harms would outweigh the efficiency benefits and, thus, to avoid the anticompetitive conduct."⁸⁰

"The problem, however, is that neither economic actors nor law enforcement entities are omniscient."⁸¹ Imperfect information and adjudication create the risk of errors and departure from optimal deterrence. This is a particularly pronounced concern in antitrust, because antitrust law is not applied economics, but rather part of a system of law enforcement. As then-Judge Breyer explained:

Nonetheless, while technical economic discussion helps to inform the antitrust laws, those laws cannot precisely replicate the economists' (sometimes conflicting) views. For, unlike economics, law is an administrative system the effects of which depend upon the content of rules and precedents only as they are applied by judges and juries in courts and by lawyers advising their clients. Rules that seek to embody every economic complexity and qualification may well, through the vagaries of administration, prove counter-productive, undercutting the very economic ends they seek to serve.⁸²

Viewed from this perspective, the position of conduct along the spectrum of Section 2 legal tests is determined by predicting the error and legal process costs from applying the indicated legal test to that conduct as compared to applying some other legal test. The sum of expected error and enforcement costs is minimized by that conduct's position on (that is, the specific legal test indicated for that conduct by) the spectrum.⁸³ There is, moreover, a general correlation between where particu-

⁸⁰ Melamed, *supra* note 8, at 1253-54.

⁸¹ *Id.* at 1254.

⁸² *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 234 (1st Cir. 1983). *See also* Melamed, *supra* note 8, at 1251-52 (arguing that antitrust is "a form of law enforcement, not regulation" and for that reason the "selection of antitrust rules depends critically on their administrability" which includes "both . . . the ability of courts and antitrust enforcement agencies to administer the rules after-the-fact and . . . the ability of businesses to know what conduct is permitted and what is prohibited."); *cf.* Oliver E. Williamson, *Delimiting Antitrust*, 76 *GEO. L.J.* 271, 280 (1987) (arguing that "administrability considerations be factored into the overall rationality analysis of the issues").

⁸³ One can envision the spectrum as the X axis of a conventional X-Y graph, where the X axis is the level of intervention associated with applying a particular legal test and the

lar conduct falls on the spectrum and the expected costs of false positives. In general, the higher the anticipated costs of false positives from condemning the conduct under alternative legal tests—that is, the greater the long-run risk of deterring conduct that might benefit consumers—the less interventionist the doctrine.

For example, the costs of false positives associated with condemning monopoly pricing under any test other than *per se* legality would be massive. Courts are ill-equipped to regulate price, and firms likely would have little guidance as to what price is “reasonable.” Consumers obviously are harmed in the short term by the charging of monopoly prices. But the law tolerates potential “false negatives” here (that is, refraining from regulating judicially a monopolist’s price when such oversight would not deter procompetitive conduct) because the costs of correcting such “errors” including deterring other firms from innovating, are just too high.⁸⁴ As Judge Hand long ago summed up: “The successful competitor, having been urged to compete, must not be turned upon when he wins.”⁸⁵

Similarly, in principle, courts *could* condemn above-cost pricing under a test that seeks either to determine the net effects on consumers from the conduct or seeks to detect a profit sacrifice.⁸⁶ A firm may cut price to just below its rival’s costs with the hope of driving the rival out (or deterring entry) and then raising prices. But courts have eschewed that inquiry on the ground that it may chill price cutting that benefits consumers and, over the long-run, make consumers worse off. As then-Judge Breyer reasoned in *Barry Wright*, although certain above-cost price cuts amount to “potentially harmful behavior,” the antitrust laws ought not condemn them, lest “a rule or precedent that authorizes a search for a particular type of undesirable pricing behavior end up by discouraging legitimate price competition.”⁸⁷ By contrast, at the other end of the

Y axis shows the total costs (error and legal process) associated with applying that legal test. Each type of conduct could have its own curve charted on this graph. The minimum point on this curve (on the Y axis) yields the position (the appropriate legal test) on the X axis.

⁸⁴ The same is true when courts privilege merely improving product quality or reducing costs. See *supra* note 35 and accompanying text.

⁸⁵ *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 430 (2d Cir. 1945). See also Elhauge, *supra* note 10, at 320 (“The point is not that unilateral efforts to improve or exploit a monopolist’s efficiency by offering a superior or cheaper product never impose offsetting inefficiencies by driving out rivals and ending market competition. The point is that normally the benefits of such efforts greatly outweigh the costs, and antitrust courts and juries cannot reliably determine when that general rule does not hold.” (footnote omitted)).

⁸⁶ See, e.g., Aaron S. Edlin, *Stopping Above-Cost Predatory Pricing*, 111 YALE L.J. 941, 965–73 (2002).

⁸⁷ *Barry Wright*, 724 F.2d at 233, 234. Explaining Section 2 legal tests as attempts to maximize long-term consumer welfare is consistent with the view that the Sherman Act

spectrum, the predicted costs of wrongfully condemning fraud on the PTO are likely low.

That courts craft Section 2 legal tests to minimize expected legal process and error costs is not just evident from comparing different Section 2 legal tests on the spectrum; it is also *expressly* the task in which antitrust courts are engaged. This is well illustrated by *Trinko*.⁸⁸ The *Trinko* Court did not stop upon concluding that plaintiff's refusal-to-deal claim "does not fit within the limited exception[s]" to the principle that a monopolist generally has no duty to deal.⁸⁹ The Court further assessed whether "traditional antitrust principles justify adding the present case to the few existing exceptions from the proposition that there is no duty to aid competitors."⁹⁰

Here, the Court engaged in precisely the assessment of the error and enforcement costs from applying competing legal tests described above. The Court reasoned that "the existence of a regulatory structure designed to deter and remedy anticompetitive harm" suggested a low risk of false negatives; "[w]here such a structure exists, the additional benefit to competition provided by antitrust enforcement will tend to be small, and it will be less plausible that the antitrust laws contemplate such additional scrutiny."⁹¹ The Court then "weigh[ed] a realistic assessment of [antitrust]'s costs" against "the slight benefits of antitrust intervention."⁹² Explaining that "[t]he cost of false positives counsels against an undue expansion of § 2 liability," the Court concluded that condemning Verizon's refusal to deal risked significant "false positives."⁹³

By expressly comparing the relative costs of alternative legal tests (or outcomes), the *Trinko* Court broke no new ground. For example, in *Town of Concord v. Boston Edison Co.*,⁹⁴ then-Judge Breyer held that a price squeeze by a monopolist regulated at both levels of its operations does not violate Section 2 absent "exceptional circumstances."⁹⁵ Judge Breyer explained that to label conduct exclusionary "one must believe that the

is a "consumer welfare prescription." *Reiter v. Sonotone Corp.*, 442 U.S. 330, 343 (1979) (citation omitted). Of course, some argue that the appropriate goal of antitrust is to maximize total welfare rather than consumer welfare. *See, e.g., BORK, supra* note 44, at 72–74.

⁸⁸ *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004).

⁸⁹ *Id.* at 409–10 (distinguishing *Aspen* and *Otter Tail*).

⁹⁰ *Id.* at 411.

⁹¹ *Id.* at 412.

⁹² *Id.* at 414.

⁹³ *Id.*

⁹⁴ 915 F.2d 17 (1st Cir. 1990).

⁹⁵ *Id.* at 29.

anticompetitive risks associated with [the conduct] outweigh the possible benefits and the adverse administrative considerations.”⁹⁶ Applying this principle, he concluded that the potential harms from a price squeeze by a monopolist regulated at both levels were low, and that “for institutional reasons, an antitrust rule making the price squeeze illegal threatens consumers.”⁹⁷ These harms included both the possibility that condemning the practice may create incentives to *raise* prices and produce costly false positives.⁹⁸ Other cases have adopted specific Section 2 legal tests on the stated ground that the selected test made consumers on balance better off than competing tests.⁹⁹

2. *Employing Decision Theory to Adopt Appropriate Legal Tests Implements the Rule of Reason*

The principle *Trinko* applied—that courts should minimize error and enforcement costs (or maximize long-term consumer welfare) in selecting legal rules—leaves a significant puzzle: How can distinct existing Section 2 legal tests, many of which do not contemplate a case-specific balancing of pro- and anticompetitive effects, be reconciled with the *Microsoft* court’s invocation of the rule of reason, and its step-wise methodology for assessing net pro- and anticompetitive effects as a general test for Section 2—a test that the *Microsoft* court found supported by no less an authority than *United States v. Standard Oil*? After all, although *Trinko* did not offer a precise legal test, the Court made clear that Verizon’s refusal to deal ought not be subjected to a case-specific assessment of that conduct’s net contribution to consumer welfare.¹⁰⁰

The tension between *Microsoft* and *Trinko* is eased when the rule of reason is recognized not to require a single liability test. The rule of reason is not simply a specific legal test that requires courts to assess

⁹⁶ *Id.* at 25.

⁹⁷ *Id.* at 26.

⁹⁸ *Id.* at 26–28.

⁹⁹ See, e.g., *Metronet Servs. Corp. v. Qwest Corp.*, 383 F.3d 1124, 1134–37 (9th Cir. 2004) (applying *Trinko*’s methodology to bar claim challenging elimination of arbitrage); *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 234–35 (1st Cir. 1983); cf. *In re IBM Peripheral EDP Devices Antitrust Litig.*, 481 F. Supp. 965, 1003 (N.D. Cal. 1979) (recognizing that “[i]t is more difficult to formulate a legal standard for design conduct than it is to imagine clearly illegal situations. Any such standard must properly balance a concern for the preservation of desirable incentives with the need to prevent monopolization by technology” and deciding to apply “[a] more generalized standard” of reasonableness), *aff’d*, 698 F.2d 1377 (9th Cir. 1983). See *supra* notes 57–59 (explaining how the *In re IBM* court effectively applied multiple legal tests).

¹⁰⁰ See *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 416 (2004) (explaining that Section 2 “does not give judges *carte blanche* to insist that a monopolist alter its way of doing business whenever some other approach might yield greater competition”).

anticompetitive effects, procompetitive justifications, less-restrictive alternatives, and net anticompetitive effects.¹⁰¹ Rather, the rule of reason also more generally expresses an underlying *principle* of maximizing long-run consumer welfare, a principle courts implement by selecting the legal test that best serves the interests of consumers under the circumstances.¹⁰²

This understanding of the rule of reason is demonstrated by settled Section 1 rules that are equally expressions of the rule of reason. The per se rule against price fixing and related conduct is one. Per se rules are not distinct liability tests that spring from a source external to the rule of reason. Properly understood, a per se rule supplies a “conclusive presumption” that the conduct violates the rule of reason.¹⁰³ The presumption, moreover, derives expressly from minimizing the sum of error and legal process costs. As the Supreme Court explained in *Maricopa*, the per se rule “avoid[s] the necessity for an incredibly complicated and prolonged economic investigation into the entire history of the industry involved, as well as related industries, in an effort to determine at large whether a particular restraint has been unreasonable—an inquiry so often wholly fruitless when undertaken.”¹⁰⁴ In other words, determining whether a particular price-fixing arrangement might benefit consumers is not worth the error and legal process costs. On the contrary: “As in every rule of general application, the match between the presumed and the actual is imperfect. For the sake of business certainty and litigation efficiency, we have tolerated the invalidation of some agreements that a full-blown inquiry might have proved to be reasonable.”¹⁰⁵

The per se rule is not absolute. Courts have held it inapplicable when, for example, the joint setting of price by competitors is necessary to create a new product,¹⁰⁶ or the restraint is ancillary to an otherwise lawful

¹⁰¹ See generally ABA SECTION OF ANTITRUST LAW, 2003 ANNUAL REVIEW OF ANTITRUST LAW DEVELOPMENTS 60 (2004) (citing cases employing this step-wise approach).

¹⁰² Cf. Ehrlich & Posner, *supra* note 78, at 260 (“Properly understood, ‘principles’ are simply the considerations that are relevant in determining the content of a rule.”).

¹⁰³ *FTC v. Superior Court Trial Lawyers Ass’n*, 493 U.S. 411, 432 (1990). See also *Ariz. v. Maricopa County Med. Soc’y*, 457 U.S. 332, 343 (1982); *Cont’l T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 50 (1977).

¹⁰⁴ *Maricopa*, 457 U.S. at 351 (internal quotations omitted).

¹⁰⁵ *Id.* at 344. See also, e.g., *PolyGram Holding, Inc. v. FTC*, 416 F.3d 29, 34 (D.C. Cir. 2005) (“Per se analysis, which requires courts to generalize about the utility of a challenged practice, reduces the cost of decision-making but correspondingly raises the total cost of error by making it more likely some practices will be held unlawful in circumstances where they are harmless or even procompetitive.”).

¹⁰⁶ *Broadcast Music, Inc. v. CBS, Inc.*, 441 U.S. 1, 8–9 (1979). Cf. *Texaco Inc. v. Dagher*, 126 S. Ct. 1276, 1279–80 (2006) (per se rule inapplicable to legitimate joint venture’s core activity of pricing its own products when joint venture’s formation eliminated competition between those products).

agreement.¹⁰⁷ Courts adopted these doctrines because applying the per se rule in these circumstances would ill serve consumers. There is also the much-maligned five-part test that governs tying arrangements, a “per se” rule that requires finding, inter alia, market power.¹⁰⁸ These tests, too, are expressions of the rule of reason, which requires, the *California Dental* Court explained in another context, “an enquiry meet for the case.”¹⁰⁹

The common-law nature of antitrust also supports applying different expressions of the rule of reason in different settings. Courts are instructed that there is a presumption in favor of the rule of reason,¹¹⁰ and to decide each case based on its particular facts, with due regard for the differences between the case before it and others.¹¹¹ But a presumption in favor of the rule of reason is not an absolute command to apply its broadest expression (originating in *Chicago Board of Trade*¹¹²)

¹⁰⁷ See, e.g., *Polk Bros., Inc. v. Forest City Enters., Inc.*, 776 F.2d 185, 188–89 (7th Cir. 1985); *Nat’l Bancard Corp. (NaBANCO) v. Visa U.S.A., Inc.*, 779 F.2d 592, 602–03 (11th Cir. 1986); *United States v. Addyston Pipe & Steel Co.*, 85 F. 271, 280–83 (6th Cir. 1898) (Taft, J.), *aff’d*, 175 U.S. 211 (1899).

¹⁰⁸ *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 467 (1992) (retaining tying’s per se rule as articulated in *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2, 16 (1984)). A related example is “group boycotts.” After *Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co.*, 472 U.S. 284, 296–97 (1985), buyer cooperatives may not be subject to the per se rule absent market power.

¹⁰⁹ *Cal. Dental Ass’n v. FTC*, 526 U.S. 756, 781 (1999) (showing required under the rule of reason can vary depending on circumstances). The so-called quick look rule of reason, discussed in *California Dental*, is a further example of the rule of reason’s flexibility. So too is the *Microsoft* court’s refusal to apply tying’s per se rule to a technological tie because of a perceived “high risk that per se analysis may produce inaccurate results” and “the nature of [the markets at issue] affirmatively suggests that the per se rules might stunt valuable innovation.” *United States v. Microsoft Corp.*, 253 F.3d 34, 90–95 (D.C. Cir. 2001) (en banc) (per curiam). The *Illinois Brick* rule denying standing for damages to indirect purchasers also illustrates the general point. Although the multi-factor *Associated General Contractors* test governs antitrust standing, *Illinois Brick* is a circumstance-specific rule crafted on decision-theoretic grounds that precludes certain claims. See *Ill. Brick Co. v. Illinois*, 431 U.S. 720, 745 (1977) (rejecting an exception to *Hanover Shoe* that assertedly threatened to “inject . . . ‘massive evidence and complicated theories’ into treble-damages proceedings”).

¹¹⁰ See, e.g., *Bus. Elecs. Corp. v. Sharp Elecs. Corp.*, 485 U.S. 717, 726 (1988) (explaining, in the context of rejecting a proposed per se rule, that “there is a presumption in favor of a rule-of-reason standard”).

¹¹¹ See, e.g., *Kodak*, 504 U.S. at 467 (“This Court has preferred to resolve antitrust claims on a case-by-case basis, focusing on the ‘particular facts disclosed by the record.’” (citation omitted)); *Maple Flooring Mfrs. Ass’n v. United States*, 268 U.S. 563, 579 (1925) (“[E]ach case arising under the Sherman Act must be determined upon the particular facts disclosed by the record, and that the opinions in those cases must be read in the light of their facts and of a clear recognition of the essential differences in the facts of those cases, and in the facts of any new case to which the rules of earlier decisions is to be applied.”).

¹¹² *Chicago Board of Trade v. United States*, 246 U.S. 231 (1918), *quoted in* *Cont’l T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36, 49 n.15 (1977).

in every case; and, as explained, courts have not. The Sherman Act “invokes the common law itself, and not merely the static content” at any particular point in time.¹¹³ The “dynamic potential” of the Sherman Act authorizes courts to reevaluate whether specific expressions of the rule of reason well serve consumers as economic learning and other conditions evolve.¹¹⁴

Thus, when *Microsoft* invokes *Standard Oil* for the proposition that the meaning of Section 2 is guided by the rule of reason, the court is not invoking necessarily a *particular* legal test, but rather an underlying *principle*: select the legal test that maximizes long-run consumer welfare. As explained, how *Microsoft* in practice applied the rule of reason is entirely consistent with this framework. The court engaged in actual “balancing” only in limited circumstances and protected certain conduct as “superior skill, foresight, and industry.”¹¹⁵ *Microsoft* does not require assessing net competitive effects when that test is inappropriate. Proving this point, when confronted with a refusal-to-deal and related claims, the D.C. Circuit in the subsequent *Covad* case held that a profit sacrifice is a necessary element of a refusal-to-deal allegation.¹¹⁶

Of course, one could equally call Section 2’s rule of reason as described above a “meta” rule of reason, to distinguish it from the rule of reason as a specific legal test applied to a particular case.¹¹⁷ The precise label does not matter. What does matter is that courts recognize both expressly in their reasoning and implicitly in their outcomes that (1) the appropriate test for “reasonableness” under Section 1 or Section 2 can vary depending on the circumstances; and (2) that test is the one that makes consumers in the long run best off or, put equivalently, minimizes error and legal process costs.¹¹⁸

¹¹³ *Sharp*, 485 U.S. at 732.

¹¹⁴ *Id.* at 732–33. The overturning of outmoded per se rules is illustrative. *See, e.g.*, *State Oil Co. v. Khan*, 522 U.S. 3 (1997) (*overruling* *Albrecht v. Herald Co.*, 390 U.S. 145 (1968)); *Sylvania*, 433 U.S. at 36 (*overruling* *United States v. Arnold, Schwinn & Co.*, 388 U.S. 365 (1967)).

¹¹⁵ *See supra* text accompanying notes 61–63.

¹¹⁶ *See, e.g.*, *Covad Communications Co. v. Bell Atl. Corp.*, 398 F.3d 666, 675–76 (D.C. Cir. 2005).

¹¹⁷ In an earlier article, I suggested the term “systemic” rule of reason. *See* Popofsky, *supra* note 30, at 576–80. One might also reconcile *Microsoft*’s invocation of the rule of reason with more discrete Section 2 doctrines by defining conduct that is lawful (such as above-cost pricing) as producing no “anticompetitive” effect in step 1 of the *Microsoft* court’s analysis. *Cf.* Gavil, *supra* note 1, at 75–78 (similar). However, defining away particular effects as not “anticompetitive” does not explain how Section 2 courts have employed entirely different frameworks after considering the *likelihood* of anticompetitive effects and comparing that likelihood against other factors. *See supra* Part II.C.1; *see also infra* Part III.D.

¹¹⁸ *See, e.g.*, *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 233–36, 239 (1st Cir. 1983) (explaining that “[a] monopolist’s conduct that from a competitive point of

III. THE RULE OF REASON AS A NORMATIVE FRAMEWORK FOR CRAFTING APPROPRIATE SECTION 2 LEGAL TESTS

Section 2's rule of reason, then, requires selecting the legal test that minimizes error and legal process costs or, equivalently, maximizes long-run consumer welfare. The practical challenge courts confront is to translate this principle into operational tests in the "real world," where conduct does not necessarily fit neat categories. This challenge is made more difficult and more important by the relative paucity of Section 2 "guidepost" decisions. Except for a few discrete (but, as explained, revealing) areas, the appropriate Section 2 legal test is largely unsettled.

Another aspect of decision theory—one that specifies the optimal form of a legal command—offers a practical framework for elaborating Section 2's rule of reason. I earlier established that different error and legal process costs explain why Section 2 courts often apply distinct legal tests to different conduct. I now turn to the attributes of a legal test—whether the test takes the form of a rule or standard and the test's degree of complexity—that in significant part *explain* why various legal tests imply different expected costs. By applying this aspect of decision theory, courts can develop workable criteria for crafting appropriate Section 2 legal tests.

A. CHOOSING BETWEEN RULES, STANDARDS, AND DEGREES OF COMPLEXITY

There are many ways to express the "Rules/Standards" dichotomy.¹¹⁹ A useful definition is that "[a] standard indicates the kinds of circumstances that are relevant to a decision" and "is thus open-ended."¹²⁰ By contrast, "[a] rule withdraws from the decision maker's consideration one or more of the circumstances that would be relevant to decision according to a standard."¹²¹ A distinct attribute is a legal test's degree of complexity. There are simple and complex rules; and there are simple and complex standards.¹²² Whether assessed in terms of the "rules versus standards" or "simple versus complex" dichotomies, the difference between legal tests "is a matter of degree."¹²³

view is unreasonable, is 'exclusionary'" but not applying a reasonableness test to assess an above-cost price cut (citation omitted)).

¹¹⁹ See generally Ehrlich & Posner, *supra* note 78, at 258; Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J. 557, 559–62 (1992).

¹²⁰ Ehrlich & Posner, *supra* note 78, at 258.

¹²¹ *Id.*

¹²² Kaplow, *supra* note 119, at 589–90.

¹²³ Ehrlich & Posner, *supra* note 78, at 258.

Section 2 courts, as explained, endeavor to select the legal test that minimizes error and legal process costs relative to applying other legal tests. These costs critically depend on whether a legal test takes the form of a rule or a standard and the test's degree of complexity. In general, rules are less costly to enforce than standards.¹²⁴ Firms are more likely to conform their conduct to a rule because the costs of predicting the results under a standard are higher than under a rule.¹²⁵ Moreover, applying a rule is usually less costly than applying an equivalently complex standard.¹²⁶

On the other hand, if "standards cost more to enforce," then "[r]ules cost more to promulgate."¹²⁷ This is because producing precedents "is a costly activity."¹²⁸ To create rules, courts must "[o]btain[] and correctly evaluat[e] information concerning the various combinations of events or circumstances under which the general standard that the set of rules is designed to implement should be activated."¹²⁹ At some point, the costs of creating a more refined rule (including litigation costs in a common-law system) become prohibitively high. Thus, "reduction of a standard to a set of rules must in practice create both overinclusion and underinclusion."¹³⁰

A legal command's complexity introduces yet a different set of potential error and legal process costs.¹³¹ The simpler the legal test (whether a rule or a standard), the greater the risk of over- or under-inclusion (that is, the greater the risk of false positives and false negatives because of a legal test's *content*).¹³² Complexity also affects the magnitude of promulgation and enforcement costs. Developing complex rules requires more information than delineating simple rules. Similarly, it is more difficult to predict the results under complex standard than a simple standard.

In other words, there is no perfect liability test: a legal test's form involves tradeoffs. A simple legal rule may reduce one set of error and legal process costs (by providing notice and reducing the risk of errone-

¹²⁴ Kaplow, *supra* note 119, at 577.

¹²⁵ *Id.* at 571-77.

¹²⁶ *See id.* at 570.

¹²⁷ *Id.* at 577.

¹²⁸ Ehrlich & Posner, *supra* note 78, at 265.

¹²⁹ *Id.* at 267.

¹³⁰ *Id.* at 268.

¹³¹ Kaplow, *supra* note 119, at 586-93.

¹³² Ehrlich & Posner, *supra* note 78, at 262.

ous adjudication), but introduce another (over- and under-inclusion). A complex standard may reduce problems of over- and under-inclusion, but risks substantial error and enforcement costs. By contrast, a complex rule may in principle reduce both problems of over- and under-inclusion and enforcement costs, but at the price of very high promulgation costs.¹³³

The optimal tradeoff between the error and legal process costs associated with different types of legal tests—the optimal form of a legal test—depends critically on two factors: (1) whether courts can accurately, effectively, and functionally distinguish one class of conduct from another; and (2) the frequency with which the conduct in question is encountered. The more homogeneous the conduct and the more frequently it is encountered, the more likely that the legal test should take the form of a rule, even if some complexity (and, thus, the incursion of additional promulgation costs) is required to reduce problems of over- and under-inclusion. This is because “promulgation costs are borne only once.”¹³⁴ “When one makes a single pronouncement that will govern many . . . cases, it is worthwhile to undertake greater investigation into the relevance of additional factors and to expend more effort fine-tuning the weight accorded to each.”¹³⁵

On the other hand, if conduct is infrequently encountered and relatively heterogeneous, a standard may be superior to a rule. The more diverse the conduct to which a legal command applies, and the greater the costs required to reduce errors by making a rule more precise, the less likely that incurring such promulgation costs outweighs the expected error and enforcement costs of instead employing a standard.¹³⁶

The above analysis of the different error and legal process costs associated with different types of legal tests has two key normative implications for courts’ formulation of appropriate Section 2 liability tests. First, a single Section 2 legal test is not appropriate. Second, courts should not create different legal tests for every arguably different class of conduct. Rather than incur prohibitive legal process costs in a quest for the optimal test that governs every case, Section 2 courts should adopt a discrete set of “baseline” legal tests and depart from those tests only when the gains from an alternative legal test are shown worth the costs.

¹³³ Kaplow, *supra* note 119, at 593. If a court cannot or does not expend these promulgation costs, a complex rule loses its advantages relative to a standard.

¹³⁴ *Id.* at 577.

¹³⁵ *Id.* at 595.

¹³⁶ *Id.* at 572, 579 (“If acts subject to the law are unlikely to arise” then “the possibility of saving the costs of giving content to the law tends to favor standards.”).

B. A SINGLE LEGAL TEST CANNOT REASONABLY PRESCRIBE
ALL EXCLUSIONARY CONDUCT

1. *The Spectrum of Section 2 Legal Tests Revisited*

An important implication of the above analysis is that legal tests are likely to impose different error and enforcement costs *depending* on the conduct to which those tests are applied. If conduct is relatively homogeneous, the pertinent factors relevant to the substantive analysis easily identified, and the conduct frequently encountered, the optimal legal test is more likely to be a rule. By contrast, if the conduct at issue is diverse and hard to characterize, tends to be infrequently encountered, and requires consideration of a myriad of factors to reduce the risks of over- and under-inclusion, consumers may be better off if courts employ a standard.

The conduct subject to Section 2, of course, runs the gamut between these two extremes. There is, accordingly, no a priori reason to suppose that a single liability test will make consumers in the long run better off relative to implementing Section 2's rule of reason through multiple liability tests. This is strongly supported by the spectrum of Section 2 legal tests depicted above. The costs associated with applying rules and standards to varying conduct explain in large measure the often different legal tests created by the courts. To take three examples from the spectrum:

- Charging a monopoly price is *per se* legal. This simple rule makes sense in decision-theoretic terms. The conduct is easy to describe and charging what the market will bear is ubiquitous. Thus, the benefits of promulgating a particularized rule are likely substantial. Moreover, applying a standard rather than a rule is likely both to increase enforcement costs and create error costs by deterring firms from engaging in behavior that benefits consumers.¹³⁷
- Predatory pricing, by contrast, is assessed under a legal test that exhibits aspects of both a rule and a standard. The price must be below a measure of cost (a moderately complex rule) and there must be a reasonable prospect of recoupment (a moderately complex standard). This test reflects tradeoffs between the costs associated with rules, standards, and degrees of complexity. Undercutting a rival's price is frequently encountered conduct that, at its core, is functionally distinguishable from other conduct. Moreover, courts reason, an admittedly underinclusive cost-based rule is superior to

¹³⁷ See *supra* text accompanying notes 81–85.

a more complicated rule or a standard. As *Barry Wright* explains, the risk of chilling price cuts that benefit consumers simply is not worth the gain from trying to capture “every economic complexity.”¹³⁸ By contrast, courts have not found a rule appropriate for the predatory pricing test’s recoupment prong. The circumstances that bear on recoupment are usually fact-specific, which suggests that a standard is superior to a rule. A rule specifying a market-share threshold below which recoupment is deemed improbable might be significantly under-inclusive. Moreover, it would be prohibitively costly to specify *ex ante* all the circumstances in which recoupment might or might not be probable.

- The sham litigation doctrine also implements a hybrid rule/standard legal test, although a simpler one. Litigation that is objectively baseless and subjectively intended to harm rivals through the litigation process rather than its outcome is unlawful if it could contribute to maintaining monopoly power.¹³⁹ The predicate legal rule (the objectively baseless prong) is expressly designed to be under-inclusive. Conduct specifically intended to harm rivals does not transgress Section 2 if it is not objectively baseless. The rule is under-inclusive by design. The subjective part of the test—is the reason for bringing the suit to harm rivals through the suit’s process rather than its outcome?¹⁴⁰—can be viewed as a proxy for conduct that serves no purpose except reducing consumer welfare. But the test exonerates some conduct that might harm consumers in order to prevent errors that might chill firms from exercising the right to petition.

The spectrum is descriptive, not normative. It reflects the law as it “is” rather than the best set of Section 2 legal tests as measured by some external metric. Still, the spectrum is instructive; for it reflects the judgment of numerous adjudicators that different classes of conduct warrant employing different liability tests. Nonetheless, some advocates of both the profit sacrifice and consumer welfare tests, the two leading contenders in the “exclusionary conduct ‘definition’ war,”¹⁴¹ suggest that their favored test supplies essentially a “one size fits all” solution that rightly governs all, or at least most, exclusionary conduct.¹⁴² Putting aside that

¹³⁸ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 234 (1st Cir. 1983).

¹³⁹ *Prof'l Real Estate Investors Inc. v. Columbia Pictures Indus., Inc.*, 508 U.S. 49, 60–61 (1993).

¹⁴⁰ *Id.* at 60–61.

¹⁴¹ Gavil, *supra* note 1, at 5.

¹⁴² *See supra* note 11.

neither view can be squared with the contrary judgment reflected in the spectrum, the undesirable implications of applying either the profit sacrifice or consumer welfare tests across the board confirm that a single liability test is inappropriate. As summed up by one scholar: "The quest for a unitary test for defining all exclusionary conduct should be abandoned" because "the teaching of economic and legal process theory suggest that a unitary and inflexible standard will necessary under- or over-deter."¹⁴³

2. *The Profit-Sacrifice Test*

The profit-sacrifice or no economic sense test fails as a universal Section 2 test because, as applied to certain conduct, it is likely not the legal test that best serves consumers. To take a few examples:

Predatory Pricing. Advocates of the profit-sacrifice test cannot square that test with the predatory pricing rule.¹⁴⁴ As explained, the profit-sacrifice test requires comparing the profitability of conduct relative to a non-exclusionary option. By contrast, predatory pricing doctrine asks whether the defendant's price is above some measure of costs. The former may take into account opportunity costs; the latter does not. Put otherwise, an above-cost price decrease may well involve a profit sacrifice but is perfectly lawful. Tellingly, advocates of the profit-sacrifice test support applying the predatory pricing test and not the profit-sacrifice test to pricing claims.¹⁴⁵

"Predatory Innovation." The profit-sacrifice test could condemn innovations that merely improve product quality; that is, the test could deem unlawful conduct that impedes rivals only because it improves the attractiveness of the defendant's product and has no other exclusionary property (for example, does not raise rivals' costs or impede compatibility).¹⁴⁶

¹⁴³ Gavil, *supra* note 1, at 74.

¹⁴⁴ See also Elhauge, *supra* note 10, at 272-73; Salop, *supra* note 6, at 326-27.

¹⁴⁵ See Melamed, *supra* note 24, at 396-97. Melamed seeks to reconcile predatory pricing doctrine with the profit-sacrifice test by arguing that profits sacrificed at above-cost prices ought not "count" as a cost because they reflect mere wealth transfers from inframarginal sales and, thus, do not affect total welfare. See Melamed, *supra* note 8, at 1259. This argument cannot square predatory pricing doctrine and the profit-sacrifice test. The latter by its own terms does not *directly* examine welfare effects, but instead employs a surrogate. See Melamed, *supra* note 24, at 395-96. The operation of that surrogate does not depend on whether the costs incurred by the monopolist relate to welfare reductions. *Id.* at 394.

¹⁴⁶ See also Elhauge, *supra* note 10, at 274-79. Werden asserts that "[o]rdinary investments in opportunities for future profit normally are not deemed exclusionary conduct under the [no economic sense] test both because they make economic sense apart from any tendency to eliminate competition and because they have no such tendency." Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 424.

Indeed, the profit-sacrifice test might condemn as predatory merely *investing* in research that generates better products.¹⁴⁷ But these innovative activities describe precisely the “superior skill, foresight, and industry” that courts privilege as a matter of law.¹⁴⁸ The profit-sacrifice test, by ignoring this safe harbor for conduct that only increases quality, risks costly false positives.

Sham Litigation. Litigation is a costly activity. Thus, the profit-sacrifice test could condemn litigation that makes no sense absent weakening rivals through the litigation process (that is, the costs of bringing suit cannot be justified by the litigation’s expected outcome). But conduct that fails this application of the profit-sacrifice test nonetheless might pass the sham litigation test’s requirements of intent to harm rivals through the litigation process and an objectively baseless suit. An objectively baseless suit is not one that fails the cost/benefit analysis the profit-sacrifice test contemplates, but rather is one that cannot support “a reasonable belief *that there is a chance* that a claim may be held valid upon adjudication.”¹⁴⁹ And litigation “unmotivated by anticompetitive intent” passes muster under Section 2 “whether it is reasonably based or not.”¹⁵⁰ These requirements reflect the very high value placed on one particular consequence of false positives: chilling the right to petition, a right often essential to the competitive process, such as when enforcing intellectual property rights. The profit-sacrifice test, if applied universally, would dismantle the protective sham litigation doctrine to the possible detriment of consumers.

Naked Exclusion. Some advocates of the profit-sacrifice test insist that naked exclusion (for example, ripping down a competitor’s racks as

¹⁴⁷ See Melamed, *supra* note 24, at 395–96. Developing new products could be condemned as a profit sacrifice, Melamed asserts, if the investment reasonably would have been made only on the expectation of pricing the subsequently commercialized product first low to drive out rivals, and then higher post exclusion to recoup the investment. See *id.* It is, however, possible to protect the investment decision through a safe harbor (or treat it under a very lenient legal test) while subjecting the subsequent pricing conduct to ordinary predatory-pricing principles. See, e.g., *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 286 n.30 (2d Cir. 1979).

¹⁴⁸ See *supra* notes 33–35 and accompanying text (discussing cases). Some advocates of the profit-sacrifice test would privilege new product introductions in certain circumstances; for instance, when a related product is not simultaneously withdrawn. See Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 419 & n.24. Cf. *Berkey*, 603 F.2d at 287 n.39 (holding lawful a new product introduction but explaining that “the situation might be completely different if, upon the introduction of the 110 system, Kodak had ceased producing film in the 126 size”).

¹⁴⁹ *Prof'l Real Estate Investors, Inc. v. Columbia Pictures Indus., Inc.*, 508 U.S. 49, 62–63 (1993) (emphasis added) (internal quotations and alterations omitted).

¹⁵⁰ *BE & K Constr. Co. v. NLRB*, 536 U.S. 516, 528 (2002).

occurred in *Conwood*) *always* involves some profit sacrifice.¹⁵¹ But there may be costless exclusion; costless that is, *relative* to alternative courses of conduct. It may, for example, require more effort to persuade a standard-setting body to adopt one's standard on the merits than to "stack the deck" by rigging the vote.¹⁵² Moreover, incurring incremental costs to impede rivals is not always a telltale sign of a profit sacrifice.¹⁵³ More fundamentally, there is no sound reason of antitrust policy to require proof of a profit-sacrifice when a plaintiff demonstrates naked exclusion that likely reinforces monopoly power. When adjudicators find conduct that lacks any efficiency justification and likely contributes to monopoly power, why impose additional costs on the legal system of applying a more complex rule that requires the plaintiff to demonstrate costs exceeding benefits that did not depend on power?

Indeed, some defenders of the profit-sacrifice test ultimately concede that it may not properly apply in many cases. These include, among others, when there is no clear "but for" world against which to measure the profitability of the defendant's conduct, and when it is difficult to separate the profits from exclusion from legitimate competitive profits.¹⁵⁴ Recognition by the profit-sacrifice test's advocates that it may not fit all circumstances reinforces the central point made here: Section 2 liability tests must be justified relative to alternatives for the circumstances at hand.

3. Case-Specific Consumer Welfare Effects Tests

A test that balances or compares net effects on consumer welfare similarly does not provide an acceptable universal Section 2 test. It too cannot be reconciled with certain settled Section 2 rules and, more importantly, the concerns with administrability and the costs of false positives and false negatives that underlie those rules.

¹⁵¹ See Melamed, *supra* note 24, at 392 n.48. This may be one circumstance in which the no economic sense and profit-sacrifice tests differ. Werden asserts, for example, that if conduct "offers no prospect of a positive payoff apart from the tendency of the conduct to eliminate competition" then it can fail the no economic sense test regardless of whether the conduct required incurring incremental costs. Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 425.

¹⁵² Cf. *Indian Head, Inc. v. Allied Tube & Conduit Corp.*, 817 F.2d 938, 946-47 (2d Cir. 1987) (subversion of standard-setting process by packing voting meetings violated Section 1), *aff'd*, 486 U.S. 492 (1988).

¹⁵³ If a firm without the prospect of market power excludes a rival through an intentional tort, by definition the incremental costs of the conduct could *not* have been expended based on the prospect of anticompetitive recoupment, a requirement of the profit-sacrifice test. The offender's objective must have been different (for example, theft). See Susan A. Creighton et al., *Cheap Exclusion*, 72 ANTITRUST L.J. 975, 985 n.39 (2005); see also Melamed, *supra* note 8, at 1261 n.30 (acknowledging that theft may not involve a profit sacrifice).

¹⁵⁴ See Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 420-21.

For example, to apply a balancing test universally would, in principle, permit antitrust courts to condemn: (1) above-cost pricing (on the ground that the price cut will drive out rivals, enabling the monopolist to recoup through raising price); (2) developing a superior product that drives out rivals merely because of superior quality (on the ground that consumers gain less from the quality improvement than they lose from loss of future sources of rivalry); and (3) an unadorned failure to predisclose anticipated product release (on the ground that consumers would benefit from more from rivals having a leg-up from the predisclosure than might be lost from dampening incentives to innovate).¹⁵⁵

But for each of these activities, courts have created safe harbors that do *not* condemn them under a net effects or comparable test.¹⁵⁶ Courts have reasoned that engaging in a case-specific assessment of net effects on consumers in these circumstances is fraught with difficulty, will undermine *ex ante* incentives to compete, and thus is not in consumers' best interests.¹⁵⁷ As courts have recognized, the inquiry adjudicators need to make is too difficult, the risk of false positives is too great, the potential costs of false negatives too low, and notice to potential defendants too elusive, to subject firms engaging in such conduct to liability under a case-specific net effects test.¹⁵⁸

This is not to assert that a structured inquiry into net effects on consumer welfare is *never* appropriate under Section 2. Rather, the key point is that a case-specific search for net economic effects is not appropriate in many Section 2 cases. As the Court explained in *Trinko*: Section 2 “does not give judges *carte blanche* to insist that a monopolist alter its way of doing business whenever some other approach might yield greater competition.”¹⁵⁹

¹⁵⁵ See, e.g., Salop, *supra* note 6, at 339–41 (discussing cost-reducing investment example).

¹⁵⁶ See cases cited *supra* notes 31–38 and accompanying text; *Berkey*, 603 F.2d at 283 (predisclosure).

¹⁵⁷ See e.g., *supra* text accompanying notes 84–87. Professor Areeda described this over-deterrence concern as a “macro” justification. See Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841, 851 (1989).

¹⁵⁸ See *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 234 (1st Cir. 1983); *Berkey*, 603 F.2d at 281, 283. Conducting the analysis *ex ante* based on reasonably available information does not eliminate these potential error and enforcement costs. See *infra* note 215.

¹⁵⁹ *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 416 (2004). Tellingly, Professor Salop, the consumer welfare effects test's chief proponent, would not engage in a plenary evaluation of net welfare effects in the case of a refusal to deal. Subject to limited exceptions, Professor Salop would not invalidate a refusal to deal at a price above a benchmark that protects some preexisting monopoly profits (those enjoyed in the input market). See *Hearings Before the Antitrust Modernization Commission* (2005) (Proposed Rule of Prof. Steven C. Salop), available at <http://www.amc.gov/>

C. A PRACTICAL APPROACH TO DEVELOPING APPROPRIATE SECTION 2 TESTS

If a single legal test is inappropriate, it is equally unworkable for courts to multiply monopolization tests endlessly. Instead, Section 2 courts should adopt a manageable set of baseline legal tests that presumptively apply and permit departures from those baselines only upon a showing that the benefits of applying a different liability test exceed the costs.

1. *Courts Should Select Baseline Legal Tests and Depart from Them Only When a Modification's Benefits Are Worth the Costs*

A single legal test is not appropriate under Section 2 because applying any one legal test to different types of conduct is likely to produce different sets of expected error and legal process costs. But that very same factor, the endless variety of conduct subject to Section 2, also implies that seeking to identify the optimal expression of Section 2's rule of reason for every possible class of conduct would be at best impractical and at worst counterproductive.

Put in terms of rules and standards, the ultimate principle underlying Section 2's rule of reason—to maximize long-term consumer welfare—can be expressed most broadly as a complex standard that directs courts to consider all the factors that bear on that inquiry. For some conduct, as explained, applying a test that attempts a case-specific reckoning of competitive benefits and harm may (and in some cases surely will) produce results that *do not* in fact achieve that goal relative to alternative legal tests. When such circumstances can be identified reliably, decision theory directs, and the common-law nature of Section 2's rule of reason permits, courts to adopt a more particularized expression of the rule of reason. The appropriate liability test, which may take the form of a rule, a standard, or a combination, in principle is the legal test that minimizes error and enforcement costs from applying that legal test as opposed to some other test.

The problem with applying this approach afresh to every new fact pattern is that “[a]nticompetitive conduct’ can come in too many different forms, and is too dependent upon context, for any court or commen-

commission_hearings/pdf/Salop_Legal_Rule.pdf. Professor Salop adopts this benchmark in place of a case-specific comparison of the long-term detrimental impact on incentives from compelling dealing against the short-term benefits to consumers of enhancing downstream competition. *See id.* (B.2); Salop, *supra* note 6, at 369–72. Developing conduct-specific rules that, when warranted, substitute for of case-specific inquiries into net welfare effects is precisely the course suggested here.

tator ever to have enumerated all the varieties.”¹⁶⁰ The costs (especially litigation) involved in seeking to determine the optimal legal test that applies to every conceivable category of conduct subject to Section 2 are immense; and at some point the incremental benefits from reducing the costs of error are outweighed by the incremental costs of devising the appropriate test. There are “practical” limits to a rulemaker’s ability “to catalogue accurately and exhaustively all the circumstances that activate a general standard.”¹⁶¹

The undesirability of developing a different Section 2 liability test for every arguably separate class of conduct is supported by the common-law nature of antitrust. Courts develop Section 2 legal tests only when presented with concrete disputes. In choosing among competing tests, courts cannot make a refined or scientific estimate of the likely error costs from of applying them. Rather, courts must rely on the showings made by the parties, their accumulated experience with the application of competing tests, and their expertise in devising and applying legal tests.¹⁶² Moreover, courts develop antitrust legal tests against the background of precedent, which may or may not be binding. Indeed, courts may face a problem of the “second best”: because Section 2 tests dictated by precedent govern certain conduct, it may ill serve consumers to apply what in principle is likely the best test to closely related conduct.

These limitations (or put in terms of decision theory, costs) inherent in the common-law process of developing Section 2 tests imply that courts need to be cautious in multiplying them. The common-law method of creating legal tests has substantial costs, is conducted in the presence of imperfect information, and operates within significant institutional constraints. Courts can only imperfectly trade off the incremental benefits and costs associated with modifying the otherwise applicable liability test.

These practical limitations imply that courts should develop appropriate default or “baseline” Section 2 legal tests (the “otherwise applicable legal test”) and depart from them when an appropriate showing is made that consumers are demonstrably better off under a different legal test because error and legal process costs are lower. After all, there is a preference for the rule of reason (in the sense of a case-specific analysis of anticipated effects) under Section 1, and *per se* rules are adopted

¹⁶⁰ *Caribbean Broadcasting Sys. Ltd. v. Cable & Wireless PLC*, 148 F.3d 1080, 1087 (D.C. Cir. 1998).

¹⁶¹ Ehrlich & Posner, *supra* note 78, at 268; *see also id.* at 265.

¹⁶² *See* Kaplow, *supra* note 119, at 609 (“Courts, for better or for worse, tend to rely on adversary proceedings in reaching conclusions.”).

only after considerable experience with the type of restraint at issue.¹⁶³ Put in the framework of decision theory, under Section 1 there is a preference for employing a broad standard as the baseline. The adoption of more particularized (and, in the case of the per se rule, simple) rules can be justified because the class of conduct is frequently enough encountered, the type of conduct is discrete enough, and the likely error costs from applying a different legal test are clear enough, that the benefits of promulgating a relatively simple rule instead of applying the baseline standard exceed the costs.¹⁶⁴

Similarly, Section 2 courts should start with a baseline legal test (or tests) and depart from it (or them) only upon an appropriate showing that the circumstances warrant applying a different legal test. This is simply to apply the lessons of *Barry Wright*, *Town of Concord*, and *Trinko* to other arrangements. Each starts with a baseline liability test, asks whether costs of error and enforcement warrant departing from that test, and wrestles with the implications of deviating from the baseline. In *Barry Wright*, the court started with a cost-based predatory pricing standard and found good reason to adhere to it.¹⁶⁵ In *Town of Concord*, the court started with Judge Hand's test for a price squeeze from *Alcoa* and found it wanting.¹⁶⁶ And in *Trinko*, the Court started with the *Colgate* doctrine and found no reason to engraft onto it a new exception.¹⁶⁷

It is through this process—identifying the baseline legal test and determining whether a basis exists for employing a different legal test—that the federal courts ought to fill in the “gaps” in the spectrum of Section 2 legal tests and when appropriate revisit otherwise applicable liability tests.

2. *Selecting and Departing from the Appropriate Baseline Legal Test*

The baseline Section 2 legal test, then, is important. It provides the starting point for selecting the appropriate expression of the rule of reason. To justify an alternative legal test, its proponent must demonstrate that the expected error and enforcement costs are clearly worth the benefits. The question, then, is the potential sources of, and how to select among, potential Section 2 baseline liability tests.

¹⁶³ See, e.g., *Broadcast Music, Inc. v. CBS, Inc.*, 441 U.S. 1, 9 (1979) (“[I]t is only after considerable experience with certain business relationships that courts classify them as per se violations.” (citation omitted)).

¹⁶⁴ See Ehrlich & Posner, *supra* note 78, at 266 (explaining that the process of supplanting a more general standard with rules “has long been at work in the antitrust area, for example, where over the years more and more practices have been ruled illegal per se after a period in which they were judged under a reasonableness standard”).

¹⁶⁵ See *supra* text accompanying note 87.

¹⁶⁶ See *supra* text accompanying notes 95–98.

¹⁶⁷ See *supra* text accompanying notes 89–94.

The first place a court must look for the appropriate baseline test is precedent. For certain conduct subject to Section 2 liability rules are settled. For example, *Brooke Group's* cost-based test governs a Section 2 claim alleging unlawfully low pricing. Even where precedent is not binding, it can supply the presumptively appropriate baseline. Precedents often reflect the efforts by courts to determine the most appropriate expression of the rule of reason. Precedent, however, cannot alone specify appropriate baseline Section 2 legal tests. For one thing, precedent decides only certain Section 2 cases. For another, precedent can always be revisited by some court. Accordingly, one cannot retreat completely to precedent.

The most obvious other source of baseline liability tests are the leading standards advanced as appropriate general tests for exclusionary conduct. Indeed, viewed from this vantage point, the debate between the profit-sacrifice and consumer welfare tests is over which supplies the appropriate baseline when the applicable liability test is unsettled. Should courts take as the default Section 2 legal test the profit-sacrifice test, and employ another test only when justified, or start (as under Section 1) with a test more akin to a structured rule of reason inquiry?

In principle, the appropriate baseline is the single legal test that, if it *were* the hypothetically universally applied Section 2 standard, minimizes error and legal process costs in the aggregate. But if the battleground is *all* conduct subject to Section 2, there is no clear victor. Supporters of the no economic sense test defend it, in part, on the ground that it eliminates costly false positives threatened by “balancing” tests.¹⁶⁸ Detractors of the profit-sacrifice test, by contrast, contend that it risks costly false negatives, assert that the costs of wrongly entrenching monopoly power are just as, if not more, pernicious than the costs of deterring procompetitive conduct, and maintain that the profit-sacrifice test is in practice difficult to apply and subjective.¹⁶⁹ As an empirical matter, it is not clear which critique is more potent.¹⁷⁰ The answer depends on the *value* assigned to likely false positives and false negatives, as well as their predicted frequency.

¹⁶⁸ See, e.g., Melamed, *supra* note 8, at 1258 (“[The sacrifice] test rests on the judgment that marketwide balancing tests, which in theory could condemn all welfare reducing conduct, will in practice prove to be an inferior legal standard because of their greater difficulty in administration and their perverse incentives effects.”).

¹⁶⁹ See, e.g., Salop, *supra* note 6, at 345–46, 357–63; cf. Gavil, *supra* note 1, at 57, 71 (“As an economic matter, ‘sacrifice’ is not relevant either to the defendant’s market power or the fact that its conduct resulted in actual exclusion or consumer harm.”). Some commentators also suggest that the profit-sacrifice test can produce false positives. See Salop, *supra* note 6, at 346.

¹⁷⁰ See Salop, *supra* note 6, at 352 & n.159.

Rather than applying a single baseline, a possibly superior approach is to apply different baseline tests to different conduct. This, after all, is a lesson of the spectrum of Section 2 legal tests: different liability tests may properly govern different conduct. To determine the appropriate baseline test (for example, comparing net effects, the profit-sacrifice test, a cost-based test, a *per se* or near *per se* rule), courts must rely on the showing of the parties, courts' experience with the conduct at issue, and practical administrative considerations.

Specifying the most desirable array of Section 2 baseline tests is beyond the scope of this article. Nonetheless, because baseline liability tests govern unless a reason to depart from them is demonstrated, baseline tests should be (1) functional (that is, the categories of conduct should be based on characteristics that appropriately distinguish anticipated economic consequences and error costs), (2) administrable, and (3) relatively few. The point of baseline tests is to avoid the unacceptably high error and legal process costs of endlessly multiplying Section 2 legal tests. A different baseline test for every arguable class of conduct would defeat that objective. Moreover, as the spectrum illustrates, for some classes of conduct the baseline liability test is settled and lower courts are bound to apply it (such as the *Brooke Group* test for below-cost pricing).¹⁷¹

Selecting the baseline is the first step in applying Section 2's rule of reason. The second step is to apply decision theory to determine whether an alternative legal test is likely to minimize error and legal process costs relative to the baseline test.¹⁷² Courts in this steps must consider whether the conduct in question is likely to be countered frequently enough, the

¹⁷¹ Thus, although the baseline test is usually not determinative, it is important. Moreover, the conduct a baseline test governs should be based on *functional* and not *formal* considerations. For instance, whether *Brooke Group's* test for predatory pricing presumptively applies to bundled discounts ought to depend on whether such practices threaten harms similar to, and offer benefits comparable to, those from straight per-unit discounting as an economic matter, as well as whether the pronounced concerns with false positives that inform the *Brooke Group* rule apply to bundled discounts. *Cf. LePage's Inc. v. 3M Corp.*, 324 F.3d 141, 151–52 (3d Cir. 2003) (en banc) (refusing to apply *Brooke Group* to bundled discounts), *cert. denied*, 124 S. Ct. 2932 (2004). If a court held that *Brooke Group* presumptively governs bundled discounts, it might nonetheless modify the predatory pricing rule to reflect that bundled discounts might cause different effects than per unit price cuts. *See, e.g., Ortho Diagnostic Sys., Inc. v. Abbott Labs., Inc.*, 920 F. Supp. 455, 469 (S.D.N.Y. 1996) (effectively applying a modified form of *Brooke Group* to bundled discounts). *See generally* Barry Nalebuff, *Exclusionary Bundling*, 50 ANTITRUST BULL. 321, 322–43 (2005) (explicating economic differences between bundled discounts and per-unit discounts and advocating a legal test for bundled discounts that assertedly takes those difference into account).

¹⁷² They are also some of the questions a court must ask in overturning Section 2 tests on the ground that the assumptions justifying the test no longer hold. *Cf. Williamson, supra* note 82, at 280 (“The rules in force at each point in time would thus be required to pass an administrability test, but provision would be made to successively improve the rules upon refining the relevant theory and our understanding of complex phenomena.”).

asserted class of conduct is coherent enough (most importantly, whether functional characteristics readily distinguish the conduct in question from other conduct covered by the baseline legal test), and the competitive effects of the class of conduct predictable enough, that the benefits of applying a different legal test to that class of conduct exceed the costs of departing from the baseline.

3. Section 2's Rule of Reason at Work: An Illustration

The following is a practical illustration of how Section 2's rule of reason works in practice (*Trinko*, too, is an example).¹⁷³ Suppose a major technology firm is both a monopolist and, through a hardware interface, gatekeeper to competition in a complementary market. Rivals competing in the complementary market, if they thrive, one day might threaten the upstream monopoly either directly or by partnering with new upstream entrants.

The monopolist elects to change its interface. The change improves the performance of its products in the complementary market modestly but dramatically impairs those of its rivals. Further suppose there is no suggestion that an alternative modification could equivalently increase the performance of the monopolist's products. One rival in the complementary market, impeded by the interface change, brings a Section 2 suit alleging monopolization on the ground that the interface modification raises entry barriers in the adjacent market in which the defendant enjoys monopoly power. Indeed, the rival contends, the benefit to the monopolist of the improvement was slight but the potential harm to consumers from eliminating upstream entry possibilities are vast.

Employing the methodology set forth above, a district court confronted with this antitrust claim would first need to identify the baseline liability test. Candidates include, among others, deeming the conduct "superior skill, foresight, and acumen," the profit-sacrifice test, and balancing or net consumer welfare tests. If the court were writing on a clean slate, it would need to assess the likely costs of error and enforcement associated with applying candidate baseline tests based on the experience of

A further implication is that the legal test a court applies on a motion to dismiss, when the facts alleged must be taken as true, may be different from that applied at summary judgment or at trial, after fuller factual development. *Cf. Gavil, supra* note 1, at 45 (criticizing the *Trinko* court for essentially engaging in judicial fact finding in ruling on a motion to dismiss). Moreover, the more particularized the Section 2 legal test, the more frequently the liability test likely will need to be revisited, a cost the courts also must consider. *See Ehrlich & Posner, supra* note 78, at 278.

¹⁷³ This hypothetical is similar to one discussed in Salop, *supra* note 6, at 323–25.

antitrust courts and the showings made by the parties. Alternatively, the court might determine that precedent supplies the appropriate baseline test.

Suppose that, in the federal circuit in which this district court sits, the law presumptively judges product design decisions under a profit-sacrifice test. The plaintiff might judge that it can equally prevail under either a profit-sacrifice test or a consumer welfare effects test, but asks the court to instruct the jury on the broadest possible test (*viz.*, consumer welfare). The court, accordingly, would need to assess whether the circumstances justify departing from the baseline profit-sacrifice test. Here, the court would assess not only the expected error and enforcement costs of alternative legal rules for the conduct in question, but also whether the benefits of creating an exception for the type of circumstances it confronts exceed the costs.

In this example, the case for departing from the profit-sacrifice baseline is at first blush appealing. If the plaintiff's evidence is believed by the adjudicator, the profit-sacrifice test (if the defendant passes it) might produce a significant false negative; the expected welfare loss from the interface change is large. By contrast, the efficiency gain is trivial. It may even be relatively easy to prove both that the conduct's expected benefit is small and is dwarfed by the potential consumer benefits of enhanced upstream competition, even if there is only a small probability of consumers obtaining those benefits absent the conduct. Thus, the plaintiff might argue, the facts present a compelling case for departing from the profit-sacrifice test and applying a balancing test.

But the court would also need to consider the effects on incentives from creating exceptions to the otherwise governing legal test to eliminate this false negative. If the court creates an exception here (for example, a circumstance in which the plaintiff has clear proof of anticipated harms grossly disproportionate to anticipated benefits), would that legal rule nonetheless over-deter and impede incentives to innovate because of concerns that fact-finders would apply it improperly in other settings? Is this circumstance likely to be encountered frequently or rarely such that these error costs are likely to be large and/or the benefits of a special rule substantial? Would the likely loss from over-deterrence over the long-run outweigh the gains from the exception? Is applying the suggested test likely to be administrable in slightly different circumstances to which it might arguably also apply? Is there a better way to characterize the nature of the exception that minimizes over-deterrence concerns? Does the court have information available to justify these departures from the baseline legal test? Do antitrust liability tests mandated by the court of

appeals for closely related conduct (that is, related precedent) reduce the anticipated benefits, or perhaps increase the costs, of adopting or failing to adopt the proposed alternative test?

In other words, as Justice Breyer has explained, in selecting the appropriate legal test, the court must determine whether “the anticompetitive risks associated with [the conduct] outweigh the possible benefits and the adverse administrative considerations.”¹⁷⁴

D. CHALLENGES IN IDENTIFYING APPROPRIATE SECTION 2 LEGAL TESTS DO NOT JUSTIFY ABANDONING SECTION 2’S RULE OF REASON

Some object to crafting different Section 2 tests to cover different conduct. These objections, although demonstrating that identifying the appropriate Section 2 legal test is not always easy, do not invalidate the approach—one that, as suggested, is mandated by a proper understanding of Section 2’s rule of reason.

(1) *Category Evasion*. Some contend that employing different Section 2 legal tests will ill serve consumers because would-be defendants will evade the applicable legal test by altering their conduct.¹⁷⁵ For example, as *Lorain Journal*¹⁷⁶ and *Dentsply*¹⁷⁷ demonstrate, a monopolist can employ unilateral refusals to deal with customers to achieve the same results as coerced exclusive dealing. Liability tests that sharply distinguish between the treatment of coerced contractual restrictions and conditional refusals to deal that achieve the same ends, it is feared, might induce firms to convert their conduct to the form that carries the least legal risk, even if that form is less efficient than the forgone alternative.¹⁷⁸ Similar concerns are raised with treating bundled discounts, such as those at issue in *LePage’s*,¹⁷⁹ as “pricing” conduct. Bundled discounts, unlike straight per unit price decreases, can exclude equally efficient rivals.¹⁸⁰ And if

¹⁷⁴ *Town of Concord v. Boston Edison Co.*, 915 F.2d 17, 25 (1st Cir. 1990).

¹⁷⁵ See Melamed, *supra* note 24, at 385.

¹⁷⁶ *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951).

¹⁷⁷ *United States v. Dentsply Int’l, Inc.*, 399 F.3d 181 (3d Cir. 2005).

¹⁷⁸ See Melamed, *supra* note 24, at 386. This criticism is often leveled at courts’ application of different liability tests to various means of achieving vertical integration, such as through internal expansion coupled with a refusal to deal (analyzed only under Section 2); merger (analyzed under Section 7, Section 1, and in principle Section 2) and contract (analyzed under Sections 1 and 2). The first, it is argued, is subject to the most lenient legal treatment, which discourages efficient vertical collaborations.

¹⁷⁹ *LePage’s Inc v. 3M Corp.*, 324 F.3d 141 (3d Cir. 2003) (en banc), *cert. denied*, 124 S. Ct. 2932 (2004). See Melamed, *supra* note 24, at 384–85.

¹⁸⁰ See Brief for the United States as Amicus Curiae at 12–13, *3M Corp. v. LePage’s Inc.*, 124 S. Ct. 2932 (2004) (No. 02-1865), available at <http://www.usdoj.gov/atr/cases/f203900/203900.pdf> [hereinafter United States Amicus Curiae Brief].

bundled discounts are not evaluated under some version of *Brooke Group*, the argument runs, firms will simply shift their bundling practice to the form that garners the least probability of an adverse antitrust judgment, even if the conduct poses an equivalent threat to, but might produce fewer benefits for, consumers.

This objection wrongly presupposes that Section 2 courts will develop “abstractly defined categories” through “formalistic inquiries.”¹⁸¹ The approach suggested here, by contrast, contemplates courts developing *functional* categories based on economic analysis of the conduct at issue and decision theory.¹⁸² If courts do their job correctly, Section 2 legal tests will not penalize firms for taking the more efficient path to a particular objective. It is the business of common-law courts, including antitrust courts, to develop workable, functional legal tests appropriate for the messy real world that do not create perverse incentives.¹⁸³

Moreover, the risk that courts improperly will treat similar conduct differently is just one side of the over/underinclusion coin. The other includes the costs of employing a single liability test. Tellingly, applying different Section 2 tests for different conduct is not some theoretical, alternative universal with ruinous transaction costs. Rather, as the spectrum of Section 2 legal test demonstrates, it is the Section 2 landscape we have inherited. Although the tests that govern many forms of conduct (particularly bundled pricing strategies) have yet to be worked out, and although many tests may be ripe for revisiting, that courts have developed different tests for different circumstances strongly suggests that the costs of a single test are prohibitively high. This is confirmed by the critiques offered by leading proponents of rival universal standards. As advocates of the profit-sacrifice test point out, a plenary inquiry into the consumer welfare effects of all conduct under Section 2 will deter welfare-enhancing conduct. But similarly, proponents of the consumer welfare standard stress, the profit-sacrifice test can generate false negatives and, under some conditions, even false positives.¹⁸⁴

(2) *Coherence/Notice/Transaction Costs*. A separate objection to multiple Section 2 legal tests is that different conduct can be characterized different ways, which threatens to render legal tests incoherent, increase litigation costs, and undermine the value of notice to firms that antitrust

¹⁸¹ See Melamed, *supra* note 24, at 384–86.

¹⁸² See *supra* Part III.C.

¹⁸³ Melamed, *supra* note 24, at 384–85. Cf. *Eastman Kodak Co. v. Image Technical Servs., Inc.* 504 U.S. 451, 466–67 (1992) (“Legal presumptions that rest on formalistic distinctions, rather than actual market realities, are generally disfavored in antitrust law.”).

¹⁸⁴ See *supra* note 169.

liability tests ought to supply.¹⁸⁵ For example, a bundled discount could be characterized as pricing conduct, tying, or de facto exclusive dealing. Wasteful litigation over characterization and the appropriate legal test for overlapping categories of conduct, it is argued, deserves antitrust.¹⁸⁶ But this objection provides no sound reason for giving up on identifying appropriate Section 2 tests.

There is always the possibility that conduct can be characterized in multiple ways. Yet legal tests requiring characterization have served the Sherman Act well for a century. For example, determining whether price-signaling amounts to an “agreement” subject to Section 1, or instead is merely oligopolistic single-firm conduct not covered by that statute, can raise thorny characterization issues.¹⁸⁷ So too can the question of whether a joint venture’s conduct is the conduct of a single firm subject only to Section 2 or instead the result of an agreement also subject to Section 1.¹⁸⁸ But no one suggests that either problem requires jettisoning the Sherman Act’s fundamental distinction between unilateral and concerted action.

Adopting a single Section 2 legal test (or analytic framework), moreover, would not eliminate debates over, and error costs from, characterization. Rather, it simply would replace one set of characterization problems with another. Always applying a structured rule of reason analysis, the first step of which is finding an “anticompetitive effect,” may foster formalistic debates over whether the conduct at issue should be *defined* as “competition on the merits.” Even if a structured rule of reason test more directly predicts the net welfare effects of particular behavior, disputes over characterizing effects would abound. For example, some formulations of the consumer welfare effects test require anticipated benefits to be disproportionate to anticipated consumer harm.¹⁸⁹ *When*, precisely, is one effect disproportionate to another? How are certain effects, such as lost innovation, to be characterized? Are

¹⁸⁵ See Melamed, *supra* note 24, at 384–86; Salop, *supra* note 6, at 354.

¹⁸⁶ See Melamed, *supra* note 24, at 384–86.

¹⁸⁷ Compare *In re Coordinated Pretrial Proceedings in Petroleum Prods. Antitrust Litig.*, 906 F.2d 432 (9th Cir. 1990) (inferring agreement from price signaling activity), with Gregory J. Werden, *Economic Evidence on the Existence of Collusion: Reconciling Antitrust Law with Oligopoly Theory*, 71 ANTITRUST L.J. 719, 748 (2004) (criticizing *In re Petroleum Products* as inferring an agreement from evidence consistent with mere oligopoly).

¹⁸⁸ Compare *Chicago Prof'l Sports Ltd. P'ship v. Nat'l Basketball Ass'n*, 95 F.3d 593, 599 (7th Cir. 1996) with *id.* at 601, 606 (Cudahy, J., concurring). See also *Texaco Inc. v. Dagher*, 126 S. Ct. 1276, 1279–80 (2006) (characterizing a legitimate joint venture’s pricing of its own products as the conduct of “a single entity” when the joint venture’s formation eliminated competition between those products).

¹⁸⁹ See Hovenkamp, *supra* note 7, at 148.

those effects less important than losses to current welfare or potentially more important?

The profit-sacrifice test, too, introduces thorny questions of characterization and categorization. Which “costs” count against incremental revenues?¹⁹⁰ How are profits preserved by the conduct properly treated—as legitimate incremental revenues or as ill-gotten gains?¹⁹¹ When is conduct collusion, and thus excluded from the profit-sacrifice test, or aimed at exclusion, and thus governed by it?¹⁹² When should the *Brooke Group* test apply rather than the (as demonstrated) more interventionist “makes no economic sense” or profit-sacrifice formulations? The profit-sacrifice test hardly provides ironclad notice to firms respecting the legal consequences of conduct.

More fundamentally, identifying appropriate Section 2 tests does not, as some suggest, invite courts to entertain debates over characterization that “increase legal process costs” to no useful end.¹⁹³ Rather than “optimize[]” the legal test “for the particular type of conduct,”¹⁹⁴ courts should employ, as explained, a small number of baseline legal tests that apply *unless* a good reason to depart from those tests is demonstrated.¹⁹⁵ The use of a small number of baseline legal tests will promote consistency and predictability while ensuring that courts can treat conduct differently when decision theoretic principles warrant. Whether a departure from

¹⁹⁰ For example, in the *American Airlines* case, the Department of Justice advanced four different cost-based tests. See *United States v. AMR Corp.*, 335 F.3d 1109, 1117–19 (10th Cir. 2003).

¹⁹¹ See Elhauge, *supra* note 10, at 272; Salop, *supra* note 6, at 360. To take one example, in a refusal to deal case, the profit-sacrifice test asks whether the defendant’s refusal to deal is profitable absent exclusion. The defendant will fail the test, when a rival seeks to deal with it at above marginal cost, if the preexisting monopoly profits the defendant seeks to retain through the refusal were not counted as legitimate. To deal with this problem, advocates of the profit-sacrifice test deem preexisting profits legitimate. See Melamed, *supra* note 8, at 1264.

¹⁹² For example, a joint venture’s enforcement of membership rules could be characterized (to take the definitions from Melamed, *supra* note 24, at 376–77) as either “reducing competition among firms that agree to participate in the collaboration” (collusion) or as “reducing the output . . . of rivals that do not agree to the arrangement” (exclusion). See *United States v. Visa USA, Inc.*, 344 F.3d 229, 243–44 (2d Cir. 2003); cf. *JTC Petroleum Co. v. Piasa Motor Fuels, Inc.*, 190 F.3d 775, 778 (7th Cir. 1999) (alleged scheme by competitors to enlist upstream input suppliers to punish maverick).

¹⁹³ Melamed, *supra* note 24, at 385.

¹⁹⁴ *Id.* at 384.

¹⁹⁵ See *supra* Part III.C.2. The development of legal tests that, through the doctrine of *stare decisis*, presumptively apply to common fact patterns obviates the concern that district courts (and courts of appeals) will need to determine the baseline legal test anew in every case.

the baseline is warranted includes, among other factors, the very question whether the benefits of a more particularized rule justify costs stemming from litigation over exceptions and whether functional, administrable tests for distinguishing conduct can be created.

In other words, that characterization may not always yield easy answers does not mean that seeking to identify the appropriate liability test for the circumstances is not useful. Employing different Section 2 legal tests need not “multiply legal proceedings and increase legal process costs” in search of “formal” distinctions that “disserve the substantive, economic objectives of antitrust law.”¹⁹⁶ As long as courts recognize that the legal tests must be both functional as well as administrable, problems inherent to characterizing conduct can be minimized.

(3) *Avoids Economic Substance.* Finally, critics of crafting discrete Section 2 legal tests contend that focusing adjudicators on selecting the proper liability test for the conduct at issue will divert the focus from the central antitrust issue of the economic consequences of that conduct.¹⁹⁷ But this criticism, too, falls wide of the mark.

The approach articulated here employs decision theory to craft potentially different specific expressions of the rule of reason to govern different conduct. Those tests need not always require a case-specific comparison of anticipated competitive effects. Instead, the tests can include rules of per se legality or illegality, the profit-sacrifice test, or tests that directly compare effects, depending on which rule minimizes the expected costs of error and legal process costs in the circumstances.

By contrast, some advocates of the consumer welfare standard assert that the potential for different error costs from applying that test to different conduct are more properly taken into account by adjusting the plaintiff’s or defendant’s burden of proof.¹⁹⁸ One such adjustment, supported by many commentators, is to require that anticipated consumer harms be disproportionate to anticipated benefits before holding the defendant liable under Section 2.¹⁹⁹ Other adjustments include heightening the evidentiary showing required on either anticompetitive effects or efficiencies, depending on the conduct.²⁰⁰ In short, these commentators suggest employing decision theory not to create different legal tests, but rather to fine-tune a single liability standard. Such “marginal

¹⁹⁶ Melamed, *supra* note 24, at 385.

¹⁹⁷ See Salop, *supra* note 6, at 326, 352–54.

¹⁹⁸ See *id.* at 353–54.

¹⁹⁹ See *supra* note 7.

²⁰⁰ See Salop, *supra* note 6, at 353–54.

quantitative adjustments” to the consumer welfare effects standard, it is argued, “make more economic sense than changing the liability standard in a qualitative way.”²⁰¹

The problem with this argument is that fine-tuning an open-ended standard may make more *economic* sense but not more *legal* sense. The consumer welfare effects test is a complex standard, a legal test that, in many circumstances, can be difficult to apply, costly to enforce, and difficult to predict.²⁰² The most appropriate Section 2 test for some conduct may take the form of a consumer welfare effects test. But that hardly demonstrates that, in *other* circumstances (indeed, perhaps most other circumstances), an entirely different test may make consumers better off.²⁰³ To invoke Justice Breyer again: “[U]nlike economics, law is an administrative system the effects of which depend upon the content of rules and precedents only as they are applied by judges and juries in courts and by lawyers advising their clients.”²⁰⁴

Moreover, the contention that applying different legal tests to different conduct threatens to miss economic substance has it precisely backwards. Requiring courts to determine the most appropriate expression of the rule of reason will focus the inquiry sharply on error and legal process costs. The applicable Section 2 legal test presents an issue of law and is reviewed *de novo* on appeal.²⁰⁵ Generalist judges, who preside over a range of cases and are expert in the law, must expressly grapple with whether holding the defendant liable in a particular case under one particular test is likely to lead to over- or under-deterrence relative to applying other legal tests. For courts to determine the most appropriate liability test is to *address* economic substance, not ignore it.²⁰⁶

²⁰¹ *Id.* at 354.

²⁰² See *supra* text accompanying notes 124–26.

²⁰³ The Solicitor General recognized this in *Trinko*. The government argued that exclusionary conduct produces “harm to competition . . . disproportionate to consumer benefits . . . and to the economic benefits to the defendant (aside from benefits that accrue from diminished competition).” Brief for the United States as Amicus Curiae at 14, *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP* (No. 02-682), available at <http://www.usdoj.gov/atr/cases/f201000/201048.pdf>. But, the government urged, when the claim involves an asserted duty to assist a rival, “conduct is not exclusionary or predatory” unless it violates a more particularized profit-sacrifice rule. See *id.* at 15.

²⁰⁴ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 234 (1st Cir. 1983).

²⁰⁵ See, e.g., *United States v. Microsoft Corp.*, 253 F.3d 34, 50 (D.C. Cir. 2001) (en banc) (per curiam).

²⁰⁶ For this reason, Professor Salop is wrong that creating safe harbors and other conduct-specific Section 2 rules “make[s] the analysis circular and the standard an empty shell.” Salop, *supra* note 6, at 326. Conduct-specific rules, as explained, must be justified based on a rigorous application of decision-theoretic antitrust analysis; not by some “subjective reflection of [a] court’s general ideology.” *Id.*

Ironically, an approach that employs a step-wise net effects framework may mask this important economic inquiry rather than invite courts to address it directly. For example, Professor Gavil suggests a general framework for Section 2, inspired by *Microsoft's* step-wise approach, based on burden shifting.²⁰⁷ The plaintiff must make a threshold showing of anticompetitive harm. If such a showing is made, the burden of production can shift to the defendant to demonstrate offsetting efficiencies. When the burden shifts, and when it can be shifted back to the plaintiff to demonstrate that anticipated anticompetitive effects are greater than likely efficiencies, depends on the type of conduct at issue.²⁰⁸ Much like the approach suggested here, the precise showing the plaintiff must make, depends on “considering substantive economics, economic decision theory, and legal process,” and can differ based on the conduct in question.²⁰⁹

The problem with this framework is that it focuses the decision maker on a *definitional* question—labeling the conduct “anticompetitive” in its first step—rather than on the underlying substantive question of which legal test will minimize the costs of false positives, false negatives, and the legal process.²¹⁰ Defining “anticompetitive” as the outcome of some external analysis is bound to confuse more than illuminate, as “anticompetitive” can also mean a negative effect on consumer welfare or inefficiency. For example, the *Trinko* Court acknowledged that Verizon’s failure to interconnect rivals as mandated by regulations could harm consumers. Yet the Court held that conduct lawful not because its consequences could not be deemed “anticompetitive” in some sense, but rather because antitrust enforcement was likely, in the long run, to impose more costs than benefits.²¹¹

A framework such as that suggested by Professor Gavil may be appropriate for some categories of conduct. Moreover, appropriate liability

²⁰⁷ Gavil, *supra* note 1, at 74–78.

²⁰⁸ *Id.* at 76–78.

²⁰⁹ *Id.* at 75.

²¹⁰ *Cf.* Hovenkamp, *supra* note 7, at 152–53 (similarly critiquing the *Microsoft* court’s “elaborate” definition of exclusionary conduct as lacking a definition of competition on the merits).

²¹¹ *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 411–16 (2004). The *LePage's* case illustrates this problem. The opinion asserts that the impact on 3M’s rivals in transparent tape was an “anticompetitive” effect. *LePage's Inc v. 3M Corp.*, 324 F.3d 141, 155 (3d Cir. 2003) (en banc), *cert. denied*, 124 S. Ct. 2932 (2004). But the court, as the Solicitor General notes, never explains precisely why the impact of the bundled discounts was anticompetitive. *See* United States Amicus Curiae Brief, *supra* note 180, at 16–17. As the Solicitor General recognizes, the right question is not whether the conduct causes some effect that can be labeled anticompetitive, but rather the contours of the legal test appropriate for that conduct. *See id.* at 18.

tests must properly allocate the burden of production and persuasion.²¹² However, Section 2 courts have the flexibility to depart from a step-wise rule of reason framework when an alternative legal framework best serves the long-run interests of consumers.

Moreover, making adjustments to pleading or evidentiary burdens (such as requiring “clear and convincing” evidence of particular effects rather than merely a “preponderance” of the evidence) may undesirably arm the fact finder with discretion that produces undesirable over- or under-deterrence. Although selecting the applicable legal test is a question of law, applying the law to the facts (a “mixed” question of law and fact) can present a question of fact on appeal.²¹³ When confronted with very sympathetic facts, adjudicators (whether judges or juries) may discount the formal evidentiary burden and side with the party with the equities. There is always a temptation to depart from a rule to seek apparent greater justice in an individual case even when adhering to the rule makes society in the long run better off as a whole.²¹⁴ So too in antitrust, it is possible to neglect incentive effects when the legal test is framed as a more discretionary standard rather than as a particularized rule.²¹⁵ If a particular liability test threatens high error costs, then courts at the very least ought to compare the potential costs and benefits of employing a different legal test.

²¹² Appropriate Section 2 tests may also treat certain categories of claimed efficiencies as legitimate or illegitimate as a matter of law. *See, e.g., Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 484 (1992) (rejecting a free-riding defense that implied a firm that develops a market may exclude rivals from complementary markets).

²¹³ *See generally* *United States v. McConney*, 728 F.2d 1195, 1200–04 (9th Cir. 1984) (en banc); *cf. United States v. Gaudin*, 515 U.S. 506, 512–13 (1995) (jury must decide mixed questions of law and fact in criminal case).

²¹⁴ *Cf. Louis Kaplow & Steven Shavell, Fairness Versus Welfare*, 114 HARV. L. REV. 961, 1071 (2001) (“[H]owever many individuals might benefit from a fairer rule, and however great their benefit might be, the fact that social welfare is lower [by changing the rule] means that a judgment has been made that the losses borne by those who are worse off under the [alternative] rule are of greater social importance . . .”). Or as Justice Holmes put it in a famous antitrust case: “Great cases, like hard cases, make bad law. For great cases are called great, not by reason of their real importance in shaping the law of the future, but because of some accident of immediate overwhelming interest which appeals to the feelings and distorts the judgment.” *N. Sec. Co. v. United States*, 193 U.S. 197, 400 (1904) (Holmes, J., dissenting).

²¹⁵ Professor Salop’s suggestion (*see* Salop, *supra* note 6, at 341–42, 352–54) that ex ante analysis ameliorates potential error and enforcement costs from applying a consumer welfare effects standard fails to take this problem into account. Moreover, the Supreme Court’s recognition in *Trinko* that antitrust liability tests in general, and Section 2 liability tests in particular, properly take into account expected error and enforcement costs makes the examples Professor Salop cites (Salop, *supra* note 6, at 365–66) from merger law (where statutory language may compel a particular analysis), product liability law, and constitutional law, all of which require actors to predict the expected consequences of behavior under a general standard, beside the point.

Finally, certain liability tests are simply a poor fit in some circumstances. For example, some proponents of the no economic sense test concede that it “can be applied only when there is a single, well-defined ‘but for’ scenario” and when it is feasible to segregate anticipated profits from eliminating competition from profits from other sources.²¹⁶ It *engages* rather than avoids economic substance for judges to pause and ask if a particular liability test is suited to the matter at hand.

IV. CONCLUSION

Section 2 is not “one size fits all.” Recognizing that different circumstances can warrant dissimilar treatment, courts have crafted an array of legal tests to govern the diverse conduct covered by Section 2. Analyzing the spectrum of Section 2 legal tests illuminates the underlying principle employed to derive those tests: For the conduct at issues, courts attempt to select the liability test that minimizes error and legal process costs and thereby makes consumers in the long run better off relative to applying other legal tests to that conduct. All such legal tests are equally expressions of Section 2’s rule of reason, which (like that of Section 1) requires “an enquiry meet for the case.”²¹⁷

Accordingly, “[t]he quest for a unitary test for defining all exclusionary conduct should be abandoned.”²¹⁸ Instead, Section 2 courts confront an important real-world challenge: to determine which Section 2 legal test as applied to the conduct at issue is likely to maximize long-term consumer welfare. In selecting among available Section 2 tests, courts must determine the appropriate baseline legal test (from precedent or first principles) and then whether to depart from it. Proceeding practically, courts must determine whether the class of conduct is coherent enough, whether the conduct is frequently encountered enough, and whether information on the anticipated consequences of applying a different legal test is reliable enough, to warrant departing from the baseline legal test. This is *Trinko*’s central teaching. And where the baseline legal test is not settled, courts must apply the same considerations in selecting between rules (with their potential benefits of minimizing enforcement costs, providing notice, and enabling courts to prefer one set of error costs over another) and standards (with their benefits of reducing over- and under-inclusion, conserving promulgation costs, and preserving flexibility) in identifying the appropriate starting point for the analysis.

²¹⁶ Werden, *Identifying Exclusionary Conduct*, *supra* note 8, at 420.

²¹⁷ Cal. Dental Ass’n v. FTC, 526 U.S. 726, 781 (1999).

²¹⁸ Gavil, *supra* note 1, at 74.

Determining the content of Section 2's rule of reason with due regard for error and legal process costs associated with different legal tests and the process of selecting among them is the critical challenge Section 2 courts confront today. Except for a few isolated although revealing islands, the sea of conduct subject to Section 2 is relatively uncharted; the appropriate liability tests are largely *not* clear. If the Sherman Act is a "charter of freedom," exhibiting "a generality and adaptability comparable to that found to be desirable in constitutional provisions,"²¹⁹ Section 2's place in that charter is unsettled. How courts select, implement, and refine Section 2 legal tests will determine whether Section 2 remains a vital component of the free enterprise system that the Sherman Act is designed to secure.

²¹⁹ *Appalachian Coals, Inc. v. United States*, 288 U.S. 344, 359-60 (1933).