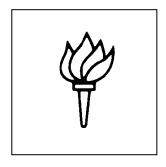
NEW YORK UNIVERSITY SCHOOL OF LAW

PUBLIC LAW & LEGAL THEORY RESEARCH PAPER SERIES WORKING PAPER NO. 15-48

LAW & ECONOMICS RESEARCH PAPER SERIES WORKING PAPER NO. 15-20



Less Restrictive Alternatives in Antitrust Law

C. Scott Hemphill

November 2015

ARTICLE

LESS RESTRICTIVE ALTERNATIVES IN ANTITRUST LAW

C. Scott Hemphill*

Antitrust courts often confront "mixed" conduct that has two contrasting effects, one harmful and the other beneficial. For example, a nationwide agreement not to pay college football players harms the players while benefiting fans of amateur sports. An important tool for analyzing mixed conduct is to compare the action to a hypothesized alternative and to ask whether the alternative action is "less restrictive" and hence less harmful. The less restrictive alternative (LRA) test is used widely, from the rule of reason to mergers to monopolization. The test often assumes a particular, narrow form, that the alternative must be dominant: not only less restrictive but also equally effective. In other words, could the benefits have been achieved equally well with less harm?

This Article offers a new account of the LRA test that draws inspiration from constitutional law and other fields. Dominant LRAs offer a shortcut that avoids the difficult tradeoff between increased benefit and increased harm. However, most LRAs are less effective rather than dominant. Such an alternative offers a basis for condemning conduct when the alternative is preferable on balance to the conduct. Balancing in antitrust is not a myth as many believe; instead, a tradeoff of incremental benefit and harm occurs in the assessment of LRAs. The LRA test serves the further function of "smoking out" an inference of anticompetitive effect.

As the Article shows, courts that restrict their analysis to dominant LRAs run a high risk of false negatives, particularly when they also

^{*} Professor of Law, NYU School of Law. I thank John Asker, Kent Bernard, Rick Brooks, Jessica Bulman-Pozen, Mike Carrier, Tasneem Chipty, Malcolm Coate, Adam Cox, Dick Craswell, Einer Elhauge, Dick Fallon, Harry First, Eleanor Fox, Andy Gavil, Clay Gillette, Vic Goldberg, John Golden, Jeff Gordon, Kent Greenawalt, Hillary Greene, Jamal Greene, Laura Hemphill, Herb Hovenkamp, Bert Huang, Jon Jacobson, Olati Johnson, Louis Kaplow, Avery Katz, James Keyte, Mark Lemley, Christopher Leslie, Daryl Levinson, Richard Markovits, Tom Merrill, Trevor Morrison, Melissa Murray, Tom Nachbar, Tejas Narechania, Mark Patterson, Nate Persily, David Pozen, Jed Purdy, Arti Rai, Alex Raskolnikov, Dan Rubinfeld, Bill Sage, Chris Sagers, Adam Samaha, Neil Siegel, Jeannie Suk, Olivier Sylvain, Kevin Walsh, Abe Wickelgren, Tim Wu, and audiences at Berkeley, Columbia, Duke, ETH Zurich, Harvard, Michigan, NYU, Stanford, Texas, and Virginia for helpful comments and discussions. Sophia Bertran, Shira Borzak, Richard Cleary, Matthew Collins, Lee Cooper, Sam Levander, Laura McDonald, and Ryan Rakower provided outstanding research assistance.

ignore the overall competitive effects of the restraint, as in the recent O'Bannon v. NCAA decision. Finally, the Article proposes best practices in assessing LRAs to minimize the risk of false positives.

| Introduction | 928 |
|--|-----|
| I. EVALUATING MIXED CONDUCT | 931 |
| A. Mixed Restraints of Trade | 931 |
| B. Less Restrictive Alternatives | 937 |
| C. Dominant Alternatives | 943 |
| II. THE FUNCTIONS OF THE LRA TEST | 947 |
| A. Anxiety About Balancing | 947 |
| B. A Valid Shortcut | 952 |
| C. Balancing | 955 |
| 1. Less Effective Alternatives | |
| 2. The Uneasy Case for Balanced Alternatives | 960 |
| D. Smoking Out | |
| 1. Bad Intent | 963 |
| 2. Anticompetitive Effect | 968 |
| 3. Pretextual Justification | |
| III. THE DUAL BENCHMARK | 973 |
| A. LRA Plus Net Effects | 974 |
| B. LRA Without Net Effects | 976 |
| IV. BEST PRACTICES | 979 |
| A. The Plaintiff's Burden of Persuasion | 979 |
| B. Zero-Profit Constraint | 983 |
| C. Practicality | 985 |
| CONCLUSION | |

INTRODUCTION

Antitrust courts often confront conduct that has two contrasting effects, one harmful and the other arguably beneficial. College football teams agree not to compete for players by paying them (harmful), a decision that also increases the popularity of the sport (beneficial). A performing-rights organization limits price competition among songwriters (harmful) in the course of assembling the authors' rights into a blanket license that is valued by radio stations (beneficial). Two groups of doctors merge, allowing them to raise prices (harmful) while also improving the quality of patient care (beneficial).

To handle mixed conduct, courts have fashioned two common law tools. The first is to calculate the net effect of the conduct. In principle, a court totals up the benefits and harms to see which is larger. Courts and agencies frequently declare that identifying net effects is the heart of modern antitrust. In practice, however, courts seldom reach this balancing step. As a consequence, balancing in antitrust is regarded as rare, even a myth.¹

A second tool for handling mixed conduct is to compare the conduct to a hypothesized alternative and ask whether the alternative action is less harmful in the particular sense that it is "less restrictive." If so, then the defendant loses. Courts and agencies apply this less restrictive alternative (LRA) test widely, from agreements in restraint of trade to monopolization to mergers.² The LRA test employed in antitrust often takes a strikingly narrow form. The alternative must be *dominant*: not only less restrictive but also equally effective. In other words, could the good have been achieved equally well with less bad?³

The LRA test is relevant wherever mixed conduct appears, from sports leagues to health care to search engines. Despite its importance, the test has received little systematic or sustained treatment across disparate doctrinal areas and industries. Nor has the distinctive role of dominant LRAs been recognized or examined. This Article aims to fill that gap by explaining the functions of the LRA test and identifying ways to improve its operation. Along the way, it situates the LRA test within the leading doctrinal frameworks for evaluating mixed conduct, such as ancillarity and the "no economic sense" test, and identifies errors in important recent applications of the LRA test.

In many instances, the test functions as a shortcut, allowing courts to avoid the balancing exercise that would otherwise be required in a search for net effects. That avoidance results from a widespread sense that balancing is hard. Courts have only a limited capacity to assess and compare the pros and cons. Quantification is difficult given that parties deny the existence of a tradeoff rather than providing guidance about making the tradeoff. Quantification is particularly complex when an effect on innovation is asserted. Thorny issues arise when the individuals harmed are different from the individuals (or firms) that benefit. The result is a judicial anxiety about balancing.⁴

The LRA shortcut relieves that anxiety by permitting the court to answer a different question instead. When an LRA dominates the defendant's conduct along both dimensions of interest—that is, when the alternative is both less restrictive and equally effective—the conduct is worse without recourse to any tradeoff. In such cases, the court can condemn the conduct without further ado.⁵

^{1.} See infra section II.A (discussing rarity of explicit net-effects balancing and bases for resistance to balancing).

^{2.} See infra notes 48–58 (collecting cases employing LRA test).

^{3.} See infra section I.C (describing courts' heavy emphasis on dominant LRAs).

^{4.} See infra section II.A (discussing judicial anxiety about, and consequent avoidance of, balancing).

^{5.} See generally infra section II.B (analyzing courts' use of dominant alternatives).

Usually, however, the only available alternative is less effective. Such an LRA may be superior to the defendant's conduct, but only on balance. Balanced LRAs are a valid basis for condemnation when the incremental positive effects, compared to the defendant's conduct, outweigh the incremental negative effects. Antitrust courts sometimes rely on balanced LRAs when they condemn the defendant's conduct. Balancing is not a myth after all, as courts trade off incremental benefit and incremental harm within the LRA test.⁶ Courts that, in applying the LRA test, condemn in light of a balanced alternative, generally do not advertise that fact. They are engaged in balancing in disguise. Bringing balancing in the LRA into the open forces antitrust courts to confront these difficult tradeoffs.

Used as a shortcut or a locus of balancing, the LRA test serves as a benchmark that the defendant's conduct must clear. A third, alternative function for the LRA test is to serve as a diagnostic tool rather than as a benchmark. The LRA test is used to "smoke out" anticompetitive effects. Here, another neglected distinction comes into view—the difference between LRAs that are *equally procompetitive* and LRAs that are *equally profitable*. Only LRAs that afford equal profits to the defendant, considering all legitimate sources of profit, provide a valid inference of anticompetitive effect. This inference is particularly useful when the court's analytical mode is to avoid balancing by choosing between two contrasting accounts of the conduct rather than calculating a net effect.

Many legal fields employ a version of the LRA test,⁸ from torts to trade to deceptive advertising. The analysis herein draws particular inspiration from constitutional law, a field that shares with antitrust both the anxiety about balancing and the use of dominant LRAs as a defensive response. The analogy also reveals an important gap in the antitrust toolkit—the absence of an explicit inquiry into *more beneficial* alternatives.

The "narrow tailoring" analysis of constitutional law tests state action not only for an LRA, but also for underinclusiveness. The latter inquiry condemns conduct in light of an alternative that better serves the defendant's asserted goal. Such a hypothetical is the flip side of the LRA test. The point is to smoke out pretext and thereby "diminish the credibility of the [defendant's] rationale." A similar analysis is valuable in antitrust. For example, if a defendant defends a vertical contract on

^{6.} See infra section II.C (describing and defending use of less effective LRAs within balancing analysis).

^{7.} See infra section II.D (analyzing use of test as diagnostic tool).

^{8.} See infra sections I.B-.C (discussing use of LRA test in tort, constitutional, and administrative law).

^{9.} See, e.g., City of Cleburne v. Cleburne Living Ctr., 473 U.S. 432, 450 (1985) (rejecting justification for discriminatory zoning ordinance, namely "avoiding concentration of population... and lessening congestion," given extreme underinclusiveness of ordinance).

^{10.} City of Ladue v. Gilleo, 512 U.S. 43, 52 (1994).

the ground that it confers desirable incentives on a dealer, a plaintiff might establish that a different contract would more powerfully serve the asserted goal. The existence of such an alternative raises the inference that the asserted justification is absent. This inference, a more powerful form of smoking out, is not available using the LRA test alone. An antitrust court that seeks to uncover pretext needs this additional tool.¹¹

Used as a benchmark, the LRA test interacts with the net-effects test in two important ways. First, the LRA test augments the net-effects analysis, condemning some conduct that a net-effects test would permit. The Article explains why this expanded range of liability is desirable, contrary to the concerns of some critics. Second, the LRA test helps fill the gap in jurisdictions that omit any net-effects inquiry. Such a truncated analysis threatens to insulate conduct from effective antitrust review, particularly when the anticompetitive effect is large and the procompetitive effect is small. Here, the LRA test reduces the substantial risk of false negatives. Moreover, using balanced LRAs—not just dominant LRAs—does a better job in filling the gap. 13

An LRA test, particularly in its more expansive form, poses a risk of false positives. A final contribution of this Article is to propose best practices that reduce that risk. ¹⁴ First, plaintiffs properly bear the burden of persuasion in establishing an LRA, including for categories of conduct (such as mergers and tying) in which the burden traditionally has been borne by defendants. Second, an identified LRA must be profitable to the defendant; otherwise condemnation can have a perverse effect on corporate conduct. Third, the LRA must be practical and "standard," not speculative.

The Article proceeds in four parts. Part I presents the problem of mixed conduct and antitrust's reliance on LRAs, particularly its reliance on dominant alternatives. Part II examines the functions of the LRA test as a shortcut, a locus of balancing, and a method of smoking out anticompetitive effect. Part III assesses LRAs as a supplement to or substitute for net-effects balancing. Part IV outlines best practices in implementing the LRA test.

I. EVALUATING MIXED CONDUCT

A. Mixed Restraints of Trade

In 2009, Ed O'Bannon, a former UCLA basketball player, filed an antitrust suit against the National Collegiate Athletic Association

^{11.} See infra section II.D.3 (assessing absence of explicit underinclusion analysis in antitrust).

^{12.} See infra section III.A (defending augmentation).

^{13.} See infra section III.B, which discusses the important recent example of O'Bannon v. NCAA, 802 F.3d 1049 (9th Cir. 2015).

^{14.} See infra Part IV (describing best practices).

(NCAA).¹⁵ The suit challenged an NCAA rule that limits the amount of compensation offered to student-athletes. The rule capped scholarships at a level several thousand dollars below the full cost of attendance and prohibited additional cash compensation.¹⁶ O'Bannon sought payment for the use of his likeness by videogame makers and other licensees.¹⁷ Other suits have challenged the ban on payments to play the sport.¹⁸

In September 2015, the Ninth Circuit affirmed—but also sharply narrowed—the district court's conclusion that the rule restrained trade. The court concluded that the rule eliminates price competition among the schools, depriving players of an opportunity for compensation. ¹⁹ At the same time, the court accepted the NCAA's proffered justification that denying payment preserves amateurism and thereby increases popular interest in college sports. ²⁰ The court was therefore faced with mixed conduct that has both positive and negative effects and the challenge of reconciling the two.

Mixed conduct arises in the full range of antitrust cases. One common fact pattern is a joint venture of "horizontal" competitors, such as the NCAA, that limits competition among its members in the course of producing a new good that could not be produced by any member acting alone.²¹ Horizontal mergers routinely package a threatened loss of competition together with certain efficiencies.²² "Vertical" contracts

^{15.} O'Bannon, 802 F.3d 1049.

^{16.} Id. at 1054.

 $^{17. \ \}mathrm{Id.}\ \mathrm{at}\ 1055$ (noting prohibition on payment for athlete's name, image, or likeness).

^{18.} See Complaint at 3–4, Hartman v. NCAA, No. 3:15-cv-00178 (N.D. Cal. Jan. 13, 2015) (challenging cap in women's basketball); Complaint & Jury Demand—Class Action Seeking Injunction and Individual Damages at 3, Jenkins v. NCAA, No. 14-1678 (D.N.J. Mar. 17, 2014), 2014 WL 1008526 (challenging cap in men's basketball and football). In practice, the rule may bind only as to football and basketball, the two most profitable college sports, and as to a subset of elite schools. See *O'Bannon*, 802 F.3d at 1056 n.4 (explaining financial basis for limitation of *O'Bannon* suit to football and men's basketball).

^{19.} The court understood the agreement alternatively as a cartel of sellers of educational services or buyers of labor. See *O'Bannon*, 802 F.3d at 1071 n.14.

^{20.} Id. at 1072–73 ("[T]he district court found, and the record supports that there is a concrete procompetitive effect in the NCAA's commitment to amateurism: namely, that the amateur nature of collegiate sports increases their appeal to consumers."). In the absence of "meaningful argument" on the issue by the NCAA, the court also accepted a second justification: that to some degree, the rule facilitates a scholar-athlete's successful integration within the academic community. Id. at 1072. The court also accepted the district court's findings that the rules fail to "promote competitive balance" or "increase output in the college education market." Id. at 1072.

^{21.} See, e.g., id. at 1069 (noting, as to certain products, "restraints on competition are essential if the product is to be available at all" (quoting NCAA v. Bd. of Regents of Univ. of Okla., 468 U.S. 85, 101, 102 (1984))).

 $^{22.\,}$ See, e.g., United States v. Phila. Nat'l Bank, 374 U.S. 321, 332–33 (1963) (noting, with respect to challenged bank merger, regulator's conclusion that "over-all effect upon

between manufacturers and retailers can limit competition while also serving a desirable end, such as assuring quality or providing incentives to retailers.²³ Conduct by a monopolist, such as the assembly of a software system from multiple components, may impede a rival's competitive opportunities, while simultaneously improving the product.²⁴ In short, mixed conduct is everywhere in antitrust. Table 1 presents a set of illustrative examples drawn from antitrust litigation.

For conduct to have a mixed effect, the negative and positive elements must be bound together in some fashion. Sometimes the reduced competition gives rise to the benefit, as with the idea that limiting payments to players is needed to preserve the NCAA's stature with fans.²⁵ In other instances, reduced competition is a side effect of the benefit, as with the reduced price competition among songwriters that results from a performing-rights organization's blanket license.²⁶

Mixed conduct pairs together a wide variety of negative and positive economic effects. The negative effects can pertain to price, output, production costs, or innovation. The benefits cover the same broad territory. A typical benefit is a new or improved product, with improvement defined broadly to include service and product information.

competition would not be unfavorable" due to certain benefits of transaction); id. at 370–71 (considering and rejecting asserted efficiencies).

23. See, e.g., Leegin Creative Leather Prods. v. PSKS, Inc., 551 U.S. 877, 889–90 (2007) (describing procompetitive justifications for such agreements); id. at 892–94 (describing anticompetitive effects); Victor P. Goldberg, The Free Rider Problem, Imperfect Pricing, and the Economics of Retailing Services, 79 Nw. U. L. Rev. 736, 738 (1984) (describing "rich array of plausible rationales for adopting vertical restrictions"); see also Cont'l T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 51–52 (1977) ("The market impact of vertical restrictions is complex because of their potential for a simultaneous reduction of intrabrand competition and stimulation of interbrand competition." (footnote omitted)).

24. See United States v. Microsoft Corp., 253 F.3d 34, 87 (D.C. Cir. 2001) (en banc) (per curiam) (describing anticompetitive and procompetitive effects of bundling, and considering doctrinal test that assists in determining whether particular conduct is "on balance... welfare-enhancing"); FTC, Statement of the Federal Trade Commission Regarding Google's Search Practices 2 (Jan. 3, 2013), http://www.ftc.gov/sites/default/ files/documents/public_statements/statement-commission-regarding-googles-search-practices /130103brillgooglesearchstmt.pdf [http://perma.cc/YZ8R-F2[6] (describing sometimes mixed effects of Google's search result displays); Patrick Rey, Paul Seabright & Jean Tirole, The Activities of a Monopoly Firm in Adjacent Competitive Markets: Economic Consequences and Implications for Competition Policy 3-4 (Institut d'Economie Industrielle, Université de Toulouse, Working Paper No. 132, 2001) (explaining how assembly of multiple "goods and services into new combinations creates real value for consumers," while also recognizing danger of anticompetitive effects). Impeding a rival is not sufficient for liability; consequent harm to consumers is needed as well. See Microsoft, 253 F.3d at 58 ("[T]o be condemned as exclusionary, a monopolist's act . . . must harm the competitive process and thereby harm consumers. In contrast, harm to one or more competitors will not suffice.").

 $25.\ \textit{O'Bannon}, 802\ \text{F.3d}\ \text{at}\ 1073\ (\text{considering and crediting this asserted justification}).$

26. See BMI v. CBS, Inc., 441 U.S. 1, 32–33 (1979) (Stevens, J., dissenting) (noting blanket license made price competition less valuable to and vigorous among songwriters).

Another is reduced production cost, which may be passed along to purchasers.²⁷

In response to mixed conduct, courts often declare that their end goal is to identify the "net competitive effect" of the conduct.²⁸ The idea is to add up the beneficial effects of the conduct and subtract ("net") the harms from reduced competition. Canonical statements of doctrine for horizontal and vertical agreements,²⁹ mergers,³⁰ and monopolization³¹ all culminate in a determination of net effects. This is a cost-benefit analysis that explicitly balances, or trades off, the incremental harms and incremental benefits of the conduct compared to a world without the challenged conduct. For example, the *O'Bannon* court concluded that the NCAA rule harms athletes but also yields the benefit of a more popular form of entertainment.³² A cost-benefit approach would assess

^{27.} For an extensive discussion of various benefits, see Rebecca Haw Allensworth, The Commensurability Myth in Antitrust, 69 Vand. L. Rev. 1, 18–22 (2016).

^{28.} See, e.g., Cal. Dental Ass'n v. FTC, 526 U.S. 756, 771 (1999) (treating goal of analysis as identification of "net procompetitive effect").

^{29.} See, e.g., id. (raising prospect that defendant's conduct had "net procompetitive effect"); id. at 774 (doubting conduct had "net anticompetitive effect"); id. at 782 (Breyer, J., dissenting) (emphasizing, for conduct with anticompetitive effect, analysis of "offsetting" justifications); Eastman Kodak Co. v. Image Tech. Servs., 504 U.S. 451, 486 (1992) (leaving as question on remand whether procompetitive effects "outweighed" anticompetitive effects); Atl. Richfield Co. v. USA Petroleum Co., 495 U.S. 328, 342 (1990) (framing core question of unreasonableness as "whether [restraint's] anticompetitive effects outweigh its procompetitive effects"); FTC v. Ind. Fed'n of Dentists, 476 U.S. 447, 459 (1986) (condemning conduct given absence of "countervailing procompetitive virtue"); Cont'l T.V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 57 n.27 (1977) (emphasizing "balancing intrabrand and interbrand competitive effects" is part of judicial function), remanded to 461 F. Supp. 1046, 1052 (N.D. Cal. 1978) (concluding vertical restraint had "overall procompetitive effect"); Interface Grp. v. Mass. Port Auth., 816 F.2d 9, 10 (1st Cir. 1987) (Breyer, J.) (finding conduct unreasonable when its "anticompetitive consequences . . . outweigh its legitimate business purposes"); U.S. Dep't of Justice & FTC, Antitrust Guidelines for Collaborations Among Competitors § 3.3, at 10-11 (2000) [hereinafter Collaboration Guidelines] (describing agencies' inquiry into "offset[ting]" procompetitive benefits); see also Nw. Wholesale Stationers v. Pac. Stationery & Printing Co., 472 U.S. 284, 290 (1985) (concluding "certain" group boycotts lacking "offsetting efficiency gains" are condemned without applying rule of reason).

^{30.} See, e.g., FTC v. H.J. Heinz Co., 246 F.3d 708, 720 (D.C. Cir. 2001) (discussing "offset[ing] . . . efficiencies"); id. at 721 (considering asserted efficiencies that, according to merging parties, would "outweigh" anticompetitive effects); see also U.S. Dep't of Justice & FTC, Horizontal Merger Guidelines § 10, at 30 (2010) [hereinafter Horizontal Merger Guidelines] (describing agencies' analysis of cognizable efficiencies in terms of "revers[ing] the merger's potential to harm consumers").

^{31.} See, e.g., United States v. Microsoft Corp., 253 F.3d 34, 59 (D.C. Cir. 2001) (en banc) (per curiam) (outlining doctrinal approach for cases of mixed conduct in which plaintiff wins by "demonstrat[ing] that the anticompetitive harm of the conduct outweighs the procompetitive benefit").

^{32.} O'Bannon v. NCAA, 802 F.3d 1049, 1072 (9th Cir. 2015) (noting "significant anticompetitive effect" of NCAA rule); id. at 1073 (noting procompetitive purpose of preserving popularity).

which effect is more important or equivalently, whether the net effect is negative.

The net-effects test weighs the conduct against a baseline world without the conduct. If the outcome of interest (e.g., price) would be unchanged over time absent the conduct, then the test boils down to a simple before-and-after comparison. For example, did prices go up after the merger? In other cases, the baseline no-conduct world is itself changing. Supply or demand may shift over time, or competitive entry may be expected absent the conduct. If the baseline changes over time in important ways, then the before-and-after comparison must be adjusted or discarded in favor of a more sophisticated analysis.

Not all mixed conduct reaches this end stage of the analysis. One filter simplifies the calculation by removing some benefits from the calculus. For example, a benefit premised on the undesirability of competition itself is considered not cognizable.³³ Thus, engineers cannot refrain from price competition on the ground that competition will result in shoddy bridges.³⁴ However, the boundaries of this rule are porous in practice, as courts often take an expansive view of what counts as supporting competition.³⁵

Another source of simplification concerns benefits retained by producers, such as a reduction in production cost that is kept rather than shared with consumers. Benefits retained by producers are often considered not cognizable, but this conclusion is the subject of scholarly debate³⁶ and uncertainty in the case law.³⁷ Overall, a great deal of mixed

^{33.} See Nat'l Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 696 (1978) ("[T]he Rule of Reason does not support a defense based on the assumption that competition itself is unreasonable."); see also Horizontal Merger Guidelines, supra note 30, § 10, at 30 (excluding efficiencies that "arise from anticompetitive reductions in output or service"). A variant of this approach is to argue that innovation requires higher profits, either as a general matter (because it increases incentives or makes available cash for research and development), or as a condition for introducing a particular product. An example of the latter is Apple's assertion that it would not have entered the ebooks market but for certain conduct challenged by the Justice Department. See United States v. Apple, Inc., 791 F.3d 290, 330–34 (2d Cir. 2015) (describing Apple's argument that agreement enabled procompetitive entry).

^{34.} Nat'l Soc'y of Prof'l Eng'rs, 435 U.S. at 696.

^{35.} See, e.g., Cal. Dental Ass'n v. FTC, 526 U.S. 756, 774–75 (1999) (entertaining suppression of false product information as justification for horizontal limitation on price and quality advertising); NCAA v. Bd. of Regents of the Univ. of Okla., 468 U.S. 85, 117, 120 (1984) (accepting amateurism as cognizable justification); *O'Bannon*, 802 F.3d at 1073 (citing preservation of amateurism and integration of players into student life as justifications for horizontal agreement not to pay players); Chi. Prof'l Sports Ltd. P'ship v. NBA, 961 F.2d 667, 674 (7th Cir. 1992) (crediting control of free-riding as means to protect "investments in design and distribution of products").

^{36.} Compare Herbert J. Hovenkamp, Consumer Welfare in Competition and Intellectual Property Law, Competition Pol'y Int'l, Autumn 2013, at 53, 53 (concluding case law uniformly supports consumer welfare view), and Steven C. Salop, Question: What Is the Real and Proper Antitrust Welfare Standard? Answer: The True Consumer Welfare Standard, 22 Loy. Consumer L. Rev. 336, 349–53 (2010) (defending consumer welfare

conduct makes it past the first filter, particularly if the benefit to competition is construed broadly or producer benefits are cognizable.

A second filter is to lump together the harms and benefits as a single overall effect. For example, a merger of two beer producers that reduces competition between them will place upward pressure on prices. At the same time, if the merger yields production efficiencies, the resulting decrease in marginal costs would have the opposite tendency. These two forces can be conceptualized and measured as a single effect. A vertical contract that increases both price and quality similarly might be addressed by measuring the overall effect on output or quality-adjusted prices.

This filter, like the first, lets through a lot of mixed conduct. Often the winners and losers are different economic actors, as with an NCAA rule that harms players but benefits fans, or an airline merger that raises prices in some city pairs and lowers them in others.³⁸ If retained producer benefits count in the balance, a further example is a restraint that harms buyers but benefits producers.³⁹ In all these settings there are two distinct effects. Moreover, even when the benefits and harms are experienced by the same individual or firm, the overall effect is often calculated by comparing two components that are conceptually separable and separately estimated. The analysis of unilateral effects in merger cases offers an important illustration of this point.⁴⁰

approach), with Robert H. Bork, The Antitrust Paradox 372–74 (1978) [hereinafter Bork, Antitrust Paradox] (advocating total welfare view but labeling it "consumer welfare"), and Oliver E. Williamson, Economies as an Antitrust Defense: The Welfare Tradeoffs, 58 Am. Econ. Rev. 18, 20 (1968) (arguing "there is no way in which the tradeoff issue can be avoided").

- 37. Compare FTC v. Actavis, Inc., 133 S. Ct. 2223, 2234–35 (2013) (adopting consumer welfare approach), and Aaron Edlin et al., Activating *Actavis*, Antitrust, Fall 2013, at 16, 17 (interpreting *Actavis* as adopting consumer-welfare approach), with In re Sulfuric Acid Antitrust Litig., 703 F.3d 1004, 1011 (7th Cir. 2012) (Posner, J.) (including "other economic values" beyond "increase[d] competition" within set of procompetitive justifications), and United States v. Microsoft Corp., 253 F.3d 34, 59 (D.C. Cir. 2001) (en banc) (per curiam) (including "greater efficiency" within set of procompetitive justifications). For further perspectives, see also Reiter v. Sonotone Corp., 442 U.S. 330, 343 (1979) (ambiguously citing Bork, advocate of total-welfare view, for proposition that "consumer welfare" is goal of antitrust); Alan J. Meese, Debunking the Purchaser Welfare Account of Section 2 of the Sherman Act: How Harvard Brought Us a Total Welfare Standard and Why We Should Keep It, 85 N.Y.U. L. Rev. 659, 736 (2010) (concluding lenient attitude toward exclusion illustrates total welfare approach).
- $38.\,$ See Daniel A. Crane, Balancing Effects Across Markets, 80 Antitrust L.J. $397,\,405-09$ (2015) (considering examples of tradeoffs).
- 39. This would include, for example, a merger to monopoly that reduced production costs without passing the savings on to consumers.
- 40. See, e.g., Carl Shapiro, The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years, 77 Antitrust L.J. 49, 75–76 (2010) (identifying level of gross upward pricing pressure that exactly balances downward pressure from marginal cost savings). Doctrinally, the defendant's assertion that prices will not rise because of downward pricing pressure might be framed instead as a negation of the plaintiff's initial case, rather than as an assertion of mixed conduct.

B. Less Restrictive Alternatives

To handle mixed conduct, courts employ a further tool beyond net effects and the filters discussed above. They ask whether an alternative exists that serves the same beneficial goal with less anticompetitive effect. For example, can the NCAA preserve the benefits of amateurism in college sports with less harm to competition for players?

LRAs take various forms. Mergers give way to more limited contractual relationships. Exclusive agreements are replaced by nonexclusive agreements. A vertical contract that indirectly supplies desirable incentives is swapped for an alternative that directly specifies the behavior. In *O'Bannon*, for example, the court condemned the NCAA rule in light of the LRA of a slightly larger scholarship that covers the full cost of attendance.⁴¹

The LRA inquiry fits a common analytical pattern—that the restraint goes too far compared to its justification. The issue is sometimes described as overinclusiveness. More informally, courts speak of swinging a sledgehammer to crack a nut, firing a cannon to shoot a sparrow, ⁴² or "burn[ing] the house to roast the pig."⁴³ The alternative might be superior because it harms fewer consumers or because it harms them all to a lesser degree. Similar moves appear in other legal fields that confront mixed conduct, most famously in constitutional law, which scrutinizes a justification for state action in light of alternative means of achieving the goal.⁴⁴

The LRA test goes beyond the net-effects test by introducing an additional alternative to the analysis. The net-effects test evaluates the conduct in comparison to a world *without* the conduct at issue. By contrast, the LRA test considers a different possible action *instead of* the conduct. An examination of unchosen alternatives—both their pros and cons—is a standard element of cost-benefit analysis. For example, a thorough evaluation of alternatives is required by official guidance for the development and review of agency regulations. A similar inquiry

^{41.} O'Bannon v. NCAA, 802 F.3d 1049, 1074–76 (9th Cir. 2015). As discussed infra notes 135–137, the court rejected a second LRA that the district court had accepted: to permit up to \$5,000 in deferred compensation, held in trust until the player leaves college. Id. at 1076–79.

^{42.} Aharon Barak, Proportionality: Constitutional Rights and Their Limitations 334 (2012).

^{43.} Butler v. Michigan, 352 U.S. 380, 383 (1957).

^{44.} See infra note 89 (collecting cases).

^{45.} This separation of the net-effects and LRA analyses confines the net-effects inquiry to a comparison of the conduct with a no-conduct baseline. Another approach is to include and hence subsume an LRA inquiry within the net-effects analysis. One implementation of such an approach is considered infra note 166.

^{46.} E.g., Exec. Order No. 12,866, § 1(a), 3 C.F.R. 638 (1994), reprinted as amended in 5 U.S.C. § 601 app. at 802 (2012) (requiring evaluation of alternatives available to agency in developing regulations); Office of Mgmt. & Budget, Exec. Office of the President, Circular A-4, Regulatory Analysis 1–2 (2003) http://www.whitehouse.gov/

plays an important role in tort law, where precautions are evaluated in light of alternative, untaken precautions that simultaneously offer incremental public benefit and impose an incremental burden on the alleged tortfeasor.⁴⁷

The LRA test appears in a wide range of antitrust cases. It is part of the rule of reason, antitrust's most important test for illegality, which is used to assess most horizontal and vertical agreements. The rule of reason probes the unreasonableness (and hence illegality) of a challenged restraint. The LRA test is part of judicial statements of the rule of reason, ⁴⁹ jury instructions, ⁵⁰ and special verdict forms. ⁵¹ Federal agencies rely on the test in making enforcement determinations. ⁵² These applications are inspired in part by *Addyston Pipe*, a famous old case that insisted that horizontal restraints must be both "ancillary" to a desirable purpose and no more restrictive than necessary to achieve the purpose. ⁵³

sites/default/files/omb/assets/regulatory_matters_pdf/a-4.pdf [http://perma.cc/KG6K - 4KNA] (providing guidance on evaluating "various alternatives that should be considered in developing regulations").

- 47. This approach is adopted, for example, in United States v. Carroll Towing Co., 159 F.2d 169, 173 (2d Cir. 1947) (Hand, J.), and in the Restatement (Second) of Torts § 292 (Am. Law Inst. 1965).
- 48. See, e.g., FTC v. Actavis, Inc., 133 S. Ct. 2223, 2237 (2013) (holding rule of reason applies to reverse payment settlements of patent litigation); Leegin Creative Leather Prods. v. PSKS, Inc., 551 U.S. 877, 882 (2007) (holding rule of reason applies to resale price maintenance).
- 49. E.g., Ark. Carpenters Health & Welfare Fund v. Bayer AG, 604 F.3d 98, 104 (2d Cir. 2010) (identifying plaintiff's obligation to establish LRA at late stage of rule of reason); Bhan v. NME Hosps., Inc., 929 F.2d 1404, 1413 (9th Cir. 1991) (stating if defendant "offer[s] evidence of pro-competitive effects . . . plaintiff, driven to this point, must then try to show that any legitimate objectives can be achieved in a substantially less restrictive manner"); Kreuzer v. Am. Acad. of Periodontology, 735 F.2d 1479, 1494–95 (D.C. Cir. 1984) (concluding where evidence supports "asserted justification," "it must be shown that the means chosen to achieve that end are the least restrictive available"); Wilk v. Am. Med. Ass'n, 719 F.2d 207, 227 (7th Cir. 1983) (describing defendant's obligation to show both procompetitive justification and that justification "could not have been adequately satisfied in a manner less restrictive of competition").
- 50. E.g., Am. Bar Ass'n Section of Antitrust Law, Model Jury Instructions in Civil Antitrust Cases, Instruction 3C, at A-10 (2005) [hereinafter Model Jury Instructions] (proceeding to LRA test upon finding restraint produces "competitive benefits").
- 51. E.g., Verdict Form at 2, Deutscher Tennis Bund v. ATP Tour Inc., No. 07-CV-00178 (D. Del. Aug. 5, 2008), 2008 WL 3857711 (proceeding to LRA test in Sherman Act § 1 claim upon finding restraint produces "procompetitive benefits").
- 52. Collaboration Guidelines, supra note 29, § 3.36(b), at 24 (using LRA test to determine whether agreement is "reasonably necessary" to achieve efficiency). In European competition law, a similar idea is conveyed by the "indispensability" requirement of Article 101(3) of the Treaty of Rome. See Communication from the Commission, Guidelines on the Application of Article 81(3) of the Treaty, 2004 O.J. (C 101) 97, ¶¶ 9, 34, 39, 73–76 (describing inquiry into LRAs as component of Article 101(3)).
- 53. See United States v. Addyston Pipe & Steel Co., 85 F. 271, 282 (6th Cir. 1898) (Taft, J.) ("[N]o... restraint of trade can be enforced unless... it is merely ancillary to the main purpose of a lawful contract, and necessary to protect the covenantee['s]...

The LRA test is important outside the rule of reason as well. Courts and agencies apply the test to horizontal mergers by insisting that a claimed justification (a so-called "efficiency") must be "merger-specific."⁵⁴ Monopolization cases also employ an LRA test,⁵⁵ as one might expect given the close kinship between monopolization analysis and the rule of reason. ⁵⁶ Finally, LRAs play a major role in assessing tying, wherein a firm conditions the purchase of one product or service on the purchase of another. ⁵⁷ Courts test the tie's claimed benefit against the presumed availability of an LRA. ⁵⁸ Table 1 contains illustrative LRAs that have been offered in mixed-conduct cases.

enjoyment of the legitimate fruits of the contract, or . . . from the dangers of an unjust use of those fruits by the other party.").

54. E.g., Saint Alphonsus Med. Ctr.–Nampa, Inc. v. St. Luke's Health Sys., Ltd., Nos. 1:12–CV–00560–BLW, 1:13–CV–00116–BLW, 2014 WL 407446, at *17 (D. Idaho Jan. 24, 2014), aff'd, 778 F.3d 775 (9th Cir. 2015) (rejecting efficiency defense "[b]ecause a committed team can be assembled without" merger and therefore "is not a merger-specific efficiency"); Horizontal Merger Guidelines, supra note 30, § 10, at 30 ("The Agencies credit only those efficiencies . . . unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects.").

55. See, e.g., LePage's Inc. v. 3M, 324 F.3d 141, 167 (3d Cir. 2003) (en banc) (asking, as part of jury charge, whether defendant "has impaired competition, in an unnecessarily restrictive way"); id. (defining "exclusionary conduct and predatory conduct" as, in relevant part, conduct that "either does not further competition on the merits, or does so in an unnecessarily restrictive way"); id. at 178 (Greenberg, J., dissenting) (concluding justification should be rejected "if a valid asserted purpose would be served fully by less restrictive means"); Trans Sport, Inc. v. Starter Sportswear, Inc., 964 F.2d 186, 188–89 (2d Cir. 1992) (prohibiting conduct that does "not further competition on the merits or does so in an unnecessarily restrictive way"); New York v. Actavis, PLC, No. 14-CV-7473, 2014 WL 7015198, at *40–41 (S.D.N.Y. Dec. 11, 2014), aff'd, 787 F.3d 638 (2d Cir. 2015) (applying *Trans Sport* test); Addamax Corp. v. Open Software Found., Inc., 888 F. Supp. 274, 283 (D. Mass. 1995) (applying rule of reason, including LRA test).

56. See United States v. Microsoft Corp., 253 F.3d 34, 59 (D.C. Cir. 2001) (en banc) (per curiam) (noting similarity between analyses under § 1 and § 2 and citing, inter alia, Standard Oil Co. v. United States, 221 U.S. 1, 61–62 (1911)). *Microsoft* itself does not contain an explicit LRA test, but it notes the plaintiff's opportunity to "rebut" the defendant's justification, id., which is fairly read to include an LRA test. When exclusion is evaluated under § 1 using the rule of reason, rather than as monopolization, the court once again applies an LRA test. See, e.g., United States v. Visa U.S.A., Inc., 344 F.3d 229, 238 (2d Cir. 2003) (stating, in cases of mixed conduct, "government must prove either that the challenged restraint is not reasonably necessary to achieve the defendants' procompetitive justifications, or that those objectives may be achieved in a manner less restrictive of free competition"); U.S. Healthcare Inc. v. Healthsource, Inc., 986 F.2d 589, 595–96 (1st Cir. 1993) (considering claim under rule of reason and not reaching LRA analysis given absence of demonstrated foreclosure).

57. Many tying cases are governed by a "quasi per se" rule. See, e.g., *U.S. Healthcare*, 986 F.2d at 593 n.2 (preferring "quasi' per se" label given plaintiff's obligation to show market power and availability of defenses). When tying is evaluated under the rule of reason, rather than the quasi-per-se rule, the court applies an LRA test. E.g., County of Tuolumne v. Sonora Cmty. Hosp., 236 F.3d 1148, 1157–59 (9th Cir. 2001).

58. See, e.g., Jefferson Par. Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 26 n.42 (1984) (noting contractual specification usually suffices to ensure quality and hence tying is

The present focus is the use of LRA analyses to determine liability, but parts of the analysis apply in other contexts as well. LRA analyses also arise, for example, when courts consider the "but-for" world in establishing causation for damages; the but-for world may reflect adoption of an LRA. Moreover, courts may impose an identified LRA as an injunctive remedy.⁵⁹

The Supreme Court has given no sustained attention to the LRA test, despite its extensive use by lower courts. Most strikingly, the Court has never endorsed (or rejected) the test. Several horizontal agreement cases⁶⁰ and one merger review⁶¹ assess restraints by reference to LRAs, though without explication or development. With respect to vertical agreements, a concurrence by Justice Brennan strongly endorses the test,⁶² while dicta in a later opinion of the Court might offer a more skeptical take.⁶³ One monopolization opinion mentions the test in

unnecessary (citing Standard Oil Co. v. United States, 337 U.S. 293, 305–06 (1949); IBM v. United States, 298 U.S. 131, 138–40 (1936))); Fortner Enters., Inc. v. U.S. Steel Corp., 394 U.S. 495, 503 (1969) (concluding tying arrangements "generally serve[] no legitimate business purpose that cannot be achieved in some less restrictive way"). In tying cases, defendants have the burden of establishing the absence of an LRA. Infra section IV.A.

59. E.g., O'Bannon v. NCAA, 802 F.3d 1049, 1075–76 (9th Cir. 2015) (affirming "injunction requiring the NCAA to permit schools to provide compensation up to the full cost of attendance").

An LRA test also determines when federal regulation repeals antitrust law by implication. See Silver v. NYSE, 373 U.S. 341, 357 (1963) (holding repeal is proper only where "necessary" to make regulatory scheme work, "and even then only to the minimum extent necessary").

60. Two examples discussed later in this Article are NCAA v. Bd. of Regents of the Univ. of Okla., 468 U.S. 85, 119 (1984), and Arizona v. Maricopa Cty. Med. Soc'y, 457 U.S. 332 (1982). See also FTC v. Actavis, Inc., 133 S. Ct. 2223, 2237 (2013) (noting availability of alternative settlement options without antitrust concerns); NFL v. N. Am. Soccer League, 459 U.S. 1074, 1079 (1982) (Rehnquist, J., dissenting) (disagreeing with Second Circuit opinion invalidating, on LRA grounds, NFL rule); Nat'l Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 699–700 (1978) (Blackmun, J., concurring) (stating even if product quality is cognizable benefit, ban on competitive bidding was "grossly overbroad").

61. See United States v. Phila. Nat'l Bank, 374 U.S. $321,\ 370$ (1963) (rejecting asserted benefit of merger in light of LRA).

62. White Motor Co. v. United States, 372 U.S. 253, 270–72 (1963) (Brennan, J., concurring) (suggesting "less restrictive alternatives" inquiry and describing its application to case at hand); see also infra section II.D (discussing Justice Brennan's concurrence).

63. In *Continental T.V., Inc. v. GTE Sylvania Inc.*, the Court noted that the restriction at issue "was neither the least nor the most restrictive provision that [defendant] could have used We are unable to perceive significant social gain from channeling transactions into one form or another." 433 U.S. 36, 58 n.29 (1977). This dictum might be read as a rejection of the least restrictive means. An alternative interpretation is that if a particular restraint is permissible, *per se* liability for a second restraint with similar effects is inapt. Phillip Areeda, The "Rule of Reason" in Antitrust Analysis: General Issues 9 (1981).

Skepticism has also been read into Justice O'Connor's concurrence in *Jefferson Parish*, which criticized the lower court's imposition of liability at the LRA stage. *Jefferson Par.*, 466 U.S. at 44 n.13 (O'Connor, J., concurring) ("In the absence of an adequate basis to expect any harm to competition from the tie-in, this objection [that there is an LRA] is simply

passing.⁶⁴ Tying cases are an exception, as several opinions have rejected claimed justifications in light of presumed LRAs.⁶⁵

Lower courts have filled the vacuum, elaborating a burden-shifting framework that combines the LRA test with a net-effects test. In one typical formulation, the plaintiff offers evidence establishing the presence of an anticompetitive effect—for example, higher prices to purchasers. ⁶⁶ In response, the defendant offers evidence of a cognizable benefit. ⁶⁷ Next, the court considers plaintiff's presentation of evidence about an LRA. ⁶⁸ If there is no LRA, the final step is to determine whether there is a net anticompetitive effect. ⁶⁹ The LRA and net-effects steps are alternative ways to establish liability.

This "typical" formulation masks important disagreement among the lower courts. For example, some courts (including the *O'Bannon* court) omit the net-effects inquiry, making the demonstration of an LRA necessary for liability.⁷⁰ A second difference is the burden of persuasion. Some courts assign this burden to defendants, particularly in tying and

irrelevant."). In context, Justice O'Connor was pointing out the lack of mixed effect, rather than objecting to the LRA test.

^{64.} Aspen Skiing Co. v. Aspen Highlands Skiing Co., 472 U.S. 585, 605 (1985) (asking, as relevant question for liability, whether conduct "impaired competition in an unnecessarily restrictive way").

^{65.} See supra note 58 (identifying cases).

^{66.} E.g., Geneva Pharms. Tech. Corp. v. Barr Labs. Inc., 386 F.3d 485, 506–07 (2d Cir. 2004) (noting plaintiff's initial burden to demonstrate anticompetitive effect). The plaintiff might show that prices actually increased or instead that an increase is likely given the usual tendency of such conduct, combined with a showing that the plaintiff has market power.

^{67.} See id. at 507.

^{68.} See id.

^{69.} See, e.g., id. ("Ultimately, the factfinder must engage in a careful weighing of the competitive effects of the agreement—both pro and con—to determine if the effects of the challenged restraint tend to promote or destroy competition."); County of Tuolumne v. Sonora Cmty. Hosp., 236 F.3d 1148, 1160 (9th Cir. 2001) (progressing to "balancing stage" after plaintiffs failed to establish LRA); Model Jury Instructions, supra note 50, at A-12 (Instruction 3D) (instructing, when no LRA exists, to "balance . . . competitive benefits against the competitive harm") Collaboration Guidelines, supra note 29, § 3.37, at 24-25 (if agreement is "reasonably necessary to achieve cognizable efficiencies," agencies proceed to analysis of "likelihood and magnitude" of harms and efficiencies to determine "overall actual or likely effect on competition"); see also Law v. NCAA, 134 F.3d 1010, 1019 (10th Cir. 1998) (describing steps discussed above, including LRA, but then proceeding to balancing "if these steps are met," raising puzzling prospect that plaintiff is forced to balance even if LRA exists); Einer Elhauge, United States Antitrust Law and Economics 141–42 (2d ed. 2011) [hereinafter Elhauge, Antitrust Law] (proposing more complex set of procedural steps distinguishing arguments made at dismissal and summary judgment stages).

^{70.} See infra section III.B (examining role of LRA test if net-effects analysis is omitted).

merger cases.⁷¹ Other courts give the burden to plaintiffs. These disagreements are taken up in Parts III and IV.

Perhaps echoing its neglect by the Supreme Court, the LRA test has received limited critical attention. Several scholars have criticized the LRA analysis as too demanding in rule of reason⁷² or monopolization⁷³ cases. A larger literature considers the test in a more limited or scattered fashion, often in the course of analyzing a particular type of antitrust claim⁷⁴ or specific matter.⁷⁵

^{71.} See infra section IV.A (arguing plaintiffs properly bear burden of persuasion in establishing LRA in rule of reason, merger, and tying cases).

^{72.} See, e.g., Gabriel A. Feldman, The Misuse of the Less Restrictive Alternative Inquiry in Rule of Reason Analysis, 58 Am. U. L. Rev. 561 (2009) [hereinafter Feldman, Misuse]. Professor Gabriel Feldman focuses attention on the rule of reason, objecting to the use of the LRA test as a benchmark for liability. See id. at 591–92 (critiquing use of LRA as "dispositive prong"); see also Renee Grewe, Antitrust Law and the Less Restrictive Alternatives Doctrine: A Case Study in Its Application in the Sports Context, 9 Sports Law. J. 227, 236–245 (2002) (describing discrepancies in lower court applications of LRA test).

^{73.} See, e.g., Alan Devlin, Antitrust as Regulation, 49 San Diego L. Rev. 823, 828 (2012) (objecting that LRA test in monopolization cases lacks limiting principle).

^{74.} In the context of the rule of reason, see Thomas C. Arthur, A Workable Rule of Reason: A Less Ambitious Antitrust Role for the Federal Courts, 68 Antitrust L.J. 337, 380-81 (2000) (proposing particular structure for LRA test); Michael A. Carrier, The Real Rule of Reason: Bridging the Disconnect, 1999 BYU L. Rev. 1265, 1336 [hereinafter Carrier, Real Rule] (arguing courts do poor job of determining LRAs); Peter C. Carstensen, The Content of the Hollow Core of Antitrust: The Chicago Board of Trade Case and the Meaning of the "Rule of Reason" in Restraint of Trade Analysis, in 15 Research in Law and Economics 1, 65-68 (Richard O. Zerbe, Jr. & Victor P. Goldberg eds., 1992) (evaluating LRA approach and its interaction with net-effects analysis); Alan J. Meese, Price Theory, Competition, and the Rule of Reason, 2003 U. Ill. L. Rev. 77, 110-13, 167-70 [hereinafter Meese, Price Theory] (observing LRAs are often less effective in practice and drawing implications); Timothy J. Muris, The New Rule of Reason, 57 Antitrust L.J. 859, 863 (1988) (accepting LRA test as proper basis for condemning conduct, while cautioning against "elaborate second-guessing" by courts); Lawrence A. Sullivan, The Viability of the Current Law on Horizontal Restraints, 75 Calif. L. Rev. 835, 885-86 (1987) (discussing importance of LRAs in several Supreme Court cases). On mergers, see, e.g., Dennis A. Yao & Thomas N. Dahdouh, Information Problems in Merger Decision Making and Their Impact on the Development of an Efficiencies Defense, 62 Antitrust L.J. 23, 35-41 (1993) (assessing difficulties in evaluating merger-specific efficiencies). For exclusion cases, see, e.g., Louis Kaplow, Extension of Monopoly Power Through Leverage, 85 Colum. L. Rev. 515, 540-43 (1985) (describing frequent failure to pay sufficient attention to LRAs). On patent royalty agreements, see, e.g., Erik Hovenkamp, A Broader Look at Patent Royalties and Antitrust 24 (Sept. 7, 2015) (unpublished manuscript) (on file with the Columbia Law Review) (advocating antitrust liability for certain offsetting royalty arrangements in light of LRA).

^{75.} For competing perspectives on the LRA test as applied in the Google Books Settlement, see generally Einer Elhauge, Why the Google Books Settlement Is Procompetitive, 2 J. Legal Analysis 1 (2010); Marina Lao, The Perfect Is the Enemy of the Good: The Antitrust Objections to the Google Books Settlement, 78 Antitrust L.J. 201 (2012); Randal C. Picker, Antitrust and Innovation: Framing Baselines in the Google Book Search Settlement, Antitrust Chron., Oct. 2009. For perspectives on the LRA test as applied in sports law, see generally Gabriel A. Feldman, Antitrust Versus Labor Law in Professional Sports, 45 U.C. Davis L. Rev. 1221 (2012); Stephen S. Ross, An Antitrust Analysis of Sports League Contracts with Cable Networks, 39 Emory L.J. 463 (1990).

C. Dominant Alternatives

To say that an alternative is less restrictive is only half of the LRA analysis. A further question is effectiveness—how well the alternative serves the procompetitive end. Some alternatives are *dominant* in the sense indicated in the Introduction: They are not only less restrictive, but also equally (or more) effective. Other alternatives are not only less restrictive, but also less effective. They may or may not be superior, on balance.

This distinction is illustrated by Figure 1, which depicts the conduct (point A) and an alternative action (point Z) along the dimensions of justification and restriction. Here, A has equal or lesser benefit and greater restriction compared to Z. Thus, the existence of the dominant alternative Z provides a basis for condemning A. The same is true for any conduct to the southwest of Z. By contrast, consider Z. Z is less effective than A and hence fails as a dominant alternative.

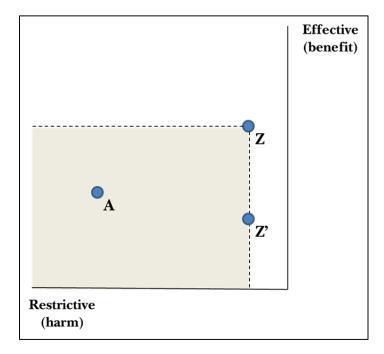


FIGURE 1: DOMINANT ALTERNATIVES

Condemning conduct in light of a dominant alternative is a form of cost-benefit analysis just as much as the net-effects inquiry. Although cost-benefit comparisons often require courts to confront a tradeoff, this is not always the case. If one action, compared to another, has greater or

^{76.} Z' may or may not be superior to A on balance, depending upon the degree to which it is less restrictive.

equal benefit and also imposes a lesser burden on competition, it is decisively better. Such alternatives offer a free lunch that we may choose without regret. These are the easy cases, in which cost-benefit analysis can be performed without needing to explore any tradeoff.

Antitrust courts and agencies often limit the LRA analysis to dominant alternatives. In *O'Bannon*, the equal-effectiveness limitation had determinative force.⁷⁷ The court accepted the slightly larger aid package as an equally effective LRA, while rejecting a second LRA as less effective.⁷⁸ Equal effectiveness is an explicit limitation in cases,⁷⁹ jury

77. See O'Bannon v. NCAA, 802 F.3d 1049, 1064 (9th Cir. 2015) ("[A] restraint that serves a procompetitive purpose can still be invalid under the Rule of Reason if a substantially less restrictive rule would further the same objectives *equally well*." (emphasis added)); id. at 1074, 1076–78 (requiring "virtually as effective" LRA); id. at 1075 (limiting analysis to following proposition: "where, as here, a restraint is patently and inexplicably stricter than is necessary to accomplish all of its procompetitive objectives, an antitrust court can and should invalidate it and order it replaced with a less restrictive alternative" (emphasis omitted)); id. at 1076 ("We cannot agree that a rule permitting schools to pay students pure cash compensation and a rule forbidding them from paying... compensation are both *equally* effective in promoting amateurism and preserving consumer demand.").

78. Id. at 1076 (rejecting deferred-compensation LRA as less effective). Similarly, the dissent accepted this limitation, arguing that the deferred-compensation LRA was in fact equally effective. Id. at 1081 (Thomas, C.J., concurring in part and dissenting in part) (framing relevant question as whether LRA is "virtually as effective' in preserving *popular demand for college sports*," as opposed to amateurism per se (quoting id. at 1076 (majority opinion))).

79. See, e.g., United States v. Apple, Inc., 791 F.3d 290, 350 (2d Cir. 2015) (Jacobs, J., dissenting) (crediting justification of procompetitive entry given that "[n]obody has proposed... any 'less restrictive means' by which Apple could have achieved the same competitive benefits"); Geneva Pharms. Tech. Corp. v. Barr Labs. Inc., 386 F.3d 485, 507 (2d Cir. 2004) (noting at LRA step, plaintiffs must prove "any legitimate competitive benefits . . . could have been achieved" through LRA); Virgin Atl. Airways Ltd. v. British Airways PLC, 257 F.3d 256, 265 (2d Cir. 2001) (requiring, at LRA step, plaintiff must show "same procompetitive effect could be achieved through alternative means"); County of Tuolumne v. Sonora Cmty. Hosp., 236 F.3d 1148, 1159 (9th Cir. 2001) (requiring plaintiffs show alternative is "virtually as effective" in serving defendant's objective, concluding proposed LRAs were less effective, and ruling in favor of defendants at final net-effects step); Sullivan v. NFL, 34 F.3d 1091, 1103 (1st Cir. 1994) (stating "restriction is not reasonable" if "less restrictive alternative . . . exists that would provide the same benefits"). Some cases impose liability in light of a dominant alternative, without specifying whether a less effective alternative would have sufficed. See, e.g., United States v. Am. Express Co., 88 F. Supp. 3d 143, 236 & n.61 (E.D.N.Y. 2015) (imposing liability in light of "equally effective" alternative); Saint Alphonsus Med. Ctr.-Nampa, Inc. v. St. Luke's Health Sys., Ltd., Nos. 1:12-CV-00560-BLW, 1:13-CV-00116-BLW, 2014 WL 407446, at *2 (D. Idaho Jan. 24, 2014) (disapproving acquisition in light of "other ways to achieve the same effect that do not run afoul of the antitrust laws"); see also United States v. Microsoft Corp., 253 F.3d 34, 90 (D.C. Cir. 2001) (en banc) (per curiam) (characterizing Supreme Court tying cases as ruling "same" benefits could be achieved through LRA); Comcast Corp., 23 FCC Rcd. 13,028 (2008), vacated, Comcast Corp. v. FCC, 600 F.3d 642 (D.C. Cir. 2010) (limiting LRA analysis, in regulatory proceeding about alleged anticompetitive conduct, to dominant alternatives); Meese, Price Theory, supra note 74, at 111 n.170 (collecting sources).

instructions,80 and commentary.81

The limitation to dominant alternatives is not an instruction of the Supreme Court, which is hardly surprising given the Court's inattention to the LRA test altogether. Nor is the limitation uniformly applied by lower courts. A somewhat broader view recognizes alternatives that confer "similar" or "comparable" benefits. 82 As a logical matter, there is a further, more expansive possibility, which is to recognize alternatives that are less effective in serving the claimed aim. As developed in section II.C, less effective alternatives might be preferred to the challenged conduct, provided that the lesser restrictiveness outweighs the lesser effectiveness.

Many cases are effectively silent on the degree of effectiveness needed to establish an LRA.⁸³ In particular, some courts employ the vague formulation that the restraint must be "reasonably necessary" to achieve the benefit.⁸⁴ That phrase can be read to implement any of the positions above. Perhaps a wide range of dominant and nondominant LRAs may be used to demonstrate that the restraint was not reasonably necessary to achieve the benefit.⁸⁵ Or perhaps only LRAs with similar or comparable benefits may be used.⁸⁶ Or more narrowly, perhaps only

^{80.} See, e.g., Model Jury Instructions, supra note 50, at A-10 (Instruction 3C) ("If the plaintiff proves that the same benefits could have been readily achieved by other, reasonably available alternative means... then they cannot be used to justify the restraint.").

^{81.} See, e.g., Elhauge, Antitrust Law, supra note 69, at 142 (framing analysis as restricted to LRAs that "equally achieve . . . procompetitive effects"); Herbert Hovenkamp, Federal Antitrust Policy: The Law of Competition and Its Practice 280 (4th ed. 2011) (limiting LRA analysis to alternatives that achieve "same efficiencies").

^{82.} See, e.g., United States v. Brown Univ., 5 F.3d 658, 679 (3d Cir. 1993) (considering, at LRA step, whether "comparable benefits could be achieved through a substantially less restrictive alternative"); 11 Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law ¶ 1912i, at 371–72 (3d ed. 2011) (asking, at LRA step, whether "same (or nearly the same) procompetitive benefits could be achieved by" LRA); Lawrence A. Sullivan & Warren S. Grimes, The Law of Antitrust: An Integrated Handbook 223 (1st ed. 2000) (criticizing opinion in which court failed to consider whether LRA would have been "nearly as effective" in achieving claimed end); Collaboration Guidelines, supra note 29, § 3.36(b), at 24 (considering, at LRA step, whether "participants... could achieve similar efficiencies by practical, significantly less restrictive means"); see also Meese, Price Theory, supra note 74, at 111 n.172 (collecting commentary).

^{83.} For example, in *Law v. NCAA*, the court considered whether the defendant's "objectives can be achieved in a substantially less restrictive manner." 134 F.3d 1010, 1019 (10th Cir. 1998). That formulation leaves open whether the objectives must be achieved to the same degree or may be achieved to a lesser degree.

^{84.} See, e.g., *Brown Univ.*, 5 F.3d at 669 (formulating standard as "reasonably necessary to achieve the stated objective").

^{85.} See, e.g., 7 Areeda & Hovenkamp, supra note 82, ¶ 1505b, at 419 (equating "reasonably necessary" test with absence of LRA); id. (reading test to require "discriminating judgment about the allegedly less restrictive alternative: how much worse for the parties or how much better for society," apparently accepting liability in light of LRA that is "worse for the parties").

^{86.} See, e.g., *Brown Univ.*, 5 F.3d at 669 (formulating standard as "reasonably necessary to achieve the stated objective"); id. at 679 (requiring "comparable benefits").

dominant LRAs count.⁸⁷ Most lenient of all, the phrase might mean that the restraint is permitted provided it makes an incremental contribution to the claimed benefit, even if there exists an LRA.⁸⁸

Dominant LRAs are used to varying degrees in areas of law other than antitrust. For example, constitutional scrutiny of state action is often limited to equally effective alternatives. By contrast, as noted above, administrative law and tort law evaluate both the benefits and the costs of an alternative. It is remarkable and even surprising that in this respect, antitrust bears a stronger resemblance to constitutional law. That resemblance is a clue to one function of the LRA test in antitrust, the subject of the next Part.

^{87.} On this view, reasonable necessity includes achievement of the objective to a particular degree.

^{88.} This appears to be the approach taken by Carrier, Real Rule, supra note 74, at 1341–46, in discussing a reasonable-necessity requirement that is less searching than condemnation in light of an LRA. The existence of a separate, more limited test is suggested by cases that treat the absence of reasonable necessity and the existence of an LRA as distinct inquiries. See, e.g., United States v. Visa U.S.A., Inc., 344 F.3d 229, 238 (2d Cir. 2003) ("[T]he government must prove either that the challenged restraint is not reasonably necessary to achieve the defendants' procompetitive justifications, or that those objectives may be achieved in a manner less restrictive of free competition."); Law, 134 F.3d at 1019 ("[T]he plaintiff... must prove that the challenged conduct is not reasonably necessary to achieve [defendant's] legitimate objectives or that those objectives can be achieved in a substantially less restrictive manner."). Of course, Visa and Law both include an explicit LRA test, so they are of limited help in determining whether a case that invokes reasonable necessity, without separately mentioning LRAs, really means to dispense with an LRA analysis.

^{89.} See, e.g., Fisher v. Univ. of Tex. at Austin, 133 S. Ct. 2411, 2420 (2013) (asking whether "nonracial approach . . . could promote the substantial interest about as well" (quoting Wygant v. Jackson Bd. of Educ., 476 U.S. 267, 280 n.6 (1986))); Sorrell v. IMS Health, Inc., 131 S. Ct. 2653, 2674 (2011) (asking whether state interest could "be served as well by a more limited restriction" (quoting Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n of N.Y., 447 U.S. 557, 564 (1980))); Ashcroft v. ACLU, 542 U.S. 656, 669 (2004) (requiring defendant establish proposed LRA is less effective); United States v. Playboy Entm't Grp., Inc., 529 U.S. 803, 813 (2000) (stating any "burden on adult speech is unacceptable if less restrictive alternatives would be at least as effective" (citing Reno v. ACLU, 521 U.S. 844, 874 (1997))); Hughes v. Oklahoma, 441 U.S. 322, 336 (1979) (asking "whether alternative means could promote this [legitimate] local purpose as well without discriminating against interstate commerce"); see also District of Columbia v. Heller, 554 U.S. 570, 712 (2008) (Breyer, J., dissenting) (proposing rule that includes search for "equally effective" LRAs); 44 Liquormart, Inc. v. Rhode Island, 517 U.S. 484, 524, 525 n.7 (1996) (Thomas, J., dissenting) (reading plurality as adopting "equa[1] effective[ness]" test); Michael M. v. Superior Court of Sonoma Cty., 450 U.S. 464, 490 (1981) (Brennan, J., concurring in part and concurring in the judgment) (arguing state must show "genderneutral statute would be a less effective means of achieving [its] goal"). The point is also made in Burwell v. Hobby Lobby, a statutory free-exercise challenge made under the Religious Freedom Restoration Act of 1993. 134 S. Ct. 2751, 2782 (2014) (faulting dissent for inability to show why posited LRA would fail to serve government goals "as effectively"); id. at 2801 (Ginsburg, J., dissenting) ("[T]he government has shown that there is no less restrictive, equally effective means ").

^{90.} For further discussion, see supra notes 46-47 and accompanying text.

II. THE FUNCTIONS OF THE LRA TEST

The LRA test serves multiple functions in antitrust law. To varying degrees, each of them serves to ease an anxiety discussed in section II.A—that courts resist and avoid calculation and integration of the tradeoff between positive and negative effects that inheres in mixed conduct.

This Part identifies three functions of the LRA test—as a shortcut, a locus of balancing, and a tool of smoking out. Section II.B demonstrates that sometimes courts can legitimately avoid net-effects balancing by the shortcut of identifying a dominant LRA. In other cases, the only available alternative is less effective. Section II.C argues that condemning in light of a less effective alternative is best understood and defended as a form of balancing. A third approach is to employ the LRA not as a benchmark that the conduct must clear but as a diagnostic tool. Section II.D makes the limited case for a diagnostic to smoke out the anticompetitive effect of ambiguous conduct.

A. Anxiety About Balancing

Although modern antitrust law has economics at its core, applying cost-benefit analysis to real-world conduct is not a straightforward task. Assessing the net effect of mixed conduct is hard. It is challenging to measure the effects of, say, a loss in competition for players arising from limits on compensation. (How much would the players receive? Which ones? What would be the change in output, if any?) Measuring the benefits to competition among sports leagues is also hard. (Would fans otherwise watch less college sports? How much worse is the next-best use of fans' time? What are the effects on advertising markets?) A full analysis requires an assessment of size, probability, and error costs. Such quantification, at least in a rough sense, is necessary in order to compare the two effects.

Implementation is a further, potentially difficult issue. Judges are generalists, see antitrust cases only rarely, are generally unfamiliar with the practice and industry at issue, and are therefore not well equipped to evaluate these effects. The limited fact-finding capacity of courts is a familiar refrain, 91 as is courts' limited capacity in antitrust cases, 92 particularly if the fact-finding is performed by a jury.

^{91.} See, e.g., C. Scott Hemphill, An Aggregate Approach to Antitrust: Using New Data and Rulemaking to Preserve Drug Competition, 109 Colum. L. Rev. 629, 671 & n.171 (2009) (discussing limited capacity of courts as fact-finders in antitrust cases); Margaret H. Lemos, The Commerce Power and Criminal Punishment: Presumption of Constitutionality or Presumption of Innocence?, 84 Tex. L. Rev. 1203, 1251–57 (2006) (reviewing arguments that courts are weak fact-finders).

^{92.} See, e.g., United States v. Topco Assocs., Inc., 405 U.S. 596, 609–10 (1972) ("The fact is that courts are of limited utility in examining difficult economic problems. Our inability to weigh, in any meaningful sense, destruction of competition in one sector of the

The adversarial nature of antitrust litigation deepens these difficulties. Party economists frequently reach the conclusion that there is no mixed conduct to begin with. The plaintiff's expert concludes that there is an anticompetitive effect and that the justification is illogical or unsupported.⁹³ The defendant's expert concludes, to the contrary, that there is no anticompetitive effect and strong evidence of a justification.⁹⁴ Neither economist is likely to offer much insight about the integration of the contrasting effects. Doing so requires the party expert to embrace hypotheticals—"if defendant's evidence of justification is correct, how does that compare to your evidence of anticompetitive effect?"—that are poorly suited to the conduct of adversarial litigation. Federal courts have substantial authority to appoint neutral economists to support the court's work,95 and neutrals would help, but they remain a rarity in antitrust litigation.96

Another issue is more fundamental—that the court might view the values at stake to be incommensurable. 97 In the context of constitutional scrutiny of mixed state action, Justice Scalia memorably described this problem as the futile attempt to "judg[e] whether a particular line is longer than a particular rock is heavy."98 The quotation comes from a dormant commerce clause case; the values at stake in an antitrust case

have formulated per se rules." (footnote omitted)); see also Herbert Hovenkamp, The Antitrust Enterprise 47 (2006) [hereinafter Hovenkamp, Antitrust Enterprise] ("[T]here is relatively little disagreement about the basic proposition that often our general judicial system is not competent to apply the economic theory necessary for identifying strategic behavior as anticompetitive."); Christopher R. Leslie, Rationality Analysis in Antitrust, 158 U. Pa. L. Rev. 261, 264 (2010) (arguing "courts are generally not effective arbiters of whether alleged business conduct is implausible").

- 93. For example, in United States v. American Express Co., the court cited testimony by plaintiff's expert that the challenged conduct had an anticompetitive effect and that a claimed justification (avoiding free-riding) was inapt in light of an LRA. 88 F. Supp. 3d 143, 209–10, 236–37 (E.D.N.Y. 2015).
- 94. The expert for American Express opined in part that the challenged conduct lacked anticompetitive effect because the form of competition suppressed is undesirable and that the conduct had the procompetitive effect of avoiding free-riding. See id. at 211,
- 95. See Fed. R. Evid. 706(a) (addressing expert witnesses); Fed. R. Civ. P. 53 (addressing special masters); Reilly v. United States, 863 F.2d 149, 158 (1st Cir. 1988) (addressing technical advisors).
- 96. In re High Fructose Corn Syrup Antitrust Litig., 295 F.3d 651, 665 (7th Cir. 2002) (Posner, J.) (noting and explaining "infrequency" of neutrals under Fed. R. Evid. 706).
- 97. For an introduction to a large literature, see generally Matthew Adler, Law and Incommensurability: Introduction, 146 U. Pa. L. Rev. 1169, 1169-84 (1998); Cass R. Sunstein, Incommensurability and Valuation in Law, 92 Mich. L. Rev. 779, 795-801 (1994) (defining and discussing problem of valuation). Even if values are incommensurable, they may nevertheless be sufficiently comparable to enable a choice. Id. at 798.
- 98. Bendix Autolite Corp. v. Midwesco Enters., 486 U.S. 888, 897 (1988) (Scalia, J., concurring in the judgment).

economy against promotion of competition in another sector is one important reason we

are comparably commercial. Not all antitrust cases raise deep issues, ⁹⁹ but relatively difficult comparisons arise when the harms and benefits fall on different economic actors, requiring an interpersonal (or intergenerational) comparison ¹⁰⁰ or a summing of contrasting effects on individuals and firms.

These difficulties tend to be particularly pronounced in cases alleging anticompetitive exclusion of a rival. ¹⁰¹ The harm to consumers is an indirect consequence of limiting a rival's production. Often, the plaintiff asserts a harm to innovation, ¹⁰² the welfare effects of which can be larger than with high prices or reduced output ¹⁰³ while being particularly difficult to measure. ¹⁰⁴ For its part, the defendant often asserts a benefit to innovation thanks to the conduct. ¹⁰⁵

The resulting anxiety about balancing has led courts and commentators to shy away from an analysis of net effects. *Addyston Pipe* worried about the "sea of doubt" that accompanies a search for net effects. ¹⁰⁶ Judge Robert Bork dismissed the possibility of "weigh[ing] procompetitive effects against anticompetitive effects" thusly: "[W]e do not think that a usable formula if it implies an ability to quantify the two effects and compare the values found." ¹⁰⁷ The leading treatise, while accepting the need for both an LRA test and a net-effects balancing step, regards the prospect with trepidation: If the court reaches that step, it "must *somehow* weigh and balance the harm against the benefit." ¹⁰⁸

^{99.} See, e.g., Thomas B. Nachbar, The Antitrust Constitution, 99 Iowa L. Rev. 57, 64 (2013) (discussing ease of comparison between positive and negative effects under efficiency-focused conception of antitrust law).

¹⁰⁰. See Allensworth, supra note 27, at 23-24 (discussing interpersonal-comparison problem).

^{101.} A. Douglas Melamed, Exclusionary Conduct Under the Antitrust Laws: Balancing, Sacrifice, and Refusals to Deal, 20 Berkeley Tech. L.J. 1247, 1248–49, 1254 (2005) (arguing practical difficulties with balancing are worse in exclusion cases).

^{102.} See, e.g., Complaint at ¶¶ 11, 37, 119, United States v. Microsoft Corp., 87 F. Supp. 2d 30 (D.D.C. 2000) (claiming Microsoft's anticompetitive conduct stifled innovation), aff'd in part, rev'd in part, 253 F.3d 34 (D.C. Cir. 2001) (No. 98-1232).

^{103.} See C. Scott Hemphill & Tim Wu, Parallel Exclusion, 122 Yale L.J. 1182, 1210–13 (2013) (discussing harm to innovation produced by parallel exclusion).

^{104.} See David McGowan, Innovation, Uncertainty, and Stability in Antitrust Law, 16 Berkeley Tech. L.J. 729, 738 (2001) (discussing difficulties associated with judicial promotion of innovation in antitrust cases).

^{105.} See, e.g., Final Form Brief of Defendants-Appellants (Redacted) at 32–33, 53–54, New York v. Actavis PLC, 787 F.3d 638 (2d Cir. 2015) (No. 14-CV-7473), 2015 WL 862486 (arguing challenged product withdrawal would facilitate distribution of newer, better drug); Hillary Greene, Muzzling Antitrust: Information Products, Innovation and Free Speech, 95 B.U. L. Rev. 35, 89 (2015) (noting commensurability problems in product-design cases when innovation is at stake).

^{106.} United States v. Addyston Pipe & Steel Co., 85 F. 271, 284 (6th Cir. 1898).

 $^{107.\}$ Rothery Storage & Van Co. v. Atlas Van Lines, Inc., 792 F.2d 210, 229 n.11 (D.C. Cir. 1986).

^{108. 7} Areeda & Hovenkamp, supra note 82, ¶ 1507c, at 430 (emphasis added).

This anxiety is shared with constitutional law. There the anxiety is rooted in analogous concerns about quantification and incommensurability. Constitutional scrutiny raises a further concern that is absent from antitrust law—that courts might be stepping beyond their proper bounds when they second guess the work of the legislature. 110

The response in constitutional law has two elements of relevance to antitrust—first, to suppress any explicit calculation of net effects. Although net-effects balancing is an acknowledged part of constitutional analysis in many democracies, 111 courts generally avoid it in the United States. 112 The second response is to emphasize an analysis of intent in place of an analysis of effects.

To a degree, antitrust law has embraced both responses. Some courts have dispensed with net-effects balancing. For example, the *O'Bannon* court and other courts have simply dropped the net-effects test (while retaining the LRA test), an approach endorsed by some commentators. Other commentators have proposed replacing balancing with an inquiry into intent grounded in an evaluation of profitability. If the mixed conduct makes "no economic sense" for a profit-maximizing firm apart from its anticompetitive tendency, the conduct is subject to

^{109.} See, e.g., T. Alexander Aleinikoff, Constitutional Law in the Age of Balancing, 96 Yale L.J. 943, 984 (1987) (noting and criticizing "opinions that have openly explored the 'costs' and 'benefits' of constitutional rules and appealed to empirical evidence of the effect of constitutional doctrine on societal interests"); Frederick Schauer, Commensurability and Its Constitutional Consequences, 45 Hastings L.J. 785, 809 (1994) (noting and "deflat[ing] some of the moral rhetoric surrounding the commensurability debate in legal and constitutional context").

^{110.} For a sampling of this view, see, e.g., Gerald Gunther, The Supreme Court, 1971 Term—Foreword: In Search of Evolving Doctrine on a Changing Court: A Model for a Newer Equal Protection, 86 Harv. L. Rev. 1, 21–22 (1972) (discussing evaluation of means rather than ends to avoid "ultimate value judgments about the legitimacy and importance of legislative purposes"); Donald H. Regan, The Supreme Court and State Protectionism: Making Sense of the Dormant Commerce Clause, 84 Mich. L. Rev. 1091, 1131 (1986) ("The court has no warrant for second-guessing the legislature"); see also Bendix Autolite Corp. v. Midwesco Enters., 486 U.S. 888, 897 (1988) (Scalia, J., concurring in the judgment) ("Weighing the governmental interests of a State against the needs of interstate commerce is . . . a task squarely within the responsibility of Congress . . . and 'ill suited to the judicial function." (quoting CTS Corp. v Dynamics Corp. of Am., 481 U.S. 69, 95 (1987) (Scalia, J., concurring in part and concurring in the judgment))).

^{111.} Barak, supra note 42, at 340, 348 (discussing "balancing in the strict sense" as final stage of proportionality review).

^{112.} Commentators often remark upon this contrast in comparisons of the regimes. See, e.g., id. at 518; Jud Mathews & Alec Stone Sweet, All Things in Proportion? American Rights Review and the Problem of Balancing, 60 Emory L.J. 797, 833–36 (2011) (contrasting "all-purpose" German proportionality analysis with "rigid" U.S. approach).

^{113.} See, e.g., Bork, Antitrust Paradox, supra note 36, at 279 (proposing categorical approach to assessing legality of horizontal restraints); Arthur, supra note 74, at 367 (characterizing balancing test as impractical); see also Carstensen, supra note 74, at 65–66 (advocating *Addyston Pipe* approach). But see id. at 67 (acknowledging insufficiency of approach in identifying unreasonable restraints). For further discussion, see infra section III.B.

condemnation, while conduct that makes economic sense is permitted.¹¹⁴ Notwithstanding these developments, however, net-effects balancing remains an important part of the law on the books for the Supreme Court and many lower courts.¹¹⁵

Beyond omission and a shift toward intent, avoidance of net effects in antitrust takes a further, more subtle form. Courts may avoid balancing in practice, while acknowledging balancing in theory, by deciding the case on other grounds that arise earlier in the analysis. Some evidence of this avoidance appears in rule-of-reason cases. Although it is commonplace to understand the rule of reason as a fact-intensive search for net effects, cases are seldom decided on that explicit basis. An extensive survey of rule of reason final judgments concluded that very few are decided on net-effect balancing grounds. A similar avoidance appears in monopolization cases such as the famous D.C. Circuit opinion in *United States v. Microsoft Corp.*, which reached balancing in just two instances, despite repeated assertions of mixed conduct. Careful observers have gone so far as to declare that explicit balancing is a "myth." 118

^{114.} See, e.g., A. Douglas Melamed, Exclusive Dealing Agreements and Other Exclusionary Conduct—Are There Unifying Principles?, 73 Antitrust L.J. 375, 391–92 (2006) (advocating "sacrifice test" and emphasizing its close resemblance to "no economic sense" test); Gregory J. Werden, Identifying Exclusionary Conduct Under Section 2: The "No Economic Sense" Test, 73 Antitrust L.J. 413, 422–25 (2006) (advocating no-economic-sense test). This test has received particular attention in the context of exclusionary conduct. The connection between this test and the LRA test is examined in section II.D.

^{115.} See supra notes 28–31 and accompanying text (collecting evidence).

^{116.} See Carrier, Real Rule, supra note 74, at 1272–73 (concluding balancing took place in less than five percent of surveyed rule-of-reason cases); Michael A. Carrier, The Rule of Reason: An Empirical Update for the 21st Century, 16 Geo. Mason L. Rev. 827, 828 (2009) (updating previous study and finding two percent of cases in more recent sample resulted in balancing). Most of the surveyed cases lacked an anticompetitive effect and thus did not present mixed conduct. The survey does not include denials of summary judgment or motions to dismiss, see Carrier, Real Rule, supra note 74, at 1270 n.13, and thus likely misses some instances of balancing.

^{117.} In both instances, the court denied liability at the balancing stage. See United States v. Microsoft Corp., 253 F.3d 34, 63 (D.C. Cir. 2001) (en banc) (per curiam) (crediting justification for Microsoft's ban on user interfaces that replaced Windows desktop and concluding the justification "outweighs the marginal anticompetitive effect"); id. at 67 (crediting justification and denying liability upon government's failure to show anticompetitive effect "outweighs" justification as to product design overriding user choice of default browser).

^{118.} Andrew I. Gavil, William E. Kovacic & Jonathan B. Baker, Antitrust Law in Perspective: Cases, Concepts and Problems in Competition Policy 207 (2d ed. 2008) ("[R]ule of reason balancing' is perhaps the greatest myth in all of U.S. antitrust law."); Andrew I. Gavil, Burden of Proof in U.S. Antitrust Law, *in* 1 Issues in Competition Law and Policy 125, 147 (2008) (characterizing balancing as "myth").

B. A Valid Shortcut

The LRA test is a response to the anxiety about balancing. It replaces a hard question—the calculation of net effects—with an analysis that requires no tradeoff between justification and restriction. The shortcut works, but only if the LRA is a dominant alternative. The analysis thus shifts to an inquiry into whether the proposed alternative is less restrictive and equally (or more) effective. This section examines the circumstances under which that inquiry offers a valid and effective shortcut.

As an example, consider the public performance licenses issued by the American Society of Composers, Authors and Publishers (ASCAP). In the early years, songwriters granted exclusive public performance licenses to ASCAP, which were repackaged into a blanket license and made available to radio stations and other public performers of musical works. 120 The exclusive licenses eliminated price competition among the songwriters, essentially creating a market-wide cartel, to the detriment of some consumers. But at the same time, they made possible the creation of a valuable new good, a blanket license offering immediate and easy access to a large repertoire of songs. 121 This mixed conduct, however, was subject to an obvious LRA—to make the licenses nonexclusive. Nonexclusive licenses fully retained the benefit of the blanket license while permitting individually negotiated licenses. 122 Put in the terms of Addyston Pipe, the licenses were ancillary to a desirable transaction but more restrictive than necessary to achieve the benefit. Under pressure from the Justice Department, ASCAP shifted to nonexclusive licenses. 123

Taking the LRA shortcut—nonexclusive licenses in the case of ASCAP—has several benefits. One benefit, already emphasized, is to avoid the calculation of harm and benefit and thereby relieve the anxiety

^{119.} Although there is no "balancing" in the sense of a tradeoff of incremental benefit and incremental harm, there may be balancing in other senses of the term. For example, finding a dominant alternative might be viewed as identifying a different balance, compared to that selected by the defendant.

^{120.} See 17 U.S.C. § 106(4) (2012) (granting, to owner of musical work copyright, right to authorize public performances). ASCAP does not handle all compositions; Broadcast Music, Inc. and the Society of European Stage Authors and Composers also assemble blanket licenses. For digital audio transmissions, a second license to the sound recording is also required. See id. § 106(6) (granting, to owner of sound recording copyright, right to authorize public performances by means of digital audio transmissions).

^{121.} Walter L. Pforzheimer, Comment, Copyright Reform and the Duffy Bill, 47 Yale L.J. 433, 443 (1938) (noting benefit to music consumers from access to "extensive repertoire required by modern entertainment demands").

^{122.} A different question would be presented if nonexclusivity caused some songwriters to withdraw their music from the blanket license. Courts would then be entering the territory of balanced LRAs.

^{123.} See United States v. Am. Soc'y of Composers, Authors & Publishers, No. 13-95, 1950 U.S. Dist. LEXIS 1900, at *3–4 (S.D.N.Y. Mar. 14, 1950) (enjoining ASCAP from limiting members' ability to issue nonexclusive licenses).

about balancing. The court also avoids deciding whether a particular benefit is cognizable.¹²⁴ Even if the mixed conduct can be conceptualized as a single effect, the shortcut may be useful if measurement of the overall effect is difficult.

As shortcuts go, however, the LRA test is unusual. Many shortcuts, in antitrust as elsewhere, offer simplicity at the expense of accuracy. For example, courts have adopted an explicitly lenient rule for predatory pricing. Price fixing is per se illegal even though sometimes it is welfare enhancing. Many antitrust claims require a finding of horizontal agreement, which serves as an imperfect proxy for socially harmful activity that can occur even without agreement. Proxy for socially harmful activity that can occur even without agreement.

By contrast, the LRA-as-shortcut approach is accurate, provided its demanding conditions are met, but not necessarily simple. The main demand pertains to the benefit: to have enough information to determine that the alternative has (at least) equal benefits compared to the conduct. This informational demand may be similar in nature to the avoided costs of calculating net effects. As for restrictiveness, showing that the LRA is indeed less restrictive is comparatively easy. Often it is not restrictive at all. The alternative to an exclusive license may be a nonexclusive contract with no anticompetitive tendency. The contractual alternative to merger may offer no opportunity for raising price.

In meeting this informational demand, an easy special case arises when the action makes no incremental contribution to the claimed justification. Such cases might be said to fail ancillarity. The LRA is simply to refrain from the conduct. Without the conduct, the level of benefit is unchanged. The conduct is unnecessary, not merely in the sense that *switching* to an alternative achieves the same benefit with less harm but in the stronger sense that *halting* the conduct would do so.

This scenario, a special case of Figure 1, is depicted in Figure 2. The alternative of cessation is located at the origin. That LRA suffices to condemn actions (such as point A) to the west of the alternative (point Z). A glance at the figure reveals an overlap between the LRA and neteffects inquiries. Where the LRA is mere cessation, rather than alternative affirmative conduct, the two inquiries essentially merge.

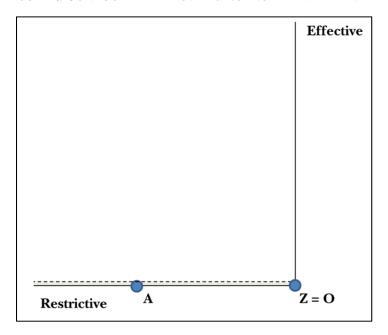
^{124.} See supra section I.A (discussing benefits premised on avoiding competition and benefits retained by defendant); cf. Ross, supra note 75, at 492–93 (identifying avoidance of costly inquiry into market power as further benefit).

^{125.} See Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 223 (1993) (declining to ban above-cost predation, even if anticompetitive, for fear of "courting intolerable risks of chilling legitimate price-cutting").

^{126.} Michael D. Whinston, Lectures on Antitrust Economics 17 (2006) (presenting example of efficient price fixing).

^{127.} See Hemphill & Wu, supra note 103, at 1226 (explaining this issue in context of both parallel price elevation and parallel exclusion).

FIGURE 2: CONDUCT THAT PROVIDES NO INCREMENTAL BENEFIT



A restraint fails ancillarity when the harm lacks a causal relationship to the claimed benefit. One common fact pattern arises when a defendant takes several conceptually separable actions at the same time, and the LRA test is used to exclude from the analysis a contemporaneous but irrelevant beneficial action. ¹²⁸ For example, in considering Apple's conspiracy to raise prices on ebooks, the benefits from Apple's introduction of the iPad, which coincided with the conspiracy, should not count in Apple's favor, because the iPad would have been introduced in any event. ¹²⁹ A second fact pattern is illustrated by another case about college sports, *NCAA v. Board of Regents of the University of Oklahoma*, ¹³⁰ decided more than thirty years before *O'Bannon*. Plaintiffs challenged an NCAA rule that limited the number of games broadcast on television, thereby increasing the price the networks paid. ¹³¹ The NCAA contended that its rule benefited consumers by helping to maintain competitive balance

^{128.} See Major League Baseball Props., Inc. v. Salvino, Inc., 542 F.3d 290, 339–41 (2d Cir. 2008) (Sotomayor, J., concurring) (applying such analysis under rubric of ancillarity, relying on Polk Bros., Inc. v. Forest City Enters., Inc., 776 F.2d 185, 188–89 (7th Cir. 1985) (Easterbrook, J.), and concluding challenged restraint was inseparable part of defendant's conduct); Greene, supra note 105, at 102–03 & n.320 (making similar point in context of antitrust challenges to product redesigns).

^{129.} See United States v. Apple, Inc., 791 F.3d 290, 334–35 (2d Cir. 2015) (Livingston, J.).

^{130. 468} U.S. 85 (1984).

^{131.} Id. at 105-06.

among the teams.¹³² The Supreme Court rejected this argument because competitive balance was already promoted equally well by other existing NCAA rules that had no restrictive effect.¹³³ In other words, the benefit was already being achieved to some degree, and the restraint provided no incremental benefit. Here, once again, cessation served as an LRA.

C. Balancing

An LRA only works as a shortcut if it is dominant. Most LRAs, however, flunk this test because they are less effective than the conduct in serving a desirable end. Section II.C.1 provides an account and typology of less effective alternatives. Section II.C.2 offers a qualified defense of such alternatives as a basis for condemning anticompetitive conduct.

- 1. Less Effective Alternatives. Many, and perhaps most, LRAs are less effective than the challenged conduct, a point that appears to be well recognized.¹³⁴ The judicial treatment of less effective alternatives can be divided into four basic patterns.
- a. *No Liability*. Some cases deny liability upon a determination that the LRA is less effective, as one would expect from a rule limited to dominant alternatives. For example, in *O'Bannon*, the court considered a second proposed LRA, deferred compensation to be paid once the player leaves college. This alternative only very imperfectly serves the NCAA's goal of promoting amateurism. The players are still being paid a substantial amount, just delayed. That hardly preserves college athletics as a money-free zone. Thus, the LRA was accurately labeled as a less

^{132.} This was one of several arguments considered (and rejected) by the Court. See id. at 117–20.

^{133.} Id. at 119 ("[T]he NCAA imposes... other restrictions designed to preserve amateurism... much better tailored to the goal of competitive balance than... the television plan, and which are clearly sufficient to preserve competitive balance to the extent it is within the NCAA's power to do so." (internal quotation marks omitted) (quoting Bd. of Regents of the Univ. of Okla. v. NCAA, 546 F. Supp. 1276, 1309 (W.D. Okla. 1982))).

^{134.} See, e.g., Feldman, Misuse, supra note 72, at 602 (describing "typical[]" LRA as "a half-way house," with both less restriction and less justification (quoting Robert H. Bork, The Rule of Reason and the Per Se Concept: Price Fixing and Market Division, 75 Yale L.J. 373, 466 (1966))); Meese, Price Theory, supra note 74, at 168 ("[M]any of the [LRAs] posited by courts and scholars are either less effective, more expensive to administer, or both.").

 $^{135.\,}$ See O'Bannon v. NCAA, 802 F.3d $1049,\,1076–79$ (9th Cir. 2015) (considering and rejecting this proposed LRA).

^{136.} Id. (explaining court's view that permitting payment is less effective in "promoting amateurism and preserving consumer demand"). The court did not consider whether this LRA might nevertheless serve the other credited justification, ensuring student integration. Here, the court might have considered whether players who anticipate deferred compensation may shift spending forward, in possible derogation of the integration goal.

effective alternative, and as a consequence, the plaintiff's claim was rejected.¹³⁷

b. Liability: Lesser Effectiveness Misidentified as Equally Effective. — In other cases, a less effective alternative is a basis for condemnation, an outcome reached with varying degrees of candor. For example, consider the St. Luke's case, challenging a transaction that brought eighty percent of primary care physicians in an Idaho town under the same roof. After a bench trial, the district court concluded that the merger was likely to raise prices. At the same time, the court recognized an important efficiency resulting from the deal: increased integration of doctors with other medical providers. Integrated providers could better coordinate care, and by negotiating payment based on outcomes rather than procedures performed, they had an incentive to economize on utilization over time. The court "complimented" the acquirer on its "foresight and vision" in acquiring practices to advance its integration goal.

Nevertheless, the court condemned the merger on the ground that the "same effect" could be accomplished instead through the LRA, a contract-based network of providers. In reaching this conclusion, the court largely relied on the general proposition that a network would achieve the same benefits. It are court's unsupported confidence that contracts are equally effective is doubtful, given previous, failed efforts to accomplish integration without merger and the literature indicating that integrated care requires a high degree of formal integration. Here, the court embraced a less effective LRA.

^{137.} Id. at 1079 (vacating district court's judgment regarding deferred compensation). 138. Saint Alphonsus Med. Ctr.–Nampa, Inc. v. St. Luke's Health Sys., Ltd., Nos. 1:12–CV–00560–BLW, 1:13–CV–00116–BLW, 2014 WL 407446 (D. Idaho Jan. 24, 2014).

^{139.} See id. at *7–8 (noting likely price rise and other bad effects). The court noted that some patients in Nampa, Idaho might go to neighboring Boise, Idaho in response to a price rise but concluded that Boise was an ineffective constraint on pricing. See id. at *7 (noting, prior to transaction, "[o]nly 15% of Nampa residents obtain[ed] their primary care in Boise").

^{140.} See id. at *1 (arguing transition to integrated care "require[s] a major shift away from our fragmented delivery system").

^{141.} Id.; see also id. at *2 ("The Acquisition was intended... primarily to improve patient outcomes. The Court believes that it would have that effect if left intact, and St. Luke's is to be applauded for its efforts to improve the delivery of health care....").

^{142.} Id. at *2. Defendants failed to carry their burden of persuasion in establishing the absence of an (equally effective) LRA. See id. at *14–19 (rejecting several efficiency defenses). For a discussion of the allocation of burdens, see infra section IV.A.

^{143.} See id. at *17 ("Because a committed team can be assembled without employing physicians, a committed team is not a merger-specific efficiency of the Acquisition."); id. at *23 (rejecting "committed team of physicians" as merger-specific efficiency). The court provided a detailed rejection of just one component of the claimed merger-specific efficiencies, namely, that shared electronic records required a merger. Id. at *19.

^{144.} See id. at *4 (noting failure of earlier collaborations).

^{145.} See, e.g., Berkeley Forum, A New Vision for California's Healthcare System: Integrated Care with Aligned Financial Incentives 6 (2013), http://berkeleyhealthcareforum.berkeley.edu/wp-content/uploads/A-New-Vision-for-California's-Healthcare-

c. Liability: Lesser Effectiveness Ignored. — Yet other courts condemn conduct in light of an LRA without considering the effectiveness of the alternative. Often the LRA is in fact less effective. For example, in *United States v. Philadelphia National Bank*, the Supreme Court enjoined a bank merger defended on the ground (among others) that "only through mergers can banks follow their customers to the suburbs and retain their business." The Court rejected this asserted benefit in favor of the LRA of internal growth. Internal growth avoids the anticompetitive concern, but there is no basis for concluding that it would provide a certain or effective means of geographic expansion.

Tying cases furnish additional examples. One early case tested IBM's claim that a tie between its tabulating machines and punch cards was necessary to avoid machine damage from inferior non-IBM punch cards. ¹⁴⁹ The Supreme Court rejected this justification in favor of the LRAs of customer outreach and detailed contractual specification. ¹⁵⁰ However, if the goal were to preserve goodwill, an outright ban would have been more effective than a public relations campaign.

d. Liability: Lesser Effectiveness Acknowledged. — Finally, we can occasionally observe condemnation in light of an alternative that is acknowledged to be less effective. In Arizona v. Maricopa County Medical Society, the Court condemned a maximum fee schedule set by doctors. ¹⁵¹ The Court entertained the doctors' justification—that a fee schedule lowers premi-

System.pdf [http://perma.cc/6T9P-9PZQ] (endorsing increase in care via "fully- or highly-integrated care systems"); Alain C. Enthoven & Laura A. Tollen, Competition in Health Care: It Takes Systems to Pursue Quality and Efficiency, Health Aff. 420 (2005), http://content.healthaffairs.org/content/early/2005/09/07/hlthaff.w5.420.full.pdf (on file with the Columbia Law Review) (identifying healthcare markets "that encourage the formation of high-quality, efficient, integrated delivery systems" as cure for deficiencies in current system); Kaiser Comm'n on Medicaid & the Uninsured, Integrating Physical and Behavioral Health Care: Promising Medicaid Models 1–3 (2014), https://kaiserfamilyfoundation.files.wordpress.com/2014/02/8553-integrating-physical-and-behavioral-healthcare-promising-medicaid-models.pdf [http://perma.cc/8EWD-5V3S] (discussing issues resulting from fragmented care and describing methods to increase integration).

146. See St. Luke's, 2014 WL 407446, at *2 (rejecting proposed acquisition).

147. 374 U.S. 321, 370 (1963).

148. Id.; see also United States v. Marine Bancorporation, Inc., 418 U.S. 602, 629–30 (1974) (citing and distinguishing *Philadelphia National Bank* where "serious questions" existed as to feasibility of internal growth).

149. IBM v. United States, 298 U.S. 131, 134 (1936) (defending lease conditioned on use of IBM cards as means "to preserve . . . the good will of its patrons by preventing the use of unsuitable cards which would interfere with . . . performance").

150. Id. at 139–40 ("Appellant is not prevented from proclaiming the virtues of its own cards or warning against the danger of using, in its machines, cards which do not conform to the necessary specifications").

 $151.\ 457$ U.S. $332,\ 336$ (1982). The case is styled as a per se condemnation of the conduct, but the Court considered the defendants' proffered justification at length.

ums by reducing the cost of providing insurance¹⁵²—but rejected it in light of the LRA that insurers could set the schedule instead of doctors. The Court's analysis conceded quietly that such an LRA would be less effective.¹⁵³

In all but the first category, the court condemns conduct in light of a less effective LRA. Such decisions might be dismissed as simple error.¹⁵⁴ An alternative interpretation, however, presents itself—that courts are engaged in balancing.

This scenario is depicted in Figure 3, which revisits the setting of Figure 1. Although the alternative Z' is somewhat less effective than A, it is much less restrictive. There is a net loss from choosing A instead of Z', and hence Z' is a basis for condemning A. The set of conduct condemned on the basis of Z' includes any conduct to the west of Z' that is below the forty-five-degree line, where incremental effectiveness and incremental restrictiveness exactly balance.

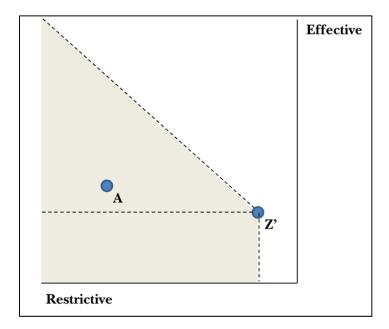


FIGURE 3: BALANCED ALTERNATIVES

¹⁵². Id. at 352 (noting resulting "potential for lower insurance premiums"); see also id. at 352 n.25 (noting fee schedule could make it "easier" and "less expensive" to calculate risks).

^{153.} Id. at 353–54 (acknowledging "doctors may be able to do it [i.e. set maximum prices] more efficiently than insurers").

^{154.} See, e.g., Meese, Price Theory, supra note 74, at 168 (arguing "[LRA] test is plainly flawed" because LRAs are less effective in practice).

Balancing within the LRA test is a rough cost-benefit analysis between the conduct and the alternative. The analysis is constrained in important respects. First, an alternative that is more effective and more restrictive—an alternative to the northwest of *A*—does not count. Alternatives that are more restrictive are not LRAs, by definition. They are also out of place in antitrust analysis, which condemns conduct for its restrictiveness, not merely because one can imagine a superior alternative. Second, the analysis measures the action and the alternative only along the dimensions of the restriction and the cognizable benefit. It omits other axes along which conduct might be desirable or harmful. 156

Net-effects balancing is frequently recited as the law on the books but seldom observed in practice. ¹⁵⁷ Meanwhile, LRA balancing is roundly ignored. Like a balloon squeezed on one end, balancing has merely been shifted to a different part of the doctrine. One consequence is that, contrary to conventional wisdom, balancing turns out not to be a myth after all. Instead, balancing is happening out of sight, in the LRA step. ¹⁵⁸ Often, this is balancing in disguise. Antitrust courts usually do not announce that they are conducting balancing with respect to the alternative. They are either silent about the nature of the alternative, or assert falsely that the alternative is equally effective.

Balancing in disguise has undesirable consequences. Opacity encourages inadequate analysis. The court never engages publicly with the tradeoff at the heart of the case. There is no full and open resolution about how the interest in player compensation should be traded off against the popularity of the sport or how low prices are integrated with clinical improvement. Where balancing is not explicit, important information may never even be presented by the parties. Moreover, when courts do not show their work, review by the appellate court is much less effective. ¹⁵⁹ With the analysis obscured from view, it is unclear whether LRA-based balancing is currently achieving optimal results. Conceivably courts are getting the balance right. Possibly they are routinely imposing false positives. It is impossible to say where balancing is disguised. Acknowledging LRA-based balancing is therefore crucial.

^{155.} See Verizon Comme'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 415–16 (2004) (noting antitrust law "does not give judges *carte blanche* to insist that a monopolist alter its way of doing business whenever some other approach might yield greater competition").

^{156.} See supra section I.A (discussing limits to cognizable justifications).

^{157.} See supra notes 116–118 and accompanying text (reviewing commentary concluding net-effects balancing is rare).

^{158.} The LRA test is not the only mechanism for balancing in disguise. See Greene, supra note 105, at 78, 86, 89 (arguing, in context of product design, courts may engage in "stealth balancing" by "aggressively dismissing innovation as pretextual").

^{159.} Cf. Bert I. Huang, Concurrent Damages, 100 Va. L. Rev. 711, 766–67 (2014) (discussing procedural benefits that result when appellate court need not "reverse engineer" lower court's damages calculation).

2. The Uneasy Case for Balanced Alternatives. — Bringing LRA-as-balancing out into the open raises the obvious question: Is this a good idea? LRA-as-balancing has several points in its favor. At the outset, it is important to note that balancing against alternatives would hardly be a development unique to antitrust. LRAs are a locus of balancing in other fields, with varying degrees of openness, ranging from tort¹⁶⁰ to trade¹⁶¹ to constitutional law.¹⁶² Considering balanced alternatives would thus bring antitrust into line with other areas of law that openly trade off the pros and cons of an alternative.

Balancing within the LRA test also complements and mirrors balancing at the final net-effects step. The LRA test and the inaction-focused net-effects test are doing parallel work, just as in a cost-benefit analysis that incorporates multiple alternatives. Fully implementing a net-effects approach implies consideration of less effective alternatives. Such an approach has a further consequence: It opens up a new set of easy cases, in which the alternative is somewhat less effective but much less restrictive. These cases would tend to arise where the anticompetitive effect is large and clear. The larger the anticompetitive effect of the conduct, the more leeway there is for a less effective alternative to furnish a basis for condemnation without fitting the demanding requirements of a dominant LRA.

Balanced LRAs are largely consistent with current doctrine. The Supreme Court has not limited the inquiry to dominant alternatives, and its general endorsement of a net-effects approach can be understood to encompass a broad examination of alternatives. Some lower courts, in characterizing the inquiry as a matter of "similar" rather than "same"

160. See supra note 47 and accompanying text (discussing full evaluation of alternatives in tort law context). In fact, the Restatement of Torts devotes a comment to the separate analysis of dominant alternatives and balanced alternatives:

If the actor can advance or protect his interest as adequately by other conduct which involves less risk of harm to others, the risk contained in his conduct is clearly unreasonable. If any other practicable course of conduct is clearly likely to give his interest a less adequate advancement or protection the question whether the risk is or is not unreasonable depends upon whether the additional risk involved in the particular course of conduct outweighs the additional advancement or protection which it is likely to secure.

Restatement (Second) of Torts § 292(c) cmt. (Am. Law Inst. 1965).

161. Alan O. Sykes, The Least Restrictive Means, 70 U. Chi. L. Rev. 403, 404 (2003) (characterizing LRA as "crude cost-benefit analysis, constrained by an awareness of error costs and uncertainty").

162. See, e.g., Baskin v. Bogan, 766 F.3d 648, 655 (7th Cir. 2014) (Posner, J.) (comparing, in context of equal protection, net benefits of conduct compared to LRA).

163. Indeed, the net-effects baseline can be conceived as a balanced LRA. This is an extension of the point made in section II.B that cessation is an LRA. There, cessation was recognized to be a dominant LRA compared to harmful conduct that offered no incremental benefit. If the conduct does make a contribution, then cessation can once again be conceived as an alternative—albeit a less effective alternative—that furnishes a potential basis for condemnation depending on the balance of benefits and harms.

effectiveness, have conceded the need for a degree of balancing.¹⁶⁴ Others have taken no view¹⁶⁵ and hence are free to adopt a balanced approach. That leaves those lower courts that have rejected a balanced approach in favor of equal effectiveness. To adopt balanced LRAs, such a court would need to either change its approach or else conceptualize the net-effects step—if it has one—to include a comparison of alternatives beyond inaction. A model for such an approach is constitutional scrutiny outside the United States under one version of "proportionality."¹⁶⁶

Notwithstanding these favorable points, LRA-as-balancing runs headlong into the anxiety about balancing discussed above. LRA-as-balancing has coexisted with an anxiety about balancing in part because the LRA test does not announce itself as a balancing test. Pushed into the open, courts are forced to confront the very difficulties they had initially hoped to avoid. These difficulties are substantial, for reasons extensively discussed by others. Identifying a balanced LRA has many of the same pitfalls that afflict net-effects balancing between the conduct and inaction. The balancing performed by courts in the LRA test is necessarily crude. A crude comparison is adequate for some cases but not others.

In a subset of cases, the difficulty of the LRA comparison is greater than with net effects because the LRA is hypothetical rather than actually implemented. Evaluating both its incremental benefits and incremental costs may entail some guesswork. However, the same is often true of net effects, which also requires estimation of projected incremental benefits and incremental costs, whether because the conduct has not yet taken hold or because the unobserved baseline no-conduct world is itself changing. Thus, this is an extra criticism of LRAs in the subset of cases

^{164.} See supra note 82 and accompanying text (discussing scholarship and lower-court decisions addressing "similar" effectiveness).

¹⁶⁵. See supra notes 83–86 and accompanying text (identifying courts taking no clear view as to effectiveness).

^{166.} See Barak, supra note 42, at 350–51 (noting usual comparison in last step is to inaction but other alternatives should be considered as well). Under this approach, the court first checks whether there is a dominant LRA compared to the conduct. See id. at 321 (arguing LRA must "achieve the proper purpose to the same extent"). Next, it asks whether the conduct is superior to both inaction and alternatives, trading off both costs and benefits. Such an approach renders the LRA step, thus limited to dominant LRAs, a lesser-included analysis compared to an evaluation of net effects that has been expanded to include balanced LRAs.

^{167.} See, e.g., Frank H. Easterbrook, The Limits of Antitrust, 63 Tex. L. Rev. 1, 9 (1984) ("[I]t is impossible to determine the difference in efficiency between a known practice and some hypothetical alternative."); Louis Kaplow, The Patent-Antitrust Intersection: A Reappraisal, 97 Harv. L. Rev. 1813, 1833–34 (1984) (summarizing difficulties in doing cost-benefit analysis for patent licenses).

^{168.} See Feldman, Misuse, supra note 72, at 603–04 (describing difficulties).

where the net-effects test is able to use the observed preconduct status quo as a baseline.¹⁶⁹

Despite these substantial difficulties, the importance of net effects as a tool for identifying anticompetitive conduct, including the Supreme Court's emphasis on a net-effects approach, supports incorporating that same incrementalist analysis into the LRA test. This conclusion is strengthened by the best practices discussed in Part IV, which limit the scope of the test and reduce the likelihood and costliness of error in identifying balanced LRAs. The case for incorporation is particularly strong as to those LRAs that are *nearly* dominant and much less restrictive. Recognizing near-dominance as a second-best approach to balancing would generalize the approach of those courts that have embraced LRAs with similar (albeit not identical) benefits as the challenged conduct.¹⁷⁰

It bears emphasis that under the balancing approach, it is not enough to simply identify an LRA without any inquiry into effectiveness. That might seem to be an obvious implication of any analysis of incremental harms and benefits. However, some courts have required that the defendant select the "least" restrictive alternative. ¹⁷¹ Logically, this formulation might seem to be a distinction without a difference. An obligation to pick the "least" bad alternative is equivalent to the obligation to choose an available "less" bad alternative. ¹⁷² However, the emphasis on "least" might embolden a court to abandon the inquiry into effectiveness, perhaps echoing a distinction made in First Amendment cases. There, "least" has been taken to suggest a particularly searching analysis, ¹⁷³ though this distinction is inconsistently applied. ¹⁷⁴ Due attention to the effectiveness of the alternative is essential under the balancing test, whatever its verbal formulation.

^{169.} Another potential difference arises when the effect of particular conduct can be measured in some other way, for example, by comparing prices and output between territories that have the restraint and others that do not. For a discussion of the availability of such tools in evaluating an LRA, see infra section IV.C.

^{170.} See supra note 82 and accompanying text (collecting sources).

^{171.} See, e.g., Kreuzer v. Am. Acad. of Periodontology, 735 F.2d 1479, 1495 (D.C. Cir. 1984) ("[I]t must be shown that the means chosen to achieve that end are the least restrictive available.").

^{172.} See Carrier, Real Rule, supra note 74, at 1337 ("The only type of restraint that will not have a less restrictive alternative is the least restrictive alternative. Any other restraint, by definition, will have a less restrictive alternative.").

^{173.} See, e.g., Lorillard Tobacco Co. v. Reilly, 533 U.S. 525, 556, 582 (2001) (requiring defendant to choose available "less" restrictive alternative but not "least" restrictive alternative).

^{174.} See United States v. Playboy Entm't Grp., 529 U.S. 803, 813 (2000) (quoting interchangeably cases discussing "less restrictive" and "least restrictive" alternatives).

D. Smoking Out

The shortcut and balancing approaches to the LRA test share the same basic approach, which is to identify an alternative with a superior mix of benefits and costs. Both approaches reflect the cost-benefit technique that is central to the self-conception of modern antitrust law and familiar from administrative law and tort law, among other areas. A different approach is to eschew the investigation of overall effect in favor of uncovering or "smoking out" a single, decisive aspect of defendant's conduct. If the single feature is made decisive, there is no need to balance and hence no anxiety about balancing.

This section considers the LRA test as a tool of smoking out three distinct aspects of the defendant's behavior: bad intent, anticompetitive effect, and a pretextual procompetitive justification. Section II.D.1 considers the idea that just as the LRA test smokes out the bad intent of state actors in constitutional law, it might have a similar role in antitrust law. As shown below, however, the kind of intent thereby uncovered in an antitrust case is usually uninformative. Section II.D.2 offers an account of the LRA test as a means to strengthen an inference of anticompetitive effect. Section II.D.3 explains why an LRA test is, at least without modification, incapable of demonstrating that an asserted procompetitive justification is merely pretextual.

1. Bad Intent. — In constitutional law, the smoking out inquiry aims to smoke out the true intent of the state actor. The court assesses the legislature's conduct for an impermissible motive rather than the potentially mixed effects of its actions. The focus on intent avoids a judicial judgment about the desirability of effects and associated infringement of the legislature's prerogative in selecting appropriate ends and the best means of achieving them.¹⁷⁵

Smoking out intent has assumed an important role in constitutional doctrine. ¹⁷⁶ For example, in *R.A.V. v. City of St. Paul*, the Court decided a

175. See John Hart Ely, Democracy and Distrust: A Theory of Judicial Review 146–47 (1980) (presenting analysis of means–ends fit as way of "flushing out' unconstitutional motivation" and addressing "initial suspicions" about state's motive); Paul Brest, Reflections on Motive Review, 15 San Diego L. Rev. 1141, 1143 (1978) (advocating motive inquiry as "less intrusive" alternative to balancing); Mathews & Stone Sweet, supra note 112, at 805 (observing "necessity" test, as component of proportionality analysis, "enables judges... to smoke out bad motives"); Regan, supra note 110, at 1209–33 (reading *Dean Milk* and other dormant commerce clause cases to smoke out motive); Jed Rubenfeld, Affirmative Action, 107 Yale L.J. 427, 436–37 (1997) (stating goal of smoking out analysis is to identify "impermissible purpose"); see also Reva Siegel, Why Equal Protection No Longer Protects: The Evolving Forms of Status-Enforcing State Action, 49 Stan. L. Rev. 1111, 1138 (1997) (criticizing this approach, as applied in equal protection cases, as means "to protect the prerogatives of coordinate branches").

176. See, e.g., Johnson v. California, 543 U.S. 499, 505 (2005) ("The reasons for strict scrutiny are familiar. Racial classifications raise special fears that they are motivated by an invidious purpose."); Grutter v. Bollinger, 539 U.S. 306, 327 (2003) ("[S]trict scrutiny is designed to provide a framework for carefully examining the importance and the sincerity of the reasons advanced by the governmental decisionmaker...."); R.A.V. v. City of St.

First Amendment challenge to a city ordinance prohibiting "fighting words that insult, or provoke violence, on the basis of race, color, creed, religion, or gender." The city defended the ordinance as a means to protect the rights of individuals "that have historically been subjected to discrimination." The Court struck down the ordinance in light of an LRA with "precisely the same beneficial effect," a prohibition not limited to the enumerated topics. The Court was open about its search for impermissible motive. Comparing the city's conduct to the LRA revealed the legislators' "special hostility towards the particular biases singled out," a hostility impermissible under the First Amendment.

One might imagine a similar role for the LRA test in antitrust law. In fact, Justice Brennan suggested this more than fifty years ago. In *White Motor Co. v. United States*, the Justice Department challenged vertical restraints that granted exclusive territories to dealers reselling trucks and parts. The Court held that per se condemnation was inappropriate and remanded for trial. Justice Brennan's concurrence urged an examination of LRAs, the first appearance of the term "less restrictive alternatives" in the U.S. Reports. He explicit goal was to smoke out the defendant's intent: "If the restraint is shown to be excessive for the manufacturer's needs, then its presence invites suspicion . . . that the real purpose of its adoption was to restrict price competition." 185

Paul, 505 U.S. 377, 386 (1992) (noting strict scrutiny prevents regulation "based on hostility—or favoritism—towards the underlying message expressed"); see also Richard H. Fallon, Jr., The Supreme Court, 1996 Term—Foreword: Implementing the Constitution, 111 Harv. L. Rev. 54, 96 (1997) (discussing uses of smoking out with respect to affirmative action and First Amendment); Elena Kagan, Private Speech, Public Purpose: The Role of Governmental Motive in First Amendment Doctrine, 63 U. Chi. L. Rev. 413, 414, 451 (1996) (arguing First Amendment doctrine "comprises a series of tools to flush out illicit [governmental] motives and to invalidate actions infected with them"); Regan, supra note 110 at 1209–33 (perceiving similar role in evaluating claims of state protectionism under dormant commerce clause).

177. 505 U.S. at 391 (internal quotation marks omitted).

178. Id. at 395.

179. Id. at 396. This is an example of conduct that, though labeled a less "restrictive" alternative, in fact regulates more speech.

180. See, e.g., id. at 390 (stating goal of identifying "realistic possibility that official suppression of ideas [was] afoot"); id. at 394 (expressing concern that government "seek[s] to handicap the expression of particular ideas").

181. Id. at 396.

 $182,\ 372$ U.S. $253,\ 255{-}56$ (1963). The restraint also restricted sales as to particular customers. See id.

183. Id. at 264.

184. Id. at 271 (Brennan, J., concurring); see also id. at 270 (Brennan, J., concurring) (arguing relevant question "is not simply whether some justification can be found, but whether the restraint so justified is more restrictive than necessary, or excessively anticompetitive, when viewed in light of the extenuating interests").

185. Id. at 270 n.9 (Brennan, J., concurring). That said, Justice Brennan also called for "a full inquiry into the pros and cons" of the restraint, which might be read as consistent with a net-effects approach. Id. at 270 (Brennan, J., concurring).

Justice Brennan's approach was likely influenced by contemporaneous developments in constitutional law. In the same Term that Justice Brennan wrote his *White Motor* concurrence and *Philadelphia National Bank*, *Sherbert v. Verner* (another Justice Brennan majority opinion)¹⁸⁶ and other cases introduced a modern conception of strict scrutiny that includes an LRA test.¹⁸⁷ Justice Brennan was open about his proposed inquiry into a firm's motives, though more guarded about questioning the bad motives of the state in constitutional cases decided the same Term.¹⁸⁸

The facts of the case illustrate how this inquiry might work. The defendant claimed that exclusivity encouraged distributors to invest in fully developing their territories. That incentive would be undercut if dealers from other areas could sweep in and cherry-pick customers. The

186. 374 U.S. 398, 407 (1963) (requiring "no alternative forms of regulation would combat such abuses without infringing First Amendment rights"). *Sherbert* and *Philadelphia National Bank* were handed down the same day. Interestingly, the clerks in Justice Brennan's chambers that Term were a future First Amendment scholar (Robert O'Neil) and a future antitrust scholar (Richard Posner).

187. See, e.g., Stephen A. Siegel, The Origin of the Compelling State Interest Test and Strict Scrutiny, 48 Am. J. Legal Hist. 355, 380 (2006) (arguing *Sherbert* offered "first clear, succinct, and complete statement" of strict scrutiny); see also Richard H. Fallon, Jr., Strict Judicial Scrutiny, 54 UCLA L. Rev. 1267, 1291 (2007) [hereinafter Fallon, Scrutiny] (crediting Justice Goldberg's appointment with advent of "empowered liberal majority" and consequent development of strict scrutiny). In addition to *Sherbert*, Professor Stephen Siegel emphasizes two other cases addressing freedoms of speech and association from the same Term: NAACP v. Button, 371 U.S. 415 (1963), another Justice Brennan opinion for the Court, and Gibson v. Fla. Legislative Investigative Comm., 372 U.S. 539 (1963). See Siegel, supra, at 373–74.

Some commentators have asserted an opposite borrowing, claiming that *White Motor* is the source of the constitutional LRA. E.g., Feldman, Misuse, supra note 72, at 562 n.9 (citing Yao & Dahdouh, supra note 74, at 37). However, that conclusion appears to be based on a misunderstanding. Professor Dennis Yao and Thomas Dahdouh rely on Guy Miller Struve for the proposition that antitrust was "the prime source for use of the [LRA] concept." Yao & Dahdouh, supra note 74, at 37 & nn.48–50 (citing Guy Miller Struve, The Less-Restrictive-Alternative Principle and Economic Due Process, 80 Harv. L. Rev. 1463, 1463 n.1 (1967). But Struve merely concluded that "[t]he *term* 'less restrictive alternative' is derived from antitrust law...." Struve, supra, at 1463 n.1 (emphasis added) (citing *White Motor*, 372 U.S. at 271–72 (Brennan, J., concurring)); see also Nadine Strossen, The Fourth Amendment in the Balance: Accurately Setting the Scales Through the Least Intrusive Alternative Analysis, 63 N.Y.U. L. Rev. 1173, 1212–13 & n.200 (1988) (citing Struve for quoted proposition). The *principle* presumably had earlier origins.

188. Professor Richard Fallon notes that the application of strict scrutiny in *Sherbert*, *Button*, and *Gibson* "may well have functioned to unmask forbidden motives." Fallon, Scrutiny, supra note 187, at 1309. But this was not explicit. The Brennan chambers' end-of-term memo, written by law clerks, reveals that Justice Brennan chose an overbreadth-based attack on the statute in *Button*, rather than relying on evidence of illicit motives revealed in the legislative history, because he believed he lacked the votes for the latter approach. See Richard Posner & Robert M. O'Neil, Opinions of William J. Brennan, Jr., October Term, 1962, at xi (1963), *in* Papers of William J. Brennan, Jr., Library of Congress, box II.6, folder 5.

189. See White Motor, 372 U.S. at 258 (quoting statements of counsel in trial court).

upshot, according to White Motor, was to encourage interbrand competition with other manufacturers. The government's proposed LRA was a detailed contract that directly specified the desired activities. If the detailed contract also elicited services without restricting dealer competition, Justice Brennan was suggesting, this would show that the true purpose was to restrict intrabrand competition among its dealers.

Such an inquiry in antitrust cases faces the initial hurdle that intent is often assigned only a minor role in antitrust analysis. ¹⁹² After all, fact-finders can be misled by vivid language that merely reflects hard competition. ¹⁹³ Moreover, even when firms lack any clear provable intent to behave anticompetitively, there remains an interest in halting and deterring that conduct if it has adverse effects.

Nevertheless, intent surely still plays some role in examinations of mixed conduct. 194 The Supreme Court's test for monopolization refers to "willful acquisition or maintenance" of monopoly power. 195 Other cases indicate the relevance of an "inference . . . that [conduct was] intended to restrain trade and enhance prices" or more colorfully, a defendant's "dreams of monopoly." 197 Another prominent example is *Microsoft*, which tests a procompetitive justification for "pretext." 198

^{190.} See id. at 256–57 (describing White Motor's argument that its conduct enabled dealers to "concentrate on trying to take sales away from other competing truck manufacturers rather than from each other").

^{191.} See Brief for the United States at 25–26, *White Motor*, 372 U.S. 253 (No. 54), 1962 WL 115588 (suggesting contracts "requir[ing] the expenditure of specified amounts of time and money in sales promotion").

^{192.} See, e.g., Chi. Bd. of Trade v. United States, 246 U.S. 231, 238 (1918) (limiting role of intent to means of "help[ing] the court to interpret facts and to predict consequences"); United States v. Microsoft Corp., 253 F.3d 34, 59 (D.C. Cir. 2001) (en banc) (per curiam) (considering intent evidence "relevant only to the extent it helps us understand the likely effect").

^{193.} See 7 Areeda & Hovenkamp, supra note 82, \P 1506 (discussing resultant problems of interpretation).

^{194.} Outside the context of mixed conduct, "general intent must be proven" in a criminal case. U.S. Dep't of Justice, Antitrust Resource Manual § 7 (2011), http://www.justice.gov/usam/antitrust-resource-manual-7-elements-offense [http://perma.cc/CH4E-GWZA].

^{195.} United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966) (emphasis added). Moreover, attempted monopolization requires a "specific intent to monopolize." Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447, 456 (1993).

^{196.} Nat'l Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 690 (1978) (emphasis added).

^{197.} Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 409 (2004).

^{198.} United States v. Microsoft Corp., 253 F.3d 34, 59 (D.C. Cir. 2001) (en banc) (per curiam) ("If the monopolist asserts a procompetitive justification—a nonpretextual claim that its conduct is . . . a form of competition . . . —then the burden shifts back to the plaintiff to rebut that claim.").

A more important problem is that the question of interest in a constitutional case is seldom informative in antitrust law. In a constitutional case, what is uncovered is the unknown, hidden type of the decisionmaker. The question asked is: Is this the type of decisionmaker that harbors an improper motive and thereby benefits (improperly) from its action?

In constitutional cases such as *R.A.V.*, the comparison to an LRA reveals a gratuitous harm, which is a likely result if the state actor desired the harm and an unlikely result otherwise. The court is making a Bayesian inference about the probability that the state had an ill motive. The idea is to begin with a "prior" probability about the issue in question, such as the probability that the city of St. Paul had a "special hostility." The court then adjusts this probability upward or downward in light of a new fact. Suppose the new fact is likely to exist if the city has special hostility and is unlikely to arise if the city had no special hostility. The court then increases its perceived probability that the city has special hostility.²⁰⁰

Here is a numerical illustration of the inference, loosely based on the facts of *R.A.V.* Suppose that, without taking account of the ordinance, the court believes that the city is twenty-five percent likely to harbor special hostility. The court examines the ordinance and identifies a gratuitous harm in light of the LRA, a prohibition on fighting words not limited to particular topics. Suppose further that a gratuitous harm is forty percent likely to result if a state actor is motivated by special hostility and ten percent likely if a state actor is indifferent. Once the court observes a gratuitous harm, it updates its assessment of a likely bad motive. Applying Bayes' Rule, instead of twenty-five percent, the court's new ("posterior") probability that the state has a bad motive is fifty-seven percent.²⁰¹ Importantly, a dominant LRA ("same beneficial effect") is necessary for the analysis; otherwise there is no basis for updating our probability because either type would reject an LRA that was less effective in achieving its claimed unobjectionable end.²⁰²

This approach, useful in constitutional cases, does not do much work in antitrust. In antitrust, the decisionmaker's type is seldom in doubt. It is typically clear that the firm is the kind that benefits from the

^{199.} The *R.A.V.* Court's stated interest in assessing the probability that the state action reflects an impermissible motive, and how that probability varies depending on the facts, invites such an analysis. R.A.V. v. City of St. Paul, 505 U.S. 377, 394 (1992) (noting certain evidence "elevate[s] the possibility [of illicit motive] to a certainty").

^{200.} See Laurence H. Tribe, Trial by Mathematics: Precision and Ritual in the Legal Process, 84 Harv. L. Rev. 1329, 1350–54 (1971) (discussing Bayes' Theorem as means to properly weigh evidence).

^{201.} The probability of special hostility ("SH") given a gratuitous harm ("G") is $p(SH|G) = p(G|SH)*p(SH)/[p(G|SH)*p(SH) + p(G|no~SH)*p(no~SH)] = (0.40*0.25)/[(0.40*0.25) + (0.10*0.75)] \approx 0.57$.

^{202.} The analogous calculation is (1.00*0.25)/[(1.00*0.25) + (1.00*0.75)] = 0.25. Thus the posterior probability remains at twenty-five percent.

harmful effect. For example, if postmerger prices are higher for medical procedures, there is no question of whether these providers are the type that benefits from higher prices. The harmful effect normally implies a transfer that benefits the providers. Thus, if an anticompetitive effect exists, normally the conclusion readily follows that the firm knowingly benefitted from that effect. This idea is captured by Judge Learned Hand's encomium that "no monopolist monopolizes unconscious of what he is doing." It is a rare antitrust case in which the connection between the anticompetitive harm and the firm's benefit is unclear, and hence there is little to be gained from using an LRA to smoke out a hidden type. Perhaps for this reason, Justice Brennan's suggestion has received little attention in later case law. ²⁰⁴

2. Anticompetitive Effect. — Justice Brennan's suggested approach can be adapted instead to an examination of effect. This inquiry makes use of the idea, frequently expressed in case law, that intent sheds light on effect. The existence of an LRA raises the question of why the defendant chose an action that harms consumers rather than the alternative. The likely reason is that the defendant expected to gain from the resulting consumer harm. The defendant's choice is consequently a basis for inferring that there is such an anticompetitive effect in fact. The defendant expected to gain from the resulting consumer harm.

This inference is valuable when the evidence of anticompetitive effect is ambiguous. For example, in a typical merger challenge, the merger has not yet occurred, and plaintiff's evidence is limited to a controverted prediction of higher prices in the future.²⁰⁸ Even after the conduct, the evidence of a price rise is often ambiguous. In the face of

^{203.} United States v. Aluminum Co. of Am., 148 F.2d 416, 432 (2d Cir. 1945); see also Am. Tobacco Co. v. United States, 328 U.S. 781, 814 (1946) (endorsing Judge Hand's view and quoting statement in text).

^{204.} See, e.g., Berkey Photo, Inc. v. Eastman Kodak Co., 603 F.2d 263, 303 (2d Cir. 1979) (citing *White Motor* concurrence in passing); Am. Motor Inns, Inc. v. Holiday Inns, Inc., 521 F.2d 1230, 1249 & n.61 (3d Cir. 1975) (noting concurrence's call for LRA analysis is consistent with need to evaluate competitive effects of restraint).

^{205.} See, e.g., Nw. Wholesale Stationers, Inc. v. Pac. Stationery & Printing Co., 472 U.S. 284, 296 (1985) (discussing "anticompetitive animus" that "thereby raise[s] a probability of anticompetitive effect"); Chi. Bd. of Trade v. United States, 246 U.S. 231, 238 (1918) ("[K]nowledge of intent may help the court to interpret facts and to predict consequences."); United States v. Microsoft Corp., 253 F.3d 34, 59 (D.C. Cir. 2001) (en banc) (per curiam) ("Evidence of the intent behind the conduct of a monopolist is relevant only to the extent it helps us understand the likely effect of the monopolist's conduct.").

^{206.} This role for the test is absent from a constitutional case like R.A.V., in which there is no factual dispute about the existence of a burden.

^{207.} In a related vein, Professor Feldman has advocated use of the LRA test to shed light on effect. See Feldman, Misuse, supra note 72, at 563 (advocating use of test "solely as proof of intent"); id. at 624 (clarifying uncovered intent sheds light on effect). As developed infra, the approach herein proposed differs in its method and result.

^{208.} Horizontal Merger Guidelines, supra note 30, at 1 ("Most merger analysis is necessarily predictive").

such uncertainties, it is desirable to have greater confidence of anticompetitive effect before condemning the conduct. The limit of this inference is illustrated by cases like *O'Bannon* and *St. Luke's*, in which the fact-finder perceived a clear anticompetitive effect.²⁰⁹ In such cases this inquiry is of little importance.

An LRA provides a useful inference when the alternative is equally (or more) profitable compared to the defendant's conduct, considering all sources of legitimate profits. Given an inquiry into the firm's decisionmaking, the focus on profit is crucial. The point is to isolate and identify a "bad" source of profits by pointing to an alternative that confers the same level of legitimate benefit. If the alternative is less profitable, then the defendant has an independent, sufficient explanation for its conduct. For example, White Motor would avoid detailed contracts if they were less profitable, even apart from any anticompetitive effect.²¹⁰ This would be equally true, whether or not the conduct also had an anticompetitive effect.²¹¹

If the LRA is *more* profitable than the defendant's conduct, then the inference of anticompetitive effect is strengthened. For a rational, well-informed firm, forgoing legitimate profits makes no sense unless the firm is making up the difference by earning extra profits through anticompetitive conduct. The existence of a more profitable LRA thus raises a strong inference of an anticompetitive effect.²¹²

Antitrust cases do not discuss "more profitable LRAs" in those terms, but one prominent proposal for addressing mixed conduct implements the search for more profitable LRAs. As introduced above, the "no economic sense" test singles out competition-restricting (usually exclusionary) conduct that is unprofitable, considering only the legitimate profits.²¹³ The two tests are identical: If the conduct is unprofitable and more restrictive, that is equivalent to the alternative being more profitable and less restrictive.

The usual interpretation of the no-economic-sense test is that it offers a conservative approach to liability for mixed conduct, at the acknowledged cost of some false negatives—a kind of no-regret shortcut.

^{209.} See, e.g., O'Bannon v. NCAA, 802 F.3d 1049, 1072 (9th Cir. 2015) (acknowledging "significant anticompetitive effect" of NCAA rule); Saint Alphonsus Med. Ctr.–Nampa, Inc. v. St. Luke's Health Sys., Ltd., Nos. 1:12–CV–00560–BLW, 1:13–CV–00116–BLW, 2014 WL 407446, at *7–8 (D. Idaho Jan. 24, 2014) (describing anticompetitive effects).

^{210.} See supra notes 189–191 and accompanying text (describing defendant's asserted justification for conduct).

^{211.} The focus on profits and the implication that only some LRAs produce a reliable inference are absent in Professor Feldman's account. See Feldman, Misuse, supra note 72, at 624 (crediting LRA when defendant failed to use "most efficient" method).

^{212.} This is subject to the familiar caveat that what looks like a sacrifice of profits might in fact be an innocent investment in future profits without any anticompetitive tendency.

^{213.} See supra note 114 and accompanying text (discussing "no economic sense" test).

However, the test is not entirely conservative. It carries a possibility of false positives due to the distinction between profitability and welfare discussed above. Just because the alternative is more profitable does not guarantee that it is more procompetitive. The false positive arises when the conduct has lower legitimate profits—the basis for condemnation—but also higher procompetitive benefits thanks to benefits that are not captured by the firm.²¹⁴

The equal-profits limitation contains a subtle but important difference from the shortcut approach. As with the shortcut approach, not all LRAs count. For the shortcut to the LRA test, the alternative must be equally effective in serving a cognizable justification. By contrast, for smoking out, it is legitimate profits, not welfare effects, that matter. Legitimate profits might accrue from a procompetitive justification or instead result from a "neutral" business reason that is not cognizable. One upshot is that an LRA that suffices for one purpose might fail for another. For example, an LRA that dominates a defendant's conduct, for purposes of a shortcut analysis, might fail to satisfy equal profitability for purposes of smoking out. 216

The smoking-out approach offers an alternative interpretation of the no-economic-sense test. Where the evidence of restrictiveness is ambiguous, the no-economic-sense test furnishes an inference that the conduct indeed has an anticompetitive effect. If the court observes conduct with a potential anticompetitive effect but the evidence is uncertain and it is possible to discern that the firm has sacrificed legitimate profits, then the defendant's choice suggests that there is indeed an anticompetitive effect.

3. Pretextual Justification. — The previous section examined an inference about anticompetitive effect that arises from some (but not all) LRAs. This section considers to what extent the LRA test sheds light on the second component of mixed conduct, the asserted procompetitive effect. In particular, can the test indicate whether an asserted justification is pretextual, as the *Microsoft* court put it,²¹⁷ in the sense of being absent?²¹⁸ If the procompetitive effect can be ruled out or minimized, the problem of assessing a tradeoff goes away. The main result, developed

^{214.} For an example, see Steven C. Salop, Exclusionary Conduct, Effect on Consumers, and the Flawed Profit-Sacrifice Standard, 73 Antitrust L.J. 311, 346 (2006); see also Einer Elhauge, Defining Better Monopolization Standards, 56 Stan. L. Rev. 253, 274–79 (2003) (arguing this type of test produces false positives).

^{215.} One example is the producer's retained benefits if (as considered in section I.A) such benefits are not cognizable.

^{216.} The opposite could also occur, where an LRA has equal legitimate profits but is not dominant. That possibility arises if an LRA is less effective in serving consumers yet brings equal profit to the defendant.

^{217.} See United States v. Microsoft Corp., 253 F.3d 34, 59 (D.C. Cir. 2001) (en banc) (per curiam) (requiring "nonpretextual" justification).

^{218.} Even if a procompetitive effect is present, one might argue that the justification is pretextual in the distinct sense (not pursued here) that it did not motivate the conduct.

below, is that the firm's choices can again shed light as to asserted procompetitive conduct that is also profitable to the firm. However, the relevant alternative is a more profitable alternative rather than an LRA.

As an example, consider an early round in the FCC's ongoing effort to implement "network neutrality" regulation. 219 In 2008, the Commission reviewed allegations that Comcast had anticompetitively interfered with its Internet customers' efforts to use BitTorrent and other file-sharing applications.²²⁰ In its order, the Commission concluded that Comcast had discriminated against, and thereby impeded, the applications.²²¹ Comcast justified its actions as "reasonable network management" that prevented congestion by large bandwidth users. 222 In rejecting these claims, the Commission noted a superior alternative that Comcast had failed to implement, which was to also curb other dataintensive applications in addition to file-sharing.²²³ The superior alternative identified by the Commission was more profitable but equally restrictive. If Comcast imposed limits on all heavy users, BitTorrent would still be suppressed. The inference offered by a broader restriction is the inference of underinclusiveness. It suggests that the claimed benefit is an illusion, for if it were real, the defendant would have pursued the beneficial goal in a more thorough way.

The search for underinclusiveness plays an important role in constitutional scrutiny. Narrow tailoring, frequently invoked in a variety of constitutional contexts, is a combination of LRA and underinclusiveness tests. ²²⁴ Within narrow tailoring, underinclusiveness is used to reveal that a claimed justification is pretextual. ²²⁵ The court hypothesizes steps that the state could be expected to take to effectively serve its asserted purpose. The state's failure to take those steps supports the conclusion that the asserted purpose is not genuine. ²²⁶ This inference is valuable when it is the existence of the claimed benefit that is in doubt.

^{219.} See Comcast Corp., 23 FCC Rcd. 13,028 (2008).

^{220.} See id. at 13,030–33.

^{221.} See id. at 13,052–53 ("Free Press has made a prima facie case that Comcast's practices do impede Internet content and applications").

^{222.} Id. at 13,054.

^{223.} See id. at 13,056–57 ("A customer may use an extraordinary amount of bandwidth during periods of network congestion and will be totally unaffected so long as he does not utilize a disfavored application.").

^{224.} See Fallon, Scrutiny, supra note 187, at 1326–32 (distinguishing elements of narrow tailoring, including distinct inquiry into underinclusiveness); see also Joseph Tussman & Jacobus tenBroek, The Equal Protection of the Laws, 37 Calif. L. Rev. 341, 341–53 (1949) (offering classic statement of under- and overinclusiveness).

^{225.} See, e.g., Eugene Volokh, Freedom of Speech, Permissible Tailoring and Transcending Strict Scrutiny, 144 U. Pa. L. Rev. 2417, 2423 (1996) (noting underinclusiveness suggests justification for speech restriction is pretextual).

^{226.} See Fallon, Scrutiny, supra note 187, at 1327 ("Underinclusive regulations... generate suspicion that the selective targeting betrays an impermissible motive.").

In antitrust, as in constitutional law, it is a more-beneficial-alternatives analysis that smokes out a pretextual justification, not the LRA test. For example, in *Comcast*, the alternative is not less restrictive. It is equally restrictive. The key point of comparison is profitability, not restrictiveness. And in fact, a *less* restrictive alternative usually fails to produce a similar inference of pretext. Even if the LRA is more profitable, the inference fails because the failure to pursue the benefit to the fullest extent has another explanation—that the defendant was sacrificing those benefits to pursue an anticompetitive effect. Such conduct is troubling, but not on the ground that the claimed benefit is an illusion. The possibility remains open that there is an anticompetitive effect but also a benefit, coexisting side by side. Hence the LRA test is ineffective in casting doubt on an asserted justification. 228

Smoking out pretext in antitrust law instead requires the recognition of a more-profitable-alternatives test. Today, there is no explicit doctrine that performs that function, just a few scattered hints. For example, in light of the foregoing analysis, *Microsoft*'s reference to pretext might be read as an oblique call for such an analysis. Moreover, antitrust liability for selective refusals to deal is consistent with this approach.²²⁹ A full examination would result in the adoption of a narrow tailoring doctrine for antitrust, both the LRA test and underinclusiveness. This approach is exemplified by the Comcast order, which explicitly adopted a narrow tailoring approach, insisting that the conduct "be narrowly or carefully tailored to serve that interest," with both LRA and underinclusiveness components to the tailoring analysis.²³¹

Even without a full narrow tailoring inquiry, there is a second way to analyze pretext. Doing so requires a reconceptualization of the antitrust inquiry. In the cases we have examined so far, there are two offsetting effects that arise simultaneously. For example, the conduct both reduces competition for players' services and increases the value of the product

^{227.} In principle, a *more* restrictive alternative would also serve this function, were it not for antitrust law. A decision not to choose a more restrictive alternative could be explained as an effort to avoid antitrust liability.

^{228.} This is a further important difference from Professor Feldman's account. See Feldman, Misuse, supra note 72, at 624 (concluding failure to use most efficient method demonstrates "pretext"). As developed below, an LRA test can shed light on pretext under a particular additional condition—that the presence of an anticompetitive effect necessarily implies the absence of a procompetitive effect.

^{229.} See, e.g., Otter Tail Power Co. v. United States, 410 U.S. 366, 370–71, 377–78 (1973) (concluding electric power company's selective refusal to serve some cities violated antitrust law).

^{230.} Comcast Corp., 23 FCC Rcd. 13,028, 13,056 (2008); see also id. at 13,055 (requiring "tight fit between [Comcast's] chosen practices and a significant goal"); id. at 13,091 (McDowell, Comm'r, dissenting) (criticizing adoption of "strict scrutiny' type standard").

^{231.} See id. at 13,057–58 (opinion of the Commission) (identifying LRAs for managing network traffic); id. at 13,056–57 (finding underinclusiveness in light of more effective alternatives).

sold to fans. The presence of both a bad effect and an offsetting good effect is clearly stated. The end of the analysis, if it is reached, is to sum up the two effects to determine the net effect.

In some cases, however, courts seem to approach mixed conduct in a different fashion—not by adding up the two effects but by choosing between the two parties' stories. Essentially, the court sees the stories as mutually exclusive. This move rests upon an additional assumption: a negative correlation between the probability of anticompetitive effect and probability of procompetitive effect. Thus, even though the LRA test does not directly shed light on pretext, it may indirectly do so by making use of this negative correlation. By reinforcing the evidence of anticompetitive effect, the test simultaneously undermines the procompetitive effect.

For example, in an exclusive-dealing case, there are often conflicting narratives about the contract. One anticompetitive story is that the contract denies a rival an outlet for its goods, restricting its opportunities with resulting harm to consumer welfare. One procompetitive story is that the contract protects the producer's investments in a retailer from interbrand free-riding—that is, from rival producers who would otherwise take advantage of the producer's investments. In practice, courts may choose between these stories rather than adding them up.

Beyond exclusive dealing, choosing rather than summing may characterize some courts' approach to resale price maintenance (RPM). The Supreme Court's leading RPM decision appears to take an either/or approach, 232 and some commentators approach RPM in either/or terms, 233 although in principle both effects could arise simultaneously. This perspective may also help explain the rarity of balancing in rule of reason and monopolization cases. In short, when an either/or frame is employed, the LRA test assumes heightened importance as a tool for smoking out.

III. THE DUAL BENCHMARK

The LRA test augments—and in some cases substitutes for—the work of the net-effects test. The test condemns some conduct even when the conduct has a positive net effect compared to inaction. Section III.A explains and defends this result, which is particularly pronounced if balanced LRAs are recognized as a baseline for condemning conduct. Section III.B considers the role of the LRA test if the net-effects analysis is omitted. Here the LRA test picks up some but not all of the slack.

^{232.} See Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877, 892 (2007) (concluding RPM has "procompetitive justifications" in some cases and "anticompetitive effects" in others).

^{233.} See, e.g., Richard A. Posner, The Next Step in the Antitrust Treatment of Restricted Distribution: Per Se Legality, 48 U. Chi. L. Rev. 6, 8 (1981) (criticizing net-effects assessments in vertical intrabrand restraint cases as "infeasible and unsound").

A. LRA Plus Net Effects

A benchmark approach to the LRA test expands the set of conduct condemned by an antitrust inquiry. The LRA test imposes a second benchmark. Conduct may be condemned either because it is worse than the LRA, or because it is worse than inaction. Figure 4 illustrates the point. As before, A depicts an action under scrutiny, and Z represents an LRA. In addition, point O represents inaction. O is neither restrictive nor effective. A is condemned based on the existence of Z; it is more restrictive and less effective than Z. A is also condemned by comparison to O; it is beneath the forty-five-degree line from O, and hence more restrictive than effective.

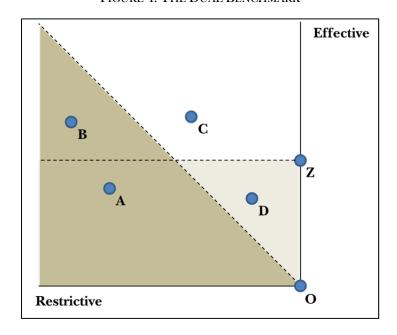


FIGURE 4: THE DUAL BENCHMARK

Use of the dual benchmark expands the range of condemnation compared to an analysis that merely compares the conduct to inaction. To illustrate, consider point D. D would not be condemned by comparison to inaction; it is above the forty-five-degree line from O, which means that it is more effective than restrictive. However, it is still condemned by comparison to Z, as it is more restrictive and less effective than Z.

Such augmentation of the range of condemnation is a possibility whenever the LRA is used as a benchmark.²³⁴ The augmentation effect is

^{234.} The issue does not arise when the LRA is used as a diagnostic tool to smoke out an anticompetitive effect rather than as a benchmark for comparing costs and benefits.

to some degree obscured by the usual formulation of the antitrust inquiry, which first compares the conduct to an alternative, and then if necessary proceeds to a comparison between the conduct and inaction. ²³⁵ When a court performs an LRA analysis first, it does not yet know how the conduct compares to inaction and hence does not know whether the conduct would be condemned absent the LRA test.

The degree of augmentation varies depending on the range of accepted LRAs. A dominant LRA is sufficient to handle the condemnation of *D* in Figure 4. Recognizing balanced LRAs increases the degree of augmentation. If balanced LRAs are recognized, one would condemn conduct, such as point *C*, that is somewhat more effective and much more restrictive than *Z*. Point *C* would be permitted if the analysis is limited to dominant LRAs.

Critics have objected to augmentation.²³⁶ They argue that antitrust merely requires that welfare must not fall overall by virtue of the conduct. Beyond that, firms are free to organize their activities as they see fit. They bristle at the proposition that a court might condemn conduct in light of the superiority of an unchosen alternative. They point to influential dicta in a refusal-to-deal case, in which the Court concluded that "[t]he Sherman Act is indeed the 'Magna Carta of free enterprise,' but it does not give judges *carte blanche* to insist that a monopolist alter its way of doing business whenever some other approach might yield greater competition."²³⁷

This and other language in the opinion²³⁸ have been read to imply a watered-down scrutiny of alternatives.²³⁹ Critics of augmentation have not distinguished between dominant and balanced LRAs. Such critics would surely be even more opposed to the use of balanced LRAs given the expanded range of condemnation.

Augmentation, however, makes eminent sense. First, to insist on mere equipoise between the conduct and inaction ignores marginal

^{235.} See supra notes 68-69 and accompanying text.

^{236.} Compare Devlin, supra note 73, at 826–27 (doubting courts can engage in such "welfare maximization"), and Feldman, Misuse, supra note 72, at 588–92 (raising objections to "maximizing test"), with Aaron Edlin et al., The *Actavis* Inference: Theory and Practice, 67 Rutgers U. L. Rev. 585, 608–09 (2015) (describing LRA-based benchmark as potentially more demanding than inaction), and Picker, supra note 75, at 5 (arguing private firms should be prohibited from "spend[ing] their procompetitive benefits on anticompetitive behavior" in particular context in which procompetitive project and anticompetitive project, bundled together, are conceptually separable).

^{237.} Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 415–16 (2004) (citation omitted) (quoting United States v. Topco Assocs., Inc., 405 U.S. 596, 610 (1972)).

^{238.} See id. at 407–08 (expressing concern about courts acting as "central planners[,] \dots a role for which they are ill suited").

^{239.} It bears noting that *Trinko* is not an analysis of mixed conduct, as the Court concluded that the defendant had not engaged in any cognizable anticompetitive conduct to begin with. Id. at 410 (concluding allegations of "insufficient assistance" fell short of any "recognized antitrust claim").

analysis. By way of analogy, suppose surgery is necessary to save a patient's life but is performed negligently, leaving the patient maimed. It is hardly a defense to note that the patient lived and that this outcome is better, all things considered, than if no surgery had been performed. We hold the defendant to a higher standard. If a small, inexpensive increase in care would yield a large improvement in outcomes, the defendant is properly held liable.

Second, if antitrust decisionmaking is ultimately bottomed on a costbenefit analysis of the restraint, then it is natural to examine a potentially more ambitious alternative in addition to the prerestraint status quo. An examination of such alternatives, after all, is a logical and standard part of cost-benefit analysis.²⁴⁰

Third, public evaluation of private restraints is different from review of agency regulations in a way that strengthens the case for evaluating alternatives. There is no reason to expect a firm to choose the means that maximize net welfare. Far from it: The firm will choose the privately optimal course subject to whatever constraint is imposed by antitrust law. If antitrust law only insists upon equipoise, compared to inaction, then there is a powerful incentive to game the system. Private parties have substantial leeway to design their restraints in anticipation of antitrust scrutiny. If they merely need to ensure that consumers break even, they will take a minimalist approach if it is profitable to do so, draining consumer welfare down to the level that just meets the inaction baseline.²⁴¹ A dual-benchmark approach avoids this problem.

B. LRA Without Net Effects

The previous section considered the LRA test as a second benchmark for anticompetitive conduct, in addition to a net-effects analysis. As noted above, other courts scrutinize mixed conduct by means of the LRA test alone, omitting any overall evaluation of the conduct.²⁴²

^{240.} See supra note 46 and accompanying text (discussing weighing of alternatives in cost-benefit analysis).

^{241.} See Picker, supra note 75, at 1, 5–6 (arguing more lenient standard allows parties to avoid scrutiny provided overall effect is "just a bit better than the status quo").

^{242.} See, e.g., Virgin Atl. Airways Ltd. v. British Airways PLC, 257 F.3d 256, 265 (2d Cir. 2001) (dismissing § 1 rule-of-reason claim upon plaintiff's failure to offer LRA to British Airway's incentive agreements that maintained loyalty of travel agents without evaluating whether overall effect was anticompetitive); Hairston v. Pac. 10 Conference, 101 F.3d 1315, 1319 (9th Cir. 1996) (affirming summary judgment for defendants upon failure to show LRA without proceeding to balancing); United States v. Brown Univ., 5 F.3d 658, 669 (3d Cir. 1993) (asserting that, to rebut defendant's justification, "plaintiff *must* demonstrate" LRA, without suggesting net-effects analysis offers an alternative (emphasis added)); Wilk v. Am. Med. Ass'n, 719 F.2d 207, 227 (7th Cir. 1983) (describing jury instructions inquiring into defendant's justification and existence of LRA but not into comparison of anticompetitive and procompetitive effects). There appears to be intracircuit conflict, generally unremarked, about the presence of a net-effects step. See, e.g., Major League Baseball Props., Inc. v. Salvino, Inc., 542 F.3d 290, 317 (2d Cir. 2008) (describing final stage of

If the defendant presents evidence of a justification, the plaintiff must establish an LRA or lose the case.

This approach was apparently embraced by the *O'Bannon* court. The court's three-step analysis identified an anticompetitive effect (step one), then a procompetitive effect (step two). Upon plaintiff's failure to demonstrate an equally effective LRA (step three), the court found for defendants.²⁴³ The NCAA did not escape liability entirely because the court recognized the slight increase in scholarship aid as an equally effective LRA.²⁴⁴ Thus, the practical consequence was to sharply narrow the injunctive relief to the increased scholarship. In other cases (or a future NCAA case), the truncated analysis eliminates relief entirely.

Dropping the net-effects step opens up a significant gap in enforcement, particularly when combined with a limitation to dominant LRAs. To see this in the context of *O'Bannon*, consider a future challenge to the NCAA rule. The challenge seeks compensation for playing, rather than for use of a player's likeness. The NCAA has now implemented the slight increase in scholarship aid. Under the *O'Bannon* rule, the NCAA rule survives—even if the harm to the players is very large and the benefit for the fans is small—unless plaintiffs can demonstrate an equally effective LRA.²⁴⁵ The court does not even try to approximate the relative size of the anticompetitive and procompetitive effects.

This enforcement gap can be understood by reference to Figure 4. If there is no LRA that substantially advances the justification, then mixed conduct gets no scrutiny at all. Points A and B are permitted, even though they impose a net loss compared to inaction. Moreover, a

"weighing of the competitive effects . . . —both pro and con" in apparent contrast to *Virgin Atlantic* (quoting Geneva Pharms. Tech. Corp. v. Barr Labs. Inc., 386 F.3d 485, 507 (2d Cir. 2004)) (citing Capital Imaging Assocs., P.C. v. Mohawk Valley Med. Assocs., Inc., 996 F.2d 537, 543 (2d Cir. 1993))); County of Tuolumne v. Sonora Cmty. Hosp., 236 F.3d 1148, 1159—60 (9th Cir. 2001) (reaching final net-effects stage and concluding procompetitive effects outweigh anticompetitive effects, in apparent contrast to *Hairston*). For an insightful paper on the confusion among the lower courts, see generally Nicholas Colombo, A Balancing Test Without Balancing: Rule of Reason Analysis, Less Restrictive Alternatives, and the Three Prong Burden Shifting Approach 1–2 (unpublished manuscript) (on file with the *Columbia Law Review*).

243. See O'Bannon v. NCAA, 802 F.3d 1049, 1079 (9th Cir. 2015) (ending analysis upon concluding plaintiff's case failed at LRA step); see also id. at 1074 (describing LRA step as "final inquiry"). Nor did the court balance as part of the identification of procompetitive effects, conceivably an alternative way to incorporate net-effects balancing. See generally id.

244. See id. at 1074–75 ("A compensation cap set at student-athletes' full cost of attendance is a substantially less restrictive alternative means of accomplishing the NCAA's legitimate procompetitive purposes.").

245. See id. at 1079 (declaring rule of reason "does not require more"). Indeed, under the *O'Bannon* rule, the defendant need merely "come forward with evidence of the restraint's procompetitive effects." Id. at 1070.

246. That assumes inaction is not simply treated as a balanced LRA—a safe assumption for courts that reject balancing either in general or within the LRA test.

247. Note that there is no basis for condemning C or D if there is no LRA.

court that rejects net-effects balancing will surely insist that the LRA test be limited to dominant LRAs, since balanced LRAs present the same sorts of concerns as net-effects balancing. The limitation to dominant LRAs means that even when a dominant LRA is identified points B and C will be erroneously permitted. 248

Though a full defense of balancing is beyond the scope of this Article, it appears unlikely that the acknowledged difficulties justify the resulting enforcement gap. Even when the restraint is essential to the achievement of some procompetitive end, further analysis is appropriate. Reading between the lines, this appears to be the view embraced by the Supreme Court in horizontal agreement cases.²⁴⁹ A closer question is presented by exclusion cases in which, for the reasons given in Part II, the difficulties with balancing are greatest.²⁵⁰

A second form of truncation is to drop the LRA test, rather than the net-effects test. Some commentators have argued that the LRA test can be omitted in exclusion cases because a dominant firm's unilateral conduct is less suspicious. That conclusion seems unwarranted, however, given the work of the previous steps in the analysis. Even if it is true in general that most conduct by a dominant firm is not suspicious, by the time a court reaches the LRA inquiry, it has already satisfied itself that there is an actual or likely anticompetitive effect. Establishing that first step is a difficult and indeed often insuperable hurdle. But once that threshold is crossed, the defendant no longer enjoys the benefit of the doubt.

Moreover, incomplete scrutiny of exclusionary conduct comes at a high cost. Exclusion of new entrants restricts the introduction of new products and services. Such innovation, and the accompanying creative destruction, is crucial to economic growth.²⁵² Conduct that slows or blocks innovation is ultimately more worrying than high prices from reduced competition among insiders and more resistant to self-correction by the market.²⁵³ As a consequence, exclusion, particularly in

^{248.} The LRA test still augments the range of condemned conduct. To see this, note that, in addition to A, D is condemned.

^{249.} For example, in *American Needle, Inc. v. NFL*, the Court considered a sports league joint venture, opining in dicta that even if the restraint is "essential" to the benefit, further analysis would be required. 560 U.S. 183, 203 (2010) (stating such restraints would "likely" survive subsequent application of rule of reason (citing BMI v. CBS, Inc., 441 U.S. 1, 23 (1979))). By "essential," the Court apparently has in mind a restraint with no LRA, so the additional analysis is presumably a balancing test.

^{250.} See supra notes 101–105 and accompanying text (discussing difficulties).

^{251.} See 11 Areeda & Hovenkamp, supra note 82, ¶ 1822d, at 217 (characterizing LRA inquiry as "least important" for monopolization because unilateral conduct "enjoys the strongest presumption of legality").

^{252.} See generally, e.g., Joseph A. Schumpeter, Capitalism, Socialism, and Democracy 63–120 (3d ed. 1942) (describing process of creative destruction).

^{253.} See Hemphill & Wu, supra note 103, at 1210–13 (arguing loss of innovation caused by parallel exclusion "is a much more important effect" than price elevation).

innovative industries, raises a particularly high cost of false negatives. For both reasons, a more thorough evaluation of the justification is justified.

IV. BEST PRACTICES

This Part identifies best practices that reduce the risk of false positives in applying the LRA test. First, plaintiffs properly bear the burden of persuasion in establishing an LRA, not only in rule-of-reason cases but also in horizontal mergers and tying cases (section IV.A). Second, the LRA must be preferred by the defendant to inaction (section IV.B). Third, the LRA must be practical and plausibly chosen by the defendant (section IV.C).

These best practices each take on heightened importance if the LRA test includes balanced alternatives. With only a little "imagination," one can usually identify an LRA.²⁵⁴ If LRAs are not restricted to equal effectiveness, the scope for imaginative alternatives is substantially increased. These best practices place significant real-world limits on the scope of the test.

A. The Plaintiff's Burden of Persuasion

The burden of persuasion is a crucial issue in antitrust cases. Imposing upon defendants a burden to establish the absence of an LRA places a potentially heavy thumb on the scales in favor of plaintiffs. Indeed, the allocation to defendants in constitutional cases²⁵⁵ may be a decisive disadvantage. In antitrust cases, the burden of persuasion is an inconsistent and poorly theorized mix that varies across jurisdictions and types of case. The majority of courts applying the rule of reason allocate the burden to plaintiffs,²⁵⁶ though some allocate the burden to

^{254.} This point resonates in both antitrust and constitutional law. See, e.g., Ill. State Bd. of Elections v. Socialist Workers Party, 440 U.S. 173, 188–89 (1979) (Blackmun, J., concurring) (opining, in applying strict scrutiny, "judge would be unimaginative . . . if he could not come up with something a little less 'drastic' or a little less 'restrictive' in almost any situation"); Am. Motor Inns, Inc. v. Holiday Inns, Inc., 521 F.2d 1230, 1249 (3d Cir. 1975) (noting in rule-of-reason analyses "imaginations of lawyers could . . . conjure up" LRAs).

^{255.} See, e.g., Fisher v. Univ. of Tex., 133 S. Ct. 2411, 2414 (2013) (placing burden on defendant in equal protection case to prove absence of LRAs); Wyoming v. Oklahoma, 502 U.S. 437, 456 (1992) (placing burden on defendant in dormant commerce clause case to prove absence of LRAs); see also Holt v. Hobbs, 135 S. Ct. 853, 863 (2015) (placing burden on defendant in statutory free-exercise challenge under RLUIPA to prove absence of LRAs).

^{256.} See, e.g., Ark. Carpenters Health & Welfare Fund v. Bayer AG, 604 F.3d 98, 104 (2d Cir. 2010) (placing burden on plaintiff); Hairston v. Pac. 10 Conference, 101 F.3d 1315, 1319 (9th Cir. 1996) (same); United States v. Brown Univ., 5 F.3d 658, 679 (3d Cir. 1993) (same); Capital Imaging Assocs., P.C. v. Mohawk Valley Med. Assocs., Inc., 996 F.2d 537, 543 (2d Cir. 1993) (same); see also 11 Areeda & Hovenkamp, supra note 82, ¶ 1914c, at 385–87 (collecting rule-of-reason cases and concluding most but not all cases assign burden to plaintiffs).

defendants.²⁵⁷ By contrast, in horizontal merger²⁵⁸ and tying²⁵⁹ cases, defendants typically have the burden.

When the LRA test is used as a benchmark for evaluating conduct, plaintiffs properly bear the burden of persuasion. At heart, the plaintiff is arguing that the net benefit of the alternative is positive compared to the conduct, as a means of establishing the anticompetitive effect of the conduct. This claim is conceptually analogous to the comparison between the conduct and inaction. Whether premised on one benchmark or the other, the plaintiff is attempting to establish an unreasonable restraint of trade. A difference in treatment between the two benchmarks is hard to justify.

Moreover, to the extent the test recognizes balanced alternatives, the case for a burden on plaintiffs is strengthened. Given that most LRAs are less effective, their superiority must be established rather than presumed. Moreover, the fuller comparison of both benefits and costs strengthens the identity between the LRA inquiry and net-effects balancing.

A further reason to assign plaintiffs this burden is that otherwise defendants are forced to prove a negative. This poses a practical difficulty where a potentially wide range of LRAs might be posed in response to the defendant's conduct. The difficulty of proving a negative strengthens the case for placing the burden on plaintiffs. That is especially true if the LRA is a balanced LRA, the asserted net benefit of which may be harder

257. See, e.g., Kreuzer v. Am. Acad. of Periodontology, 735 F.2d 1479, 1495 (D.C. Cir. 1984) (finding justification lacking because defendant failed to demonstrate lack of LRA); Wilk v. Am. Med. Ass'n, 719 F.2d 207, 227 (7th Cir. 1983) ("[T]he burden of persuasion is on the defendants to show... [the alleged] concern... could not have been adequately satisfied in a manner less restrictive of competition."); N. Am. Soccer League v. NFL, 670 F.2d 1249, 1261 (2d Cir. 1982) (placing burden on defendants, unlike later Second Circuit cases such as *Arkansas Carpenters*); see also Thomas A. Piraino, Jr., Reconciling the Per Se and Rule of Reason Approaches to Antitrust Analysis, 64 S. Cal. L. Rev. 685, 724 (1991) (arguing defendant should bear burden of persuasion to show ancillary restriction is "no broader than necessary").

258. See, e.g., United States v. Phila. Nat'l Bank, 374 U.S. 321, 370 (1963) (condemning conduct upon defendant's failure to "contend that they are unable to expand" through internal growth); Saint Alphonsus Med. Ctr.–Nampa, Inc. v. St. Luke's Health Sys., Ltd., 778 F.3d 775, 791 & n.15 (9th Cir. 2015) (determining burden is "properly part of the defense"). The Horizontal Merger Guidelines place some justificatory obligation on the merging parties but may be read to impose only a burden of production, rather than a burden of persuasion. Horizontal Merger Guidelines, supra note 30, § 10, at 32 ("[I]t is incumbent upon the merging firms to substantiate efficiency claims").

259. See, e.g., Image Tech. Serv., Inc. v. Eastman Kodak Co., 903 F.2d 612, 618–19 (9th Cir. 1990) ("To prevail . . . [defendant] would have to prove that its tying arrangement is the only way that highest quality service can be assured." (footnote omitted)), aff'd, 504 U.S. 451 (1992); Mozart Co. v. Mercedes-Benz of N. Am., Inc., 833 F.2d 1342, 1349 (9th Cir. 1987) ("To exonerate a franchisor's tie-in quality control technique from the antitrust law, there must be a finding that no [LRA] exists. Frequently [LRAs] do exist."); Metrix Warehouse, Inc. v. Daimler-Benz Aktiengesellschaft, 828 F.2d 1033, 1040 (4th Cir. 1987) ("An asserted business justification cannot salvage a tying arrangement that is otherwise per se unlawful without proof that means less restrictive than the tie-in were not feasible to achieve the desired protection.").

to disprove. The strength of this argument, however, must not be overstated. Even if defendant had the burden of persuasion, the plaintiff could be assigned a burden of pleading and limited to one or several "standard" alternatives, as discussed in more detail below.

The plaintiff's burden properly extends to a horizontal merger, which raises some similar concerns as horizontal agreement, such as coordinated pricing and, like other forms of agreement, is a "contract, combination, . . . or conspiracy" covered by section 1 of the Sherman Act.²⁶⁰ Here, the traditional allocation to defendants has had an important effect. For example, the *St. Luke*'s court insisted that the merging medical providers prove the absence of an LRA.²⁶¹ The allocation of burden here was likely decisive to the result. Given the limited state of current knowledge about what is needed for successful integration,²⁶² it was very difficult for defendants to show that their merger was a superior vehicle for delivering the beneficial effects.

The foregoing analysis suggests that the *St. Luke's* court applied the wrong rule and that plaintiffs ought to have borne the burden of establishing the comparison between the conduct and the LRA benchmark. This conclusion holds even if the governing statute, the Clayton Act, establishes a prophylactic goal and even if it weighs false negatives especially highly. Such a goal does not require that defendants bear the burden of persuasion as to an LRA. Sensitivity to false negatives is already reflected in other elements of doctrine, particularly the presumption of anticompetitive effect from increased concentration²⁶³ and the skepticism with which courts evaluate claims of efficiencies.²⁶⁴

Tying, like horizontal mergers, places a thumb on the scales for plaintiffs. The reason is different: a judicial belief that most tying is anticompetitive and that usually there exist LRAs.²⁶⁵ Even if the first belief were correct—a conclusion that is sharply contested²⁶⁶—the

^{260. 15} U.S.C. \S 1 (2012). Of course, horizontal mergers are customarily challenged under section 7 of the Clayton Act rather than the Sherman Act.

^{261.} See *St. Luke's*, 778 F.3d at 791 n.15 (treating LRA as part of defendant's "burden to rebut a prima facie case of illegality").

^{262.} See, e.g., Brief of Appellants at 56, *St. Luke's*, 778 F.3d 775 (No. 14-35173), 2014 WL 2812656 (quoting plaintiffs' expert who, asked whether looser affiliation would be equally effective, responded "[t]he jury is still out").

^{263.} See, e.g., United States v. Baker Hughes Inc., 908 F.2d 981, 982 (D.C. Cir. 1990) ("By showing that a transaction will lead to undue concentration in the market for a particular product... the government establishes a presumption that the transaction will substantially lessen competition." (footnote omitted)).

^{264.} See FTC v. Sysco Corp., 113 F. Supp. 3d 1, 82–83 (D.D.C. 2015) (concluding no merger case exists in which defendants "have successfully rebutted the government's prima facie case on the strength of the efficiencies").

^{265.} See supra note 58 (noting Supreme Court's treatment of this issue).

^{266.} See, e.g., Bork, Antitrust Paradox, supra note 36, at 381 (concluding, after review of judicial treatment of tying arrangements, that "law in this field is unjustified and is itself inflicting harm upon consumers"); Hovenkamp, Antitrust Enterprise, supra note 92, at 198–206 (criticizing current tying doctrine). But see Einer Elhauge, Tying, Bundled

playing field is already tilted in favor of plaintiffs by dispensing with the need to show substantial foreclosure as to the tied product.²⁶⁷ As to the second belief, the LRAs are generally less effective. 268 Thus, once again, overall superiority is something to be established, rather than presumed, suggesting that plaintiffs ought to have the burden of persuasion here, too.

If plaintiffs have the burden of persuasion, defendants ought to bear a burden of production.²⁶⁹ Defendants have better access to information about their reasons for adopting a particular practice.²⁷⁰ Giving defendants a burden of production is not unduly onerous. The burden is lightened by requiring the plaintiff to propose the set of alternatives to which the defendant responds, and it is further constrained by the "practicality" requirement discussed below. 271

Giving defendants a limited justificatory burden has additional benefits. A firm that may later be required to explain its actions is more likely to create a suitable record at the time that it implements the conduct. A burden of production is therefore likely to induce more careful deliberation by the firm before taking its action.²⁷² At least some anticompetitive conduct is the product of inattention by the firm. Deliberation is frequently in short supply, and often firms may have no considered reason for having taken an action with anticompetitive consequences. Encouraging a culture of justification and reason giving, a familiar part of constitutional discussion, is valuable in antitrust as a source of deterrence.²⁷³

Discounts, and the Death of the Single Monopoly Profit Theory, 123 Harv. L. Rev. 397, 400 (2009) ("The Supreme Court should stick to its tying precedent"). Resolving this debate is not necessary to the present analysis.

267. See Christopher R. Leslie, Tying Conspiracies, 48 Wm. & Mary L. Rev. 2247, 2255 (2007) (noting requirement as to tied product that "not insubstantial" volume must be

268. See supra notes 134, 149-150 and accompanying text (discussing cases and commentary making this point); see also Benjamin Klein & Lester F. Saft, The Law and Economics of Franchise Tying Contracts, 28 J.L. & Econ. 345, 353 (1985) (describing higher cost of contractual specification).

269. In merger cases, this combination of burdens may be suggested by the Horizontal Merger Guidelines, which merely require, as noted supra note 258, that the merging parties "substantiate" efficiencies, without assigning a clear burden of persuasion. Horizontal Merger Guidelines, supra note 30, at 30.

270. Cf. Carrier, Real Rule, supra note 74, at 1341-43 (arguing, as to apparently narrow understanding of "reasonable necessity" discussed supra in note 88, defendant should bear burden of persuasion because it is "most familiar with its chosen objectives, its capacities, the types of ... restraints that it has used in the past, and the market in which the restraint is applied").

271. See infra section IV.C for a further discussion.

272. See, e.g., Hennessey v. NCAA, 564 F.2d 1136, 1154 (5th Cir. 1977) (observing NCAA schools undertook "much study" before concluding no LRA existed).

273. Cf. 7 Areeda & Hovenkamp, supra note 82, ¶ 1505b, at 417 ("Forcing defendants to explain how their restraint promotes their asserted objective not only illuminates the

The plaintiff's burden of persuasion is appropriate when the LRA test is used as a benchmark, whether as a shortcut or as a locus of balancing. By contrast, it does not arise for LRA-as-smoking-out, for in that instance it is an input to an evaluation of effects, rather than a benchmark. Instead, plaintiffs bear a burden of persuasion on anticompetitive effect, and the LRA test is one piece of evidence among many that bears on that effect.

A further exception arises when the LRA test is used to reveal a lack of ancillarity. As discussed in Part II, when conduct makes no incremental contribution to a claimed beneficial end, cessation is an LRA. Another way to say this is that there is no benefit in the first place, a point on which the defendant properly bears the burden of persuasion.

B. Zero-Profit Constraint

Section III.A defended the augmentation that arises from use of the LRA test. However, augmentation can produce perverse outcomes if courts are not careful. This issue potentially arises where the conduct is already superior to inaction. In such cases, the LRA condemns the conduct with a view to further welfare improvement.

For condemnation to have the desired effect, the LRA must be preferable *to the firm* compared to inaction. If not, as Professor Richard Craswell has noted in the context of deceptive advertising, a perverse outcome may result.²⁷⁴ A firm that anticipates condemnation for its conduct will just stick with inaction, rather than choosing the LRA. Condemning the conduct imposes a social loss, the difference between the conduct and the inferior results of inaction.²⁷⁵ This perversity problem has received little attention.

One important setting for the perversity problem arises when the defendant depends on the anticompetitive effect to make the conduct profitable. Suppose the firm would not enter, but for the opportunity to raise prices through collusive and otherwise illegal conduct, or through conduct that raised prices though it was not the point of the conduct. For example, in the *Apple* case, the Justice Department accused Apple of taking part in a conspiracy to raise ebook retail prices.²⁷⁶ Apple defended on the ground (among others) that its entry into ebook retailing brought important consumer benefits that would otherwise not have been

legitimacy of that objective; it may also suggest that alternative, less injurious means are available.").

^{274.} See Richard Craswell, "Compared to What?" The Use of Control Ads in Deceptive Advertising Litigation, 65 Antitrust L.J. 757, 779 (1997) ("[I]f the advertiser were barred from using the original ad... and was instead limited to using either [the ideal solution from the FTC's standpoint] or no ad at all, the advertiser might choose no ad at all.").

^{275.} Courts cannot simply order the LRA as preferable to inaction. Among other problems, there is no conduct on which to premise the antitrust violation.

^{276.} United States v. Apple, Inc., 791 F.3d 290, 296 (2d Cir. 2015).

available and that it would not have entered but for the conduct that resulted in higher prices.²⁷⁷ Here, the benefit is premised on the harm itself.

The LRA test is not easily applied in this instance. It is not enough to simply say there exists an LRA with higher welfare, namely entry without collusion. If the firm would not have entered on those terms, the LRA is off the table. That is not to say the conduct is permissible. The conduct may still be condemned, either because a benefit premised on collusion is not cognizable²⁷⁸ or because the cognizable benefit is smaller than the loss. But courts cannot use the LRA test to avoid that analysis.

Crediting balanced LRAs exacerbates concerns about the perversity problem. It does so, in part, simply by expanding the range of credited LRAs. Beyond that, less effective alternatives—the set of alternatives added by expanding the range of LRAs—are particularly apt to raise the perversity issue. That is because less effective alternatives are often (though not always, it must be stressed) less profitable. Thus a disproportionate share of balanced LRAs are likely ruled out by the zero-profit restriction. Consequently, this restriction sets a potentially important limit on the set of balanced LRAs available to condemn mixed conduct.

The solution is to credit only those LRAs that meet the defendant's participation constraint. For example, we might insist that the plaintiff furnish evidence, including expert testimony based on economic theory, that the LRA would likely be chosen if the conduct is condemned. The defendant's own asserted justification may tend to show that the LRA is profitable.

It is worth pausing to consider whether this additional requirement is overkill. Perhaps the perversity problem is so rare, small when it occurs, or costly and error prone to calculate that courts should ignore the complication. To answer that question, courts need better information, currently lacking, about two questions—first, how often scrutinized conduct is superior to inaction. To the extent it is inferior, there is no undue deterrence concern; deterring the conduct is desirable. The second question is how often identified LRAs are unprofitable compared to inaction. Certainly the LRA is (weakly) less profitable compared to the conduct; otherwise the defendant would have chosen it. The lesser restrictiveness will ordinarily reduce or remove the illicit profits arising from an anticompetitive effect. The legitimate profits may be lower as well. Even a dominant LRA may deliver lower legitimate profits to the defendant, as explained in section II.D. These considerations suggest

^{277.} See id. at 330–34. Apple argued that it was not motivated by higher ebook prices, but to the contrary was indifferent to the price level, provided that Apple retail prices were no higher than Amazon's.

^{278.} See supra section I.A (discussing cognizability as filter screening out some cases of mixed conduct).

that the perversity problem is not merely theoretical, though further work is required to establish its size.

C. Practicality

An idea developed in the previous section—that the LRA test is properly limited to alternatives a defendant might actually pursue—has a further implication. The LRA ought to be practically rooted in real commercial experience. Some courts have operationalized this idea by requiring that the posited alternative must be "based on actual experience" or else "fairly obvious."²⁷⁹ A rigorous test of practicality is needed both to avoid the perversity problem discussed above and to avoid an overestimate of the benefit from conduct whose speculative basis makes it hard to evaluate.

One useful indicia of practicality is that the alternative has been implemented by this or other firms in similar circumstances. For example, a professional sports league's internal restrictions might be evaluated in light of the alternatives implemented by other sports leagues. Similarly, certain types of standard contractual provisions have clear real-world alternatives. For example, if a retailer implements resale price maintenance, asserting the avoidance of intrabrand free-riding as a justification for resale price maintenance, the alternative of a more detailed contract may be ready at hand.

Practicality is harder to establish when the conduct itself is more unusual and less standardized. Where the alternative has never been implemented in a related context, there is less of a basis for confidence in its effectiveness. Judged from the perspective of practicality, the *O'Bannon* district court erred in embracing a highly nonstandard alternative to the NCAA's rule. The deferred compensation alternative was an ingenious response to the justifications credited by the court. However, this LRA lacked the indicia of reliability based on previous experience. As a consequence, it was less clear how well the alternative would perform, raising the expected error costs of its evaluation.

Practicality also poses a challenge where alleged exclusion is accomplished through product design. In some cases alleging predatory product design, the proposed alternative is a redesign of the product.

^{279.} O'Bannon v. NCAA, 7 F. Supp. 3d 955, 1005 (N.D. Cal. 2014), aff'd in part and rev'd in part, 802 F.3d 1049 (9th Cir. 2015) (quoting Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law ¶ 1913b (3d ed. 2006)); see also 11 Areeda & Hovenkamp, supra note 82, ¶ 1822d, at 218–19 (warning of "armchair surmising"); Horizontal Merger Guidelines, supra note 30, § 10, at 30 (restricting analysis to "practical" as opposed to "merely theoretical" alternatives).

^{280.} See, e.g., Chi. Prof'l Sports Ltd. P'ship v. NBA, 961 F.2d 667, 675 (7th Cir. 1992) (pointing to Major League Baseball rule that avoids free-riding on network advertising by levying charge for games shown on superstation); McNeil v. NFL, 1992-2 Trade Cas. (CCH) ¶ 69,983 (D. Minn. 1992) (giving jury instruction emphasizing relevance of "player movement" rules adopted by other sports leagues).

Such proposals tend to be idiosyncratic one-offs. There is less evidence on which to rely in arguing, say, that a search engine could serve users equally (or nearly) as well with a different organization of its search results. Such LRAs face an uphill battle.

However, innovation is not only an obstacle to application of the LRA test. Technological change also opens up new, practical LRAs that were infeasible before. For example, as it becomes cheaper to specify and monitor the services required of a counterparty, it is less important to use indirect contracts that confer incentives but also have anticompetitive effects.

A second change is the enhanced ability to arrange and manage a large set of contractual relationships. For an illustration, let us return to the example of ASCAP. As discussed above, ASCAP pools public performance rights to musical works and packages them into blanket licenses.²⁸¹ The availability of a blanket license dampens, though it does not prohibit, price competition among songwriters for per-song, per-use negotiations with users.²⁸² Meanwhile, ASCAP offers only a blanket license; it does not offer a per-song, per-use option.

The question is whether ASCAP's conduct ought to be judged against the LRA of per-song, per-use negotiation between ASCAP and a broadcaster. Such licenses would introduce price competition among songwriters for public performance rights. In the 1970s, the CBS television network sought a limited license as part of its antitrust suit against ASCAP.²⁸³ The Court held that the rule of reason applied and remanded.²⁸⁴ In a dissent, Justice Stevens argued for condemnation in light of the LRA of individualized licenses.²⁸⁵

Such licenses were infeasible in the 1970s. As a district court noted two years later, it was too difficult at the time to monitor compliance with per-use licenses. Today, by contrast, there are well developed, successful examples in which content is monitored, used, and priced on an à la carte basis. Given changes in the frontier of practicality, the LRA analysis today would be more favorable to plaintiffs.

^{281.} See supra note 26 and accompanying text (noting reduced price competition as "side effect" of blanket license).

^{282.} Other forms of competition remain, as songwriters are paid based on the frequency of their use.

^{283.} See BMI v. CBS, Inc., 441 U.S. 1, 26-27 (1979) (describing CBS request for license with payments based on actual use).

^{284.} Id. at 24–25.

^{285.} See id. at 33 (Stevens, J., dissenting) (arguing "more limited—and thus less restrictive—licenses" were feasible).

^{286.} See BMI v. Moor-Law, Inc., 527 F. Supp. 758, 769–70 (D. Del. 1981) (noting practical problems with per-use licensing); see also id. at 767–69 (reaching similar conclusion as to license limited to country music).

CONCLUSION

The LRA test plays several roles in antitrust cases. Sometimes a dominant LRA offers a valid shortcut that avoids the need to weigh incremental restriction against incremental effectiveness. In other cases, a less effective alternative is a locus for balancing. And sometimes it may serve not as a benchmark but as a diagnostic tool that smokes out anticompetitive effect.

While the LRA test offers a searching inquiry of mixed conduct, it is subject to significant limitations. The posited alternative must be profitable to the defendant, compared to inaction, and practical rather than speculative. The plaintiff properly has the burden of persuasion, even for conduct such as mergers and tying, where the burden has traditionally been assigned to defendants.

Several features of the LRA test apply broadly beyond antitrust. For example, expansion of the range of condemnation results whenever the LRA test offers a second baseline beyond inaction, whether in antitrust or constitutional law.²⁸⁷ Moreover, balancing against alternatives is inevitable wherever LRAs arise. For example, the limitation to dominant LRAs in constitutional scrutiny is breached there, just as in antitrust law.²⁸⁸ At the same time, a few courts have openly acknowledged the role of balanced LRAs in constitutional scrutiny, making possible a fuller comparison of the alternative's incremental benefits and costs.²⁸⁹ Such frankness about balancing—and its inevitably—might profitably be brought to both constitutional law and antitrust law.

^{287.} For a case making this explicit in the constitutional-law context, see Baskin v. Bogan, 766 F.3d 648, 655 (7th Cir. 2014) (Posner, J.) (comparing, in context of equal protection, costs and benefits of conduct compared to LRA).

^{288.} See, e.g., Volokh, supra note 225, at 2441–42 (providing First Amendment example).

^{289.} See, e.g., Baskin, 766 F.3d at 655 (discussing parameters of LRA test).

TABLE 1: EXAMPLES OF MIXED CONDUCT AND PROPOSED LESS RESTRICTIVE ALTERNATIVES

| | 1. | Conduct |
|----------------|----|---|
| Industry | 2. | Justification |
| , | 3. | Less restrictive alternative |
| | 1. | Incentive agreements with travel agents and |
| | | customers ²⁹⁰ |
| Airlines | 2. | Improve customer loyalty |
| | 3. | None suggested (resulting in judgment for |
| | | defendants) |
| | 1. | Merger ²⁹¹ |
| Baby food | 2. | Gain access to acquired firm's recipes |
| , | 3. | Greater investment in product development |
| Cars | 1. | Territorial restrictions in distribution of cars ²⁹² |
| | 2. | Improve incentive to work the territory |
| | 3. | More detailed contract |
| | 1. | Rule prohibiting payments to college |
| | | athletes ²⁹³ |
| | 2. | Maintain amateurism and improve athletes' |
| | | integration with academic life |
| College sports | 3. | Increased scholarship aid and deferred |
| College sports | | compensation |
| | 1. | Rule restricting quantity of televised football |
| | | games ²⁹⁴ |
| | 2. | Improve competitive balance |
| | 3. | Cessation |
| Dentistry | 1. | Rule that dental association members must |
| | | practice only periodontics, not restorative |
| | | dentistry ²⁹⁵ |
| | 2. | Increase quality of patient care and inform the |
| | | public |
| | 3. | Minimum-hour requirement for periodontics |

^{290.} Virgin Atl. Airways Ltd. v. British Airways PLC, 257 F.3d $256,\,264–65$ (2d Cir. 2001).

^{291.} FTC v. H.J. Heinz Co., 246 F.3d 708, 722 (D.C. Cir. 2001).

^{292.} White Motor Co. v. United States, 372 U.S. 253, 263 (1963).

^{293.} O'Bannon v. NCAA, 802 F.3d 1049, 1053 (9th Cir. 2015).

^{294.} NCAA v. Bd. of Regents of the Univ. of Okla., 468 U.S. 85, 94 (1984).

^{295.} Kreuzer v. Am. Acad. of Periodontology, 735 F.2d 1479, 1494–95 (D.C. Cir. 1984).

| | 1. | Merger of hospitals ²⁹⁶ |
|-------------|----|---|
| | 2. | Achieve clinical integration of doctors |
| | 3. | Integration through contract |
| | 1. | Medical association boycott of chiropractors ²⁹⁷ |
| | 2. | Improve patient care through rigorous |
| | | adherence to scientific method |
| | 3. | Patient education |
| | 1. | Maximum price setting by doctors ²⁹⁸ |
| Health care | 2. | Lower cost of providing insurance |
| | 3. | Price setting by insurers |
| | 1. | Rule requiring that doctors performing |
| | | cesarean procedure must be board certified or |
| | | complete thirty-six-month residency ²⁹⁹ |
| | 2. | Ensure patient health by requiring minimum |
| | | training |
| | 3. | Individualized evaluation (such as letters of |
| | | recommendation) |
| | 1. | Blanket license to public performance of full |
| Music | _ | repertory for a period ³⁰⁰ |
| | 2. | Create a new good |
| | 3. | Per-use license |
| | 1. | Blanket license to public performance of full |
| | _ | repertory for a period ³⁰¹ |
| | 2. | Create a new good |
| | 3. | Per-use license or narrower license to subset of |
| | | repertory (e.g., country music) |

^{296.} Saint Alphonsus Med. Ctr.–Nampa, Inc. v. St. Luke's Health Sys., Ltd., Nos. 1:12–CV–00560–BLW, 1:13–CV–00116–BLW, at *2, *17 (D. Idaho Jan. 24, 2014).

^{297.} Wilk v. Am. Med. Ass'n, 719 F.2d 207, 225 (7th Cir. 1983), remanded to 671 F. Supp. 1465, 1483 (N.D. Ill. 1987).

^{298.} Arizona v. Maricopa Cty. Med. Soc'y, 457 U.S. 332, 339 (1982).

^{299.} County of Tuolumne v. Sonora Cmty. Hosp., 236 F.3d 1148, 1152 (9th Cir. 2001).

^{300.} BMI v. CBS, Inc., 441 U.S. 1, 6 (1979).

^{301.} BMI v. Moor-Law, Inc., 527 F. Supp. 758, 761 (D. Del. 1981).

| other professional teams ³⁰² 2. Avoid divided loyalty in negotiating for broadcast rights 3. Removal of such owners from negotiations 1. Rule restricting out-of-market television licenses by individual hockey and baseball teams ³⁰³ 2. Promote competitive balance by sharing revenue from league-offered, out-of-market licenses 3. Other forms of direct revenue sharing 1. Rule deferring player entry until three years after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards 3. Customer education or direct specification | | 1. | Rule prohibiting NFL owners from owning |
|---|---------------|----|--|
| Brofessional sports Professional sports Professional sports 1. Rule restricting out-of-market television licenses by individual hockey and baseball teams 303 2. Promote competitive balance by sharing revenue from league-offered, out-of-market licenses 3. Other forms of direct revenue sharing 1. Rule deferring player entry until three years after high school graduation 304 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets 305 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications 306 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger 307 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating Tabulating Tabulating Tabulating Professional 1. Tying machine leases and punch cards 308 2. Protect machine from inferior punch cards | | | |
| Professional sports Professional sports 2. Promote competitive balance by sharing revenue from league-offered, out-of-market licenses 3. Other forms of direct revenue sharing 1. Rule deferring player entry until three years after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating machines 2. Protect machine from inferior punch cards 1. Tying machine leases and punch cards 2. Protect machine from inferior punch cards | | 2. | Avoid divided loyalty in negotiating for |
| Professional sports Professional sports 2. Promote competitive balance by sharing revenue from league-offered, out-of-market licenses 3. Other forms of direct revenue sharing 1. Rule deferring player entry until three years after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating Tabulating Tabulating Tabulating Protect machine from inferior punch cards | | | broadcast rights |
| Professional sports 2. Promote competitive balance by sharing revenue from league-offered, out-of-market licenses 3. Other forms of direct revenue sharing 1. Rule deferring player entry until three years after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating Tabulating Tabulating Tabulating Protect machine from inferior punch cards | | 3. | |
| Professional sports 2. Promote competitive balance by sharing revenue from league-offered, out-of-market licenses 3. Other forms of direct revenue sharing 1. Rule deferring player entry until three years after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating Tabulating Tabulating Tabulating Protect machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | 1. | Rule restricting out-of-market television |
| Professional sports 2. Promote competitive balance by sharing revenue from league-offered, out-of-market licenses 3. Other forms of direct revenue sharing 1. Rule deferring player entry until three years after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating Tabulating Tabulating Protect machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | | licenses by individual hockey and baseball |
| sports 2. Promote competitive balance by snaring revenue from league-offered, out-of-market licenses 3. Other forms of direct revenue sharing 1. Rule deferring player entry until three years after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | D C | | teams ³⁰³ |
| Salt machines Software Tabulating Tabulating | | 2. | Promote competitive balance by sharing |
| 3. Other forms of direct revenue sharing 1. Rule deferring player entry until three years after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | | revenue from league-offered, out-of-market |
| 1. Rule deferring player entry until three years after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | | licenses |
| after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating Tabulating Tabulating Protect machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | 3. | Other forms of direct revenue sharing |
| after high school graduation ³⁰⁴ 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating Tabulating Tabulating Protect machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | 1. | Rule deferring player entry until three years |
| 2. Protect athletes and league from immature players 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating machines 2. Protect machine from inferior punch cards | | | after high school graduation ³⁰⁴ |
| 3. Individualized evaluation to measure maturity 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating machines 2. Protect machine from inferior punch cards | | 2. | |
| Salt machines 1. Tying machines and salt tablets ³⁰⁵ 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating machines 2. Protect machine from inferior punch cards Protect machine from inferior punch cards | | | players |
| Salt machines 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating machines 2. Assure quality 3. Direct specification of quality standard 1. Tunname applications ³⁰⁶ 2. Lower labor costs of acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | 3. | Individualized evaluation to measure maturity |
| Salt machines 2. Assure quality 3. Direct specification of quality standard 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating machines 2. Assure quality 3. Direct specification of quality standard 1. Tunname applications ³⁰⁶ 2. Lower labor costs of acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | 1. | Tying machines and salt tablets ³⁰⁵ |
| 1. Interference with peer-to-peer applications ³⁰⁶ 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | Salt machines | 2. | |
| 2. Manage network congestion 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | 3. | Direct specification of quality standard |
| 3. Cessation, as to usage that has no effect on congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating machines 2. Protect machine from inferior punch cards | Software | 1. | Interference with peer-to-peer applications ³⁰⁶ |
| Software congestion 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating machines 2. Protect machine from inferior punch cards | | 2. | Manage network congestion |
| 1. Merger ³⁰⁷ 2. Lower labor costs in acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | 3. | Cessation, as to usage that has no effect on |
| 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating machines 2. Lower labor costs in acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | | congestion |
| 2. Lower labor costs in acquired firm's area 3. Relocation of production Tabulating machines 2. Lower labor costs in acquired firm's area 3. Relocation of production 1. Tying machine leases and punch cards ³⁰⁸ 2. Protect machine from inferior punch cards | | 1. | Merger ³⁰⁷ |
| Tabulating Tabulating 2. Protect machine from inferior punch cards | | 2. | |
| 2. Protect machine from inferior punch cards | | 3. | Relocation of production |
| 2. Protect machine from inferior punch cards | | 1. | Tying machine leases and punch cards ³⁰⁸ |
| 3. Customer education or direct specification | | 2. | |
| | | 3. | Customer education or direct specification |

^{302.} N. Am. Soccer League v. NFL, 670 F.2d 1249, 1261 (2d Cir. 1982).

^{303.} Laumann v. NHL, 56 F. Supp. 3d 280, 287–88 (S.D.N.Y. 2014).

^{304.} Clarett v. NFL, 306 F. Supp. 2d 379, 382 (S.D.N.Y.), rev'd on other grounds, 369 F.3d 124 (2d Cir. 2004).

^{305.} Int'l Salt Co. v. United States, 332 U.S. 392, 394 (1947).

^{306.} Comcast Corp., 23 FCC Rcd. 13,028, 13,028 (2008).

 $^{307.\,}$ United States v. H&R Block, Inc., 833 F. Supp. 2d 36, 43–45 (D.D.C. 2011).

^{308.} IBM v. United States, 298 U.S. 131, 132 (1936).