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DEFINING UNREASONABLY EXCLUSIONARY CONDUCT: THE “EXCLUSION OF A COMPETITIVE RIVAL” APPROACH*

THOMAS A. LAMBERT**

Unreasonably exclusionary conduct, the element common to monopolization and attempted monopolization offenses under Section 2 of the Sherman Act, remains essentially undefined. Federal courts, including the U.S. Supreme Court, have purported to define the term, but the definitions they have offered are so indeterminate as to be, in the words of one prominent commentator, “not just vague but vacuous.” Seeking to fill the void left by the courts, antitrust scholars have in recent years proposed four universal definitions of unreasonably exclusionary conduct. Each, however, is deficient: one would fail to deter a substantial amount of anticompetitive conduct, and the other three would provide business planners with little guidance and no safe harbors, and would likely chill efficient but novel business practices. In light of these deficiencies, some commentators have recently suggested abandoning the search for a universal definition of unreasonably exclusionary conduct and instead adopting non-universal standards. Such an approach, though, would either offend rule-of-law norms or, if implemented as some non-universalists have suggested, reduce to one of the aforementioned—and deficient—universal definitions.

This Article examines the proposed definitions or tests for identifying unreasonably exclusionary conduct (including the non-universalist approach) and, finding each lacking, suggests an alternative definition. The proposed approach would deem conduct to be unreasonably exclusionary if it would exclude from the defendant’s market a “competitive rival,” defined as a rival that is both as determined as the defendant and capable, at minimum efficient scale, of matching the defendant’s efficiency. The “exclusion of a competitive rival” definition identifies the

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key common thread running through instances of unreasonable exclusion, comports with widely accepted intuitions about what constitutes improper competitive conduct, and generates specific safe harbors and liability rules that collectively would maximize monopolization doctrine's net benefits by minimizing the sum of its "decision" and "error" costs.

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INTRODUCTION

There is a problem with Section 2 of the Sherman Act: nobody knows what it means. The provision forbids monopolization, attempts to monopolize, and conspiracies to monopolize,¹ and courts have articulated formal lists of elements for each of those offenses.² But the element common to the unilateral offenses of monopolization and attempted monopolization—“exclusionary conduct”—remains essentially undefined.³

We do know that more than the mere “exclusion” of a defendant’s rivals is required. All sorts of output-enhancing practices—basic product improvements and nonpredatory discounts,

1. 15 U.S.C. § 2 (2012) (“Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony . . .”).

2. *See, e.g.*, *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 456 (1993) (defining attempted monopolization); *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966) (listing elements of monopolization); *United States Anchor Mfg., Inc. v. Rule Indus., Inc.*, 7 F.3d 986, 1001 (11th Cir. 1993) (describing conspiracy to monopolize); *Int’l Distrib. Ctrs., Inc. v. Walsh Trucking Co.*, 812 F.2d 786, 795 (2d Cir. 1987) (outlining conspiracy to monopolize elements).

3. Monopolization and attempted monopolization are unilateral offenses because they may be accomplished by a single economic entity acting alone. Conspiracy to monopolize, by contrast, requires concerted conduct. The elements of monopolization are “(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.” *Grinnell*, 384 U.S. at 570–71. The latter element is usually referred to as “exclusionary” conduct. *See, e.g.*, PHILLIP E. AREEDA & HERBERT HOVENKAMP, 3 ANTITRUST LAW ¶ 618 at 66 (3d ed. 2008) (“The §2 monopolizing offense requires something more than the existence of monopoly power; the ‘something more’ is generally referred to as an ‘exclusionary practice.’”). To establish attempted monopolization, a plaintiff must establish “(1) that the defendant has engaged in predatory or anticompetitive conduct with (2) a specific intent to monopolize and (3) a dangerous probability of achieving monopoly power.” *Spectrum Sports*, 506 U.S. at 456. Courts have deemed the first element of the attempted monopolization offense to be identical to the exclusionary conduct element of a monopolization offense. *See, e.g.*, *Olympia Equip. Leasing Co. v. Western Union Tel. Co.*, 797 F.2d 370, 373 (7th Cir. 1986) (“Conduct lawful for a monopolist is lawful for a firm attempting to become a monopolist.”); *Transamerica Computer Co. v. IBM Corp.*, 698 F.2d 1377, 1382 (9th Cir. 1983) (“Conduct that does not constitute ‘willful acquisition or maintenance’ of monopoly power (thus precluding establishment of the offense of monopolization) cannot constitute the ‘predatory or anticompetitive conduct’ required to establish the offense of attempt to monopolize.”); JULIAN O. VON KALINOWSKI, PETER SULLIVAN & MAUREEN MCGUIRL 2-26 ANTITRUST LAWS AND TRADE REGULATION § 26.01 (2d ed. 2013) (Lexis) (“The same analysis applies in deciding whether conduct is anticompetitive in both monopolization and attempted monopolization cases.”).

for example—tend to win business for the perpetrator and thereby reduce sales opportunities for its rivals. Although “exclusionary” in a literal sense, such practices are hardly deserving of condemnation. Only *unreasonably* exclusionary conduct should be condemned.

Courts have provided little assistance in defining unreasonably exclusionary conduct. The U.S. Supreme Court has said that such conduct consists of “the willful acquisition or maintenance of [monopoly] power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.”⁴ But that is an unhelpful definition; virtually every firm “wills” to win business from its rivals and thereby attain monopoly power.⁵ Recognizing as much, courts have emphasized that exclusionary conduct must involve practices other than “competition on the merits.”⁶ But what exactly is *that*? As Einer Elhauge has observed, these verbal formulae are “not just vague but vacuous” because they “are utterly conclusory, failing to identify a coherent norm that provides any real help in distinguishing bad behavior from good or even in knowing which way certain factual conclusions cut.”⁷

What courts and business planners need is something akin to the Hand Formula for identifying negligence. Judge Learned Hand’s observation that the failure to take a precaution is negligent if $B < PL$ —i.e., if the cost or “burden” of taking the precaution is less than the “probability” that harm will occur absent the precaution times the magnitude of “loss” resulting from such harm⁸—helpfully operationalized the negligence concept, grounding it in economic

4. *Grinnell*, 384 U.S. at 571.

5. See *Ortho Diagnostic Sys., Inc. v. Abbott Labs., Inc.*, 920 F. Supp. 455, 465 (S.D.N.Y. 1996) (“Unfortunately, the *Grinnell* test is not of much assistance in resolving particular cases. Every competitor seeks to capture as much business as possible.”).

6. See, e.g., *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 605 n.32 (1985) (observing that exclusionary conduct must impair rivals and either “not further competition on the merits or do[] so in an unnecessarily restrictive way” (quoting 3 P. AREEDA & D. TURNER, *ANTITRUST LAW* 78 (1978))); *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 308 (3d Cir. 2007) (“Anticompetitive conduct may take a variety of forms, but it is generally defined as conduct to obtain or maintain monopoly power as a result of competition on some basis other than the merits.”); *Foremost Pro Color, Inc. v. Eastman Kodak Co.*, 703 F.2d 534, 545–46 (9th Cir. 1983) (defining unreasonably exclusionary as conduct that “constitutes an anticompetitive abuse or leverage of monopoly power, or a predatory or exclusionary means of attempting to monopolize the relevant market, rather than aggressive competition on the merits”).

7. Einer Elhauge, *Defining Better Monopolization Standards*, 56 STAN. L. REV. 253, 255 (2003).

8. *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947) (“[I]f the probability be called P; the injury, L; and the burden, B; liability depends upon whether B is less than L multiplied by P: i.e., whether B [is less than] PL.”).

efficiency and providing far more guidance to adjudicators and business planners than had previous verbal formulae like “due care,” “reasonable precaution,” “reasonable prudence,” etc.⁹ An ideal definition of unreasonably exclusionary conduct would similarly enhance the efficiency of monopolization doctrine and provide reliable guidance to courts, regulators, and business planners.

The foregoing observations are nothing new. For more than a decade now, antitrust commentators have debated how to define unreasonably exclusionary conduct. Four possible universal definitions have emerged: (1) Judge Richard Posner’s “equally efficient rival” approach,¹⁰ (2) post-Chicago theorists’ “raising rivals’ costs” approach,¹¹ (3) the consumer welfare effects test set forth in the leading antitrust treatise,¹² and (4) the profit sacrifice or “no economic sense” test the U.S. Department of Justice (“DOJ”) once endorsed.¹³ In addition to those universal approaches, some commentators have eschewed a generally applicable theory of exclusionary conduct and called instead for evaluating different categories of exclusionary conduct according to different criteria.¹⁴

This Article takes issue with all of these positions. Judge Posner’s equally efficient rival definition would fail to deter a fair amount of anticompetitive conduct.¹⁵ The other proposed universal definitions would be difficult for adjudicators to apply, would provide little

9. See Richard A. Posner, *A Theory of Negligence*, 1 J. LEGAL STUD. 29, 32 (1972) (describing Hand’s “famous formulation of the negligence standard” as “one of the few attempts to give content to the deceptively simple concept of ordinary care”).

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

11. See, e.g., Thomas G. Krattenmaker & Steven C. Salop, *Anticompetitive Exclusion: Raising Rivals’ Costs to Achieve Power Over Price*, 96 YALE L.J. 209, 213–14 (1986).

12. See AREEDA & HOVENKAMP, *supra* note 3, ¶ 651a at 96.

13. See Brief for the United States and the FTC as Amici Curiae Supporting Petitioner at 15, *Verizon Commc’ns, Inc. v. Law Offices of Curtis V. Trinko*, 540 U.S. 398 (2004) (No. 02-682), available at <http://www.justice.gov/atr/cases/f200500/200558.htm> (advocating for the no economic sense test); see also A. Douglas Melamed, *Exclusive Dealing Arrangements and Other Exclusionary Conduct—Are There Unifying Principles?*, 73 ANTITRUST L.J. 375, 391–92 (2006) (espousing the no economic sense test); Janusz A. Ordover & Robert D. Willig, *An Economic Definition of Predation: Pricing and Product Innovation*, 91 YALE L.J. 8, 9 (1981) (describing the profit sacrifice test); Gregory J. Werden, *Identifying Exclusionary Conduct Under Section 2: The “No Economic Sense” Test*, 73 ANTITRUST L.J. 413, 415–25 (2006) (detailing the no economic sense test).

14. See, e.g., Marina Lao, *Defining Exclusionary Conduct Under Section 2: The Case for Non-Universal Standards*, in ANNUAL PROCEEDINGS OF THE FORDHAM COMPETITION LAW INSTITUTE: INTERNATIONAL ANTITRUST LAW AND POLICY 433, 435 (Barry E. Hawk ed., 2007); Mark S. Popofsky, *Defining Exclusionary Conduct: Section 2, the Rule of Reason, and the Unifying Principle Underlying Antitrust Rules*, 73 ANTITRUST L.J. 435, 437 (2006).

15. See *infra* notes 32–35 and accompanying text.

guidance and no reliable safe harbors to business planners, and would likely over-deter by chilling efficient business practices.¹⁶ In its most extreme form, eschewal of a single definition of exclusionary conduct in favor of non-universal standards would offend basic rule-of-law norms.¹⁷ The more modest non-universalist approach some commentators have advocated ultimately reduces to one of the indeterminate and overdeterrent universal theories.¹⁸

In light of these deficiencies, this Article proposes an alternative “exclusion of a competitive rival” approach that would deem conduct unreasonably exclusionary only if it were reasonably likely to exclude from the defendant’s market a “competitive rival,” defined as a rival that is as aggressive a competitor as the defendant and would be capable at minimum efficient scale (“MES”)—the lowest production level at which all available scale economies could be exploited—of matching or exceeding the defendant’s productive efficiency.¹⁹ Such an approach would comport with basic intuitions about appropriate competition, provide clear guidance and reliable safe harbors for business planners, generate administrable liability rules for antitrust tribunals, and maximize the net benefits of antitrust regulation by minimizing the sum of “decision” and “error” costs.

The Article proceeds as follows. Part I sets forth and critiques the aforementioned universal definitions of exclusionary conduct as well as the argument in favor of non-universal standards. Part II then describes my alternative “exclusion of a competitive rival” approach and shows how it may be operationalized in different contexts. Finally, Part III anticipates and responds to concerns that the proposed approach would be underdeterrent and could facilitate collusion.

I. PREVIOUSLY PROPOSED DEFINITIONS OF UNREASONABLY EXCLUSIONARY CONDUCT

A. *Exclusion of an Equally Efficient Rival*

In the second edition of his *Antitrust Law* book, Judge Posner defined unreasonably exclusionary conduct as behavior that is “likely in the circumstances to exclude from the defendant’s market an

16. See *infra* notes 44–45, 56–68, 88–92 and accompanying text.

17. See *infra* notes 98–102 and accompanying text.

18. See *infra* notes 103–10 and accompanying text.

19. Minimum efficient scale is the lowest production point at which long-run average total costs are minimized. See HAL R. VARIAN, INTERMEDIATE MICROECONOMICS 428 (1987).

equally or more efficient competitor.”²⁰ Such a definition seemingly accords with common notions of vigorous but fair competition. A “competitive” race, for example, is one in which each runner does all she can to get ahead, and the fastest runner wins. While conduct that would permit victory by a runner other than the fastest is, quite literally, *anti-competitive*, any conduct that would push a runner ahead, though not ahead of her faster or equally fast rivals, makes the race better (i.e., improves the average speed of the runners) and is expected. An “equally efficient rival” test thus encourages firms to do all they can to win business for themselves, except for any actions that might reduce long-run market output by driving out more capable competitors. Consistent with the oft-repeated adage that antitrust exists “for the protection of *competition*, not *competitors*,”²¹ the equally efficient rival definition ultimately focuses on protecting the overall system for maximizing market output rather than on preserving undeserving participants within the system.

Posner’s intuition has found some traction in Section 2 case law. Lower courts confronting the relatively novel issue of how to evaluate bundled discounts,²² for example, have sought to frame liability rules in a manner that would permit all discounts except those that could

20. POSNER, *supra* note 10, at 194–95.

21. *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 767 n.14 (1984) (quoting *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 488 (1977)).

22. A bundled discount occurs when a firm sells a collection of goods from different product markets for a lower price than the aggregate price for which it would sell the constituent goods individually. See U.S. DEP’T OF JUSTICE, COMPETITION AND MONOPOLY: SINGLE-FIRM CONDUCT UNDER SECTION 2 OF THE SHERMAN ACT 91 (2008), available at <http://www.justice.gov/atr/public/reports/236681.pdf> [hereinafter Bush DOJ Single-Firm Conduct Report]. The Justice Department under President Obama withdrew this report. See Press Release, U.S. Dep’t of Justice, Justice Department Withdraws Report on Antitrust Monopoly Law (May 11, 2009), available at http://www.justice.gov/atr/public/press_releases/2009/245710.pdf. Courts are currently split on the appropriate rule for evaluating the legality of such discounts. Compare, e.g., *LePage’s Inc. v. 3M*, 324 F.3d 141, 152 (3d Cir. 2003) (en banc) (positing broad liability rule), with *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883, 906 (9th Cir. 2008) (positing narrow liability rule with safe harbors), and *Ortho Diagnostic Sys., Inc. v. Abbott Labs., Inc.*, 920 F. Supp. 455, 469–70 (S.D.N.Y. 1996) (positing even narrower liability rule). Commentators are also split. Compare, e.g., Einer Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, 123 HARV. L. REV. 397, 399–403 (2009) (advocating broad liability rule with no price-cost safe harbor), with Daniel A. Crane, *Mixed Bundling, Profit Sacrifice, and Consumer Welfare*, 55 EMORY L.J. 423, 474–75 (2006) (advocating narrow liability rule with safe harbor), Herbert Hovenkamp, *Discounts and Exclusion*, 2006 UTAH L. REV. 841, 850–54 (advocating narrow liability rule with safe harbor), and Thomas A. Lambert, *Evaluating Bundled Discounts*, 89 MINN. L. REV. 1688, 1742–53 (2005) (advocating narrower liability rule with safe harbor).

exclude an equally efficient rival.²³ The prevailing liability rule on predatory pricing is similar. Under the Supreme Court's decision in *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*,²⁴ there can be no liability if the defendant's price exceeds its incremental cost.²⁵ Given that an equally efficient rival (i.e., one facing the same incremental cost as the defendant) could match any price above that level, the rule effectively makes the ability to exclude an equally efficient rival a necessary condition for liability.²⁶

Despite the equally efficient rival test's theoretical appeal and apparent influence on the Section 2 case law, the test has drawn criticism; and few commentators have embraced it as a generally applicable definition of exclusionary conduct.²⁷ First, some have argued that the test could permit instances of naked exclusion, which is "conduct unabashedly meant to exclude rivals, for which no one offers any efficiency justification."²⁸ Herbert Hovenkamp, for example, offers the example of a fraudulent patent suit that is meritless but would be costly to defend.²⁹ Suppose that a rival as efficient as the plaintiff could afford to defend against the lawsuit, but

23. The district court in *Ortho Diagnostic*, for example, began with the question of "whether a firm that enjoys a monopoly on one or more of a group of complementary products, but which faces competition on others, can price all of its products above average variable cost and yet still drive an equally efficient competitor out of the market." *Ortho Diagnostic*, 920 F. Supp. at 467. Answering that question in the affirmative, it proceeded to propose a liability rule aimed at preventing exclusion of equally efficient rivals. *Id.* at 469–70. Similarly, the Ninth Circuit's safe harbor for bundled discounts that result in above-cost pricing under the "discount attribution" test expressly aims to permit all bundled discounts that could not exclude an equally efficient rival. See *Cascade Health Solutions*, 515 F.3d at 906 (observing that selected liability rule "makes the defendant's bundled discounts legal unless the discounts have the potential to exclude a hypothetical equally efficient producer of the competitive product" (emphasis omitted)).

24. 509 U.S. 209 (1993).

25. *Id.* at 222 ("First, a plaintiff seeking to establish competitive injury resulting from a rival's low prices must prove that the prices complained of are below an appropriate measure of its rival's costs.").

26. Cf. *Ortho Diagnostic*, 920 F. Supp. at 466 (observing that "[t]he reason [for *Brooke Group's* below-cost pricing requirement] is plain: below-cost pricing, unlike pricing at or above that level, carries with it the threat that the party so engaged will drive equally efficient competitors out of business, thus setting the stage for recoupment at the expense of consumers").

27. I am one of the few antitrust commentators to offer a defense of the equally efficient rival test. See Thomas A. Lambert, *Weyerhaeuser and the Search for Antitrust's Holy Grail*, 2006–07 CATO SUP. CT. REV. 277 (arguing that Supreme Court's 2007 *Weyerhaeuser* decision implicitly embraced the test and lauding that development).

28. Eric B. Rasmusen, J. Mark Ramseyer & John S. Wiley, Jr., *Naked Exclusion*, 81 AM. ECON. REV. 1137, 1137 (1991).

29. See Herbert Hovenkamp, *Exclusion and the Sherman Act*, 72 U. CHI. L. REV. 147, 154 (2005).

a less efficient upstart rival could not and might thus be driven out of business by the meritless action. Surely filing the lawsuit constitutes “unreasonably exclusionary conduct” despite the fact that it would exclude only less efficient rivals.³⁰

While that may be the case, the equally efficient rival definition’s failure to capture some instances of naked exclusion does not undermine the approach in any context in which it might actually be utilized. A definition of, or test for identifying, unreasonably exclusionary conduct is needed only for evaluating “mixed bag” practices that create some efficiencies but also threaten to enhance market power. Because naked exclusion generates no efficiencies and may be easily condemned without reference to any test for unreasonably exclusionary conduct, the fact that the equally efficient rival test fails to capture instances of naked exclusion is, from a practical standpoint, unimportant.³¹

Two additional criticisms of the equally efficient rival approach, however, may be genuinely troubling. First, the approach appears to be under-inclusive in that it would acquit practices that *prevent* rivals from attaining equivalent efficiencies.³² Conduct that impedes a rival firm’s sales opportunities—for example, a dominant manufacturer’s execution of exclusive dealing contracts with retailers collectively comprising a large percentage of available marketing outlets—may prevent the rival from achieving MES and thereby *cause* it to be less efficient than the perpetrator.³³ Such conduct would reduce market output and consumer welfare, but as long as it merely prevented the perpetrator’s rivals from attaining equivalent efficiencies, it would pass muster under the equally efficient rival approach.

30. *See id.*

31. *Cf.* Melamed, *supra* note 13, at 399 (observing that “conduct [that] has no efficiency properties and serves only to harm rivals . . . can be readily condemned without application of either a balancing test or a sacrifice test,” for such conduct “does not raise the issue at which these tests are directed: what to do about conduct that both has efficiency benefits and excludes rivals”).

32. *See, e.g.,* Lao, *supra* note 14, at 447 (“[E]xclusionary practices are often designed specifically to prevent a challenger from gaining scale efficiencies.”); Melamed, *supra* note 13, at 388 (“[A] rival that is less efficient today might become equally or more efficient if permitted time to develop learning-by-doing economies or if its sales grew and enabled it to gain scale economies.”).

33. *See, e.g.,* EINER ELHAUGE, THE EXCLUSION OF COMPETITION FOR HOSPITAL SALES THROUGH GROUP PURCHASING ORGANIZATIONS 24 n.68, 33–34 (2002), available at http://www.law.harvard.edu/faculty/elhaug/pdf/gpo_report_june_02.pdf (arguing that it is not sufficient to ask whether a bundled discount could exclude an equally efficient competitor, for such discounts may be used to prevent rivals from growing and thereby attaining scale efficiencies).

Critics also complain that the equally efficient rival approach would allow for the exclusion of rivals that are less efficient than the perpetrator but nevertheless constrain its market power and are the only competitors likely to arrive on the scene.³⁴ Suppose, for example, that a dominant firm incurs incremental costs of \$10 per unit and would, as a monopolist, charge a profit-maximizing price of \$20. The existence of a rival with costs of \$13 per unit would benefit consumers, for if that rival were to charge, say, \$15, then the dominant firm would have to lower its price or improve its quality.³⁵ Because the equally efficient rival definition protects only equally or more efficient rivals from exclusion, detractors maintain that it could reduce consumer welfare.

B. Raising Rivals' Costs Unjustifiably

A second proposed definition of unreasonably exclusionary conduct would reach substantially further than the equally efficient rival approach. This definition stems from the insights of so-called "Post-Chicago" theorists who, in the last few decades, have responded to purported Chicago School claims by setting forth complex models that demonstrate how various business practices may occasion anticompetitive harm.³⁶ In particular, such scholars have

34. See Hovenkamp, *supra* note 29, at 154 (noting that equally efficient rival test "can underdeter in situations where the rival that is most likely to emerge is less efficient than the dominant firm"); Lao, *supra* note 14, at 447 ("The existence, or even the potential entry, of a less efficient rival can, in fact, constrain a monopolist, thereby benefiting consumers, and its exclusion would harm consumer welfare."); Steven C. Salop, *Exclusionary Conduct, Effect on Consumers, and the Flawed Profit-Sacrifice Standard*, 73 ANTITRUST L.J. 311, 328–29 (2006) (noting that "unencumbered (potential) entry of less-efficient competitors often raises consumer welfare").

35. See Lao, *supra* note 14, at 447; Salop, *supra* note 34, at 328–29 (offering a similar example).

36. Much Post-Chicago scholarship has been in response to a somewhat caricatured version of Chicago School antitrust analysis. Confronting a body of highly restrictive and interventionist antitrust rules, antitrust scholars associated with the University of Chicago demonstrated in the mid-twentieth century that many theretofore condemned business practices would, in practice, rarely occasion anticompetitive results and were likely adopted for procompetitive reasons. See, e.g., Robert Bork, *Vertical Integration and the Sherman Act: The Legal History of an Economic Misconception*, 22 U. CHI. L. REV. 157, 198–201 (1954); Ward S. Bowman, Jr., *The Prerequisites and Effects of Resale Price Maintenance*, 22 U. CHI. L. REV. 825, 855–58 (1955); Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem*, 67 YALE L.J. 19, 19–20 (1957); Aaron Director & Edward H. Levi, *Law and the Future: Trade Regulation*, 51 NW. U. L. REV. 281, 282 (1956); John S. McGee, *Predatory Price Cutting: The Standard Oil (N.J.) Case*, 1 J.L. & ECON. 137, 137–38 (1958); Lester G. Telser, *Why Should Manufacturers Want Fair Trade?*, 3 J.L. & ECON. 86, 88 (1960). Later Chicago-affiliated scholars relied on these works to argue, as a legal matter, that certain practices should be legal per se. See, e.g., ROBERT H. BORK, *THE ANTITRUST PARADOX* 375–81 (1978) (arguing for rule of per se legality for

endeavored to explain how dominant firms may use contracts, product innovations, and other means to impose disproportionately higher costs on their rivals.³⁷ By imposing such costs, a dominant firm may render its rivals less efficient and thus less able to check its higher prices, even if it fails to exclude those rivals altogether. Accordingly, a number of scholars have suggested that conduct be deemed unreasonably exclusionary if it raises rivals' costs without adequate justification.³⁸ And their proposed approach has found some traction in the case law, primarily in exclusive dealing and tying cases, in which courts have emphasized that the competitive harm is that the conduct at issue may foreclose rivals to a point where their production falls below MES.³⁹

tying arrangements) [hereinafter BORK, *THE ANTITRUST PARADOX*]; *id.* at 406 (“[Antitrust law] should abandon its concern with such beneficial practices as small horizontal mergers, all vertical and conglomerate mergers, vertical price maintenance and market division, tying arrangements, exclusive dealing and requirements contracts, ‘predatory’ price-cutting, price ‘discrimination,’ and the like.”); RICHARD A. POSNER, *ANTITRUST LAW* 212 (1976) (“I would like to see the antitrust laws other than Section 1 of the Sherman Act repealed.”); Richard A. Posner, *The Next Step in the Antitrust Treatment of Restricted Distribution: Per Se Legality*, 48 U. CHI. L. REV. 6, 23–26 (1981) (advocating rule of per se legality for vertical price and non-price restraints, including resale price maintenance). These later, broad statements concerning antitrust law led some scholars to characterize the Chicago School as concluding that vertical and unilateral practices can “never” be anticompetitive. *See, e.g.*, HOW THE CHICAGO SCHOOL OVERSHOT THE MARK 7 (Robert Pitofsky ed., 2008). Among these scholars are so-called “Post-Chicago” theorists who have posited models demonstrating how, in certain narrow circumstances, various controversial practices may occasion genuine anticompetitive harm. *See, e.g.*, Elhauge *supra* note 22, at 399–403 (demonstrating how tying, despite the Chicago School’s single monopoly profit theory, may injure consumers under certain circumstances). In fact, Chicago School scholars recognized many of the possible harms these scholars purport to identify. *See* Bruce H. Kobayashi & Timothy J. Muris, *Chicago, Post-Chicago, and Beyond: Time to Let Go of the 20th Century*, 78 ANTITRUST L.J. 147, 148 (2012) (demonstrating that “economists, lawyers, and judges associated with the Chicago School anticipated many of the ‘new’ insights credited to the Post-Chicago School”); Thomas A. Lambert, *Appropriate Liability Rules for Tying and Bundled Discounting*, 72 OHIO ST. L.J. 909, 924 n.78 (2011) (showing that Chicago School scholars had acknowledged the potential adverse tying effects Elhauge identified).

37. *See* Hovenkamp, *supra* note 29, at 159–60. *See generally* Herbert Hovenkamp, *Post-Chicago Antitrust: A Review and Critique*, 2001 COLUM. BUS. L. REV. 257 (exploring the successes and failures of the Post-Chicago school).

38. *See, e.g.*, Elhauge, *supra* note 7, at 256, 330; Krattenmaker & Salop, *supra* note 11, at 214; Steven C. Salop & David T. Scheffman, *Raising Rivals’ Costs*, 73 AM. ECON. REV. 267 (1983).

39. *See, e.g.*, *NicSand, Inc. v. 3M Co.*, 457 F.3d 534, 543 (6th Cir. 2006), *vacated and reheard en banc*, 507 F.3d 442 (6th Cir. 2007) (“Monopolization through exclusive dealing is unlawful because it enables a party to attain that position of dominance not by offering ‘a superior product, business acumen, or historic accident,’ but by raising its rivals’ distribution costs by eliminating their access to downstream markets.” (internal citation omitted)); Hovenkamp, *supra* note 29, at 159–60 n.45 (citing cases embracing raising rivals’ costs theory of anticompetitive harm).

It is crucial, of course, that any “raising rivals’ costs” (“RRC”) approach require that the cost-raising be *unjustifiable*. Given that consumer-friendly, efficient conduct often has the effect of winning business from rivals and may thereby reduce their scale and increase their per-unit cost of production,⁴⁰ an RRC definition of exclusionary conduct must posit some means of determining when cost-raising conduct is unjustifiable if it is to represent an improvement on the vacuous verbal formulations sprinkled throughout the case law.⁴¹ The leading attempt to do so defines “justifiable” increases of rivals’ costs as those that result as a byproduct of the defendant’s enhanced efficiency.⁴² If a firm’s conduct raises rivals’ costs because it makes the firm more efficient, the cost-raising is justifiable. If the conduct raises rivals’ costs *without* enhancing the perpetrator’s efficiency, the cost-raising is unjustifiable.⁴³

While it sounds simple enough, this approach imposes a difficult burden on adjudicators and provides little guidance—and no safe harbors—to business planners contemplating actions likely to win business from rivals. Consider, for example, a firm that offered a 12% loyalty discount to customers purchasing at least 70% of their requirements from the firm.⁴⁴ Suppose that a rival firm complained

40. Building a better mousetrap, for example, may allow the builder to usurp so much business from its rival mousetrap producers that they fall below MES. Cf. Frank H. Easterbrook, *When Is It Worthwhile to Use Courts to Search for Exclusionary Conduct?*, 2003 COLUM. BUS. L. REV. 345, 346–47 (“Raising rivals’ costs can be mistaken for any other element of doing business. General Motors does not sell engines to Ford, and this may raise Ford’s costs; but the separation also is essential to rivalry . . .”).

41. See *supra* notes 4–7 and accompanying text (discussing vacuous judicial definitions of unreasonably exclusionary conduct).

42. See Elhauge, *supra* note 7, at 256 (“The key is that [justifiable cost-raising] conduct can successfully impair rival efficiency only as a byproduct of the defendant improving its own efficiency, which enhances the market options available to consumers.”).

43. Elhauge maintains that antitrust should eschew “an open-ended rule of reason balancing test” for determining when cost-raising conduct is justifiable and should instead:

employ[] two rules to sort out when to condemn conduct that helps acquire or maintain monopoly power. One rule makes such conduct per se legal if its exclusionary effect on rivals depends on enhancing the defendant’s efficiency. The other rule makes such conduct per se illegal if its exclusionary effect on rivals will enhance monopoly power regardless of any improvement in defendant efficiency.

Id. at 330.

44. A loyalty discount occurs when a seller discounts (or provides a price rebate on) all units of a single product if a buyer makes a certain level of purchases. Sometimes called “all-units” or “first-dollar” discounts, loyalty discounts apply to all of the customer’s purchases, rather than just the units beyond the level of purchases required to qualify for the discount. See Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 106. The

that this structured discount usurped so much of its business that it fell below MES and consequently incurred higher per-unit costs. To determine whether that cost-raising was justifiable, a factfinder would have to decide whether it was a byproduct of enhancing the discounter's efficiency.

Imagine that the defendant demonstrated that it was running its factories at 70% capacity prior to offering the discount and that the discount increased sales so that the factories were run at 90% capacity, creating apparent economies of scale. If the complaining rival could show (1) that all efficiencies could be exploited at 80% capacity (because, say, incremental scale economies above that level were small and were offset by diseconomies occasioned by increased wear and tear) and (2) that an 8% loyalty rebate would have driven production to 80% capacity, then the "excessive" loyalty discount (the additional four percentage points) would appear unjustifiable. That is, it would raise rivals' costs "regardless of any improvement in defendant efficiency."⁴⁵ Of course, determining with confidence what level of production achieves MES is difficult, and ascertaining what size discount will achieve that level of production is nigh-onto-impossible. But those are precisely the tasks factfinders would have to undertake under the RRC approach. Arbitrary verdicts, and the chilling effect they precipitate, would inevitably result.

C. *Consumer Welfare Effects Balancing*

Whereas the equally efficient rival and RRC approaches define unreasonably exclusionary conduct in reference to the conduct's effect on actual or potential rivals, a third set of approaches deemphasizes effects on rivals and focuses directly on the net effect the conduct at issue has on consumer welfare. The most prominent consumer welfare-balancing test appears in the Areeda-Hovenkamp antitrust treatise, which defines unreasonably exclusionary conduct as acts that

- (1) are reasonably capable of creating, enlarging or prolonging monopoly power by impairing the opportunities of rivals; and

competitive risks presented by loyalty discounts are discussed in greater detail below. See *infra* notes 167–70 and accompanying text.

45. Elhauge, *supra* note 7, at 330; see also *id.* at 324 (condemning the portion of a hypothetical agreement that expanded a monopolist's market share beyond the level needed to attain MES because it "provided no incremental increase in the monopolist's efficiency").

(2) that either (2a) do not benefit consumers at all, or (2b) are unnecessary for the particular consumer benefits that the acts produce, or (2c) produce harms disproportionate to any resulting benefits.⁴⁶

In practice, this seemingly complicated definition simply posits an effects-balancing test. The first element (Part (1)) is useful only for immunizing conduct that could have no adverse effect on rivals and should obviously pass muster. Parts (2a) and (2b), then, address easy cases of harm without benefit. Because a generalized definition of exclusionary conduct is needed only for evaluating mixed bag conduct exhibiting both procompetitive and anticompetitive effects—conduct that would satisfy element 1 but neither (2a) nor (2b)—the focus in any case in which the Areeda-Hovenkamp definition is actually helpful will be on Part (2c): a balancing of the challenged conduct's harms and benefits.⁴⁷

In its now-abrogated report on Section 2 of the Sherman Act, the DOJ under George W. Bush endorsed this sort of effects-balancing approach for evaluating mixed bag conduct, though it was careful to emphasize that a practice should be deemed unreasonably exclusionary only if “its likely anticompetitive harms *substantially* outweigh its likely procompetitive benefits.”⁴⁸ The DOJ asserted that exclusionary conduct producing only slightly greater anticompetitive harms than procompetitive benefits should not be deemed unreasonably exclusionary lest the law chill procompetitive but novel business practices.⁴⁹ That caveat, of course, raises the question of how disproportionate the balance of harms to benefits must be before the line of “unreasonableness” is crossed.⁵⁰

Like both the equally efficient rival and RRC tests,⁵¹ the consumer welfare-balancing approach has achieved some traction in case law. Most notably, the U.S. Court of Appeals for the D.C.

46. AREEDA & HOVENKAMP, *supra* note 3, ¶ 651a at 96.

47. *See* Melamed, *supra* note 13, at 380 (explaining why the Areeda-Hovenkamp test requires balancing in all cases in which a generalized test for exclusionary conduct would be helpful).

48. Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 45 (emphasis added).

49. *See id.* (observing that the “disproportionality” test would “allow[] firms the freedom to compete vigorously without undue fear of antitrust liability based on an after-the-fact determination that their conduct had small negative effects on static competition”).

50. *See id.* (acknowledging that “disproportionality ‘is hardly an inherently certain formula’” (quoting Andrew I. Gavil, *Exclusionary Distribution Strategies by Dominant Firms: Striking a Better Balance*, 72 ANTITRUST L.J. 3, 64 (2004))).

51. *See supra* notes 22–26, 39 and accompanying text (discussing influence of the equally efficient test and the RRC approach on Section 2 case law).

Circuit purported to follow such an approach in *United States v. Microsoft Corp.*,⁵² in which it assigned burdens to the parties as follows:

[T]he plaintiff, on whom the burden of proof of course rests, must [first] demonstrate that the monopolist's conduct indeed has the requisite anticompetitive effect. . . .

[I]f a plaintiff successfully establishes a *prima facie* case under § 2 by demonstrating anticompetitive effect, then the monopolist [defendant] may proffer a "procompetitive justification" for its conduct. If the monopolist asserts 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—then the burden shifts back to the plaintiff to rebut that claim. . . .

[I]f the monopolist's procompetitive justification stands un rebutted, then the plaintiff must demonstrate that the anticompetitive harm of the conduct outweighs the procompetitive benefit.⁵³

Although this burden-shifting regime officially called for the unreasonableness of exclusionary conduct to be determined on the basis of its net effect on consumer welfare,⁵⁴ the actual analysis in *Microsoft* involved little effects balancing.⁵⁵

52. 253 F.3d 34 (D.C. Cir. 2001).

53. *Id.* at 58–59 (citations omitted).

54. Professor Hovenkamp has observed that the *Microsoft* court's definition of unreasonably exclusionary conduct was "roughly similar to the definition given in *Antitrust Law*." Hovenkamp, *supra* note 29, at 153.

55. As Mark Popofsky has observed,

The [*Microsoft*] 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. By contrast, when analyzing Microsoft's unilateral "product design" conduct . . . 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 justification. . . .

Revealingly, the *Microsoft* court also appeared to protect certain conduct as essentially *per se* lawful. . . . In other words, the court determined that impeding rivals through conduct deemed to reflect only efficiency was, in effect, protected "superior skill, foresight, and industry."

Despite drawing praise from leading treatise authors and the DOJ, and at least lip service from the D.C. Circuit, consumer welfare-balancing is problematic as a means of assessing whether conduct is unreasonably exclusionary. For one thing, recent Supreme Court precedents appear to be inconsistent with an effects-balancing approach. In a number of key Section 2 decisions—including the *Brooke Group* decision setting forth predatory pricing standards,⁵⁶ the *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber, Co., LLP*⁵⁷ decision on predatory over-bidding,⁵⁸ and the *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*⁵⁹ decision on a monopolist's antitrust duty to share facilities with its rivals⁶⁰—the Court crafted liability rules that concededly could permit net consumer harm. In each case, the Court reasoned that conduct should be permitted even in instances in which net consumer welfare might be reduced because the potential harm at issue was “beyond the practical ability of a judicial tribunal to control.”⁶¹ A narrow focus on consumer welfare-balancing alone, then, cannot explain existing liability rules.

As a policy matter, using welfare-balancing to assess whether exclusionary conduct is unreasonable is problematic because the required inquiry is too difficult for courts to conduct and provides business planners with little guidance and no reliable safe harbors. Consider, for example, the Herculean task confronting a court assessing a recently implemented loyalty rebate that could end up winning so much business for the discounter that one of its key rivals falls below MES.⁶² To determine whether such a rebate is unreasonably exclusionary, the evaluating court would have to:

Popofsky, *supra* note 14, at 445–47.

56. *Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 222–23 (1993) (holding that plaintiffs complaining of price predation must allege and prove pricing “below an appropriate measure of . . . costs,” even though net consumer harm may result even absent below-cost pricing).

57. 549 U.S. 312 (2007).

58. *Id.* at 325 (holding that bidding up the price of an input cannot create liability unless the bidding drives the defendant's output price below cost, even though net consumer harm could result from less aggressive bidding for inputs).

59. 540 U.S. 398 (2004).

60. *Id.* at 411 (2004) (refusing to impose a general duty to share productive facilities with rivals even though such non-sharing may result in monopoly pricing and impose net consumer harm).

61. *Brooke Grp.*, 509 U.S. at 223; see *Weyerhaeuser*, 549 U.S. at 325 (quoting *Brooke Grp.*, 509 U.S. at 223); *Trinko*, 540 U.S. at 414 (quoting *Brooke Grp.*, 509 U.S. at 223).

62. This was the Federal Trade Commission's theory of liability in its recent (ultimately settled) action against Intel Corporation under Section 5 of the Federal Trade Commission Act. As then-professor (now FTC Commissioner) Joshua Wright explained,

(1) estimate immediate consumer benefit by comparing output and price levels with the rebate in place to what would have persisted absent the rebate;⁶³

(2) estimate expected future harm by (2a) assessing the probability that the rebate will drive the discounter's rival below MES, (2b) estimating the degree to which future consumer welfare will be lower (because of reduced output and higher prices) if the rival is driven from the market or continues in business but raises its prices to account for its higher costs, (2c) multiplying the probability of a consumer welfare loss (determined in (2a)) by the estimated magnitude of welfare reduction (determined in (2b)), and (2d) discounting to present value any future expected welfare loss (determined in (2c)); and

(3) compare immediate consumer benefit (determined in step 1) to the present value of expected consumer harm (determined in step (2d)).

Because some version of this complicated analysis would be required for evaluating virtually all mixed bag conduct⁶⁴—the only conduct for which a generalized definition of exclusionary conduct is helpful—the consumer welfare-balancing approach would tax courts and strain the capacities of jurors.⁶⁵

The Commission's anticompetitive theory [was] that Intel's loyalty discounts provide original equipment manufacturers ("OEMs") with an incentive to purchase almost all of their microprocessor and graphics processor units ("CPUs", "GPUs") from Intel. Accordingly, Intel's rivals lose sales, and are unable to achieve minimum efficient scale to compete effectively with Intel. After these rivals—chief among them AMD [Advanced Micro Devices]—are excluded, Intel is free to raise prices to recoup profits lost by the original discounts.

Joshua D. Wright, *An Antitrust Analysis of the Federal Trade Commission's Complaint Against Intel*, in ICLE ANTITRUST AND COMPETITION POLICY WHITE PAPER SERIES 1, 1 (2010), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1624943.

63. Market output is of course merely a proxy for consumer benefit. In some circumstances, such as when there is rampant price discrimination that increases output but transfers surplus from consumers to producers, market output may poorly reflect consumer surplus. Because accurately assessing consumer benefit would require access to consumers' individual reservation prices, however, market output is generally the best surrogate.

64. The required analysis would be particularly difficult for conduct involving "degrees." See *infra* notes 88–92 and accompanying text.

65. Antitrust issues are notoriously difficult for jurors. Consider, for example, Arthur Austin's account of his post-trial interviews with the *Brooke Group* jurors. Professor Austin concluded that "the jurors were overwhelmed, frustrated, and confused by testimony well beyond their comprehension" and that "at no time did any juror grasp—even at the margins—the law, the economics, or any other testimony relating to the

More importantly, widespread adoption of the consumer welfare-balancing approach would create tremendous uncertainty for business planners and thereby chill innovation.⁶⁶ The business planner must not simply estimate benefits and compare them to expected harms, a formidable enough task; she must instead predict *how a future judge or jury evaluating matters in hindsight* will assess the net consumer benefits of the contemplated innovation. If the business planner makes a mistake, either in her estimation of net benefits or her assessment of how a future court will view matters, her firm may suffer an adverse treble damages verdict.⁶⁷ A consumer welfare-balancing approach is thus likely to deter many efficiency-enhancing, but novel, business practices.⁶⁸

D. Sacrifice-Based Tests

The aforementioned approaches all purport to *define* unreasonably exclusionary conduct—that is, to specify the essence of

allegations or defense.” Arthur Austin, *The Jury System at Risk from Complexity, the New Media, and Deviancy*, 73 DENV. U. L. REV. 51, 54 (1995).

66. As Douglas Melamed has observed,

The [consumer welfare-]balancing test would require a firm to determine, before it embraces new competitive strategies, not just the impact of the strategies on its business, but also the impact on rivals and to weigh the benefits to its consumers against the long-run harm to consumers if the firm's less-inventive rivals are weakened or driven from the market as a result. Assessing the long-run harm would require, among other things, calculating the duration of the harm in light of responses by competitors, new entry, and future innovation.

Melamed, *supra* note 13, at 381.

67. As Professor Elhauge has observed, when indeterminate monopolization standards are employed,

firms must operate under the risk that the actual criteria by which their conduct will be judged will depend largely on the happenstance of which judge and jurors will be selected in a trial a great number of years later that will retroactively decide whether to assess multimillion or even multibillion dollar treble damages. Further, firms run the risk that different judges or juries will reach inconsistent conclusions about the legality of their conduct based on different implicit normative criteria. These sorts of risks cannot help but chill investments to create product offerings with a sufficient quality or cost advantage over preexisting market options to enjoy monopoly power.

Elhauge, *supra* note 7, at 266–67.

68. Tweaking the consumer welfare-balancing test so that it finds unreasonableness only where expected consumer harms “substantially outweigh” consumer benefits, as the Bush DOJ proposed, *see supra* notes 47–48 and accompanying text, hardly solves the problem here. While such a tactic could enhance judicial administrability and alleviate some uncertainty for planners by requiring less precision in measuring likely effects, it adds another source of uncertainty by incorporating yet another unknown variable: the degree by which harms must exceed benefits in order to “substantially outweigh” them.

“unreasonable exclusionariness.”⁶⁹ A fourth set of approaches, by contrast, abandons the quest for the Platonic essence of unreasonable exclusionariness and instead seeks merely to *identify* unreasonably exclusionary conduct without specifying what it is about the conduct that makes it so.⁷⁰

Early versions of this identifying approach held that conduct is unreasonably exclusionary if it involves a sacrifice of immediate profits as part of a strategy whose profitability depends on the exclusion of rivals.⁷¹ Advocates emphasized the administrability of this so-called “profit-sacrifice test,” which requires courts (or business planners) to determine only whether challenged (or contemplated) conduct is profit-enhancing apart from the market power it generates. Like the three foregoing approaches, the profit sacrifice test has enjoyed some apparent support in the Section 2 case law.⁷² In *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*,⁷³ for example, the Supreme Court upheld a jury’s finding that the owner of three ski resorts had engaged in unreasonably exclusionary conduct when it ceased participating in a profitable joint venture with a competing ski resort and went so far as to refuse to sell lift tickets to that rival at retail prices that would have generated a profit.⁷⁴ The Court explained,

The refusal to accept [plaintiff’s] Adventure Pack coupons in exchange for daily tickets was apparently motivated entirely by a decision to avoid providing any benefit to [plaintiff] even

69. According to those approaches, that essence consists of having the potential to exclude an equally efficient rival, *see supra* notes 19–20 and accompanying text, or raising rivals’ costs without justification, *see supra* notes 35–42 and accompanying text, or impairing rivals’ opportunities to the point at which market power would be created and net consumer welfare reduced, *see supra* notes 45–48 and accompanying text.

70. *See* Werden, *supra* note 13, at 418 (observing that “the no economic sense test provides only a tool for identifying exclusionary conduct”).

71. *See, e.g.,* BORK, THE ANTITRUST PARADOX, *supra* note 36, at 144 (defining predation 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, leaving the predator with a market share sufficient to command monopoly profits, or (2) rivals will be chastened sufficiently to abandon competitive behavior the predator finds inconvenient or threatening”); Ordovery & Willig, *supra* note 13, at 9 (“Assuming that businessmen know how their actions affect their profitability and the profitability of their rivals, predatory objectives are present if a practice would be unprofitable without the exit it causes, but profitable with the exit. Thus, although a practice may cause a rival’s exit, it is predatory only if the practice would not be profitable without the additional monopoly power resulting from the exit.”).

72. *See infra* notes 73–76 and accompanying text.

73. 472 U.S. 585 (1985).

74. *Id.* at 610–11.

though accepting the coupons would have entailed no cost to [the defendant] itself, would have provided it with immediate benefits, and would have satisfied its potential customers. Thus the evidence supports an inference that [defendant] 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.⁷⁵

Building on this reasoning, the Court in *Trinko* concluded that the defendant did not owe a duty to deal with its rivals where, unlike in *Aspen Skiing*, the defendant had not done so voluntarily in the past and the refusal to deal did not “suggest[] a willingness to forsake short-term profits to achieve an anticompetitive end.”⁷⁶

Despite the intuitive appeal of the profit sacrifice test and the judicial acceptance it has achieved, its traditional formulation is somewhat problematic. As Professor Herbert Hovenkamp has observed, the traditional profit sacrifice test is both over- and under-inclusive.⁷⁷ It is over-inclusive because it would condemn some obviously procompetitive conduct, such as new product development.⁷⁸ Hovenkamp offers the example of a firm that spends money developing a new mousetrap that, when ultimately sold, will attract so many buyers that competing mousetrap makers are driven out of business and the innovator’s per-unit profit margin (the difference between its price and marginal cost) rises.⁷⁹ The firm’s conduct involves an immediate profit sacrifice leading to monopoly pricing that compensates for the sacrifice period, but the conduct is

75. *Id.*

76. *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 409 (2004); *see also Covad Commc’ns Co. v. Bell Atl. Corp.*, 398 F.3d 666, 676 (D.C. Cir. 2005) (refusing to dismiss claim of exclusionary conduct based on refusal to deal because facts could show that “[defendant’s] refusal to deal reflected its willingness to sacrifice immediate profits from the sale of its DSL service in the hope of driving [plaintiff] out of the market and recovering monopoly profits in the long-run”); *MetroNet Servs. Corp. v. Qwest Corp.*, 383 F.3d 1124, 1134 (9th Cir. 2004) (finding no unreasonably exclusionary conduct where defendant’s refusal to deal did not “entail a sacrifice of short-term profits for long-term gain from the exclusion of competition”). In addition to these “refusal to deal” cases, the *Brooke Group* decision on predatory pricing—at least in the second part of its famous liability test—is consistent with a profit sacrifice approach. By requiring that the market in which below-cost pricing occurs be one in which there is a likelihood of recoupment, *see Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 224 (1993), the Court acknowledged that unreasonably exclusionary price cuts are those that sacrifice current profits in an effort to achieve supracompetitive profits upon the attainment of market power in the future. *Id.* at 225–26.

77. *See* HERBERT HOVENKAMP, *THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION* 152–53 (2005).

78. *See id.*

79. *Id.*

garden-variety innovation that should hardly be condemned under the antitrust laws.⁸⁰ On the other hand, Hovenkamp observes, the traditional profit sacrifice test is under-inclusive because it would acquit various acts of monopoly maintenance, such as certain exclusive dealing and tying arrangements, that are immediately profitable (i.e., they require no recoupment period) but are also anticompetitive.⁸¹

In light of these criticisms of the profit sacrifice test, most proponents of a sacrifice-based approach to identifying unreasonably exclusionary conduct now advocate what has been dubbed a “no economic sense test.” In an amicus brief filed in *Trinko*, for example, the DOJ contended that “conduct is not exclusionary or predatory *unless* it would make no economic sense for the defendant but for its tendency to eliminate or lessen competition.”⁸² Taken literally, the DOJ was merely positing a safe harbor—i.e., saying what will *not* constitute exclusionary conduct—rather than setting forth a liability test. Presumably, though, the DOJ also meant that conduct *is* unreasonably exclusionary if it makes no economic sense apart from its tendency to eliminate or lessen competition.⁸³

So construed, the no economic sense test appears to avoid Hovenkamp’s concerns about the profit sacrifice test’s over- and under-inclusivity. The argument that the latter test is too broad because it would condemn costly research and development in pursuit

80. *Id.*

81. *Id.*

82. Brief for the United States and the FTC as Amici Curiae Supporting Petitioner at 15, *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004) (No. 02-682), *available at* <http://www.ftc.gov/os/2003/05/trinkof.pdf>.

83. Indeed, the DOJ has made that point clear in several lower court filings. *See, e.g.*, Brief for the United States at 7, 28, *United States v. Dentsply Int’l, Inc.*, 399 F.3d 181 (3d Cir. 2005) (No. 03-4097) (public redacted version), *available at* <http://www.justice.gov/atr/cases/f202100/202141.pdf> (contending that defendant’s policies of terminating dealers that carried rivals’ products and accepting dealers only if they dropped rivals’ products “made no economic sense but for their tendency to harm rivals” because the policies cost the defendant something yet produced no possible benefit other than reducing competition); Brief for Appellant United States of America at 2, 30, *United States v. AMR Corp.*, 335 F.3d 1109 (10th Cir. 2003) (No. 01-3202) (public redacted version), *available at* <http://www.justice.gov/atr/cases/f9800/9814.pdf> (asserting that defendant drove out rivals by adding “money-losing capacity” and that “distinguishing legitimate competition from unlawful predation requires a common-sense business inquiry: whether the conduct would be profitable, apart from any exclusionary effects”); Brief for Appellees United States and the State Plaintiffs at 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/f221300/221393.pdf> (arguing that a course of conduct that served to protect the defendant’s operating system monopoly was exclusionary because it “would not make economic sense unless it eliminated or softened competition”).

of innovation assumes that it is sufficient to ask whether the defendant's conduct involves a short-run profit sacrifice. The no economic sense test, however, requires more: Where there is a short-run profit sacrifice, one must ask *why it would be rational* to make that sacrifice; if there is a profit-enhancing rationale—some “economic sense”—besides a lessening of competition, then the liability test is not satisfied.⁸⁴ Advocates of the test therefore retort that research and development expenditures, purchases of capital equipment, and other “[o]rdinary investments in opportunities for future profit normally are not deemed exclusionary under the [no economic sense] test because they make economic sense apart from any tendency to eliminate competition and because they have no such tendency.”⁸⁵

As for the argument that the profit sacrifice test is too narrow because it fails to condemn practices that are immediately profitable but also exclusionary, advocates of the no economic sense test retort that their version of a sacrifice-based approach does not require two time periods—a short-run period in which losses are incurred followed by a period of monopoly recoupment. Instead, the no economic sense test focuses on the nature of the challenged conduct and asks simply whether the conduct would reduce profits but for its tendency to eliminate competition. *When* the conduct will be profitable is irrelevant; the key question is instead *why* it is (or is expected to be). If the answer to that question is anything other than

84. See Werden, *supra* note 13, at 424 (“When the defendant’s conduct entails a short-run profit sacrifice, the no economic sense test further asks why it is rational to make that sacrifice.”).

85. *Id.* One might quibble with this retort. Investments in innovation (R&D expenditures, etc.) are not rational unless the investor expects to earn future economic profits sufficient to recoup those up-front expenses. Even when an innovation investment does not result in the elimination of rivals, it makes no economic sense unless the innovator in the future is able to charge prices in excess of its incremental cost. Market power is conventionally defined as the ability to charge prices in excess of marginal cost. See Thomas G. Krattenmaker, Robert H. Lande & Steven M. Salop, *Monopoly Power and Market Power in Antitrust Law*, 76 GEO. L.J. 241, 247 (1987) (“Economists use both ‘market power’ and ‘monopoly power’ to refer to the power of a single firm or group of firms to price profitability above marginal cost.”). Indeed, the Lerner Index measures market power as $(P_{\text{profit-maximizing price}} - MC_{\text{marginal cost}}) / P_{\text{profit-maximizing price}}$, thereby indicating that the essence of market power is the ability to charge above-cost prices and that market power grows the more a seller is able to increase profits by raising its price above its cost. See generally Kenneth G. Elzinga & David E. Mills, *The Lerner Index of Monopoly Power: Origins and Uses*, 101 AM. ECON. REV. 558 (2011) (discussing the history of the Lerner Index and its uses in antitrust law). Because every innovation involving up-front expenditures makes no economic sense absent an ability to profitably charge above-marginal cost prices in the future, one might say that every innovation makes no economic sense absent the attainment of future market power of some sort.

“because of a reduction of competition,” then the conduct is not unreasonably exclusionary. The no economic sense test, therefore, could condemn practices that, in Hovenkamp’s words, “may be profitable the instant they are in place, yet also anticompetitive.”⁸⁶

Despite avoiding the primary problems afflicting the profit sacrifice test, the no economic sense test still comes up short as a generalized test for identifying instances of unreasonably exclusionary conduct. The inquiry it requires—whether the conduct at issue enhances the perpetrator’s profits absent an exercise of market power—is admittedly simpler than that involved in consumer welfare-balancing, which requires assessment of the net effects on myriad current and future consumers.⁸⁷ But application of the no economic sense test can still be difficult and its outcome indeterminate. Assessing actual or contemplated conduct under the test requires courts and business planners to compare the perpetrator’s expected profits without the conduct at issue to what its profits would be with the practice *if* no price increases (or output reductions) from enhanced market power resulted.⁸⁸ This gets quite complicated when the practice at issue is a mixed bag likely to result in some efficiency enhancement and some increase in market share and thus perhaps market power. Because the dispositive question is whether the conduct would be profitable but for the enhancement of market power, the party assessing the conduct would have to (1) determine the perpetrator’s cost of engaging in the conduct at issue, (2) ascertain the incremental revenue gain the conduct is likely to produce for the perpetrator, (3) estimate how much of that gain would be attributable to an increase in market power, (4) subtract that amount from the total incremental revenue gain, and (5) compare the remaining revenue gain to the cost of engaging in the conduct at issue. The conduct is non-exclusionary only if the revenue increase not induced by an enhancement of market power exceeds the cost of engaging in the conduct.

The inquiry set forth above, as complicated as it is, would be even more difficult for most of the mixed bag business practices for which a generally applicable exclusionary conduct test is helpful. Most business strategies that generate some efficiencies but also have

86. HOVENKAMP, *supra* note 77, at 152.

87. *See supra* notes 62–65 and accompanying text.

88. *See* Salop, *supra* note 34, at 319 (“The profit-sacrifice test examines the profitability of the defendant’s conduct relative to a hypothetical market outcome that is used as the non-exclusionary benchmark. The hypothetical ‘but-for’ marketplace is one in which it is impossible to raise prices following the exclusionary conduct.”).

the potential to create or enhance market power do not involve only binary, all-or-nothing practices. While a decision, say, to redesign a product in a manner that would disadvantage rival complement makers might involve an all-or-nothing choice,⁸⁹ most decisions that enhance efficiency but also increase the perpetrator's market share involve doing something "to some degree." Offering a bundled discount to purchasers who buy both one's *A* and *B* products, for example, requires a decision about what level of discount to offer (5%? 8%? 12%?).⁹⁰ A loyalty rebate to customers who purchase some percentage of their requirements from the discounter requires two decisions involving degrees: at what level of loyalty should the rebates kick in (60% of the buyer's requirements? 70%? 80%?), and how great should the rebate be (5%? 8%? 12%?). Exclusive dealing agreements and requirements tie-ins involve decisions about agreement duration (six months? one year? two years?) and the scope of covered products (i.e., is the buyer permitted to buy very close substitutes from your rival? how close?). When conduct involving "degrees" is at issue, application of the no economic sense test becomes nearly intractable, for the business planner (*ex ante*) and the adjudicator (*ex post*) cannot simply evaluate the business practice in its entirety. Instead, the decision-maker must engage in *marginal* analysis—that is, she must decide *for each increment* whether it makes economic sense but for its tendency to exclude rivals.

Consider again a firm's offer to pay a 12% loyalty rebate to customers who buy at least 70% of their requirements from it. Suppose that prior to implementation of the rebate scheme, the firm was running its factories at 70% capacity and that the rebate permitted it to expand sales so that its factories were operated at 90% capacity, reducing the firm's per-unit costs. Even if the increased revenues from cost reductions exceeded the total amount of loyalty rebates paid, this rebate would not be insulated from antitrust liability, for *some increment* of the rebate scheme might run afoul of the no economic sense test. For example, first suppose that all scale efficiencies could be exploited if the seller were to run its factories at 80% capacity (because the incremental scale economies above that level were offset by diseconomies occasioned by increased wear and

89. See, e.g., *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 285 (2d Cir. 1979). Even that decision may involve "degrees"—i.e., there may be a range of redesign options, some creating greater rival disadvantage than others.

90. Offering a bundled discount may also require decisions about how many and which products to include in the bundle a purchaser must buy to secure the discount—e.g., *A* and *B* only; *A*, *B*, and *C*; or *A*, *B*, *C*, and *D*?

tear). Second, suppose that the seller could have attracted enough new business to achieve that lower level of production by either paying only an 8% (not 12%) loyalty rebate conditioned on purchasing 70% of requirements, or paying a 12% loyalty rebate conditioned on purchasing only 65% (not 70%) of requirements. Under those facts, some portion of the seller's loyalty rebate—four percentage points of the rebate (the increment from 8% to 12%) or five percentage points of the purchase requirement to secure the rebate (the increment from 65% to 70%)—would be deemed unreasonably exclusionary under the no economic sense test. Given that a firm considering a loyalty rebate could ensure against treble antitrust damages only by justifying each increment of its rebate scheme, and even then could not be certain that a jury evaluating matters *ex post* would find its *ex ante* analysis persuasive,⁹¹ the no economic sense test would almost certainly chill many such rebates, as well as other efficiency enhancing but market share increasing practices involving “degrees.”⁹² Widespread adoption of the no economic sense test would therefore occasion large welfare losses by imposing high administrative costs (the cost of reaching a liability judgment) and discouraging efficient but novel business practices.

E. *Non-Universal Standards*

In light of the various difficulties afflicting each of the proposed definitions of (and tests for identifying) unreasonably exclusionary conduct, some commentators have called for abandoning the quest for a single definition of unreasonable exclusionariness—a “‘holy grail’ that may never be precisely located”⁹³—and instead embracing conduct-specific, non-universal standards. Marina Lao, for example, contends that “the application of any single standard to all allegedly exclusionary conduct would lead to dangers of false positives or false

91. See *supra* notes 65–66 and accompanying text.

92. The difficulty of assessing conduct involving degrees similarly besets the RRC and consumer welfare-balancing approaches. Under the RRC approach, evaluating such conduct requires determining whether *each increment* of the practice at issue impairs rivals regardless of any improvement in defendant efficiency. See *supra* note 45 and accompanying text. Assessing such conduct under a consumer welfare-balancing approach requires determining whether *each increment* of the conduct under consideration “produce[s] consumer] harms disproportionate to any resulting [consumer] benefits.” AREEDA & HOVENKAMP, *supra* note 3, ¶ 651a at 96 (discussed *supra* at notes 46–47 and accompanying text).

93. R. Hewitt Pate, Assistant Attorney Gen., Antitrust Div., U.S. Dep’t of Justice, The Common Law Approach and Improving Standards for Analyzing Single Firm Conduct, Address Before Fordham Corporate Law Institute 8 (Oct. 23, 2003), available at <http://www.justice.gov/atr/public/speeches/202724.pdf>.

negatives (mistakenly permitting anticompetitive conduct) and would necessarily either over-deter or under-deter.”⁹⁴ Accordingly, she concludes, courts should “have different tests for different types of exclusionary conduct.”⁹⁵ Similarly, Mark Popofsky maintains that “Section 2 is not ‘one size fits all’ ” and that “courts properly apply different Section 2 legal tests to different conduct.”⁹⁶

There are two ways courts might embrace non-universal standards. In the extreme, they could deny the very existence of a unified definition of unreasonably exclusionary conduct and permit the term to mean different things in different contexts. Alternatively, they could simply apply different legal tests in different contexts when seeking to identify whether unreasonably exclusionary conduct, which does have a single meaning, exists. The former approach maintains that there is no universal *definition* of unreasonably exclusionary conduct; the latter, merely that there is no universally applicable *test for identifying* such conduct. Both are troubling. The former violates basic rule-of-law norms. The latter—at least as non-universalists have proposed it—conceptually reduces to, and is subject to the drawbacks associated with, one of the aforementioned understandings of exclusionary conduct.⁹⁷

The rule of law—“the supremacy of regular as opposed to arbitrary power”⁹⁸—is a core commitment of the American system of government and generally requires that legal proscriptions be prospective, be known or knowable to those subject to them, and exhibit characteristics of generality, equality, and certainty.⁹⁹ When it

94. Lao, *supra* note 14, at 434.

95. *Id.* at 435.

96. Popofsky, *supra* note 14, at 437.

97. The proposed approach that denies the existence of a universal test for identifying unreasonably exclusionary conduct but concedes that such conduct does have a universal meaning would define such conduct in terms of consumer welfare-balancing. *See infra* notes 103–04 and accompanying text. For reasons explained below, that is troubling. *See infra* notes 105–09 and accompanying text. An approach that similarly eschewed a universal test for identifying unreasonably exclusionary conduct but defined such conduct as that which could exclude a competitive rival, by contrast, would not entail the difficulties detailed below. Thus, the problem with current proposals to reject a universal test for, but not a universal definition of, unreasonably exclusionary conduct is with the universal definition proponents have advocated, namely, a version of consumer welfare-balancing. This Article does not dispute the notion that different specific liability tests may be appropriate for different types of conduct. Rather, it contends that (1) all liability tests should ultimately seek to identify *the same* adverse effect and (2) that effect is the actual or likely exclusion of a competitive rival from the defendant’s market. *See infra* Part II.

98. BLACK’S LAW DICTIONARY 1448 (9th ed. 2009).

99. *See* A. V. DICEY, INTRODUCTION TO THE STUDY OF THE LAW OF THE CONSTITUTION 198 (8th ed. 1915) (“[Rule of law] means, in the first place, the absolute

comes to monopolization, existing legal proscriptions stem from a single statutory source, Section 2 of the Sherman Act,¹⁰⁰ which the Supreme Court has interpreted to require two elements for liability.¹⁰¹ One of those elements is, in the words of subsequent courts and commentators, exclusionary conduct.¹⁰² Rule of law norms require that there be a common thread running through any conduct that would satisfy that element; otherwise, the “element” would consist of a non-exhaustive menu of unrelated acts and would cease to be an element. Respect for the rule of law therefore mandates a single definition of unreasonably exclusionary conduct—i.e., some common thread that runs through all the practices deemed to be unreasonably exclusionary and thereby causes the exclusionary conduct element to “mean” something.

This is not to say that the rule of law requires courts to have a single *test for identifying* conduct that contains the common thread; different types of conduct may best be evaluated (to see if they contain the common thread) using different legal tests. But if non-universalists are saying merely that courts should craft different legal tests for assessing different types of conduct, that raises the question, “What should those different tests seek to identify?” If proponents of non-universal standards give an answer to that question—as the rule of law requires—then they have indeed proposed a universal definition of unreasonable exclusionariness.

That is what Lao and Popofsky have done. They assume that reducing net consumer welfare through the exclusion or impairment of rivals is the essence of unreasonable exclusionariness, but they

supremacy or predominance of regular law as opposed to the influence of arbitrary power, and excludes the existence of arbitrariness, of prerogative, or even of wide discretionary authority on the part of the government.”); FRIEDRICH A. HAYEK, *THE ROAD TO SERFDOM* 72 (1944) (“Stripped of all technicalities, [the rule of law] means that government in all its actions is bound by rules fixed and announced beforehand—rules which make it possible to foresee with fair certainty how the authority will use its coercive powers in given circumstances and to plan one’s individual affairs on the basis of this knowledge.”).

100. 15 U.S.C. § 2 (2012) (“Every person who shall monopolize, or attempt to monopolize . . . any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony . . .”).

101. *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966) (“The offense of monopoly under § 2 of the Sherman Act has two elements: (1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.”).

102. *See, e.g., AREEDA & HOVENKAMP, supra* note 3, ¶ 618 at 66 (“The § 2 monopolizing offense requires something more than the existence of monopoly power; the ‘something more’ is generally referred to as an ‘exclusionary practice.’”).

would apply disparate legal tests to determine whether different types of conduct exhibit that characteristic.¹⁰³ They have thus implicitly adopted a consumer welfare-balancing definition of exclusionary conduct. Like so-called “rule utilitarians,” they would conduct utility-balancing at the rule level rather than on an act-by-act basis.¹⁰⁴ But they have implicitly embraced a universal definition of unreasonably exclusionary conduct, namely, that which violates a rule selected to maximize net consumer welfare.

Given that it ultimately reduces to “rule” consumer welfare-balancing, the sort of approach proposed by Lao and Popofsky is subject to the administrative difficulties besetting consumer welfare-balancing in general. Recall that a chief problem with “act” consumer welfare-balancing is that it is largely indeterminate and therefore likely to deter efficiency-enhancing but novel practices.¹⁰⁵ The same problems—indeterminacy and its consequent chilling effect—would exist in spades under a rule consumer welfare-balancing approach. Consider, for example, the predicament faced by a firm deciding, in 1995, whether to offer an above-cost bundled discount on its *A* and *B* products.¹⁰⁶ The firm first would have had to ascertain whether the business practice under consideration fit within a class of conduct for which there was an existing liability rule. Finding no well-established rules on bundled discounts,¹⁰⁷ the firm would have had to determine

103. See Lao, *supra* note 14, at 451–63 (describing approach and emphasizing concern with selecting conduct-specific tests that will maximize consumer benefit by minimizing error costs); Popofsky, *supra* note 14, at 437 (“The unifying principle is that each Section 2 legal test reflects a specific expression of the same underlying ‘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?”); *id.* (“[A]lthough 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.”).

104. In ethical theory, the essential difference between “act” and “rule” utilitarianism lies in what determines whether or not an action is the right action. Act utilitarianism maintains that an action is right insofar as it maximizes utility; rule utilitarianism maintains that an action is right insofar as it conforms to a rule that maximizes utility. See Brad Hooker, *Rule Consequentialism*, in STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Jan. 9, 2008), <http://plato.stanford.edu/entries/consequentialism-rule/>.

105. See *supra* notes 66–68 and accompanying text.

106. An “above-cost bundled discount” is one in which the discounted price of the bundle still exceeds the aggregate cost of the products within the bundle. Lambert, *supra* note 22, at 1691. Bundled discounts are discussed in greater detail below. See *infra* notes 171–74 and accompanying text.

107. Most decisions addressing how to evaluate bundled discounts (and reaching different conclusions) appeared after 1995. See, e.g., *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883, 906 (9th Cir. 2008); *LePage’s Inc. v. 3M*, 324 F.3d 141, 159–63 (3d Cir. 2003) (en banc); *Ortho Diagnostic Sys., Inc. v. Abbott Labs, Inc.*, 920 F. Supp. 455,

whether its discount should be analyzed as potential predatory pricing (since the conduct at issue involves a price cut) or perhaps tying (since the seller would be creating an incentive for buyers of its *A* product also to purchase its *B* product). If convinced that its contemplated discounting was sufficiently close to a practice governed by an established liability rule, then the firm would have had to apply that rule to determine the legality of the behavior under consideration.

In the likely event that the firm decided that its contemplated conduct was too different from that covered by existing liability rules,¹⁰⁸ it would have been required not simply to assess whether its contemplated course of action would enhance net consumer welfare—that would constitute “act” consumer welfare-balancing—but instead to (1) predict what liability rule a reviewing court would adopt for determining the legality of the type of conduct at issue (that is, what liability rule would be deemed to maximize net consumer welfare) and (2) evaluate its contemplated conduct under that rule. A wrong judgment on either of those matters would have resulted in a treble damages judgment, and the firm may well have given up on its plan to offer its bundled discount. To the extent that the contemplated discount would have been efficiency-enhancing, the rule welfare-balancing approach would have created social losses in the form of foregone efficiencies.

In addition to such uncertainty-fueled welfare losses, the sort of approach advocated by Lao and Popofsky would generate significant administrative costs. Applying different liability rules to different types of behavior encourages wasteful “pigeonholing”—i.e., inquiries by adjudicators into the appropriate category for challenged practices and efforts by business planners to make cosmetic changes to their practices so that they are deemed to fall within categories receiving more favorable legal treatment.¹⁰⁹ Antitrust case law is replete with

469 (S.D.N.Y. 1996). The only significant reported precedent on bundled discounts prior to 1995 did not announce a generally applicable evaluative approach. See *SmithKline Corp. v. Eli Lilly & Co.*, 575 F.2d 1056, 1065 (3d Cir. 1978) (basing the conclusion on the fact-specific policies Eli Lilly instituted).

108. The contemplated bundled discount would differ from predatory pricing governed by *Brooke Group* in that it would (1) be conditional upon meeting some purchase target, (2) cover multiple products, and (3) result in an above-cost price (at least, as measured against the aggregate cost of the bundle). See *infra* notes 135–36 and accompanying text. It would differ from tying in that buyers *could* purchase the products separately, though doing so would cost them the discount.

109. See generally CHARLES J. GOETZ, FRED S. MCCHESENEY & THOMAS A. LAMBERT, *ANTITRUST LAW: INTERPRETATION AND IMPLEMENTATION* 71 (5th ed. 2013) (discussing “the art of ‘pigeonholing’ in antitrust”).

disagreements among adjudicators about how business practices should be characterized and thus evaluated.¹¹⁰ To the extent Section 2 analysis turns on categorizing practices and does not allow for a categorization judgment to be overridden by reference to some overarching principle, courts and litigants will waste significant resources in *ex post* fights over categorization, and business planners will squander resources on *ex ante* efforts to ensure a favorable categorization regardless of actual competitive effect. Accordingly, the administrative costs of rule consumer welfare-balancing—like the efficiency losses stemming from the high risk of improper liability judgments under the approach—would be large.

II. AN ALTERNATIVE DEFINITION

A. *Criteria for Selecting a Definition of Unreasonably Exclusionary Conduct*

The foregoing consideration of deficiencies in previously proposed definitions of exclusionary conduct suggests features that an optimal definition would possess. First, it would identify a common thread that ties together all instances of unreasonably exclusionary conduct and comports with widely accepted intuitions about what constitutes improper competitive conduct.¹¹¹ In addition, the definition would be easily administrable by adjudicators and business planners or would at least generate conduct-specific legal tests that are easy to administer.¹¹² It would strive to minimize allocative inefficiencies—the result of market power—by avoiding improper

110. Compare, e.g., *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 18–25 (1984) (construing hospital's exclusive relationship with anesthesiologists as imposing a tie-in subject to quasi per se rule), with *id.* at 44–45 (O'Connor, J., concurring) (construing same arrangement as exclusive dealing subject to rule of reason). For another example, compare *Siegel v. Chicken Delight, Inc.*, 448 F.2d 43, 47–49 (9th Cir. 1971) (holding that franchisor's requirement that franchisee purchase materials from it was tying arrangement, subject to quasi per se rule), with *Queen City Pizza, Inc. v. Domino's Pizza, Inc.*, 922 F. Supp. 1055, 1059–63 (E.D.Pa. 1996), *aff'd*, 124 F.3d 430 (3d Cir. 1997) (refusing to analyze similar agreement as tie-in).

111. Any non-universal approach that denies the existence of a singular definition of exclusionary conduct (a category that excludes the sort of rule consumer welfare-balancing approach proposed by Popofsky and Lao) could not meet this criterion. See *supra* notes 94–104 and accompanying text.

112. The RRC and consumer welfare-balancing approaches, as well as the rule welfare-balancing approach proposed by Lao and Popofsky, fail to meet this criterion. See *supra* notes 44–45, 62–65, 105–07 and accompanying text. So do sacrifice-based tests (the profit sacrifice and no economic sense tests) when they are employed to evaluate conduct involving “degrees” (e.g., discounting, loyalty requirements). See *supra* notes 89–92 and accompanying text.

acquittals of truly exclusionary practices.¹¹³ Yet it would also seek to avoid the social losses that result when the law improperly condemns or discourages efficient but novel practices that tend to disadvantage the perpetrator's rivals.¹¹⁴

Several of these objectives are in tension. Reducing social losses from false acquittals may require broadening the definition of unreasonably exclusionary conduct, but doing so enhances the risk of false convictions and thereby increases the social cost resulting from the deterrence of efficient but novel business practices. Aggregate social losses from incorrect liability judgments (i.e., the sum of social losses from false acquittals and false convictions) may be reduced by crafting a more nuanced definition of exclusionary conduct, but such a definition would be more difficult for adjudicators and business planners to administer. Efforts to achieve one key objective—avoidance of false negatives, avoidance of false positives, or administrability—tend to impair another. Accordingly, an *optimal* definition of unreasonably exclusionary conduct would (1) provide a common thread that ties together all instances of unreasonably exclusionary conduct and comports with widely accepted intuitions about what constitutes improper competitive conduct and (2) minimize the sum of “decision costs” (the aggregate cost to adjudicators and business planners of administering the definition and rules that flow from it) and “error costs” (the sum of allocative inefficiencies resulting from false acquittals of bad behavior and foregone efficiencies resulting from false convictions of good behavior).¹¹⁵

113. The equally efficient rival approach fails to satisfy this criterion because it acquits conduct that would *render* a rival less efficient than the defendant. See *supra* notes 32–33 and accompanying text.

114. Given their indeterminacy and lack of reliable safe harbors, the RRC, consumer welfare-balancing, sacrifice-based, and “rule” consumer welfare-balancing approaches are likely to chill novel business practices that enhance efficiency but may foreclose rivals. See *supra* notes 44–45, 62–68, 89–92, 105–10 and accompanying text.

115. Judge Easterbrook famously proposed this latter criterion for antitrust liability rules. See Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1, 16 (1984). Sometimes called the “decision-theoretic” principle, the criterion has been quite influential among antitrust scholars. See, e.g., David S. Evans & A. Jorge Padilla, *Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach*, 72 U. CHI. L. REV. 73, 85 (2005) (setting forth an error cost approach to crafting rules governing unilateral practices); Keith N. Hylton & Michael Salinger, *Tying Law and Policy: A Decision-Theoretic Approach*, 69 ANTITRUST L.J. 469, 470 (2001) (applying criterion in analyzing law on tie-ins); Geoffrey A. Manne & Joshua D. Wright, *Google and the Limits of Antitrust: The Case Against the Case Against Google*, 34 HARV. J.L. & PUB. POL'Y 171, 178 (2011) (using decision theory to argue against antitrust intervention on

B. The Exclusion of a Competitive Rival (“ECR”) Definition

Consistent with the foregoing criteria, I propose the following approach: a defendant has engaged in unreasonably exclusionary conduct if its behavior as a whole has excluded a competitive rival from the defendant’s market, or is likely to do so, where a “competitive rival” is one that is as aggressive as the defendant in seeking out business opportunities and either is as efficient as the defendant or would be but for the defendant’s exclusionary acts. The defendant’s behavior “as a whole” includes all its dealings with excluded or potentially excluded rivals, not simply the challenged conduct.

This proposed “exclusion of a competitive rival” approach comports with prevailing intuitions about what constitutes fair and vigorous competition. A competitor may do all it can to get ahead—short of rigging the game to beat a more deserving rival or taking steps that would prevent rivals from rising to the top—and talented rivals are expected to take aggressive action to stay in the game. More importantly, the proposed definition would avoid most of the pitfalls that have bedeviled other proposals. Unlike Posner’s equally efficient rival approach, it could condemn conduct *that renders* the perpetrator’s rivals less efficient.¹¹⁶ Unlike the RRC, consumer welfare-balancing (both act and rule), and sacrifice-based approaches, it would enable the creation of reliable safe harbors for firms considering practices that are efficient on the whole but are either novel (so no liability rule exists) or governed by existing liability rules that are somewhat indeterminate (so business planners cannot be confident about the decision an adjudicator will reach).¹¹⁷ Unlike a truly non-universal approach, the ECR definition comports with rule-of-law norms by identifying a common thread that ties together instances of unreasonably exclusionary conduct.¹¹⁸ And the liability

basis of Google’s alleged search manipulation). It also seems to underlie many recent decisions by the Supreme Court. See Thomas A. Lambert, *The Roberts Court and the Limits of Antitrust*, 52 B.C. L. REV. 871, 873 (2011) (arguing that the Roberts Court’s antitrust jurisprudence is not reflexively “pro-business” but instead reflects an effort to minimize the sum of decision and error costs).

116. See *supra* notes 32–33 and accompanying text (discussing equally efficient rival definition’s failure to condemn conduct rendering a rival less efficient).

117. See *supra* notes 44–45, 62–68, 86–92, 105–10 and accompanying text (discussing indeterminacy of and lack of reliable safe harbors created by RRC, consumer welfare-balancing, and sacrifice-based approaches).

118. See *supra* notes 98–105 and accompanying text (explaining why non-universal standards approaches that do not reduce to rule consumer welfare-balancing violate rule of law norms).

rules it would generate would be easier to administer than any of the other proposed approaches. Accordingly, the ECR definition satisfies the two criteria set forth above: It defines unreasonably exclusionary conduct in a unified, coherent manner and, as the following subpart shows, would generate legal rules capable of minimizing the sum of decision and error costs.

C. Operationalizing the Proposed Definition

The ability to generate clear guidance and reliable safe harbors for business planners—something the RRC, consumer welfare-balancing, and sacrifice-based approaches lack¹¹⁹—is perhaps the most appealing feature of the ECR definition of exclusionary conduct. It liberates firms to experiment with novel business practices that are likely efficient but could have the effect of driving some rivals out of business or reducing their scale. Accordingly, a consideration of how the ECR definition would operate in practice should begin by examining the safe harbors the definition would generate. Part II.C.1 considers the contours of those safe harbors. Part II.C.2 then addresses how courts adjudicating monopolization and attempted monopolization claims could structure a general rule of reason embracing the ECR approach.

1. Safe Harbors for Different Species of Exclusionary Conduct

As the U.S. Court of Appeals for the D.C. Circuit observed, “the means of illicit exclusion, like the means of legitimate competition, are myriad.”¹²⁰ It would be a fool’s errand to attempt to catalogue exhaustively the types of exclusionary conduct in which a defendant might engage. Indeed, the impossibility of *ex ante* specification of all the types of exclusionary conduct is the chief motivation for this Article. We need a generalized definition of exclusionary conduct precisely because we cannot predict what sorts of exclusion-causing, but possibly efficient, conduct firms might attempt in the future, and we need to provide business planners with some guidance about how to avoid liability.

Despite the impossibility of exhaustively cataloguing all species of exclusionary conduct, it is possible to articulate a list that covers

119. See *supra* notes 44–45, 62–68, 86–92, 105–10 and accompanying text. The equally efficient rival definition provides similar clarity, but its failure to condemn conduct that prevents rivals from attaining equivalent efficiency causes it to be significantly underdeterrent. See *supra* notes 32–33 and accompanying text.

120. *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) (en banc) (per curiam).

most of the ways a firm might try to create market power by excluding its rivals. Experience with Section 2 has revealed that unreasonable market exclusion that creates or enhances market power is likely to occur via either *predation* (the perpetrator sets its prices so low or bids up input costs so high that rivals can remain in competition with it only by pricing at unsustainable levels); *market foreclosure* (the perpetrator deprives its rivals of customers by persuading buyers to give their business to the perpetrator or withhold it from the perpetrator's rivals); *input denial* (the perpetrator denies rivals access to something they need to conduct their business); or *naked acts of exclusion* (a perpetrator engages in an act that is unabashedly aimed at hobbling its rivals and creates no apparent social benefit—e.g., the perpetrator fraudulently obtains a market power creating patent or intentionally destroys a rival's productive facilities).¹²¹ Because a generalized definition of exclusionary conduct is needed only for evaluating mixed bag conduct that exhibits both procompetitive and anticompetitive tendencies,¹²² our concern here is with the first three species of unreasonable exclusion: predation, foreclosure, and input-denial.

As the following discussion shows, the ECR approach enables the creation of reliable safe harbors for business conduct within each of those species as well as for “hybrid” practices that combine features of multiple species.

a. *Predation*

One way a firm might exclude its rivals and thereby enhance its market power is to compete in such a way that its rivals must somehow harm themselves in order to win business. On the sale side, such predation could consist of charging below-cost (predatory) prices, which forces even one's equally efficient rivals to suffer losses in order to win sales,¹²³ or charging so-called “limit” prices that are above the seller's own incremental cost but below both its profit-maximizing price level and its rivals' incremental costs.¹²⁴ When acting

121. See generally Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 49–76 (predation), 113–15 (foreclosure), 119–30 (input denial), and 131–41 (naked acts of exclusion).

122. See *supra* notes 27–31 and accompanying text.

123. See *Cargill, Inc. v. Monfort of Colorado, Inc.*, 479 U.S. 104, 117 (1986) (discussing anticompetitive harm from below-cost pricing).

124. See Phillip Areeda & Donald F. Turner, *Predatory Pricing and Related Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697, 705–06 (1975) (explaining how limit pricing by a firm operating at a more efficient scale than potential entrants can maintain its monopoly by excluding those entrants from the market).

as a buyer of inputs, a firm may predate by bidding up the price of inputs higher than the level at which it could acquire the amount it needs (or, what is economically equivalent, by simply buying a greater quantity than it needs so that competing input buyers have to raise their bid prices).¹²⁵ This harms the perpetrator's input market rivals by raising their costs, and the harm is particularly grave if the rivals cannot pass those higher costs on to consumers because, for example, the overbidding firm is an output market rival and holds down its own prices.¹²⁶

Of course, lowering output prices and bidding up input prices are usually desirable practices. Price cuts always benefit consumers (at least in the short-run) and typically represent procompetitive attempts to win business legitimately.¹²⁷ Bidding up input prices is usually done to ensure access to an adequate supply of inputs, but even stockpiling inputs or bidding up prices above the level required to satisfy immediate needs can be efficiency enhancing.¹²⁸ Because output price-slashing and input price-raising are at worst mixed bags, antitrust doctrine should take care not to condemn or deter their efficient uses while pursuing harmful predation.

125. See Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 73; see also *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co., Inc.*, 549 U.S. 312, 322 n.3 (2007) (observing that “[p]redatory bidding on inputs is not analytically different from predatory overbuying of inputs”).

126. See, e.g., *Weyerhaeuser*, 549 U.S. at 316 (observing that defendant held its output prices down while bidding up input prices, causing plaintiff, a rival in both input and output markets, to suffer heavy losses).

127. See *Atlantic Richfield Co. v. USA Petroleum Co.*, 495 U.S. 328, 340 (1990) (observing that “[l]ow prices benefit consumers regardless of how those prices are set”); *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 594 (1986) (observing that “cutting prices in order to increase business often is the very essence of competition”).

128. As the *Weyerhaeuser* Court explained:

There are myriad legitimate reasons—ranging from benign to affirmatively procompetitive—why a buyer might bid up input prices. A firm might bid up inputs as a result of miscalculation of its input needs or as a response to increased consumer demand for its outputs. A more efficient firm might bid up input prices to acquire more inputs as a part of a procompetitive strategy to gain market share in the output market. A firm that has adopted an input-intensive production process might bid up inputs to acquire the inputs necessary for its process. Or a firm might bid up input prices to acquire excess inputs as a hedge against the risk of future rises in input costs or future input shortages. There is nothing illicit about these bidding decisions. Indeed, this sort of high bidding is essential to competition and innovation on the buy side of the market.

Weyerhaeuser, 549 U.S. at 323–24 (internal citation omitted).

Seeking to exercise such care, the Supreme Court has set forth predation liability rules that include reliable safe harbors. The Court's *Brooke Group* decision insulates from liability any simple discount that results in a price above "an appropriate measure" of the seller's cost,¹²⁹ which most lower courts have defined as the seller's average variable cost.¹³⁰ In *Weyerhaeuser*, the Court extended the *Brooke Group* rule to the overbidding context, creating a safe harbor for aggressive input-bidding (or overbuying) that does not drive the buyer's output price below incremental cost after its higher input costs are accounted for.¹³¹

These reliable safe harbors, which enable firms to engage in price-cutting and aggressive input buying without fear of liability, could not exist if unreasonably exclusionary conduct were defined according to the RRC, consumer welfare-balancing, or sacrifice-based approaches. Under an RRC approach, a defendant that slashed its price to a point that some rivals could not match would worry that a reviewing court would determine that *some increment* of the price cut failed to enhance its efficiency and thus unjustifiably raised its rivals' costs (by reducing their scale). On the bidding side, a defendant that had bid up input prices would worry that a reviewing court might deem some increment of its high bid price to be unnecessary to attain needed inputs (or achieve some other efficiency) and thus an instance of unjustifiably raising rivals' costs.¹³² Under a consumer welfare-balancing approach, a dominant firm that cut its price to a level above its cost but to some point that might be deemed below the level necessary to encourage entry would worry that a reviewing court would find the consumer benefit of immediate lower prices to be outweighed by consumer harm in the form of sustained market power. On the bidding side, a firm that bid up prices to a point that injured its rival input buyers but did not cause it to price below cost in the output market would worry that a reviewing court would deem

129. *Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 222 (1993) ("First, a plaintiff seeking to establish competitive injury resulting from a rival's low prices must prove that the prices complained of are below an appropriate measure of its rival's costs.").

130. See William J. Kolasky, *Network Effects: A Contrarian View*, 7 GEO. MASON L. REV. 577, 605 (1999) (observing that in applying *Brooke Group*'s below-cost pricing element, "most courts use average variable cost").

131. *Weyerhaeuser*, 549 U.S. at 325 ("A plaintiff must prove that the alleged predatory bidding led to below-cost pricing of the predator's outputs. That is, the predator's bidding on the buy side must have caused the cost of the relevant output to rise above the revenues generated in the sale of those outputs.").

132. See *supra* notes 42–45 and accompanying text.

likely consumer harms from increased monopsony power to outweigh the benefits the higher bid prices would ultimately create for consumers.¹³³ Under the no economic sense test, a discounter would always worry that some increment of its price cut would be deemed economically irrational but for an increase in market power, and an input buyer that pushed bid prices above the level required to attain its immediate needs could have a difficult time establishing some economic sense for that conduct apart from an increase in market power.¹³⁴ The RRC, consumer welfare-balancing, and sacrifice-based approaches, then, could not sustain the safe harbors the Supreme Court has created for potentially predatory conduct.

The ECR approach, by contrast, could do so.¹³⁵ Any rival seller that is as efficient as the defendant could match a price cut resulting in an above-cost price for the defendant's product, and if the defendant bid up input prices but only to a point at which its incremental cost was still less than its output price, any equally efficient output producer could match the bid price for the input. Smaller-scale rivals that are not currently as efficient as the defendant but would be upon reaching MES may have to raise capital to meet the discount or input price and grow their business, but those that are genuinely capable of matching the defendant's efficiency upon achieving MES ought to be able to do so. Most firms, at some point in their existence, incur costs in excess of their revenues; it takes money to make money. But just as a new firm with a promising business plan can attain capital to cover start-up costs, any determined firm that genuinely could match a profit-making defendant's efficiency when operating at MES ought to be able to attain the financing to achieve that scale and earn similar profit.¹³⁶ Accordingly, neither cutting price to a level above one's incremental cost nor bidding up input prices to a point at which one's output is still priced above cost could exclude a

133. See *supra* Part I.C.

134. See *supra* notes 88–92 and accompanying text.

135. So could the equally efficient rival approach, but that approach, as noted, is underdeterrent. See *supra* notes 32–35 and accompanying text.

136. See 2A PHILLIP E. AREEDA, HERBERT HOVENKAMP & JOHN L. SOLOW, ANTITRUST LAW ¶ 421b at 66–67 (2d ed. 2002) (“If capital markets are working well, new investment will be made in any market earning anything above competitive returns—a term defined to include sufficient profit to attract new capital—regardless of the absolute cost of entry.”); GEORGE J. STIGLER, THE ORGANIZATION OF INDUSTRY 67–70 (1968); Harold Demsetz, *Barriers to Entry*, 72 AM. ECON. REV. 47, 49–53 (1982); Harold Demsetz, *Industry Structure, Market Rivalry, and Public Policy*, 16 J.L. & ECON. 1, 4 (1973); Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925, 929–30 (1979). Criticisms of this assertion are considered below. See *infra* notes 207–10 and accompanying text.

determined rival possessing, at MES, the ability to match the defendant's efficiency—that is, a *competitive* rival. The ECR approach, unlike the RRC, consumer welfare-balancing, and sacrifice-based approaches, thus supports the existing safe harbors for potentially predatory conduct.

b. Market Foreclosure

Businesses require customers to survive and thrive. Accordingly, a second way a firm might create or enhance its market power is by denying sales opportunities to its rivals. In an extreme case, the lack of available customers may drive a rival out of business altogether. More commonly, denying customers to one's rival will not cause it to exit the market entirely but will instead, by reducing demand for the rival's offering and thereby shrinking its output, cause the rival to lose scale efficiencies so that its per-unit costs rise.¹³⁷ Facing higher production costs, the "foreclosed" rival will be less able to impose pricing discipline on the perpetrator.

Illicit exclusive dealing and tying arrangements are the prototypical foreclosure-focused Section 2 offenses.¹³⁸ Every exclusive dealing arrangement involves some degree of foreclosure because the buyer is contractually forbidden to deal with the seller's rivals.¹³⁹ Tying arrangements occasion foreclosure in the tied product market because buyers seeking the seller's tying product, over which the seller has market power, must also purchase its tied product, reducing

137. See generally Joshua D. Wright, *Moving Beyond Naïve Foreclosure Analysis*, 19 GEO. MASON L. REV. 1163, 1166–71 (2012) (discussing economics of foreclosure).

138. In addition to being policed as exclusionary acts that may violate Section 2 of the Sherman Act, anticompetitive exclusive dealing and tying arrangements are expressly forbidden by Section 3 of the Clayton Act, 15 U.S.C. § 14 (2012) (prohibiting formation of exclusive contracts, leases, or sales that have the effect of lessening competition or creating a monopoly), and may be deemed agreements in unreasonable restraint of trade, violating Section 1 of the Sherman Act, *id.* § 1. When employed in an effort to create market power, tying and exclusive dealing are most appropriately analyzed under Section 2. Cf. Herbert Hovenkamp, *The Obama Administration and Section 2 of the Sherman Act*, 90 B.U. L. REV. 1611, 1613–14 (2010) (discussing overlapping statutory bases for policing tying and exclusive dealing and observing that "one notable development in recent law has been the increased use of Section 2 of the Sherman Act to pursue tying and exclusive dealing, although both of these typically involve an 'agreement' among two or more firms").

139. "Exclusive dealing describes an arrangement whereby one party's willingness to deal with another is contingent upon that other party (1) dealing with it exclusively or (2) purchasing a large share of its requirements from it." Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 131.

sales opportunities for rival sellers of the tied product.¹⁴⁰ If a seller's exclusive dealing or tying arrangement covers a large proportion of the sales opportunities that would otherwise be available to its rivals, those rivals may be forced to reduce their output so much that they fall below MES and are impaired in their ability to constrain the seller's pricing or are perhaps driven out of business altogether.¹⁴¹

But exclusive dealing and tying arrangements, despite their potential to create foreclosure-induced market power, are not always—or even usually—bad. Well-known procompetitive uses of exclusive dealing include providing a guaranteed supply for buyers or predictable demand for sellers,¹⁴² encouraging manufacturer investments in dealers by preventing “interbrand free-riding,”¹⁴³ and enhancing distributional efficiency by facilitating manufacturer contracting for distributor promotion.¹⁴⁴ Tie-ins may be imposed for such procompetitive (or competitively neutral) ends as ensuring tying

140. In a tying arrangement or “tie-in,” a purchaser of some product over which the seller has market power (the “tying” product) is required also to purchase some other “tied” product from the seller. See *N. Pac. Ry. Co. v. United States*, 356 U.S. 1, 5–6 (1958).

141. On exclusive dealing's ability to drive rivals below MES, see Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 136–37 (“[E]xclusive dealing can be a way that a firm acquires or maintains monopoly power by impairing the ability of rivals to grow into effective competitors that erode the firm's position.”); Daniel A. Crane & Graciela Miralles, *Toward a Unified Theory of Exclusionary Vertical Restraints*, 84 S. CAL. L. REV. 605, 640 n.137 (2011) (noting use of MES to assess anticompetitive foreclosure); Benjamin Klein, *Exclusive Dealing as Competition for Distribution “On the Merits”*, 12 GEO. MASON L. REV. 119, 122–28 (2003) (“[I]f exclusive contracts foreclose a sufficient share of distribution to rivals for a significant time so that what remains to serve competitors cannot support a manufacturer of [MES], the exclusive will force existing competitors and potential new entrants to operate at a cost disadvantage. The exclusives then may have the effect of driving out and/or preventing entry of manufacturing competitors until sufficient distribution becomes available.”). On tying's ability to drive rivals below MES, see Elhauge, *supra* note 22, at 413–14; Michael D. Whinston, *Tying, Foreclosure, and Exclusion*, 80 AM. ECON. REV. 837 (1990).

142. See *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 334 (1961) (“In the case of the buyer [an exclusive dealing contract] ‘may assure supply,’ while on the part of the seller it ‘may make possible the substantial reduction of selling expenses, give protection against price fluctuations, and . . . offer the possibility of a predictable market.’” (quoting *Standard Oil Co. of Cal. v. United States*, 337 U.S. 293, 306–07 (1949))).

143. See Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 131, 139 (“Exclusive dealing is frequently procompetitive, as when it enables manufacturers and retailers to overcome free-rider issues For example, a manufacturer may be unwilling to train its distributors optimally if distributors can take that training and use it to sell products of the manufacturer's rivals.”); Klein, *supra* note 141, at 137–41 (“A commonly recognized efficiency rationale for exclusive dealing is the protection of manufacturer property rights on investments manufacturers provide to distributors.”).

144. See Klein, *supra* note 141, at 141–60 (arguing that exclusive contracts between manufacturers and distributors are economically efficient because they assure a return on the manufacturers' investment).

product quality or protecting seller goodwill,¹⁴⁵ engaging in output-enhancing price discrimination,¹⁴⁶ expanding market output by eliminating double-marginalization,¹⁴⁷ or evading price regulation.¹⁴⁸ In light of the legitimate uses of tying, exclusive dealing, and other foreclosure-inducing business practices, antitrust doctrine should take care not to over-deter.

Over-deterrence of foreclosure-inducing conduct is likely, however, under the RRC, consumer welfare-balancing, and sacrifice-based approaches to identifying unreasonably exclusionary conduct. A firm embarking on a course of conduct involving exclusive dealing, tying, or some other foreclosure-causing practice generally cannot predict with certainty the market consequences of its arrangement (e.g., the degree of foreclosure the arrangement will occasion, its effects on rivals, etc.). Business planners therefore often cannot guarantee, when embarking upon a novel arrangement, that contemplated conduct will limit foreclosure to some pre-determined levels. Moreover, a reviewing court evaluating matters in retrospect

145. See, e.g., *Mozart Co. v. Mercedes-Benz of N. Am., Inc.*, 833 F.2d 1342, 1348–51 (9th Cir. 1987).

146. Tie-ins may facilitate price discrimination via “metering” or Stigler-type bundling. See *infra* notes 229–32 and accompanying text. Both species of tying-induced price discrimination may enhance total welfare. See Erik Hovenkamp & Herbert Hovenkamp, *Tying Arrangements and Antitrust Harm*, 52 ARIZ. L. REV. 925, 943–52 (2010) (discussing efficiency of price-discriminating “metering” tie-ins); Lambert, *supra* note 36, at 934–50 (explaining why metering tie-ins tend to enhance total welfare); *id.* at 950–53 (explaining that price discrimination via “Stigler-type bundling” is an efficient way of solving the pricing dilemmas which affect manufacturers of negligible-cost goods).

147. As Herbert Hovenkamp has explained:

Double marginalization occurs when separate firms selling complementary products each have some market power, are unable to pool their output, and each assesses a profit-maximizing output rate individually. Under quite robust assumptions, the profit-maximizing output is higher if a single firm offers the complements together or the two firms can coordinate their output by licensing together. The benefit accrues both to consumers in the form of lower prices, and to producers in the form of higher output. Eliminating double marginalization explains many instances of tying . . .

Herbert Hovenkamp, *Antitrust and the Movement of Technology*, 19 GEO. MASON L. REV. 1119, 1129 (2012).

148. See Herbert Hovenkamp, *Tying Arrangements and Class Actions*, 36 VAND. L. REV. 213, 234 (1983) (“Tying arrangements in price-regulated industries may be efficiency creating.”); Thomas B. Leary, Former Comm’r, Fed. Trade Comm’n, *Antitrust Law as a Balancing Act*, Address at the Tenth Annual Seattle Computer Law Conference (Dec. 17, 1999), <http://www.ftc.gov/public-statements/1999/12/antitrust-law-balancing-act> (discussing use of tie-ins to evade price regulation and observing that “[w]hile regulatory evasion [via tying] may supply the motive for particular conduct that may be otherwise inexplicable, it does not constitute independent evidence of competitive harm”).

may determine that *some increment* of the foreclosure-causing conduct was unnecessary to achieve an enhancement in the defendant's efficiency (RRC) or created greater consumer harm than benefit (consumer welfare-balancing) or would have been economically irrational but for its ability to exclude rivals (no economic sense test).¹⁴⁹ Firms seeking to employ foreclosure-causing arrangements for procompetitive (or competitively neutral) purposes therefore incur significant liability risks under the RRC, consumer welfare-balancing, and no economic sense approaches.

The ECR approach, by contrast, generates a reliable safe harbor because any defendant engaging in foreclosure-causing conduct may take steps to avoid excluding truly competitive rivals. Consider how a competitive rival would maintain (and, if necessary, grow) its scale in the face of a competitor defendant's foreclosure-causing conduct. If truly *determined*, a rival losing a significant number of customers because of the defendant's conduct would (after exhausting all other reasonably available options for expanding its sales) seek to maintain scale by offering to become a supplier to the defendant, ultimately lowering its price to the level of its incremental cost at the scale it would achieve as a supplier, presumably MES.¹⁵⁰ If the rival *could meet or beat the defendant's productive efficiency at that scale*, then any defendant that was pursuing efficiency rather than seeking to enhance its market power by foreclosing rivals would be willing to accept the rival's supplier offer.¹⁵¹ If a rival complaining of exclusion did not seek to become a supplier to the defendant or did not lower its price to the level of its incremental cost at MES, then it was not a

149. See *supra* notes 39, 62–64, 88–91 and accompanying text.

150. If the rival still would not achieve MES, or at least a scale sufficient to allow it to match the defendant's efficiency, by becoming a supplier to the defendant, then it would seem that market demand does not warrant the firm's existence (i.e., the number of producers in the market is inefficiently large), so the exit of the firm would not cause an efficiency loss. See E. THOMAS SULLIVAN, HERBERT HOVENKAMP & HOWARD A. SHELANSKI, *ANTITRUST LAW, POLICY AND PROCEDURE: CASES, MATERIALS, PROBLEMS* 41–42 (6th ed. 2009) (discussing determinants of optimal number of producers in a market). See generally F.M. SCHERER & DAVID ROSS, *INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE* (3d ed. 1990) (providing a broad overview of the way industrial organizations have adapted their businesses to the American economy).

151. Conversely, an exclusion-causing defendant that turned down a supplier offer that would enhance its profits but enable a competitive rival to remain in business and maintain its scale would evince an anticompetitive intent. Cf. *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 601 (1985) (concluding that dominant defendant's refusal to continue profit-enhancing venture with rival had "evidentiary significance" and therefore upholding jury's verdict that defendant had engaged in unreasonably exclusionary conduct).

determined rival. If the rival did so but its offer was unfavorable in that the price demanded exceeded the defendant's cost or the quality of its offering was inferior, then the rival could not meet or beat the defendant's efficiency operating at MES. Only where a foreclosed rival made an attractive supplier offer that the defendant rejected would the defendant have excluded a *competitive* rival. Accordingly, a defendant utilizing exclusive dealing, tying, or other foreclosure-inducing conduct could avoid liability under the ECR approach by considering all offers by its foreclosed rivals to act as its supplier and turning down only those offers that would be economically disadvantageous (because the rival's offered price, adjusted for quality, is greater than the defendant's own cost). The ECR approach therefore generates the sort of reliable safe harbor that eludes the RRC, consumer welfare-balancing, and no economic sense approaches.

c. Unilateral Input-Denial

A third way a firm may enhance its market power is by unilaterally denying its rivals access to various inputs they need to conduct their business.¹⁵² Courts have thus sometimes deemed it unreasonably exclusionary to deny rivals access to an "essential facility"¹⁵³ or to unilaterally refuse to deal with them.¹⁵⁴ Some lower courts have gone so far as to suggest that dominant firms may have a duty to pre-disclose their business plans—effective "inputs" for rivals engaged in their own planning—but such rulings have been overruled on appeal.¹⁵⁵ More recently, the Federal Trade Commission

152. Concerted input denials, such as group boycotts, concerted refusals to deal, and some vertical mergers, may also be exclusionary. They are not addressed here because they are typically and more appropriately analyzed as unreasonable restraints of trade, a violation of Sherman Act Section 1. *See* 15 U.S.C. § 1 (2012) (condemning all contracts, combinations, and conspiracies that unreasonably restrain trade). The ECR definition could, however, accommodate a safe harbor for concerted input denials challenged as instances of actual or attempted monopolization. Any determined rival facing exclusion because of a dominant firm's contractual tying-up of inputs (e.g., via exclusive sales agreements with input suppliers or a vertical merger) would offer to supply its services to the dominant firm at a price approaching the rival's cost. If the rival could, at MES, match the dominant firm's input-processing efficiency, then the dominant firm should be willing to accept its offer. Thus, demonstrating a willingness to accept a supplier offer from a put-upon rival should insulate a dominant firm from Section 2 liability premised on a concerted input denial.

153. *See* MCI Commc'ns Corp. v. Am. Tel. & Tel. Co., 708 F.2d 1081, 1132–33 (7th Cir. 1983); *Hecht v. Pro-Football, Inc.*, 570 F.2d 982, 992–93 (D.C. Cir. 1977).

154. *See Aspen Skiing*, 472 U.S. at 605–11.

155. *See* *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 281 (2d Cir. 1979) (disapproving of district court's jury instruction that dominant camera manufacturer's

considered what is essentially a unilateral input denial theory in its now-terminated investigation into Google's alleged manipulation of Internet search results.¹⁵⁶ Firms that compete with Google in providing web-based content complained that they need favorable placement in Google's search results in order to compete successfully and that Google denied that "input" by artificially manipulating the ranking of its search results.¹⁵⁷ As the Google matter shows, unilateral input-denial is a broad and manipulable category of exclusionary conduct, an area in which a general definition of unreasonable exclusion would be particularly helpful.

As with the other types of exclusionary conduct, "unilateral input denials" are generally mixed bags. On the one hand, if a dominant firm controls something (e.g., a physical facility or information) that its rival could "use to make more, different, or better products," consumers might be better off if the dominant firm were forced to deal with the rival.¹⁵⁸ On the other hand, it is the right to control and profit from one's property that generates the incentive to create the property in the first place, so the ability to withhold an input unilaterally may further dynamic efficiency by fostering innovation.¹⁵⁹ Moreover, any remedy involving forced sharing requires difficult decisions about what must be shared, at what price, and under what terms. Generalist courts are poorly suited to make those decisions

failure to predispose forthcoming changes in film cartridges to rival film producers could be "on balance an exclusionary course of conduct").

156. See STATEMENT OF THE FED. TRADE COMM'N REGARDING GOOGLE'S SEARCH PRACTICES, F.T.C. FILE NO. 111-0163, GOOGLE INC., (Jan. 3, 2013), available at http://www.ftc.gov/sites/default/files/documents/public_statements/statement-commission-regarding-googles-search-practices/130103brillgooglesearchstmt.pdf.

157. See, e.g., Adam Raff & Shivaun Raff, *Foundem's Google Story*, SEARCHNEUTRALITY.ORG (Aug. 18, 2009), <http://www.searchneutrality.org/eu-launches-formal-investigation/foundem-google-story>.

158. See Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 119 ("If a monopolist has something that a rival wants to use to make more, different, or better products, it can appear that consumers would be better off if the monopolist were forced to deal with its rival.").

159. See *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407-08 (2004) ("Firms may acquire monopoly power by establishing an infrastructure that renders them uniquely suited to serve their customers. Compelling such firms to share the source of their advantage . . . may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities."); Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 119 ("[I]f the monopolist is forced to deal with the rival, the monopolist's incentives to spend the necessary time and resources to innovate may be diminished. Moreover, the incentives of other firms to invest and innovate . . . may be diminished if they believe they will be forced to share a successful innovation.").

and to enforce sharing obligations.¹⁶⁰ For these reasons, many commentators have called into question whether antitrust should ever require a firm to deal with its rivals.¹⁶¹

The consumer welfare-balancing, RRC, and sacrifice-based definitions of unreasonably exclusionary conduct, however, would call for all manner of forced sharing. It is easy to imagine a court determining that a balancing of consumer welfare effects—even after accounting for dynamic effects turning on incentives to innovate—calls for a firm to share its physical facility, information, or business plans.¹⁶² Similarly, a court could decide that a failure to share such assets either raises the costs of the non-sharer's rivals without sufficient justification,¹⁶³ or, in light of the revenue the non-sharer foregoes by denying access, makes no economic sense but for its tendency to enhance market power.¹⁶⁴ Thus, the consumer welfare-balancing, RRC, and sacrifice-based tests could not provide reliable safe harbors for firms that refused to collaborate with their rivals.

The ECR approach, by contrast, could do so. On first glance, it may seem that any firm that is reliant upon a rival for an input could not be a competitive rival, so the ECR approach would sanction all unilateral input denials. But a firm seeking access to an input controlled by a vertically integrated rival may be equally or more efficient than the input controller *in the aspects of production not involving the input*. Sellers of local telephone service, for example, must provide both access to a network and customer service. An upstart local telephone service provider that must lease access to another's network might still be equally or more efficient in providing the customer service part of the offering.¹⁶⁵ The ECR approach thus would not create a rule of per se legality for unilateral input denials on the theory that any rival needing access to an input controlled by a competitor could not, by definition, be a competitive rival.

160. See *Trinko*, 540 U.S. at 408 (“Enforced sharing also requires antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing—a role for which they are ill suited.”); Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 119 (“[I]f forced sharing is required, difficult decisions must be made on precisely what needs to be shared, at what price, and under what other terms.”).

161. See, e.g., HOVENKAMP, *supra* note 77, at 244–48, 270; POSNER, *supra* note 10, at 242.

162. See *supra* Part I.B.

163. See *supra* notes 45–46, 61–64 and accompanying text.

164. See *supra* notes 82–92 and accompanying text.

165. Cf. *Pac. Bell Tel. Co. v. LinkLine Commc'ns Inc.*, 555 U.S. 438, 443 (2009) (recognizing that Internet service providers without access to their own transmission lines nevertheless could be competitive with a vertically integrated rival in customer service aspect of business).

Rather, to stay within a safe harbor under the ECR approach, a firm denying access to some necessary input would need to be able to show that its denial of access would not exclude a rival that is competitive—both determined and equally efficient when operating at MES—in some discrete aspect of the business (e.g., customer service in the example above). Faced with the prospect of no access to a necessary input, a determined “single-aspect” rival would seek to supply that aspect to the vertically integrated firm controlling the input and would be willing to reduce its price to the level of its incremental cost. If the rival is truly as efficient as the input-controlling firm or is able to match that firm’s efficiency after growing to MES, the single-aspect rival ought to be able to make a supplier offer that would be attractive to the input-controlling firm. Accordingly, a firm controlling a crucial input could ensure against liability for input denial by being willing to accept any attractive supplier offer. A local telephone company controlling the local network, for example, could avoid antitrust liability based on its refusal to give access to its network by establishing either that the complaining rival failed to offer to supply its services to the local telephone company (in which case the rival was not determined) or that the rival’s supplier offer was unfavorable on cost or quality grounds (in which case the rival was not equally efficient when operating at MES). Once again, then, the ECR approach, unlike the RRC, consumer welfare-balancing, and no economic sense approaches, accommodates reliable safe harbors.

d. Hybrid Practices

In recent years, antitrust courts have confronted a number of “hybrid” business practices that are both foreclosure-inducing and potentially predatory but do not fall squarely within traditional conduct classifications.¹⁶⁶ Loyalty rebates and bundled discounts, for example, are not strictly exclusive dealing, tying, or predatory pricing arrangements, but, they combine aspects of each. Again, the ECR definition of exclusionary conduct, unlike the RRC, consumer welfare-balancing, and sacrifice-based approaches, could offer

166. See, e.g., *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 273–81 (3d Cir. 2012) (considering loyalty discounts), *cert. denied*, 133 S. Ct. 2025 (2013); *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883, 906 (9th Cir. 2008) (discussing bundled discounts); *LePage’s Inc. v. 3M*, 324 F.3d 141, 154–57 (3d Cir. 2003) (en banc) (considering bundled discounts); *Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039, 1061–62 (8th Cir. 2000) (confronting loyalty rebates); *Ortho Diagnostic Sys., Inc. v. Abbott Labs., Inc.*, 920 F. Supp. 455, 469 (S.D.N.Y. 1996) (examining bundled discounts).

reliable safe harbors for firms contemplating efficient instances of such practices.

A loyalty rebate (or discount) is a price cut on all of a buyer's purchases of some item from a seller, where the price concession is conditioned upon purchasing some predetermined quantity of the item—usually, some percentage of the buyer's requirements.¹⁶⁷ A producer of surgical sutures, for example, might pay a 15% rebate on all purchases of the producer's sutures by any hospital that buys at least 70% of its suture requirements from that producer.¹⁶⁸ Loyalty rebates resemble predatory pricing in that they are price cuts that some rivals may have difficulty meeting, and they resemble exclusive dealing in that they may have the effect of dissuading customers from patronizing the discounter's rivals. Yet, they are neither. Unlike simple predatory pricing, loyalty rebates may effectively “penalize” incremental purchases from the discounter's rivals by more than the per-unit discount.¹⁶⁹ Unlike exclusive dealing, they do not require

167. See, e.g., *supra* note 44. Conditioning loyalty discounts or rebates on purchasing a percentage of the buyers' requirements, rather than a set amount of the product at issue, enables the seller to enhance the attractiveness of its offer by bearing the risk of a market downturn. See Herbert Hovenkamp, *The Federal Trade Commission and the Sherman Act*, 62 FLA. L. REV. 871, 889 (2010) (“A seller . . . can improve the attractiveness of its package if it bears . . . the market risk . . . itself. This is why it tends to use market share discounts rather than quantity discounts.”).

168. See, e.g., ELHAUGE, *supra* note 33, at 4 n.12, 7 n.20, 9 n.24 (citing contracts conditioning discounts to hospitals on hospitals purchasing minimum percentages of sutures requirements from seller).

169. Consider, for example, a producer that offers a 10% loyalty rebate on its brand of widgets, normally priced at \$1.00, to any retailer that buys 70% of its widget requirements from the producer. Suppose a multi-brand retailer normally carries 100 total widgets and buys 70 of them from the producer. Were that retailer to buy *one more* of its widgets from a rival of the producer, the retailer would lose not only \$0.10, the loyalty discount on the marginal widget, but \$7.00, the loyalty rebate that would be paid on *all* the retailer's purchases from the producer. See Jonathan M. Jacobson, *A Note on Loyalty Discounts*, ANTITRUST SOURCE 1, 2 (June 2010), available at <http://www.abanet.org/antitrust/at-source/10/06/Jun10-Jacobson6-24f.pdf> (explaining that the incremental purchase that would prevent a buyer from achieving the minimum level of purchases required for a loyalty discount does not cost the purchaser simply the per-unit discount; rather, the purchaser incurs an effective “penalty” equal to the dollar value of the aggregate discount that would otherwise be achieved on all units purchased). In light of this effect, some have argued that a loyalty rebate offered by a firm with a dominant brand, for which a significant level of demand is inelastic (i.e., sales of many units of the firm's brand are effectively “uncontested”), may not be met by an equally efficient rival, that would have to price its product below cost in order to compensate buyers for the “penalty” they would suffer by failing to meet the purchase target required to secure the dominant firm's loyalty rebate. See Willard K. Tom, David A. Balto & Neil W. Averitt, *Anticompetitive Aspects of Market-Share Discounts and Other Incentives to Exclusive Dealing*, 67 ANTITRUST L.J. 615, 627 (2000). This issue is addressed below. See *infra* notes 186–91 and accompanying text.

customers to purchase exclusively, or even primarily, from the discounter. They merely reward fidelity.¹⁷⁰

Bundled discounts are also conditional price cuts. With bundled discounts, though, the cuts are conditioned upon achieving purchase targets in multiple product markets.¹⁷¹ For example, a diversified producer of medical products might give a 20% discount (or pay a 20% rebate) on a hospital's purchases of sutures and scalpels if the hospital acquires 70% of its sutures and 50% of its scalpels from the producer.¹⁷² Like loyalty rebates, bundled discounts do not fit neatly into antitrust's traditional categories of business conduct. They resemble predatory pricing in that they involve price cuts that might exclude some rivals, and they resemble tying in that they encourage purchasers of one product also to buy a second, different product from the seller. Again, though, they are neither. As explained below, bundled discounts differ from the simple price cuts normally analyzed as predatory pricing in that they may exclude equally efficient, single-product rivals even if they result in above-cost prices for the package being sold.¹⁷³ Unlike tying, bundled discounts do not require purchasers to take both of a seller's products. They merely encourage doing so.¹⁷⁴

For both loyalty rebates and bundled discounts, different courts have articulated different liability rules. On loyalty rebates, some have concluded that any rebate (or discount) resulting in an above-cost discounted price is immune from liability,¹⁷⁵ while others have rejected such a price-cost safe harbor.¹⁷⁶ With respect to bundled discounts, one court imposed a broad liability rule that permitted liability even when the complaining rival was admittedly less efficient

170. See Richard M. Steuer, *Bundles of Joy*, ANTITRUST Spring 2008, at 25, 25 ("Unlike exclusive dealing, the purchaser need not promise to forgo buying that product from other suppliers, but the amount of the discount earned will depend on the volume it buys from that supplier rather than from competing suppliers.").

171. See Lambert, *supra* note 22, at 1689.

172. See, e.g., ELHAUGE, *supra* note 33, at 9 nn.24 & 25 (citing contracts conditioning discounts to hospitals on hospitals purchasing from seller minimum percentages of requirements of multiple products).

173. See *infra* notes 192–96 and accompanying text.

174. See Steuer, *supra* note 170, at 26.

175. See, e.g., *Concord Boat Corp. v. Brunswick Corp.*, 207 F.3d 1039, 1061–62 (8th Cir. 2000).

176. See, e.g., *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254, 278 (3d Cir. 2012) ("Nothing in the case law suggests, nor would it be sound policy to hold, that above-cost prices render an otherwise unlawful exclusive dealing agreement lawful."), *cert. denied*, 133 S. Ct. 2025 (2013) (considering loyalty discounts).

than the discounter;¹⁷⁷ another created a narrow safe harbor for discounts that could not exclude equally efficient single-product rivals;¹⁷⁸ and a third crafted a relatively lenient (defendant-friendly) rule that would require a complaining plaintiff to establish that the discount could exclude an equally efficient rival.¹⁷⁹

This legal uncertainty highlights the need for a generalized definition of unreasonably exclusionary conduct. Loyalty rebates and bundled discounts are price concessions—the sort of behavior antitrust generally encourages¹⁸⁰—and can be used to achieve all sorts of procompetitive objectives.¹⁸¹ But business planners will wisely steer clear of such practices if they do not know what unreasonably exclusionary conduct generally consists of and are thus unable to ensure that their conduct will pass muster under whatever specific liability rule is ultimately adopted. Moreover, it is not enough that there be *some* general definition of unreasonably exclusionary conduct. The definition itself must give rise to reliable safe harbors, lest efficient but novel business practices be chilled.

For that reason, the RRC, consumer welfare-balancing, and sacrifice-based definitions of unreasonably exclusionary conduct once again come up lacking. Under an RRC approach, a business planner

177. See *LePage's Inc. v. 3M*, 324 F.3d 141, 155–58 (3d Cir. 2003) (en banc) (concluding that 3M's bundled discounts were unreasonably exclusionary); *LePage's Inc. v. 3M*, 277 F.3d 365, 380 (3d Cir. 2002) (observing that “LePage's's economist conceded that LePage's is not as efficient a tape producer as 3M”), *rev'd* 324 F.3d 141.

178. See *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883, 906 (9th Cir. 2008) (adopting “discount attribution” safe harbor, under which “the full amount of the discounts given by the defendant on the bundle are allocated to the competitive product or products,” and only “[i]f the resulting price of the competitive product or products is below the defendant's incremental cost” may the trier of fact find that the discount is unreasonably exclusionary).

179. See *Ortho Diagnostic Sys., Inc. v. Abbott Labs., Inc.*, 920 F. Supp. 455, 469 (S.D.N.Y. 1996) (“[T]his Court holds that a Section 2 plaintiff in a case like this—a case in which a monopolist (1) faces competition on only part of a complementary group of products, (2) offers the products both as a package and individually, and (3) effectively forces its competitors to absorb the differential between the bundled and unbundled prices of the product in which the monopolist has market power—must allege and prove either that (a) the monopolist has priced below its average variable cost or (b) the plaintiff is at least as efficient a producer of the competitive product as the defendant, but that the defendant's pricing makes it unprofitable for the plaintiff to continue to produce.”).

180. Cf. *Concord Boat*, 207 F.3d at 1060–61 (noting that the Supreme Court has urged caution in considering potential antitrust liability from price cuts).

181. For example, loyalty rebates may reduce inter-brand free-riding and thereby encourage producers to make output-enhancing investments in their dealers. See *infra* notes 226–31 and accompanying text (offering example of loyalty rebate used to combat inter-brand free-riding). Bundled discounts may be a powerful tool for combating output-reducing double marginalization. See Hovenkamp & Hovenkamp, *supra* note 146, at 959–60.

contemplating a loyalty rebate or bundled discount would have to justify any impairment of rivals' efficiencies resulting from their reduced scale. If a jury found that the defendant's price concession was greater than necessary to achieve whatever productive or distributional efficiencies it produced, the excess discount would raise rivals' costs "regardless of any improvement in defendant efficiency"¹⁸² and would be deemed unreasonably exclusionary.¹⁸³ Under a consumer welfare-balancing test, the legality of the price concession would turn on the jury's difficult-to-predict decision about whether the immediate consumer benefit of the price cuts would outweigh the long-run harm to consumers from disadvantaging the discounter's rivals.¹⁸⁴ Under a sacrifice-based approach, legality would turn on the jury's determination of whether some increment of the discount or rebate made no economic sense but for its ability to exclude rivals.¹⁸⁵ There are simply no reliable safe harbors under these approaches.

The ECR approach, by contrast, accommodates reliable safe harbors for practices like loyalty rebates and bundled discounts. For loyalty rebates, the most obvious safe harbor stems from a straightforward application of *Brooke Group*: if the rebate results in a discounted price that is above the discounter's incremental cost, then it should be legal, for a competitive rival could (and would) avoid exclusion by matching the discounted price.¹⁸⁶ While some have argued that even an equally efficient rival might not be able to match a loyalty rebate by a firm with a significantly larger "natural" base of sales (since the rival would have to match the entire dollar value of

182. See Elhauge, *supra* note 7, at 330 (conduct that raises rivals' costs should be "per se illegal if its exclusionary effect on rivals will enhance monopoly power regardless of any improvement in defendant efficiency").

183. See *supra* notes 42–45 and accompanying text.

184. See *supra* notes 46–47, 62–65 and accompanying text.

185. See *supra* notes 88–92 and accompanying text. For example, if the discount were 10%, would the discounter, absent an exercise of market power, have been better off offering only a 7% discount? If so, the incremental three percentage points of discount would make no economic sense but for the market power it created and would thus be unreasonably exclusionary.

186. A determined, equally efficient rival would lower its price down to the level of its incremental cost. A determined rival that is currently less efficient than the discounter but could match the discounter's efficiency if operating at MES would seek (and ought to be able to obtain) financing to expand its operations to reach that level of production and sustain a period of below-cost pricing. See Lambert, *supra* note 22, at 1713–14 (explaining how a smaller rival that could match defendant's efficiency at MES could raise the capital necessary to compete with an above-cost loyalty discount).

the rebate on its smaller base of sales),¹⁸⁷ this argument ignores dynamic effects.¹⁸⁸ Moreover, it calls at most for an altered safe harbor in which the loyalty rebate is legal as long as “contested” units—those that are not part of the dominant firm’s natural base of sales—are priced above cost after the entire dollar value of the loyalty rebate is attributed to those units.¹⁸⁹ While this alternative safe harbor would create administrative difficulties that weaken its

187. See Bush DOJ Single-Firm Conduct Report, *supra* note 22, at 107; Tom, Balto, & Averitt, *supra* note 169, at 627. Suppose, for example, that the market for tennis balls consists of two brands, Pinn and Willson; that current market shares, which reflect consumer demand, are 60% for Pinn (the dominant brand) and 40% for rival Willson; and that retailers stock tennis balls in those proportions. Assume also that each manufacturer’s marginal cost of is \$0.90 per can of tennis balls, that each sells cans to retailers for \$1 per unit, and that MES in this market occurs at a level of production equal to 35% of market demand. Suppose, then, that Pinn offers retailers a 10% loyalty rebate on all purchases if they buy 70% of their requirements from Pinn. The \$0.90 per unit discounted price is not below Pinn’s cost and thus would not run afoul of *Brooke Group*. Yet, it might cause Willson’s exclusion even though Willson is an equally efficient rival. A typical retailer that initially (before the rebate announcement) satisfied its requirements by purchasing sixty cans of Pinn balls for \$60 and forty Willson cans for \$40 could, after implementation of the rebate plan, meet its requirements by spending \$63 to obtain seventy Pinn cans and \$30 to obtain thirty Willson cans. In order to prevent a loss of market share that would drive it below MES, Willson would need to match Pinn’s \$7 discount. But doing so would require it to cut its \$1 per-unit price by 17.5 cents ($\$0.175 * 40 = \7.00), so its price would fall below its cost of \$0.90 per unit. See Lambert, *supra* note 115, at 932–33.

188. A competitive rival—one that was both determined and capable at MES of matching the defendant’s efficiency—could (and would) prevent being in the position to be excluded by an above-cost loyalty discount. For example, in the hypothetical in note 187, nondominant rival Willson, had it acted as a *determined* rival, would have charged a price approaching or equal to its cost (\$0.90/unit) *prior to* implementation of Pinn’s loyalty rebate and thereby would have grown its market share to a point at which Pinn’s rebate strategy could not have driven it below MES. Moreover, a strategy that would prevent a nondominant but equally efficient firm like Willson from being harmed by a dominant rival’s above-cost loyalty rebate would be for it to give its own loyalty or volume discounts *from the outset*, securing up-front commitments from enough buyers (in exchange for discounted prices) to ensure that its production stayed above MES. In the end, then, any truly competitive rival ought not to be excluded by a dominant seller’s above-cost loyalty rebate. Lambert, *supra* note 115, at 933. Straightforward application of the *Brooke Group* safe harbor to loyalty rebates would further dynamic efficiency by signaling to rivals capable of matching the dominant firm’s efficiency that they must act aggressively—and in a manner that benefits consumers—to grow their market share and thereby avoid exclusion.

189. See Richard A. Duncan & Brian S. McCormac, *Loyalty & Fidelity Discounts & Rebates in the U.S. & E.U.: Will Divergence Occur Over Cost-Based Standards of Liability?*, 9 SEDONA CONF. J. 133, 144 (2008) (“A cost-based standard which permits all loyalty rebate programs which do not result in the marginal units which are affected by the rebate being functionally discounted below marginal cost—with some consideration of post-predation recoupment—appears to be the standard toward which commentators and courts will soon gravitate.”); Robert H. Lande, *Should Predatory Pricing Rules Immunize Exclusionary Discounts?*, 2006 UTAH L. REV. 863, 877–80 (applying “discount attribution” test to single-product loyalty discounts and rebates).

reliability (and seem unjustified in light of dynamic effects),¹⁹⁰ the ex ante determination it requires of business planners—i.e., how many sales are contestable—is far simpler than those required by the RRC, consumer welfare-balancing, and sacrifice-based approaches.¹⁹¹

For bundled discounts, the ECR approach would create a reliable safe harbor where the discounter *either* (1) priced its products above cost under the “discount attribution” test described below *or* (2) maintained a willingness to accept any attractive supplier offer from a less-diversified rival. With bundled discounts, a straightforward application of *Brooke Group*—i.e., the discount is legal as long as the discounted price for the bundle exceeds the aggregate cost of the products within it—would be underdeterrent because even such an “above-cost” bundled discount may exclude the discounter’s equally efficient but less diversified rivals. Because such rivals must match on their competitive products the entire amount of the discount that the discounter funds by giving up profit margin on a larger collection of products, they may have no choice but to price below cost.¹⁹² And this may be true even if (1) the discounter’s bundled price exceeds the aggregate cost of the bundled products and (2) the less diversified rivals produce their competitive products as efficiently as the discounter.¹⁹³ In light of this possibility, a

190. See *supra* note 188 and accompanying text.

191. The RRC definition would require the business planner to determine (1) what level of output or market share achieves all available efficiencies and (2) what level of discount would achieve that level of sales but no more. See *supra* notes 44–45 and accompanying text. Consumer welfare-balancing would require a prediction of how a subsequent factfinder would weigh the consumer benefits from lower prices (because of the loyalty discount) against any consumer harm from weakened rivals. See *supra* notes 62–65 and accompanying text. The no economic sense test would require the planner to determine whether each increment of discount and each incremental level of loyalty required to achieve the discount makes economic sense but for its ability to weaken rivals. See *supra* notes 88–92 and accompanying text.

192. See *LePage’s Inc. v. 3M*, 324 F.3d 141, 155 (3d Cir. 2003) (en banc) (“The principal anticompetitive effect of bundled rebates . . . is that when offered by a monopolist they may foreclose portions of the market to a potential competitor who does not manufacture an equally diverse group of products and who therefore cannot make a comparable offer.”).

193. Consider, for example, a slightly revised version of a hypothetical set forth in *Ortho Diagnostic Systems v. Abbott Laboratories, Inc.*, 920 F. Supp. 455, 467 (S.D.N.Y. 1996). Manufacturer *A* sells both shampoo and conditioner and competes against another producer *B* that sells only shampoo. *B* is the more efficient shampoo manufacturer; it can produce a bottle of shampoo for \$1.25, while it costs *A* \$1.50 to do so. *A* produces conditioner, over which it commands some market power, for \$2.50/bottle. If sold separately, *A* charges \$2.00 for shampoo and \$4.00 for conditioner, but it charges only \$5.00 for a bundle of the products. While that \$1.00 bundled discount results in an above-cost price (*A*’s aggregate cost is \$4.00), it may still tend to exclude *B*, which would have to

straightforward application of *Brooke Group* (i.e., adoption of the so-called “aggregate discount” rule)¹⁹⁴ would create significant error costs stemming from false acquittals.¹⁹⁵ A better price-cost safe harbor results from application of the discount attribution test: attribute the entire dollar value of the bundled discount to the competitive product sold by a less diversified rival, and ask whether the product, so discounted, is priced above the discounter’s incremental cost. If so, any competitive rival could match the discount, and it should be legal.¹⁹⁶

In addition to limiting its discounts so that they result in above-cost pricing under the discount attribution test, there are other ways a bundled discounter might ensure that its conduct could not exclude competitive rivals. Like a firm confronting a competitor’s exclusive dealing or tying, a single-product rival of a bundled discounter could prevent its foreclosure by becoming a supplier to the discounter.¹⁹⁷ If the rival were at least as efficient as the bundled discounter, or would become so by expanding to MES, it could offer to supply the discounter for a price the discounter would find attractive (i.e., a price at or below the discounter’s own cost of producing and distributing the product); if the rival were determined, it would make such an offer, at least as a last resort.¹⁹⁸ A bundled discounter could thus avoid

lower its shampoo price to \$1.00—a level below its own cost—in order to attract customers who would have to pay the \$4.00 unbundled price for *A*’s conditioner.

194. *Cascade Health Solutions v. PeaceHealth*, 515 F.3d 883, 904 (9th Cir. 2008) (describing the “aggregate discount” rule as one that “condemns bundled discounts as anticompetitive only in the narrow cases in which the discounted price of the entire bundle does not exceed the bundling firm’s incremental cost to produce the entire bundle”).

195. *See Lambert*, *supra* note 22, at 1700–05 (explaining why rule of per se legality for above-cost bundled discounts is undesirable).

196. *See Cascade Health Solutions*, 515 F.3d at 906–08 (describing and adopting discount attribution safe harbor).

197. *See Lambert*, *supra* note 22, at 1747–50 (explaining how a competitive rival could avoid exclusion by a bundled discount by becoming a supplier to the discounter).

198. Small, regional airlines, facing threats of exclusion from what is essentially bundled discounting, have successfully taken this tack. A significant impediment facing such airlines is the major carriers’ ability to engage in bundled discounting—to offer a price for a “bundle” of flights going from departure point to hub to destination that is significantly lower than the sum of the prices of two flights, one from departure point to hub and the other from hub to destination. A smaller carrier servicing only one leg of the journey (either between departure point and hub city or between hub city and destination, but not both) would have to absorb the entire amount of the package discount on the single leg it offered. That requirement could force the regional airline to price below its cost. Despite this possibility, regional airlines have remained in business—and have thrived—by becoming suppliers to the major carriers. *See Eric Wieffering, Engine of Change*, MINNEAPOLIS STAR TRIB., May 11, 2003, at D6 (documenting successful supply relationships between small regional and major air carriers and noting that “Northwest [Airlines] and most other major network carriers experienced a decline in traffic in 2002

excluding any competitive rival by expressing a willingness to accept (and actually accepting) any favorable supplier offer from a rival finding itself squeezed by the discount. As long as the discounter could establish that it turned down only supply offers that were unfavorable (on price or quality grounds), indicating that the offerors were not “competitive,” it could avoid liability for having excluded a competitive rival.

2. Structuring a Rule of Reason Based on the ECR Definition of Exclusionary Conduct

Having considered the safe harbors the ECR definition of exclusionary conduct would generate, we now consider what litigation structure—required showings, proof burdens, etc.—would best implement the definition. Because the ECR definition ultimately denies recovery absent a showing that the defendant’s behavior has excluded or is likely to exclude a competitive rival, one possible approach would be to require every plaintiff in a monopolization or attempted monopolization action to prove that it is a competitive rival, much the way antitrust plaintiffs seeking monetary damages or injunctive relief must establish antitrust injury¹⁹⁹ and antitrust standing.²⁰⁰ Such an approach, however, fails to account for the fact that plaintiffs usually are not in the best position to make all the showings necessary to establish their competitive-rival status. An optimal rule of reason would instead put the burden on plaintiffs to establish the competitive rival-related facts to which they are likely to be privy while burdening defendants with proving those for which they are more likely to possess the relevant evidence.

but traffic on most regional carriers soared”); Bill McGee, *Regional Jets Crowd Skies, Squeeze Fliers*, USA TODAY (June 13, 2012), <http://travel.usatoday.com/experts/mcgee/story/2012-06-14/Regional-jets-crowd-skies-squeeze-fliers/55584132/1> (observing that 53% of nation’s commercial airline departures are operated by regional airlines acting as suppliers for major carriers). In similar fashion, single-product producers finding themselves hampered by a bundled discount may be able to stay in business, and thrive, by becoming suppliers to the discounter.

199. See *Cargill, Inc. v. Monfort of Colo., Inc.*, 479 U.S. 104, 113 (1986) (requiring antitrust injury in private actions seeking injunctive relief); *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 489 (1977) (stating that to recover antitrust damages, “[p]laintiffs must prove antitrust injury, which is to say injury of the type the antitrust laws were intended to prevent and that flows from that which makes defendants’ acts unlawful” (emphasis omitted)).

200. See *Associated Gen. Contractors of Cal., Inc. v. Cal. State Council of Carpenters*, 459 U.S. 519, 535 n.31 (1983) (“Harm to the antitrust plaintiff is sufficient to satisfy the constitutional standing requirement of injury in fact, but the court must make a further determination whether the plaintiff is a proper party to bring a private antitrust action.”).

Recall that competitive-rival status exists only where a rival is both determined, meaning that it takes all reasonable efforts to maintain and grow sales in the face of the defendant's conduct, and technically competent, meaning that it is able to match the defendant's efficiency when operating at MES.²⁰¹ Although a plaintiff will normally possess evidence related to the former component (e.g., information on the steps it took to compete with the defendant's allegedly exclusionary conduct), much of the evidence related to whether it could match the defendant's efficiency when operating at MES will reside with the defendant, who alone will know its own production costs and thus whether the plaintiff's best supplier offer, reflective of the plaintiff's efficiency at MES,²⁰² was attractive.

In light of the likely distribution of evidence related to a plaintiff's competitive-rival status, an optimal litigation structure would place the initial burden on the plaintiff to establish that: (1) the defendant's conduct somehow excluded or threatened to exclude the plaintiff from the market and drive (or hold) it below MES; (2) the plaintiff pursued all reasonable options for staying in the market at a level where it could produce at MES, ultimately offering to supply the defendant at a price approaching the plaintiff's incremental cost; and (3) the defendant rejected plaintiff's offer. Such a showing, involving evidence within the plaintiff's possession, would establish a presumption that the plaintiff was a competitive rival excluded by the defendant's action. The defendant could then rebut that presumption by demonstrating that the plaintiff's supplier offer was unfavorable because either the price offered exceeded the defendant's own cost or the quality of the plaintiff's product or service was inferior.²⁰³ That

201. See *supra* Part II.B and notes 182–96 and accompanying text.

202. A determined rival would, if necessary to survive, lower its price to the level of its incremental cost. A plaintiff claiming to be a determined rival can therefore be assumed to have lowered its price under its supplier offer to a level reflecting what its incremental cost would be if the offer were accepted and the plaintiff were permitted to grow to MES. If the plaintiff would not achieve MES (or at least a scale sufficient to allow it to match the defendant's efficiency) by becoming a supplier to the defendant, then market demand must not warrant the plaintiff firm's existence (i.e., the number of firms in the market must be inefficiently large), so that exit of the plaintiff firm would not occasion an efficiency loss. See *supra* note 150.

203. In addition to rebutting the presumption of competitive-rival status, the defendant could prevent such a presumption from arising by showing that the plaintiff failed to pursue other reasonably available opportunities to maintain its scale. For example, in a bundled discount case, the defendant might show that a less diversified plaintiff failed to collaborate with other producers to assemble a competitive bundle that could have competed with the defendant's. See *infra* note 252 and accompanying text. Establishing that the plaintiff failed to pursue reasonable opportunities to maintain its scale would negate the second prong of the plaintiff's required showing.

demonstration, involving evidence within the defendant's possession, would establish that the plaintiff was not, in fact, a competitive rival. If the defendant could not make such a showing, however, the presumption of competitive-rival status would stand.

Allocating proof burdens in this fashion would enable courts to determine at the lowest possible administrative cost whether the defendant's conduct as a whole excluded, or would likely exclude, a competitive rival from the defendant's market. More importantly, knowledge that this litigation structure would be used would enable business planners to ensure against liability for monopolization or attempted monopolization by considering all supplier offers from allegedly excluded rivals and accepting any that would reduce, or at least not increase, their firms' costs. Freed from concern about antitrust liability, such business planners would be more willing to pursue efficient but novel business practices and other conduct that would enhance their output but whose immediate effect on rivals is uncertain.

III. CRITICISMS OF THE ECR DEFINITION AND RESPONSES THERE TO

A. *Concerns About Underdeterrence*

Critics of the ECR definition of unreasonably exclusionary conduct will likely contend that embracing the definition, along with the safe harbors and general litigation structure it would call for, would lead to underdeterrence of Section 2 offenses. Some may simply assert that the definition impairs deterrence by requiring monopolization and attempted monopolization plaintiffs to make a showing they previously have not had to make, namely, that they took all reasonable steps to stay in business, ultimately offering to supply the defendant at a price approaching their incremental cost. This new requirement, however, replaces more difficult showings that would be required under the other definitions of exclusionary conduct and therefore does not increase the burden facing Section 2 plaintiffs.²⁰⁴ Moreover, the notion that any increase in a Section 2

204. Under the other proposed definitions, the plaintiff would have to show that the defendant's conduct either imposed unjustified costs on rivals (RRC), *see supra* notes 38–45 and accompanying text, created consumer harm in excess of consumer benefit (consumer welfare-balancing), *see supra* notes 46–55 and accompanying text, or was economically irrational absent an increase in market power (no economic sense test), *see supra* notes 82–92 and accompanying text. I am assuming, of course, that the law requires

plaintiff's burden of proof impairs deterrence implicitly assumes that optimal deterrence results from maximizing the number of private enforcement actions. That is unlikely. Many private Section 2 actions are non-meritorious strike suits that create administrative costs and chill aggressive competition. One objective of the ECR definition's additional requirement for plaintiffs is to weed out such lawsuits by ensuring that plaintiffs first compete aggressively by making all reasonable efforts to avoid exclusion before seeking antitrust's assistance. Even if it reduces the total number of lawsuits, then, the requirement will strengthen the degree to which Section 2 fosters competition.

We turn, then, to three more persuasive reasons for worrying that the ECR definition might result in underdeterrence. In turn, I address (1) concerns that some truly competitive rivals could not practicably make attractive supplier offers; (2) the possibility that consumers would benefit from protecting some non-competitive rivals; and (3) the intuition that monopolization doctrine should police behaviors that extract consumer surplus, even if they are non-exclusionary.

1. Could Competitive Rivals that Do Not Currently Match the Defendant's Efficiency Really Make Attractive Supplier Offers?

Critics may contend that many rivals that are not currently as efficient as the defendant, but would be at MES, will be incapable of making an attractive supplier offer and thus unable to establish their competitive-rival status. If a plaintiff is not currently operating at MES, then supplying the defendant at a price equivalent to the plaintiff's (lower) cost at MES would require the plaintiff to price below cost until the plaintiff achieves such scale. Consider, for example, a rival that currently incurs a marginal cost of \$15 but would face a marginal cost of \$13 if it were to expand production to MES. Suppose that a defendant with a marginal cost of \$14 engages in some exclusionary business practice that reduces sales to the rival. If the rival were to offer to supply the defendant at \$13—the rival's cost

a monopolization or attempted monopolization plaintiff to establish that the conduct complained of is unreasonably exclusionary. Current doctrine on some exclusionary practices, such as tying, requires no such showing. *See Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 461–62 (1992) (setting forth elements of quasi per se rule against tying); *Fortner Enters., Inc. v. U.S. Steel Corp.*, 394 U.S. 495, 499–503 (1969) (discussing at length the application of the quasi per se rule against tying). With respect to such practices, the ECR definition may raise a plaintiff's proof burden, but it would also ensure—unlike the prevailing liability rule—that only truly anticompetitive practices would give rise to liability.

when operating at MES—the defendant would likely accept the offer and the rival would stay in business. But since the rival’s current marginal cost is \$15, supplying to the defendant at any price below that level would require the rival to sustain immediate losses. If the rival could not obtain financing to cover those losses and expand its operations to MES, it would not be in a position to make an attractive supplier offer to the defendant even though it would surpass the defendant’s efficiency at MES. As explained above, the ECR definition assumes that a rival that could eventually match or exceed a defendant’s efficiency could obtain the financing necessary to grow to MES and, in the meantime, cover any losses from below-cost pricing.²⁰⁵ But such an assumption, critics are likely to argue, may involve excessive optimism about the efficacy of capital markets.²⁰⁶

For one thing, a determined rival with the technical capability to match or exceed a defendant’s efficiency at MES may face a “chicken-or-egg” dilemma. Providers of capital may refuse to finance the rival’s expansion and period of below-cost pricing if it has not yet secured the supplier agreement that will guarantee demand for its expansion-level output; yet, a dominant firm may be reluctant to enter such an agreement with the rival absent some guarantee that expansion financing can be obtained. In other words, the supplier contract is a pre-requisite to expansion financing, but expansion financing is a pre-requisite to securing the supplier contract.

This apparent difficulty is easily remedied through the use of contracts incorporating conditional promises. Just as a prospective homebuyer may extend an offer that, if accepted, would bind her to purchase a new home *if* certain conditions are satisfied (e.g., if she is able to obtain financing at a specified interest rate by a certain date), a competitive rival could make an offer that, if accepted, would bind it to supply the dominant firm at a price equal to or below the defendant’s cost *if* the rival secured expansion financing on acceptable terms.²⁰⁷ If the dominant firm were to accept, the rival would be in a good position to obtain expansion financing. If expansion financing turned out not to be available, the deal would be off; the rival’s failure to supply would not constitute a breach on its

205. See *supra* notes 135–36 and accompanying text.

206. See, e.g., Richard R. Nelson, *Comments on a Paper by Posner*, 127 U. PA. L. REV. 949, 950 (1979) (“The Chicago proposition that scale economies don’t serve as a barrier to entry hinges on explicit or implicit assumptions about perfect capital markets and no adjustment lags or costs.”).

207. See generally RESTATEMENT (SECOND) OF CONTRACTS § 224 (1979) (defining “condition”).

part (the condition to its promise being unsatisfied),²⁰⁸ nor would the dominant firm's failure to purchase from the rival constitute a breach (the rival's performance being a constructive condition of the dominant firm's duty).²⁰⁹ Thus, the chicken-or-egg problem should not preclude a competitive rival from staying in business by supplying a dominant defendant.²¹⁰

There may be a more significant problem, though, for below-MES rivals that upon achieving MES would only match—not exceed—the dominant firm's efficiency. A dominant defendant would be willing to accept such a rival's supplier offer only if the rival charged a price equal to its marginal cost.²¹¹ But if the rival earned only its marginal cost at MES, it might be able to cover the incremental cost of producing each unit but could not afford to service its growth financing (e.g., any debt it took on to achieve MES). Thus, it could not obtain the funds needed to grow to the point at which it would match the defendant's efficiency.

While this may be a theoretical difficulty for the ECR definition, it is likely to matter little in practice. The matter is of course irrelevant for rivals already operating at MES. Any rival that had achieved that level of output and could match the defendant's efficiency should be able to make an attractive supplier offer (or, in the case of predation, to match the defendant's pricing) and thereby maintain its scale. Nor would the difficulty afflict rivals that are not operating at MES but would have a substantial efficiency advantage at that level of output; any such rival should be able to finance its expansion.²¹² A rival that would only match the defendant's efficiency at MES but would be able to make sales outside the venture (i.e., to customers other than the defendant) at prices in excess of its incremental cost could use the profits from non-venture sales to finance its expansion. Thus, the only context in which the problem at

208. *See generally id.* § 225 (discussing effect of non-occurrence of condition).

209. *See generally id.* § 237 (discussing required performances as constructive conditions of exchange).

210. The drafting requirements and uncertainties involved in executing these sorts of contingent agreements would, of course, raise transaction costs. But, given the widespread use of similar contingent agreements in other contexts, one would not expect such costs to thwart supplier arrangements that would otherwise be mutually beneficial.

211. Any price greater than a price equal to a dominant defendant's marginal cost would not be favorable to the defendant, which would be better off producing the product itself.

212. The rival could offer to supply the defendant at some amount less than the defendant's cost but greater than its own (at MES), and the defendant would accept. After achieving MES, the rival would earn revenues in excess of its costs and could therefore service its expansion financing.

issue matters is one in which a below-MES rival would, at MES, at least match the defendant's efficiency but (1) would not have a sufficient efficiency advantage to service expansion financing and (2) would not be able to make sales outside the supply agreement at prices sufficient to service expansion financing. In such circumstances, though, the rival's continued existence in the market would provide little in the way of consumer benefit. If the defendant were charging above-cost prices, the rival's presence would be beneficial. But in that case, the rival ought to be able to sell outside the venture (at a price equal to or just below the defendant's) and use the incremental revenue above its cost to finance its expansion. If the rival could not do so, then the defendant must be charging a price very near its cost, in which case the presence of an equally efficient rival that would charge, at best, the same price would provide no significant consumer benefit. It seems, then, that there is little reason to worry that truly competitive rivals would be unable to make the sort of supplier offers necessary to establish liability under the ECR approach.

2. Shouldn't Antitrust Protect Even Non-Competitive Rivals?

Under the ECR definition, a firm is free to engage in any non-naked (mixed bag) unilateral practice that would exclude only rivals that could not, at MES, match or exceed the defendant's efficiency. Such non-competitive rivals, though, may be the only competition likely to materialize in a particular market. Accordingly, the ECR definition is subject to a criticism often levied against Judge Posner's more permissive equally efficient rival definition, namely, that it could create social costs in the form of allocative inefficiencies by improperly acquitting acts that cause the exclusion of rivals whose market presence would discipline dominant firms.²¹³

The mere fact that a proposed antitrust rule may result in false acquittals and consequent allocative inefficiency, however, does not imply that the rule is socially undesirable. In the presence of incomplete information and limited predictive abilities, every liability rule is prone to occasional error and is thus likely to create some social cost from false acquittals or false convictions.²¹⁴ To demonstrate

213. See *supra* notes 34–35 and accompanying text.

214. See Geoffrey A. Manne & Joshua D. Wright, *If Search Neutrality Is the Answer, What's the Question?*, 2012 COLUM. BUS. L. REV. 151, 184–85 (“The key challenge facing any proposed analytical framework for evaluating monopolization claims is distinguishing pro-competitive from anticompetitive conduct. Antitrust errors are inevitable because much of what is potentially actionable conduct under the antitrust laws frequently actually benefits consumers, and generalist judges are called upon to identify anticompetitive

that a proposed liability rule is suboptimal, a critic must show that some other rule would entail lower total error costs while keeping administrative costs in check.²¹⁵ It is not enough, then, for critics to show that the ECR definition creates error cost by wrongly acquitting conduct that could exclude or impair some non-competitive rivals whose unimpeded participation in the market would benefit consumers. Instead, such critics must further establish that it is possible to craft a broader liability rule that would condemn such conduct without generating other error costs that exceed those purportedly created by the ECR definition. They likely could not do so.

While the ECR definition may generate some false acquittals and thereby occasion allocative inefficiency, broader liability rules—those that would afford protection to some set of noncompetitive rivals—create risks of false convictions and could deter many instances of efficient, but novel, conduct. To see this point, consider a firm that is considering a somewhat novel business practice that is efficient on the whole but capable of usurping business from rivals and thereby possibly reducing their efficiency or driving them from the market. Suppose, for example, that a manufacturer possessing market power desires to make investments in its multi-brand dealers' outlets but is concerned about free-riding by other manufacturers.²¹⁶ To induce loyalty and prevent inter-brand free-riding, the manufacturer offers a 15% discount (still resulting in an above-cost price) to retailers that agree to carry at least 80% of their requirements in the manufacturer's brand for a three-year period. For retailers that accept the offer, the manufacturer could expect low levels of inter-brand free-riding, and it would therefore make significant sales-enhancing, consumer-friendly investments in those retailers' outlets.

Under the consumer welfare-balancing, RRC, and sacrifice-based definitions, a manufacturer considering this efficient course of action could have no confidence that its conduct would not be

conduct with imperfect information.”). See generally Cass R. Sunstein, *Problems With Minimalism*, 58 STAN. L. REV. 1899, 1913 (2006) (“When the Court lacks relevant information, so that any rule will predictably misfire, rules are hazardous.”).

215. See Easterbrook, *supra* note 115, at 16 (“The legal system should be designed to minimize the total costs of (1) anticompetitive practices that escape condemnation; (2) competitive practices that are condemned or deterred; and (3) the system itself.”). See generally Lambert, *supra* note 115, at 874–79 (setting forth decision-theoretic approach to crafting antitrust liability rules).

216. See *supra* note 143 and accompanying text (discussing possibility of “inter-brand free-riding”).

deemed unreasonably exclusionary. Under a consumer welfare-balancing approach, a jury might find that the consumer harm from reducing the scale of some rivals would exceed the consumer benefits of lower immediate prices and output-enhancing investments in compliant dealers' outlets.²¹⁷ Under the RRC and no economic sense approaches, a jury could easily determine that *some increment* of the defendant's conduct either reduced rivals' scale and increased their costs unjustifiably or would have made no economic sense but for its exclusionary effect. For example, under the RRC approach, a jury might conclude that the level of loyalty necessary to justify the manufacturers' investments in its dealers could have been achieved with a 10% (rather than 15%) loyalty discount, or a 15% discount triggered by only 70% (rather than 80%) loyalty, or a discount like the one utilized but requiring only a two-year (not three-year) commitment. Any "unnecessary" part of the discount scheme—the incremental 5% discount above 10% off, the additional loyalty required above 70%, or the third year of commitment—would be unnecessary to achieve efficiency benefits and thus could have involved "unjustified" raising of the costs of any rivals who suffered sales losses and thus potentially lost scale efficiencies.²¹⁸ Under the no economic sense test, a jury might conclude that similar incremental parts of the discount scheme were unnecessary to achieve the loyalty required to justify dealer investments and thus would have made no economic sense but for their ability to exclude rivals and thereby permit future supracompetitive pricing.²¹⁹ Thus, the consumer welfare-balancing, RRC, and sacrifice-based approaches—and any other approach that aims to select *some* non-competitive rivals for protection under the antitrust laws—cannot generate reliable guidance and safe harbors for business planners and will thus deter conduct that is efficient on the whole but capable of causing some exclusion.

The key question, then, is whether the allocative inefficiency occasioned by the failure of the ECR definition to protect some non-competitive rivals would exceed the productive efficiency losses broader liability rules would occasion. There are at least two reasons to believe the ECR definition produces lower total error cost. First,

217. See *supra* notes 46–47, 62–68 and accompanying text (criticizing shortcomings of consumer welfare-balancing approach).

218. See *supra* notes 42–45 and accompanying text (describing limitations of RRC approach).

219. See *supra* notes 88–92 and accompanying text (describing the failures of the no economic sense test).

the adverse effect of the ECR definition—enhanced market power resulting from a reduction of price discipline on the dominant firm—tends to be self-correcting, while the adverse effect of broader liability rules—the chilling of efficient (but exclusion-causing) business practices—is not. Market power invites entry and is difficult to sustain.²²⁰ The chilling from a judicial decision wrongly condemning an efficient business practice, by contrast, can be eliminated only by subsequent judicial or legislative action. Thus, less social cost is generally created by failing to condemn some market power-enhancing practices than by wrongly condemning some efficient mixed bag practices and thereby discouraging their use throughout the economy.²²¹

In addition, any underdeterrence caused by the ECR definition is of less concern than the other approaches' overdeterrence because significant overdeterrence is already built into the scheme for privately enforcing the monopolization and attempted monopolization provisions of the antitrust laws. To account for the fact that many antitrust violations—most notably, price-fixing conspiracies—occur in secret and thus frequently escape punishment,²²² the private enforcement provisions of the antitrust laws aim to achieve optimal (or at least better) deterrence by providing for treble damages.²²³ The exclusionary acts giving rise to monopolization and attempted monopolization claims, however, are almost always conducted publicly—not in secret—so the generally applicable treble damage provision of the antitrust laws tends to

220. See *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 589 (1986) (“[I]t is not enough simply to achieve monopoly power, as monopoly pricing may breed quick entry by new competitors eager to share in the excess profits.”); Easterbrook, *supra* note 115, at 2 (“Monopoly is self-destructive. Monopoly prices eventually attract entry.”)

221. As Judge Easterbrook famously explained,

A fundamental difficulty facing [an antitrust] court is the incommensurability of the stakes. If the court errs by condemning a beneficial practice, the benefits may be lost for good. Any other firm that uses the condemned practice faces sanctions in the name of *stare decisis*, no matter the benefits. If the court errs by permitting a [deleterious] practice, though, the welfare loss decreases over time. Monopoly is self-destructive. Monopoly prices eventually attract entry. True, this long run may be a long time coming, with loss to society in the interim. The central purpose of antitrust is to speed up the arrival of the long run. But this should not obscure the point: judicial errors that tolerate baleful practices are self-correcting, while erroneous condemnations are not.

Easterbrook, *supra* note 115, at 2–3.

222. See POSNER, *supra* note 10, at 271.

223. See 15 U.S.C. § 15 (2012); see also HOVENKAMP, *supra* note 77, at 66 (explaining policy rationale for trebling antitrust damages).

occasion overdeterrence in the Section 2 context.²²⁴ A somewhat underdeterrent liability rule, like that resulting from the ECR definition, could help correct this flaw.

In the end, then, the ECR definition—even if imperfect in that it would allow for the exclusion of some non-competitive rivals whose continued existence might benefit consumers—likely produces less consumer harm (lower total error costs) than broader liability rules aimed at protecting some set of non-competitive rivals. Because it also appears to be easier to administer than the other approaches (i.e., to entail lower decision costs), the ECR definition seems to prevail over the other approaches in terms of the decision-theoretic criterion set forth above.²²⁵

3. What About Adverse Consumer Effects from Unilateral Conduct that, While Not Exclusionary, Results in Price Discrimination and Surplus Extraction?

The ECR definition of exclusionary conduct assumes that anticompetitive harm resulting from an instance of actual or attempted monopolization requires the exclusion of a rival—either its complete exclusion from the market or a foreclosure-induced reduction in its scale and thus its competitiveness. Some scholars contend, however, that anticompetitive harms properly policed by monopolization doctrine include *non-exclusionary* effects that result in price discrimination and/or increased extraction of surplus by producers at the expense of consumers.²²⁶ If monopolization doctrine should, in fact, pursue practices that do not exclude rivals but do result in price discrimination or surplus extraction, then the ECR definition, which assigns liability only if the exclusion of a competitive rival is likely, may under-deter. In actuality, however, prevailing monopolization doctrine does not (as a descriptive matter) and should not (as a normative matter) pursue non-exclusionary, but price discriminatory or surplus extractive, effects.

The non-exclusionary effects in question generally result from vertical restraints of trade, most frequently tying. In certain circumstances, even non-exclusionary instances of tying (i.e., instances that do not result in substantial foreclosure from the tied

224. See HOVENKAMP, *supra* note 77, at 66–68; POSNER, *supra* note 10, at 271–73.

225. See *supra* note 115 and accompanying text (setting forth decision-theoretic criterion for optimal definition of unreasonably exclusionary conduct).

226. See, e.g., Elhauge, *supra* note 22, at 420–26 (arguing that Supreme Court precedent deems nonforeclosure price discrimination effects to be anticompetitive); *id.* at 426–42 (arguing that such effects *should* be deemed anticompetitive).

product market) may nevertheless result in price discrimination or surplus extraction in favor of the tying defendant.²²⁷ For example, in a variable proportion tie-in of a complementary product—e.g., a requirement by the producer of a patented and unique photocopier that buyers of its monopoly copier also purchase its unpatented ink—a monopolist may enhance its own profits by effectively price discriminating against high-volume users of its monopoly product, who likely value the product the most.²²⁸ Similarly, sellers (or licensors) of multiple low-marginal cost goods—frequently “information” goods like software, television programming, music, or movies²²⁹—may enhance their own profit and reduce consumer surplus by selling the goods in bundles, effectively tying them together.²³⁰ In both situations, the tie-ins may have price

227. See *id.* at 404–13 (setting forth potential non-foreclosure “power” effects that may transfer surplus from consumers to producer).

228. The manufacturer of the photocopier could lower its price (elevated above cost because of the machine’s unique features) but require purchasers to use only the manufacturer’s brand of ink, for which it would then charge a supracompetitive price. Because it earns its monopoly profits on the ink rather than the machine, the seller would end up charging high-use buyers a higher effective price than low-use buyers, who likely ascribe a lower value to the copier. Output would be higher than if the seller charged a single monopoly price for the machine, for some lower-use consumers who valued the copier below the single-product monopoly price but above its cost would now buy it. However, more of the surplus—the difference between the copier’s cost and price—would go to the manufacturer. See Lambert, *supra* note 36, at 917 (describing so-called “metering” tie-ins); *id.* at 935–50 (explaining why metering tie-ins generally enhance total welfare).

229. An “information good” is generally defined as “anything that can be digitized,” such as a movie, song, book, or computer program. See CARL SHAPIRO & HAL R. VARIAN, *INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY* 3 (1999).

230. Where demand for the tied-together goods is not strongly positively correlated, bundling in this fashion can enhance the monopolist’s profits via surplus extraction. See Elhauge, *supra* note 22, at 405–07, 419–20. In *United States v. Loew’s, Inc.*, 371 U.S. 38 (1962), for example, the defendants, distributors of motion pictures, enhanced their profits by requiring licensees to take films in packages. See George Stigler, *United States v. Loew’s Inc.: A Note on Block-Booking*, 1963 SUP. CT. REV. 152, 152. To visualize the block-booking strategy utilized, suppose that a monopolist film distributor has two films, “The British Patient” (“TBP”) and “Porkee’s,” and two customers, Arthouse and Cineplex. Arthouse values highbrow TBP at \$8,000 and low-brow Porkee’s at \$2,500; Cineplex values TBP at \$7,000 and Porkee’s at \$3,000. If the marginal cost of licensing each film is zero and the distributor licenses the films separately, it would do best by charging \$7,000 for TBP and \$2,500 for Porkee’s, earning profits of \$19,000 ($\$9,500 \times 2$). But by tying the films together (i.e., licensing them as a bundle), the distributor could charge \$10,000 per customer, an amount less than or equal to each customer’s reservation price for the package, thereby earning profits of \$20,000. Absent the tie-in, Arthouse would have enjoyed surplus of \$1,000 on TBP, and Cineplex would have enjoyed surplus of \$500 on Porkee’s; the tying transfers \$1,000 of consumer surplus to the distributor. See POSNER, *supra* note 10, at 235 (“When the products are priced separately, the price is

discriminatory or surplus extractive effects *even if* they do not foreclose rivals from the market or reduce their scale at all.²³¹ Accordingly, scholars such as Professor Elhauge have argued that tying liability, which may arise under the monopolization and attempted monopolization provisions of Section 2 of the Sherman Act, should result even in situations not involving foreclosure (exclusion) of the tying defendant's rivals.²³² Because the ECR definition would preclude liability for actual or attempted monopolization absent such exclusion, these scholars would contend that it is underdeterrent.

It is unlikely, though, that current law deems the non-exclusionary but price discriminatory or surplus extractive effects of unilateral business practices to be "anticompetitive" effects. Admittedly, the Supreme Court has spoken somewhat equivocally on this matter. Purporting to state "the rationale on which the illegality of tying arrangements is based," a 1969 dissent by Justice White mentioned that such arrangements "may be used [as in the photocopier example²³³] . . . as a counting device to effect price discrimination; and they may be used [as in *Loew's*²³⁴] to force a full line of products on the customer so as to extract more easily from him a monopoly return on one unique product in the line."²³⁵ Subsequently, those words were quoted favorably in a majority opinion, in which the Court went on to observe that tying "can increase the social costs of market power by facilitating price discrimination, thereby increasing monopoly profits over what they would be absent the tie."²³⁶ Elhauge has pointed to such statements as grounds for concluding that non-exclusionary, surplus extractive effects are anticompetitive and appropriately give rise to antitrust liability.²³⁷

depressed by the buyer who values each one less than the other buyer does; the bundling eliminates this effect.").

231. See Elhauge, *supra* note 22, at 404–13 (describing potential non-foreclosure effects of tie-ins).

232. See *id.* at Part IV (arguing that tying's surplus-extractive and price discriminatory effects should be deemed anticompetitive even when they do not occasion substantial market foreclosure).

233. See *supra* note 228 and accompanying text.

234. See *supra* note 230 and accompanying text.

235. *Fortner Enters. v. U.S. Steel Corp.*, 394 U.S. 495, 513–14 (1969) (White, J., dissenting).

236. *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 14–15 (1984).

237. See Elhauge, *supra* note 22, at 423.

The Supreme Court's 2006 decision in *Illinois Tool Works, Inc. v. Independent Ink*,²³⁸ however, rejected the notion that tying's price discrimination and surplus extraction effects are anticompetitive.²³⁹ The plaintiff in that case asked the Court to rule (as an alternative to plaintiff's broader requested holding) that tying market power will be presumed when a defendant with a patent on its tying product imposes a "requirements tie," mandating that purchasers also buy their requirements of unpatented complements from the defendant.²⁴⁰ In an amicus brief cited by the Court, a group of professors pressed for such a rule, contending that the presumption of tying market power in cases involving patented tying products and requirements ties would enable antitrust to police the use of tie-ins to price discriminate and earn greater profits for sellers.²⁴¹ Such price discrimination and surplus extraction, the professors argued, are anticompetitive effects that are properly addressed by antitrust.²⁴² The Court, however, was not persuaded. Although it conceded that metering tie-ins may result in price discrimination, referencing its prior acknowledgement of that point,²⁴³ the Court rejected the ruling advocated by the amici professors because it concluded that price discrimination "occurs in fully competitive markets" and that "[m]any tying arrangements, even those involving patents and requirements ties, are fully consistent with a free, competitive market."²⁴⁴ The Court thus indicated that non-exclusionary price discrimination and surplus extraction, while possible effects of tying, are not to be deemed "anticompetitive" effects.

Nor should they be. As I have explained elsewhere, metering tie-ins are a form of second-degree price discrimination that usually enhances total welfare.²⁴⁵ Even if they are conceived as instances of third-degree price discrimination, which sometimes reduces total

238. 547 U.S. 28 (2006).

239. *Id.* at 45.

240. *Id.* at 43–44 (discussing alternative narrower holding requested by plaintiff, which had also asked the Court to hold more broadly that tying market power should be assumed whenever the tying product is patented).

241. Brief of Professors Barry Nalebuff, Ian Ayres, and Lawrence Sullivan as Amici Curiae in Support of Respondent at 4, *Indep. Ink*, 547 U.S. 28 (No. 04-1329), 2005 WL 2427646, at *4 (cited by Supreme Court in *Indep. Ink*, 547 U.S. at 44).

242. *Id.* at *18–*27 (section of brief entitled "The Use of Tying as a Metering Device Implicates Serious Antitrust Concerns").

243. *Indep. Ink*, 547 U.S. at 44 (citing *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 15 n.23 (1984)).

244. *Id.* at 45.

245. See Lambert, *supra* note 36, at 935–41; see also Hovenkamp & Hovenkamp, *supra* note 146, at 943–52 (discussing efficiency of metering tie-ins).

welfare,²⁴⁶ the metering tie-ins generally observed in actual practice tend to expand market output and thereby enhance total welfare.²⁴⁷ Bundling tie-ins of the sort involved in *Loew's* also tend to enhance total welfare.²⁴⁸ They do so by enabling producers of goods with very low marginal costs to set prices that will permit use by all consumers attaching an above-cost value to the goods but still provide the seller with enough revenue to cover the total cost of producing the goods.²⁴⁹ In addition to these improvements in static efficiency, both types of tie-ins—metering and *Loew's*-type bundling—enhance dynamic efficiency. By enabling the entrepreneur to capture a greater portion of the surplus her innovation creates, tying-induced price discrimination and surplus extraction increase the reward for developing unique products and services and thereby encourage innovation.²⁵⁰ The Supreme Court was therefore correct to conclude that non-exclusionary but price discriminatory or surplus extractive business practices are not anticompetitive. The ECR definition appropriately requires actual or likely exclusion as a prerequisite to liability.

B. Concerns About Collusion

The Supreme Court has warned that “compelling negotiation between competitors may facilitate the supreme evil of antitrust: collusion.”²⁵¹ Because the ECR definition encourages firms to avoid

246. See Hovenkamp & Hovenkamp, *supra* note 146, at 927–37 (explaining how third-degree price discrimination may, under certain circumstances, reduce total surplus).

247. See Lambert, *supra* note 36, at 941–50.

248. See *supra* note 230 (discussing use of tying to extract consumer surplus in *United States v. Loew's, Inc.*, 371 U.S. 38 (1962)).

249. See Lambert, *supra* note 36, at 950–53.

250. See *id.* at 953–59. Innovators' inability to capture more than a fraction of the surplus their efforts produce tends to retard innovation. By transferring to the innovator more of the value she produces, tying-induced price discrimination and surplus extraction help mitigate this positive externality and thereby encourage innovation. See Benjamin Klein & John Shepard Wiley, Jr., *Competitive Price Discrimination as an Antitrust Justification for Intellectual Property Refusals to Deal*, 70 ANTITRUST L.J. 599, 619 (2003) (“[P]rice discrimination allows producers to recoup more of the social value of their innovations and thereby leads to more innovation.”).

251. *Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 408 (2004). Note also, however, the Court's insinuation in the same opinion that a dominant firm's refusal to accept a rival's offer to enter a venture that would enhance both overall market output and the dominant firm's own profits may evince an anticompetitive scheme on the part of the dominant firm. See *id.* at 409 (distinguishing *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985), on grounds that that “defendant's unilateral termination of a voluntary (and thus presumably profitable) course of dealing suggested a willingness to forsake short-term profits to achieve an anticompetitive end” and observing that defendant's “unwillingness to renew the ticket even if compensated at retail price

exclusion or scale reductions by negotiating with and perhaps becoming suppliers to their rivals, critics will likely contend that it flouts the Court's warning and may lead to consumer harm.

Consider, for example, a dominant firm that engages in exclusion-causing conduct but avoids Section 2 liability by accepting a competitive rival's supplier offer, thereby enabling the rival to maintain MES. Suppose the dominant firm then reduces its own output by more than the amount the rival supplied and raises its price to a supracompetitive level. Such a strategy would fail if the supplier rival remained free to sell directly to the dominant firm's customers; the supracompetitive price would induce the rival to expand its own output and undersell the dominant firm. But suppose the dominant firm strikes a deal to share its monopoly profits with the rival (e.g., by increasing the amount paid under the supplier agreement or by making some sort of side payment) in exchange for the rival's restraining its own production. By encouraging excluded rivals to negotiate supplier deals with dominant firms, critics may contend, the ECR definition would facilitate this sort of collusion.

There is little reason to worry, though, that the ECR definition will cause the proliferation of these sorts of arrangements. As an initial matter, actual supplier agreements between exclusion-causing dominant firms and their rivals will probably be rare. If a rival could find any other means to maintain its scale, it would likely do so;²⁵² extending a supplier offer to the exclusion-causing firm will usually be a last resort.²⁵³ Moreover, if the supplier offer is unattractive, indicating that the rival could not match the defendant's efficiency at

revealed a distinctly anticompetitive bent" and "suggest[ed] a calculation that its future monopoly retail price would be higher").

252. For example, a single-product rival facing exclusion by a dominant firm's bundled discount might be able to avoid exclusion by collaborating with other producers to offer a competing bundled discount. See Lambert, *supra* note 22, at 1746-47 (explaining how single-product rival could compete against bundled discount via collaborative bundle with other producers); Hovenkamp, *supra* note 22, at 855 (noting that there is no liability for bundling "if the market contains at least one other significant firm that offers the same package that the defendant is discounting").

253. Because a dominant firm engaged in exclusion-causing conduct could avoid liability by either (1) accepting or demonstrating the unattractiveness of a rival's supplier offer (the former would avoid exclusion altogether; the latter would rebut the presumption that the plaintiff is a competitive rival) or (2) demonstrating that plaintiff failed to avail itself of some other reasonably available opportunity to achieve or maintain MES (doing so would prevent the presumption of plaintiff's competitive-rival status from arising), see *supra* note 203 and accompanying text, plaintiffs seeking to establish unreasonable exclusion under the ECR definition will generally pursue all other reasonably available opportunities to avoid exclusion before seeking to become a supplier to the defendant.

MES and thus is not a competitive rival, the dominant firm will not accept it. Most likely, the number of supplier offers extended (because the rival can find no other way to maintain its scale in the face of the defendant's conduct) and accepted (because the rival is truly competitive with the defendant) will be relatively small.

Of that small number, those resulting in the sort of collusion described above would be easily policed under other provisions of the antitrust laws. Such arrangements are naked horizontal-output restraints and are per se illegal under Section 1 of the Sherman Act.²⁵⁴ Moreover, when adopted in connection with the sort of supplier agreements encouraged by the ECR definition, they would be easy to identify. Any reduction in output and increase in price by a dominant firm entering a supplier agreement with a rival would occasion suspicion. Absent a compelling justification for the dominant firm's output reduction and the rival's failure to expand its own output in the face of rising prices, an inference of collusion—and liability under Sherman Act Section 1—would be warranted. There is little reason to avoid an exclusionary conduct definition on grounds that it would encourage negotiation among competitors when any resulting collusive arrangements would be both rare and easily identified and condemned.²⁵⁵

CONCLUSION

In the introduction to his classic 1978 book, *The Antitrust Paradox*, Robert Bork bemoaned the prevailing state of antitrust by comparing it to the sheriff of an old west frontier town: “[H]e did not sift evidence, distinguish between suspects, and solve crimes, but merely walked the main street and every so often pistol-whipped a few people.”²⁵⁶ Antitrust as a whole has come a long way since Bork penned those words. The rules governing horizontal and vertical restraints of trade, mergers, and even specific instances of monopolization—e.g., price squeezes, predatory pricing, unilateral refusals to deal—are far more coherent and economically sophisticated than they were back in Bork's bad old days.

254. See *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 223–24 (1940) (holding that an agreement among competitors to reduce output, like an agreement to fix prices, is per se illegal under Section 1 of the Sherman Act).

255. Cf. Easterbrook, *supra* note 40, at 347 (“Instead of making predictions that are impossible to test—and will injure consumers if wrong—wait to see what happens. If monopolistic prices happen later, prosecute then.”).

256. BORK, *THE ANTITRUST PARADOX*, *supra* note 36, at 6.

Yet, the law on monopolization and attempted monopolization retains some of that “frontier sheriff” feel because courts and commentators have never satisfactorily articulated the quality that makes any particular instance of exclusion-causing activity legally problematic. Until that matter is addressed—and in a way that provides real guidance to business planners—dominant firms run some risk of getting pistol-whipped whenever they engage in conduct that may enhance their output but also occasion some rival exclusion. Knowing this, they will tend to hold their competitive punches, to the detriment of consumers.

Drawing lessons from past, unsuccessful attempts to define unreasonably exclusionary conduct, this Article has set forth a definition that identifies a common thread tying together all instances of unreasonable exclusion, comports with widely accepted intuitions about what constitutes improper competitive conduct, and generates specific safe harbors and liability rules that would collectively minimize the sum of antitrust’s decision and error costs. Critics will likely assert that the proposed “exclusion of a competitive rival” approach is radical and underdeterrent, but it is far less so than proposals by prominent antitrust scholars to scrap the monopolization prohibition altogether²⁵⁷ or to define unreasonably exclusionary conduct according to the equally efficient rival standard.²⁵⁸ Moreover, it is the only proposed exclusionary conduct definition (other than the under-deterrent equally efficient rival definition) that could really put antitrust’s frontier sheriff out of business. Surely he has earned his retirement.

257. See *id.* at 406 (“[Antitrust law] should abandon its concern with such beneficial practices as small horizontal mergers, all vertical and conglomerate mergers, vertical price maintenance and market division, tying arrangements, exclusive dealing and requirements contracts, ‘predatory’ price-cutting, price ‘discrimination,’ and the like.”); POSNER, *supra* note 36, at 212 (“I would like to see the antitrust laws other than Section 1 of the Sherman Act repealed.”).

258. See POSNER, *supra* note 10, at 194–95.