INTRODUCTION

Antitrust is having a moment. Commentators and policymakers, both progressive and conservative, are calling for increased antitrust enforcement to address all manner of social ills. From technology platforms’ power over speech\(^1\) and encroachments on user privacy,\(^2\) to wage stagnation in more concentrated labor markets,\(^3\) to competition-softening from ever-larger index funds,\(^4\) to growing income inequality,\(^5\)

\(^\ast\) Wall Family Chair in Corporate Law and Governance and Professor of Law at the University of Missouri Law School.


2. See, e.g., Dina Srinivasan, Why Privacy Is an Antitrust Issue, N.Y. TIMES (May 28, 2019), https://www.nytimes.com/2019/05/28/opinion/privacy-antitrust-facebook.html [https://perma.cc/ZT7Y-DDV3] (“This is how Facebook usurped our privacy: with the help of its market dominance. The price of using Facebook has stayed the same over the years (it’s free to join and use), but the cost of using it, calculated in terms of the amount of data that users now must provide, is an order of magnitude above what it was when Facebook faced real competition.”).


5. See, e.g., Jonathan B. Baker & Steven C. Salop, Antitrust, Competition Policy, and Inequality, 104 GEO. L.J. ONLINE 1, 14 (2015) (“Concerns with inequality can implicate antitrust and competition policy in two general ways. First, in that market power contributes to inequality, more aggressive antitrust enforcement might play a remedial role. Second, antitrust enforcers and regulatory agencies such as the Federal Communications Commission (FCC) might make reducing the effects of inequality a high priority in developing enforcement and regulatory initiatives.”).
reduced innovation,\textsuperscript{6} and threats to democracy itself\textsuperscript{7}—the list of maladies for which antitrust has been proposed as a remedy goes on and on.

Antitrust enforcers have taken note. From Fall 2018 through Spring 2019, the U.S. Federal Trade Commission (FTC) held fourteen hearings on “Competition and Consumer Protection in the 21st Century.”\textsuperscript{8} The FTC considered such diverse topics as common ownership by institutional investors, labor market monopsony, consumer privacy, effects of “big data,” predatory and exclusionary tactics of technology platforms, algorithms and artificial intelligence, and vertical mergers.\textsuperscript{9} In Summer 2019, the FTC joined the Antitrust Division of the U.S. Department of Justice (DOJ) in announcing probes of Google, Apple, Facebook, and Amazon (colloquially referred to as GAF)A.\textsuperscript{10} And the action is not limited to the federal level; more than forty-six state attorneys general have joined the fray with their own investigations of Facebook (led by Democrat Letitia James of New York)\textsuperscript{11} and Google (led by Republican Ken Paxton of Texas).\textsuperscript{12}

In light of policymakers’ heightened interest in antitrust and the recent flurry of bipartisan enforcement activity, it is worth stepping back to ask a couple of big-picture questions: What are antitrust’s limits in addressing the social harms that are motivating calls for more aggressive enforcement? And how should enforcers and courts proceed in light of

\textsuperscript{6} See, e.g., Derek Thompson, America’s Monopoly Problem: How Big Business Jammed the Wheels of Innovation, THE ATLANTIC (Oct. 2016), https://www.theatlantic.com/magazine/archive/2016/10/americas-monopoly-problem/497549/ [https://perma.cc/X728-3Q6X] (“This decline in dynamism has coincided with the rise of extraordinarily large and profitable firms that look discomfortingly like the monopolies and oligopolies of the 19th century.”).

\textsuperscript{7} See Ganesh Sitaraman, Unchecked Power: How Monopolies Have Flourished—and Undermined Democracy, NEW REPUBLIC (Nov. 29, 2018), https://newrepublic.com/article/152294/unchecked-power [https://perma.cc/LUS7-HRFU] (“When economic power is concentrated, it destroys not only economic freedom but also political freedom, as the wealthy and powerful use their resources to capture the government and rig it in their favor.”).\textsuperscript{8} See generally TIM WU, THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE (2018) [hereinafter WU, THE CURSE OF BIGNESS].


\textsuperscript{9} See id. (cataloguing hearing topics).


those limits?

These questions are not new. In 1984, Judge (then Professor) Frank Easterbrook addressed them in an article entitled The Limits of Antitrust. Few antitrust articles—or law review articles generally—have had the influence of that writing. Cited over 650 times in law journals, its central idea appears to underlie most of the U.S. Supreme Court’s recent antitrust decisions.

This Article revisits The Limits of Antitrust in light of the current antitrust moment. Part I describes the central components of Easterbrook’s 1984 proposal and considers, for each, whether and how it should be revised in light of subsequent market developments and advances in economic learning. Part I concludes that Easterbrook’s overarching prescription for maximizing antitrust’s effectiveness remains fundamentally sound but that his view about the relative harms from over- and under-enforcement, as well as some of the specific screening mechanisms he proposed for optimizing antitrust’s effectiveness, require some adjustment.

Part II then builds upon Easterbrook’s approach by proposing four new screening mechanisms that could assist twenty-first century courts and enforcers in ensuring that antitrust secures as much social welfare as possible, given its intrinsic limitations. The proposed screening mechanisms would limit antitrust intervention to situations in which the complained of conduct (1) causes or threatens harm to consumers, (2) extends market power, (3) is unlikely to be addressed by other bodies of law or privately ordered solutions, and (4) does not involve a remedy requiring a great deal of information or endowing government officials with substantial discretionary authority.

I. ASSESSING THE LIMITS OF ANTITRUST

We begin with a summary of The Limits of Antitrust and then turn to assess the merits of its prescriptions in light of twenty-first century developments.

A. Three Central Components of The Limits of Antitrust

The approach set forth in The Limits of Antitrust included three components. Judge Easterbrook set forth an overarching objective for antitrust courts and enforcers, offered advice on how to weigh different costs in making intervention decisions, and posited a set of specific screening mechanisms that would help achieve antitrust’s overarching goal.\(^\text{17}\)

1. The Overarching Objective

To understand the objective Easterbrook posited for antitrust courts and enforcers, it may help to consider antitrust’s “domain”—i.e., the type of activity it regulates. Antitrust is concerned with business behaviors that generate market power: \textit{coordinated conduct} that leads to collusion\(^\text{18}\) and \textit{exclusionary actions} that create monopoly power.\(^\text{19}\) The difficulty is that many acts of coordination between firms enhance market output, and many business practices that usurp business from the actor’s rivals—and thus “exclude” them from the market—also generate benefits for consumers. For example, resale price maintenance may facilitate collusion but may also encourage dealer-provided services by preventing free-riding;\(^\text{20}\) manufacturers’ exclusive dealing agreements may raise rivals’ costs of distribution but may also spur manufacturer investment in distributors by reducing interbrand free-riding;\(^\text{21}\) extremely low prices may drive rivals from the market, but they offer an obvious and immediate benefit to consumers.\(^\text{22}\) These are typical of the behaviors antitrust addresses: they involve both upsides and downsides, and thus may be, on

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17. See generally \textit{id.}
21. See, \textit{e.g.}, Benjamin Klein & Andres V. Lerner, \textit{Procompetitive Justifications for Exclusive Dealing: Preventing Free-Riding and Creating Incentives for Undivided Dealer Loyalty}, U.S. DEP’T OF JUSTICE (draft Nov. 12, 2006), https://www.justice.gov/atr/procompetitive-justifications-exclusive-dealing-preventing-free-riding-and-creating-undivided\#2 [https://perma.cc/LE2G-CXPF] (explaining that exclusive dealing may be used to prevent free-riding in certain cases, such as the standard case where dealers use promotional assets supplied by the manufacturer to sell rival products).
net, either output-enhancing (procompetitive) or output-reducing (anticompetitive). They are, in short, mixed bags.

Regulating competitive mixed bags inevitably entails costs. First, there are the costs that result from mistaken judgments. If the regulator wrongly allows conduct that is, on net, anticompetitive, consumers will face higher prices and/or reduced quality, and a deadweight loss will occur. But if the regulator wrongly forbids conduct that is, on balance, procompetitive, market output will be lower than it otherwise would be and, again, consumers will suffer. Both false convictions (Type I errors) and false acquittals (Type II errors) generate losses.

In addition to these so-called error costs, regulating competitive mixed bags entails significant costs of simply deciding whether contemplated or actual conduct is forbidden or permitted. Such “decision costs” must be borne by business planners (who are attempting to avoid liability), by litigating parties (who are trying to prove their case), and by adjudicators (who must decide whether the law has been broken).

Type I error costs, Type II error costs, and decision costs are intertwined. If policymakers try to reduce the risk of false conviction (Type I error) by making it harder for a plaintiff to establish liability or easier for a defendant to make out a defense, they will increase the risk of false acquittal (Type II error). If they ease a plaintiff’s burden or cut back on available defenses to reduce false acquittals, they will tend to enhance the social losses from false convictions. And if they make the rule more nuanced in an effort to condemn the bad without chilling the good, thereby reducing error costs overall, they enhance decision costs. As in a game of whack-a-mole, driving down costs in one area will cause them to rise elsewhere.

In light of antitrust’s inevitable and intertwined costs of error and

23. Easterbrook, supra note 13, at 4 (“Antitrust is costly. The judges act with imperfect information about the effects of the practices at stake. The costs of action and information are the limits of antitrust.”).
24. See id. at 21 (“The costs of judicial error are borne by consumers, who lose the efficient practices and get nothing in return.”).
25. Id.
26. See id.
27. See id.
28. See id. at 39.
29. See THOMAS A. LAMBERT, HOW TO REGULATE: A GUIDE FOR POLICYMAKERS 10–12 (2017) (explaining the differences and similarities between Type I and Type II error costs).
30. Id.
31. Id.
32. Id.
decision—what he called, collectively, the “limits of antitrust”\(^33\)—Easterbrook proposed an overarching goal for antitrust policies: They should be crafted so as to minimize the sum of error and decision costs.\(^34\)
Pursuing such an objective, policymakers would not try to prevent every anticompetitive act, allow every procompetitive one, or keep antitrust rules as simple as possible. In keeping with Voltaire’s prudent maxim, “the perfect is the enemy of the good,”\(^35\) they would eschew perfection along any single dimension in favor of overall \textit{optimization}. This would ensure that antitrust, despite its limits, accomplishes as much good as possible.

2. The Notion of Incommensurate Harms

The second key component of Easterbrook’s \textit{Limits of Antitrust} was his instruction about how to weigh Type I versus Type II errors.\(^36\) If a procompetitive behavior is wrongly condemned (Type I error), the adverse effect—squandered efficiencies—is not limited to the defendant’s market but, because of the precedent created, extends to other markets in which the condemned practice is or would be utilized.\(^37\) Moreover, correcting the erroneous precedent and resulting welfare loss requires a judicial decision that overrules the mistaken condemnation.\(^38\) By contrast, if anticompetitive conduct is wrongly allowed to persist, the result will be the sort of monopoly pricing that invites entry and may thereby self-correct.\(^39\)

Accordingly, Easterbrook reasoned, false convictions are “worse” than false acquittals.\(^40\) And that suggests, he argued, that liability rules on questionable practices should be calibrated so as to err in the

\(^{33}\) See \textit{supra} note 23 and accompanying text.

\(^{34}\) Easterbrook, \textit{supra} note 13, at 16 ("The legal system should be designed to minimize the total costs of (1) anticompetitive practices that escape condemnation; (2) competitive practices that are condemned or deterred; and (3) the system itself.").

\(^{35}\) Voltaire, \textit{La Beguille}, in \textit{RECUEIL DES MEILLEURS CONTES EN VERS} 412, 412 (1772) ("[L]e mieux est ennemi du bien . . .").

\(^{36}\) Easterbrook explained:

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

Easterbrook, \textit{supra} note 13, at 2–3.

\(^{37}\) \textit{Id.}

\(^{38}\) \textit{Id.}

\(^{39}\) \textit{Id.}

\(^{40}\) \textit{Id.}
direction of allowing anticompetitive acts rather than banning or discouraging procompetitive ones.41

The U.S. Department of Justice seemingly endorsed Easterbrook’s incommensurate harms position in its now-abrogated Section 2 Report, which suggested that exclusionary unilateral conduct not subject to one of the more tailored liability rules in the Report should be condemned only if its likely anticompetitive harm would be “substantially disproportionate” to its likely procompetitive benefit.42

3. The Screening Mechanisms

If the overall goal is to implement antitrust so as to minimize the sum of error and decision costs, with an understanding that Type I errors typically impose greater costs than Type II errors, how should courts proceed? The third key component of Easterbrook’s approach was a set of screening mechanisms designed to help antitrust courts achieve the overarching objective by filtering out challenges to practices that are likely to be procompetitive. Specifically, Easterbrook proposed five filters:

1. Market Power. The court should ask whether the defendant (or group of defendants) has market power. If not, Easterbrook asserted, the challenged conduct is unlikely to create anticompetitive harm and should not be condemned.43
2. Logical Relation Between Profit and Reduced Competition. The court should ask whether the challenged conduct would increase the defendant’s profits by reducing competition. If the alleged reduction in competition would reduce the defendant’s profits, there is no need for antitrust to deter the anticompetitive behavior;

41. See id. at 15 (“In which direction should these rules err? For a number of reasons, errors on the side of excusing questionable practices are preferable.”); see also id. (“[T]he economic system corrects monopoly more readily than it corrects judicial errors.”).


43. Easterbrook, supra note 13, at 19–23.
the market will do so.\textsuperscript{44} Moreover, if the challenged practice could enhance the defendant’s profits even apart from a reduction in competition, condemnation of the practice could deter procompetitive conduct.\textsuperscript{45}

3. \textit{Widespread Adoption of Identical Vertical Practices.} For vertical practices like resale price maintenance (RPM), exclusive dealing, and tying, the court should ask whether “almost all firms in [the defendant’s] industry use the same vertical restraints.”\textsuperscript{46} The reason for this filter, Easterbrook said, “is that every one of the potentially-anticompetitive outcomes of vertical arrangements depends on the uniformity of the practice.”\textsuperscript{47} Easterbrook offered RPM as an example, observing that the potential anticompetitive harms from the practice—facilitation of dealer or manufacturer cartels—can occur only if the practice is widely deployed.\textsuperscript{48} Where a vertical practice is used by just one or a few competitors in an industry, Easterbrook reasoned, it is likely employed for procompetitive ends.\textsuperscript{49}

4. \textit{Effect on Output and Market Share.} The court should ask whether the defendant’s output and market share are falling.\textsuperscript{50} If the challenged practice results in a better deal for consumers—perhaps by enhancing the quality of the defendant’s offering by enough to offset any price increase—then the defendant’s output and market share will grow.\textsuperscript{51} By contrast, if the practice is enhancing the

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\textsuperscript{44} Id. at 24 (“Unless there is a link between the antitrust injury and the defendant’s profit, there is no need for judges to impose a sanction. The sanction imposed by the business losses will clear up the practice in due course.”).

\textsuperscript{45} Id. at 28–29 (explaining how a period of below-cost pricing could enhance the seller’s profits even apart from a reduction in competition and asserting that “an antitrust court should handle cases such as this by asking whether profits depended on monopoly”).

\textsuperscript{46} Id. at 30.

\textsuperscript{47} Id.

\textsuperscript{48} Id. Easterbrook explained:

[R]esale price maintenance (RPM) or territorial restraints can facilitate or enforce a cartel only if all firms in the industry use identical practices. If Sylvania uses RPM while GE and Sony do not, the RPM cannot facilitate anyone’s cartel. Dealers that want to cheat on a dealers’ cartel will sell more GE sets at reduced prices, [a]nd if practices are not identical in the manufacturing industry, then RPM cannot facilitate a cartel there, either. The whole point of a “facilitating practice” is that when everyone does things the same way, this reduces the number of things the cartel must monitor to control cheating. When everyone does not do things the same way, nothing can be “facilitated.”

\textsuperscript{49} Id. at 31 (“Whatever explains a solitary manufacturer’s use of RPM, exclusive contracts, ties, or other practices, the practice cannot be anticompetitive.”).

\textsuperscript{50} Id. (“If arrangements are anticompetitive, the output and market share of those using them must fall.”).

\textsuperscript{51} Id. (“If [the defendant firm] both increases the price and increases the quality, it may sell
defendant’s market power, its output will fall; the monopolist enhances its profits by reducing output so as to drive up price. Thus, Easterbrook reasoned, trends in the defendant’s output and market share can signal whether its conduct is, on balance, pro- or anti-competitive.52

5. The Identity of the Plaintiff. Finally, the court should ask whether the plaintiff is a customer or a competitor of the defendant.53 Customers benefit from enhanced competition in the defendant’s market, as when a defendant gains a cost- or quality-advantage over its rivals; customers are harmed by reductions in competition. By contrast, competitors are injured when a defendant’s conduct gives it a cost- or quality-advantage, and they benefit when market competition eases. A customer plaintiff, then, is likely complaining about reduced competition—antitrust’s target—whereas a competitor plaintiff may be complaining of enhanced competition or may be seeking to raise the defendant’s cost (and thereby secure its own cost-advantage) by forcing it to defend a lawsuit.54 The identity of the complaining party, then, can assist courts in determining whether a challenged practice is likely pro- or anti-competitive.

B. Evaluating the Approach Today

More than thirty-five years have passed since Easterbrook published The Limits of Antitrust. During that time, there have been some major developments in the business world, including, among many others, the advent of the Internet and mobile telephony, the rise of digital social networks and other digital platforms, and, in the world of finance, explosive growth in index investing. There have also been significant advances in economic learning, with scholars gaining a better understanding of how certain business practices can be pro- and/or anti-competitive. How does Easterbrook’s late-twentieth century approach look in light of twenty-first century market developments and advances in economic learning?

Easterbrook’s overarching objective for antitrust policy decisions remains fundamentally sound. Since 1984, no developments in market

50 more or less, depending on whether consumers value the improvement at more than the cost. . . . If its sales increase despite the higher price, we know that the change was worth the higher price, and then some, to consumers.”)

52. See id.
53. Id. at 33–39.
54. As Easterbrook observed, the costs of antitrust litigation are usually significantly greater for defendants than for plaintiffs. Id. at 34.
structures or economic learning have altered the mixed-bag nature of the behavior antitrust regulates, the consequent inevitability of error and decision costs, or the fact that efforts to reduce one set of costs will drive up another. Scholars have progressed in their understanding of the circumstances under which particular behaviors may occasion anticompetitive harm (or create procompetitive benefits), and that new knowledge may allow courts to restructure doctrines so as to reduce costs overall. But antitrust remains an inherently limited enterprise, and Easterbrook’s overarching prescription for maximizing welfare in light of those limits—craft policies to minimize the sum of error and decision costs—remains as wise as ever.

Easterbrook’s instruction on the incommensurate harms from Type I versus Type II errors has fared less well. The claim that false convictions are systematically worse than false acquittals is too categorical. It is true that many anticompetitive harms are self-correcting. Collusion among competitors, for example, is difficult to maintain and invites entry. Economic learning has revealed, though, that some forms of exclusionary conduct do not automatically self-correct. For example, some actions by a dominant firm—e.g., exclusive dealing that forecloses a manufacturer’s competitors from a substantial proportion of available distribution outlets—can prevent rivals from growing enough to attain the scale economies that would enable them to underprice the dominant firm.

Indeed, in markets characterized by large economies of scale and network effects (e.g., digital social networking, computer operating systems), entry and underpricing may be particularly unlikely. Easterbrook’s point about incommensurate harms should thus be somewhat softened: in deciding whether to tilt the liability rule in favor of permitting questionable conduct, courts should ask whether any resulting market power would be transitory (as with collusion) or durable (as with some exclusionary practices in some types of markets). Sometimes a pro-defendant bias will be appropriate, but not always.

Like his instruction on incommensurate harms, Easterbrook’s


56. See generally Alan Devlin & Michael Jacobs, Antitrust Error, 52 WM. & MARY L. REV. 75 (2010) (arguing that the current role of error analysis in United States antitrust law is too simplistic).


58. See Devlin & Jacobs, supra note 56, at 80 (“Recent experience suggests that monopolistic behavior may not always be eliminated by the market in a timely fashion, especially where powerful network effects are present.”).

59. Id. at 104–26 (arguing that Type I errors are not always worse than Type II errors and that whether liability rules should be calibrated to favor Type II errors depends on, inter alia, the likely durability of the resulting harms).
screening mechanisms for filtering out procompetitive behaviors require some adjustment. The first two screens—the requirement that defendants possess market power and that the challenged conduct enhance their profits by reducing competition—have fared well and continue to enjoy support in the case law. The fifth—weeding out competitor complaints—remains useful in some contexts. In challenges to horizontal mergers, for example, complaints by rivals should raise yellow flags, since competitors benefit from reduced competition and are injured when their rivals become more efficient. Developments in economic learning, though, suggest that the mere fact that the complainant is a competitor does not always signal that the challenged practice is procompetitive. We now understand that many exclusionary practices (e.g., exclusive dealing arrangements involving substantial market foreclosure) may injure competition by raising rivals’ costs. Because such practices hurt both consumers and competitors, the fact that a competitor is complaining, standing alone, does not indicate that the challenged practice is procompetitive. The fifth filter is thus useful in some situations but not others. A useful revision would be to say that behaviors drawing competitor complaints but no consumer complaints is likely procompetitive.

Easterbrook’s third and fourth filters have not stood the test of time. The third, which eliminates challenges to vertical restraints that are not in widespread use throughout the market at issue, rests on a premise that we now understand to be faulty. According to Easterbrook, “[t]he rationale for this [widespread use] filter is that every one of the potentially anticompetitive outcomes of vertical arrangements depends on the uniformity of the practice.” We now know, though, that this is not true. A dominant producer’s exclusive dealing contract that forecloses its rivals from a substantial proportion of sales opportunities and thereby holds them below minimum efficient scale can injure competition even if no other producers

60. With respect to the first (market power) filter, monopolization claims under Sherman Act Section 2 still require that the defendant possess monopoly power. See Diaz Aviation Corp. v. Airport Aviation Servs., Inc., 716 F.3d 256, 265 (1st Cir. 2013) (citing United States v. Grinnell Corp., 384 U.S. 563, 570–71 (1966)). And the existence of market power is typically required for liability based on concerted conduct that is not per se illegal. See, e.g., Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877, 897 (2007) (observing that market power is necessary for anticompetitive harm, and thus liability, from RPM); Todd v. Exxon Corp., 275 F.3d 191, 199 (2d Cir. 2001) (assessing defendants’ market power in considering whether information exchange was illegal under the rule of reason). The antitrust injury requirement helps implement the second filter, for it results in the dismissal of actions in which the complained of harm does not stem from a reduction in competition. See Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc., 429 U.S. 477, 487–89 (1977).


in the market engage in similar arrangements. A single firm’s tie-in that results in substantial foreclosure in the tied product market can similarly impair competition in that market. Even RPM, the vertical restraint Easterbrook referenced, can impair competition despite not being widely utilized. For example, as the U.S. Supreme Court observed in *Leegin Creative Leather Products, Inc. v. PSKS, Inc.*, a dominant manufacturer can use RPM (with its guaranteed retail mark-up) to induce distributors to exclude rival brands, raising rivals’ distribution costs and potentially driving them below minimum efficient scale. And a dominant retailer can protect itself from being undersold by more efficient retailers by insisting that the producers whose brands it carries impose RPM. Neither of these types of anticompetitive harm from RPM requires that the practice be employed by all or most of the producers in a market.

Easterbrook’s fourth filter—which screens out actions against defendants whose output and market share are not dropping—is similarly problematic. This screen may be appropriate when the alleged anticompetitive harm is collusion—some kind of agreement to restrain output so as to increase price and enhance profits. But if the defendant has engaged in unreasonably exclusionary conduct to drive rivals from the market or raise their costs, it will grow its market share and may well see its output rise as well, particularly if market demand is increasing. Thus, in actions alleging unreasonably exclusionary conduct, courts should not dismiss claims solely because the defendant’s market share and output are rising.

II. FOUR ADDITIONAL SCREENS FOR THE CURRENT ERA

In addition to softening Easterbrook’s incommensurate harms principle and revising or eliminating some of his particular screening mechanisms, courts attempting to optimize antitrust’s effectiveness in the current antitrust moment should adopt four additional screens. Although the first of these was implicit in Easterbrook’s analysis, he did not spell it out explicitly, likely for reasons discussed below. The remaining screens differ somewhat from Easterbrook’s original filters in that they are not aimed at discerning whether challenged conduct is procompetitive or anticompetitive but are instead designed to ensure that antitrust *intervention* is likely to be welfare-enhancing. They thus reflect

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63. See Wright, *supra* note 57, at 1166–71 (discussing economics of market foreclosure).
65. 551 U.S. at 893–94.
66. Id.
Easterbrook’s well-founded concern about Type I error costs.

A. Does the Challenged Practice Entail Consumer Harm?

An initial twenty-first century filter—no imposition of antitrust liability absent consumer harm—would not have seemed worth mentioning when Easterbrook authored his 1984 article. In Robert Bork’s influential 1978 book, The Antitrust Paradox: A Policy at War with Itself, Bork purported to show that the purpose of the Sherman Act—as revealed in its legislative history—was to enhance consumer welfare, which Bork equated with maximizing efficiency (or, more specifically, minimizing the sum of allocative and productive inefficiencies).67 While Bork’s reading of legislative history has been severely questioned—if not discredited68—his effort to focus the antitrust laws on consumer welfare met with success. In 1979, the U.S. Supreme Court proclaimed the antitrust laws to be a “consumer welfare prescription,”69 and ever since, the prevailing view among courts has been that antitrust’s sole end is consumer welfare, a view known as the “consumer welfare standard” (CWS).70 It is thus no surprise that in 1984, Easterbrook did not propose a screening mechanism to weed out antitrust actions aimed at some other objective besides consumer welfare.

Times have changed. Today, numerous commentators contend that the CWS prevents antitrust from remedying significant social harms that it could—and historically did—address.71 One such harm, these

70. Kenneth Heyer, Consumer Welfare and the Legacy of Robert Bork, 57 J.L. & ECON. S19, S32 (2014) (“On the question of welfare standards for antitrust, however, it is harder to dispute the fact that Bork not only won the battle, he also won the war.”).
71. See generally WU, THE CURSE OF BIGNESS, supra note 7; Wu, After Consumer Welfare, supra note 68 (arguing for the adoption of a “protection of competition” standard in lieu of the consumer welfare standard); see also Lina M. Kahn, Amazon’s Antitrust Paradox, 126 YALE L.J. 710, 737 (2017) (“[T]he undue focus on consumer welfare is misguided. It betrays legislative history, which reveals that Congress passed antitrust laws to promote a host of political economic ends—including our interests as workers, producers, entrepreneurs, and citizens.”); MARSHALL STEINBAUM & MAURICE E. STUCKE, ROOSEVELT INST., THE EFFECTIVE COMPETITION STANDARD: A NEW STANDARD FOR
Commentators say, is buyer market power. When purchasers of labor or inputs face little competition from other potential buyers, they can drive wages down and input prices below competitive levels. This not only harms laborers and input sellers, but it also results in allocative inefficiencies as high-quality laborers and input providers, denied competitive prices, cut back on their offerings or divert them to less-valuable uses. These social harms do not register under the CWS—according to critics of the standard—because driving prices of labor and other inputs below competitive levels does tend to lower output prices, providing an immediate benefit to consumers.

CWS critics also assert that the standard is incapable of addressing innovation harms that, unlike higher prices, are difficult to quantify and prove. They say that dominant technology platforms like Google, Amazon, Facebook, and Apple threaten innovation for a number of reasons. Their efficiencies have driven out small businesses, which tend to be particularly inventive. Operating in highly concentrated markets, these dominant firms face little pressure to innovate so as to avoid losing business to rivals. And they are well-positioned to cut back on their own inventive efforts and either usurp others’ innovations or buy out the innovators at paltry prices.

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Because they collect extensive data on their inputs, businesses, which tend to be more inventive, producing more valuable uses. These social harms do not register under the CWS because driving prices of labor and other inputs below competitive levels does tend to lower output prices, providing an immediate benefit to consumers.
users’ Internet activity—both on and off their platforms—they can identify what innovations are most valuable and pursue only those opportunities.\textsuperscript{78} If the valuable innovations are not subject to intellectual property protections, they can simply copy them; or, if copying is illegal or infeasible, they can purchase the innovator.\textsuperscript{79} Many times, they can gain bargaining leverage over a buyout target by threatening to disadvantage the innovator’s offering on their own platforms (e.g., by making it less visible to platform users, hiding favorable reviews, etc.).\textsuperscript{80} These factors, CWS critics say, have collectively created a “kill zone” in which venture capitalists will not invest out of fear that any valuable innovations will be appropriated or purchased on the cheap.\textsuperscript{81}

The concern that the CWS cannot address innovation harms is a subset of the broader concern that it is incapable of policing anticompetitive harm in zero-price markets.\textsuperscript{82} Because antitrust enforcement occurs in courts and not in expert regulatory agencies, evidence of consumer welfare effects must be accessible to and easily processed by juries and generalist, nonexpert judges. As a practical matter, evidence concerning short-term price effects tends to be most salient to these factfinders.\textsuperscript{83} With firms like Facebook and Google, which allow consumers to access their services for free, showing consumer harm poses a challenge. Even if a court adopts

\begin{itemize}
\item\textsuperscript{78} See, e.g., Hal Singer, \textit{Inside Tech’s “Kill Zone”: How to Deal With the Threat to Edge Innovation Posed by Multi-Sided Platforms}, PRO-MARKET (Nov. 21, 2018), https://promarket.org/inside-tech-kill-zone/ [https://perma.cc/C488-NUS4] [hereinafter Singer, \textit{Kill Zone} (“Dominant tech platforms can also exploit the vast amount of user data made available only to them by monitoring what their users do both on and off their platforms, and then appropriating the best-performing ideas, functionality, and non-patentable products pioneered by independent providers.”)].
\item\textsuperscript{79} See, e.g., id. (discussing the trend in big tech for dominant firms to discriminate against, or vertically integrate with, innovative independent content providers); see also infra notes 80–81 and accompanying text.
\item\textsuperscript{80} See, e.g., Lina M. Kahn, \textit{The Separation of Platforms and Commerce}, 119 COLUM. L. REV. 973, 992 (2019) (“There are numerous means by which Amazon can disfavor any particular merchant: It can suspend or shut down accounts overnight, withhold merchant funds, change page displays, and throttle or block favorable reviews.”); Hal Singer, \textit{How to Stop Amazon from Swallowing the Internet}, FORBES (Jan. 28, 2019, 5:50 AM), https://www.forbes.com/sites/washingtonbytes/2019/01/28/how-to-stop-amazon-from-swallowing-the-internet/#6b611fcc3664 [https://perma.cc/932F-TV8U].
\item\textsuperscript{81} See Singer, \textit{Kill Zone}, supra note 78 (describing the “kill zone” as an area “around the tech giants in which startups are squashed”); see also Into the Danger Zone: \textit{American Tech Giants Are Making Life Tough for Startups}, \textit{The Economist} (June 2, 2018), https://www.economist.com/business/2018/06/02/american-tech-giants-are-making-life-tough-for-startups [https://perma.cc/A3GP-GVJU] (“Venture capitalists . . . now talk of a ‘kill-zone’ around the giants. Once a young firm enters, it can be extremely difficult to survive. Tech giants try to squash startups by copying them, or they pay to scoop them up early to eliminate a threat.”).
\item\textsuperscript{82} See John M. Newman, \textit{Antitrust in Zero-Price Markets: Foundations}, 164 U. PA. L. REV. 149, 198 (2015) (“The narrow-minded focus on price competition exhibited throughout much of antitrust law’s developmental history has yielded analytical frameworks suited only for use in positive-price product markets.”).
the view that consumers effectively pay for free services by providing the firms with valuable data, proving and quantifying an “overcharge” can be difficult.84

CWS critics also assert that the standard’s focus on short-term price effects can immunize structural developments (high market concentration, etc.) that cause long-run consumer harm.85 Criticizing the CWS as applied to Amazon’s low pricing, for example, Lina Kahn writes:

Focusing primarily on price and output undermines effective antitrust enforcement by delaying intervention until market power is being actively exercised, and largely ignoring whether and how it is being acquired. In other words, pegging anticompetitive harm to high prices and/or lower output—while disregarding the market structure and competitive process that give rise to this market power—restricts intervention to the moment when a company has already acquired sufficient dominance to distort competition.86

Finally, a number of commentators—dubbed “Neo-Brandeisians” after Justice Louis Brandeis’s essay, A Curse of Bigness87—contend that the CWS prevents antitrust from addressing non-buyer/seller harms that result from having firms that are just too big. For example, highly efficient giant businesses can eliminate less efficient smaller rivals that provide employment opportunities and are the lifeblood of many communities.88 By generating massive profits for their managers and largest stockholders, giant businesses exacerbate wealth inequality.89 And because their economic might gives them excessive influence over government officials, their existence tends to undermine democratic values.90

In light of the harms purportedly left unaddressed by the CWS—buyer market power, reduced innovation, harms in zero-price markets, long-term consumer harm from increased concentration, job losses, community impairment, wealth inequality, harm to democracy—many contemporary commentators contend that the CWS is myopic.91 They would not make

85. See Kahn, Amazon’s Antitrust Paradox, supra note 71, at 738–39.
86. Id. at 738.
88. See, e.g., Lynn & Longman, supra note 76.
90. See generally WU, THE CURSE OF BIGNESS, supra note 7.
91. See, e.g., The Consumer Welfare Standard in Antitrust: Outdated or a Harbor in a Sea of
consumer harm a necessary condition to antitrust intervention and would replace the CWS with some sort of public interest approach that would permit antitrust intervention in the pursuit of other values.\textsuperscript{92}

Such a move would be misguided. As an initial matter, jettisoning the CWS is unnecessary, as each of the aforementioned harms is either cognizable under the CWS or better addressed, if at all, by a body of law other than antitrust.\textsuperscript{93}

It is well established, for example, that the CWS reaches harms stemming from buyer market power.\textsuperscript{94} Properly understood, the standard focuses on harms not just to “final consumers” but also to trading parties on the other side of the market from the defendant.\textsuperscript{95} The term “consumer” is used in the CWS because most antitrust defendants are sellers accused of exercising market power to cause their buyers to pay an excessive price or accept inferior quality. However, when a buyer possesses market power and exercises it to influence its suppliers, any diminution in prices paid to sellers is also considered “consumer” harm for purposes of the CWS.\textsuperscript{96} Moreover, even if antitrust required harm to actual final consumers, exercises of buyer market power would still create cognizable harms: by artificially lowering input or labor prices, buyers exercising market power drive high-quality inputs and laborers from the market, reducing the quality of their output to the detriment of final consumers. Accordingly,

\begin{itemize}
\item \textsuperscript{94}See Herbert Hovenkamp, Whatever Did Happen to the Antitrust Movement?, 94 NOTRE DAME L. REV. 583, 628–36 (2018) [hereinafter Hovenkamp, Antitrust Movement] (explaining how CWS addresses buyer market power and labor market monopsony).
\item \textsuperscript{95}Herbert Hovenkamp & Carl Shapiro, Horizontal Mergers, Market Structure, and Burdens of Proof, 127 YALE L.J. 1996, 2000-01 (2018) (“[A]ppealing the ‘consumer welfare’ standard means that a merger is judged to be anticompetitive if it disrupts the competitive process and harms trading parties on the other side of the market.”); see also id. at 2001 n.14 (observing that trading partners “may be final consumers or businesses purchasing intermediate goods” or “suppliers such as workers or farmers who are harmed by the loss of competition when two large buyers merge”).
\item \textsuperscript{96}See Hovenkamp, Antitrust Movement, supra note 94, at 634–35 (“For the purpose of analyzing wage suppression agreements, the worker stands in the same position on the sell side as the consumer does on the buy side.”).
\end{itemize}
a number of recent court decisions and enforcement actions, all purporting to implement the CWS, have invoked antitrust to prevent buyer market power.97

Reduced innovation, non-price harms in zero-price markets, and adverse long-term effects on consumers are also cognizable under the CWS. The consumer-welfare-focused Horizontal Merger Guidelines, for example, explicitly direct the antitrust enforcement agencies to consider potential innovation harms when evaluating proposed mergers,98 and the agencies regularly pursue cases on the basis of harms to innovation.99 Non-price harms associated with free services are reachable under the CWS because all aspects of the transaction—price, quality, accompanying services, etc.—are relevant to the overall surplus consumers enjoy.100 For this reason, antitrust enforcers have recently affirmed that market power-induced harms to consumer privacy, a matter of service quality, are cognizable under the CWS.101 And, of course, long-term adverse price


98. U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES § 6.4 (2010) (agencies may consider whether a proposed merger is “likely to diminish innovation competition by encouraging the merged firm to curtail its innovative efforts below the level that would prevail in the absence of the merger”).


100. In applying the CWS to abrogate the rule of per se illegality for minimum resale price maintenance (RPM), the U.S. Supreme Court made clear that the standard is not exclusively price-focused. See Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877, 890–95 (2007). While minimum RPM typically raises consumer prices, the Court observed that the practice is nevertheless frequently procompetitive because it induces services that consumers value by more than the incremental price increase. Id. at 890–92, 895. In other words, quality effects may trump price effects under the CWS.

101. The U.S. Assistant Attorney General for the Antitrust Division recently explained:

The goal of antitrust law is to ensure that firms compete through superior pricing, innovation, or quality. Price is therefore only one dimension of competition, and non-price factors like innovation and quality are especially important in zero-price markets.

Like other features that make a service appealing to a particular consumer, privacy is an important dimension of quality. For example, robust competition can spur companies to offer more or better privacy protections. Without competition, a dominant firm can more easily reduce quality—such as by decreasing privacy protections—without losing a significant number of users.
effects should always be part of the inquiry under the CWS; to the extent they have not been, the standard has been misapplied.\textsuperscript{102}

The non-buyer/seller harms emphasized by the Neo-Brandeisians—job losses, community impairment, wealth inequality, harms to democracy—are better addressed by bodies of law other than antitrust, or perhaps left unremedied.\textsuperscript{103} Wealth inequality, for example, is better handled through tax and redistribution schemes;\textsuperscript{104} harms to democracy, by campaign finance rules and restrictions on lobbying (and, most fundamentally, by limiting government so that it cannot be used to procure private advantages for politically connected firms).\textsuperscript{105} Job losses and harms to communities from the failure of smaller, less efficient businesses may be somewhat mitigated by job-training programs, community investments, and the relocation of government agencies to economically depressed areas.\textsuperscript{106} At the end of the day, though, obsolescence is a consequence of economic development; there will always be some losses when new and better displaces old and less good.\textsuperscript{107} Using antitrust to protect economic laggards is sure to reduce welfare in the long run.\textsuperscript{108} In the end, then, none of the harms emphasized by CWS critics justifies abandoning the standard in favor of an approach that would pursue multiple goals.

Not only is it unnecessary to abandon the CWS in favor of some sort of public interest standard, doing so would have adverse consequences for consumers and for the rule of law. We know this from experience. During the early- and mid-twentieth century, courts embraced multiple goals for antitrust.\textsuperscript{109} They often interpreted the law to promote consumer welfare by encouraging competition so as to lower prices and enhance quality.\textsuperscript{110} But, in this effort to encourage competition, courts sometimes imposed liability in the absence of final-consumer harm—even in the face of...

\textsuperscript{102} See Kennedy, supra note 93, at 9 ("[T]he consumer welfare standard allows regulators and courts to focus on long-term changes. It just requires a sound economic analysis that shows the probability of market power at some later date.").

\textsuperscript{103} Id. at 14–19.

\textsuperscript{104} Id. at 6.

\textsuperscript{105} Id. at 15–17.

\textsuperscript{106} Id. at 18–19.

\textsuperscript{107} Id. at 19.

\textsuperscript{108} Id. at 18–19.


\textsuperscript{110} Id. at 300.
obvious final-consumer benefit—simply to protect smaller firms from larger, more efficient rivals.\textsuperscript{111}

In \textit{Utah Pie Co. v. Continental Baking Co.}, for example, the U.S. Supreme Court upheld a finding of harm to competition when Continental Baking, a large, efficient firm, entered a market and underpriced Utah Pie, a smaller but locally dominant rival.\textsuperscript{112} The Court did so even though the Utah Pie was able to cut its own prices, grow its output, and continue earning profits (albeit at lower margins) on each sale.\textsuperscript{113} Reinstating a jury verdict in favor of Utah Pie, which had been forced to cut its prices in response to Continental’s pricing strategies, the Court concluded that the jury could have found the requisite harm to competition because “a competitor who is forced to reduce his price to a new all-time low in a market of declining prices will in time feel the financial pinch and will be a less effective competitive force.”\textsuperscript{114} Thus, consumer concerns could be paramount in antitrust cases—unless the court decides to eschew consumer benefit to protect a less efficient rival.

In \textit{Brown Shoe Co. v. United States},\textsuperscript{115} the Court all but admitted that it could pick and choose whether to put consumers or competitors first. Having conceded that the merger under review could enhance the merged firm’s productive efficiency, the Court wrote:

\begin{quote}
Of course, some of the results of large integrated or chain operations are beneficial to consumers. Their expansion is not rendered unlawful by the mere fact that small independent stores may be adversely affected. It is competition, not competitors, which the Act protects. But we cannot fail to recognize Congress’ desire to promote competition through the protection of viable, small, locally owned businesses. Congress appreciated that occasional higher costs and prices might result from the maintenance of fragmented industries and markets. It resolved these competing considerations in favor of decentralization. We must give effect to that decision.\textsuperscript{116}
\end{quote}

As Robert Bork aptly observed, “No matter how many times you read it, that passage states: Although mergers are not rendered unlawful by the mere fact that small independent stores may be adversely affected, we must recognize that mergers are unlawful when small independent stores

\begin{footnotes}
\item[111] \textit{Id.} ("[C]ourts viewed the role of antitrust as serving various—often conflicting and even anticompetitive—socio-political goals.").
\item[112] \textit{Utah Pie Co. v. Cont'l Baking Co.}, 386 U.S. 685, 687–89 (1967); see also \textit{id.} at 698 (describing Continental’s innovative method of processing fruit to make frozen pies).
\item[113] \textit{Id.} at 689–90.
\item[114] \textit{Id.} at 699–700.
\item[115] 370 U.S. 294 (1962).
\item[116] \textit{Id.} at 344.
\end{footnotes}
may be adversely affected.” Under such an approach, a court could allow a merger that would benefit consumers by enhancing productive efficiency (if the court followed the second and third sentences in the passage above), or it could choose to block the merger (if it followed sentences four through seven). Such leeway naturally trickled down to the enforcement agencies, which could then articulate grounds for challenging just about any businesses’ conduct by emphasizing its adverse effects on either consumers or competitors.

With enforcers and courts free to pick and choose among antitrust’s multiple goals in order to condemn or acquit virtually any business behavior, antitrust became less a body of law and more an exercise of raw political power. Bork compared it to the sheriff of a frontier town: “he did not sift the evidence, distinguish between suspects, and solve crimes, but merely walked the main street and every so often pistol-whipped a few people.” Even a U.S. Supreme Court justice admitted that antitrust had become arbitrary and unprincipled. Dissenting in *United States v. Von’s Grocery Co.*—a decision that condemned a grocery store merger that generated obvious efficiencies and resulted in a merged firm with a paltry 7.5% market share—Justice Potter Stewart confessed: “The sole consistency that I can find is that in litigation under [Clayton Act Section] 7, the Government always wins.”

When the government always wins, winning the favor of government officials becomes paramount. For that reason, abandonment of the CWS in favor of a multi-goaled public interest standard would promote politicization of the antitrust enforcement agencies. It would also ensure that consumers, widely dispersed and difficult to organize, regularly lose out to firms and organized interest groups, even when the total harms to consumers from an enforcement decision exceed the benefits to the organized interests promoting it. When the benefits of a government action are concentrated on a well-organized few while the costs are spread over a widely dispersed group, government officials tend to defer to the few over the many, even when the total benefits to the few are less than the total costs to the many.

117. BORK, supra note 67, at 216.
118. Id. at 6.
120. Id. at 301 (Stewart, J., dissenting).
122. Id. at 4 (“Although such decisions result in net losses to society, private interests can successfully extract these rents because the benefits are concentrated among a small number of
A multi-goaled antitrust approach is not needed to address harms emphasized by CWS critics. Adopting such an approach would politicize antitrust enforcement decisions and would likely reduce overall social welfare. Courts should thus resist calls to jettison the CWS, and a demonstration of actual or likely consumer harm should remain a prerequisite to antitrust intervention.

B. Has the Defendant Extended Market Power, or Just Exercised It to Extract Greater Surplus?

Consumer harm from market power is a necessary, but insufficient, condition for antitrust intervention. A second prerequisite to intervention should be an extension of market power by the defendant.

Two types of antitrust-related business behavior can harm consumers. The first is an exercise of market power, which is the ability of a firm lacking competitive constraints to enhance its profits by raising its price above its incremental cost. When a firm exercises market power to charge supracompetitive prices, it extracts for itself more of the surplus, or wealth, created by its transactions with its customers. Firms organized individuals while the costs are diffused across numerous consumers who individually lack the incentive to organize and protect themselves.


124. See HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE 80 (3d ed. 2005) [hereinafter HOVENKAMP, FEDERAL ANTITRUST POLICY] (“Market power is a firm’s ability to deviate profitably from marginal cost pricing.”). A firm competing in a market in which there are many good substitutes for the firm’s product will possess little market power; if it tries to raise price substantially above its incremental cost, it will lose sales to competitors who charge prices closer to the level of cost. Id. at 81. An absence of suitable substitutes for a firm’s product, however, may enable the firm to enhance its profits by raising its price above its incremental cost. Marginal consumers—those that attach the lowest value to the firm’s offering—may stop buying the product in response to the price increase. But consumers who attach a greater value to the product (infra-marginal consumers) will continue to buy it as long as the inflated price is less than the value they attach to the product and there is no competing product that offers them greater net value. If the increased profits from consumers who continue to buy at the inflated price exceed the lost profits on foregone sales to marginal consumers, the price increase will be profitable. The loss of value from transactions that would have occurred but for the price increase (i.e., from sales to marginal consumers) is an inefficiency—a “deadweight loss” in social welfare—occasioned by supracompetitive pricing. See id. at 12–14, 19–20 (explaining monopoly pricing and deadweight loss).

125. Every voluntary transaction between a buyer and seller involves the creation of surplus (wealth), which is split between the buyer and seller. The total surplus is the difference between the subjective value the buyer attaches to the thing being sold and the seller’s cost of producing and selling the item. The seller’s surplus is the difference between the price the seller collects and the cost of making and selling the unit sold; the buyer’s is the amount by which she subjectively values the unit, less the price she must pay to obtain it. See id. at 4–5. Surplus “extraction” occurs when one party usurps for itself a greater proportion of the wealth created by the transaction with its counterparty. See Carlton & Heyer, supra note 123, at 293–97.
may also cause consumer harm by extending their market power.\textsuperscript{126} When nominal competitors agree to act in concert to raise prices—e.g., in a naked price-fixing conspiracy—their collusive agreement creates market power that would not otherwise exist. When two firms merge to create a monopoly, or in a manner that substantially increases the likelihood of future oligopolistic coordination, they similarly extend market power. When a firm engages in unreasonably exclusionary conduct that drives its rivals from the market or somehow raises their costs so as to render them less formidable competitors, its market power grows.

While both surplus extraction and market power extension can occasion consumer harm, there should be no antitrust liability absent the latter.\textsuperscript{127} One reason for this is practical. If surplus extraction involving no extension of market power were illegal, adjudicators and business planners would confront an intractable question: How much extraction is permitted? Every instance of supracompetitive pricing by any firm with any quantum of market power transfers some surplus from consumers to the producer.\textsuperscript{128} It would be impracticable for antitrust to forbid all such surplus extraction, so courts would have to draw some sort of line. Given the difficulty of doing so in any nonarbitrary fashion, courts have wisely ruled that the mere charging of monopoly prices is not an antitrust violation, despite the consumer harm from surplus extraction.\textsuperscript{129}

A more important reason for immunizing mere surplus extraction from antitrust liability is that doing so promotes dynamic efficiency.\textsuperscript{130} First, the prospect of earning supernormal profits due to a lack of competition motivates entrepreneurs to develop unique products and services. As the U.S. Supreme Court has acknowledged, “[t]he opportunity to charge monopoly prices—at least for a short period—is what attracts ‘business acumen’ in the first place; it induces risk taking that produces innovation and economic growth.”\textsuperscript{131}

In addition to motivating innovation, the supracompetitive profits

\textsuperscript{126} E.g., Carlton & Heyer, supra note 123, at 298 (describing market power extension). Note that Carlton & Heyer are concerned solely with single-firm conduct that extends market power. But collusion does so as well: Competitors as a group gain market power when they agree not to compete.

\textsuperscript{127} Id. at 293 (“[A]ntitrust policy could be simplified and, in our view, improved if conduct falling squarely into the extraction category was immune from antitrust attack.”).


\textsuperscript{130} See Carlton & Heyer, supra note 123, at 287–88.

\textsuperscript{131} Verizon Commc’ns, 540 U.S. at 407.
gained through surplus extraction often enable innovation by funding research and development efforts. A glance at the top global spenders on research and development (R&D) reveals that most (eleven of fifteen) are either technology firms derided by many as monopolistic (#1 Amazon, #2 Alphabet/Google, #5 Intel, #6 Microsoft, #7 Apple, and #14 Facebook) or pharmaceutical companies whose patent protections insulate them from competition and allow them to charge supracompetitive prices for their products (#8 Roche, #9 Johnson & Johnson, #10 Merck, #12 Novartis, and #15 Pfizer). This should come as no surprise. Firms that cannot extract surplus—those forced by competition to charge prices near incremental cost—have no money to spend on R&D. Because the static inefficiencies (deadweight losses) occasioned by mere surplus extraction may be dwarfed by the dynamic efficiencies that result from rewarding and financing innovation, antitrust should not forbid practices that extract surplus without also extending market power.

This runs counter to a number of recent proposals to condemn mere surplus extraction under the antitrust laws. Harry First, for example, has argued that simple monopoly pricing may constitute an antitrust violation. Maintaining that “excessive pricing could satisfy the monopolistic conduct requirement” of Sherman Act Section 2, he contends that courts should impose antitrust liability on pharmaceutical companies solely on the basis of their excessive drug pricing.

132. See Peter Thiel, Zero to One: Notes on Startups, or How to Build the Future 33 (2014) (“Monopolies drive progress because the promise of years or even decades of monopoly profits provides a powerful incentive to innovate. Then monopolies can keep innovating because profits enable them to make the long-term plans and to finance the ambitious research projects that firms locked in competition can’t dream of.”).
134. Kennedy, supra note 93, at 12 (“Firms need to be able to obtain ‘Schumpertarian’ profits to reinvest in innovation that is both expensive and uncertain.”).
135. See Hovenkamp, Federal Antitrust Policy, supra note 124 and accompanying text (describing deadweight loss from supracompetitive pricing).
136. Carlton & Heyer, supra note 123, at 287 (“Rigorous measurements by economic scholars have demonstrated that investment and innovation are the dominant forces behind an economy’s advances in productivity and growth.”).
137. See generally Harry First, Excessive Drug Pricing As an Antitrust Violation, 82 Antitrust L.J. 701 (2019).
138. Id. at 711. First asserts that “courts should reconsider the ready assumption that Section 2 does not reach excessive pricing . . . because we do actually condemn high prices in many areas of antitrust law.” Id. at 716. In support of that claim, he points to authorities condemning price increases occasioned by cartels, anticompetitive mergers, and unreasonably exclusionary conduct. Id. Of course, in each of those situations the price increase accompanied conduct that extended market power (via combination, collusion, or exclusion). First cites no case in which a court has condemned monopoly pricing absent some conduct extending market power.
139. Id. at 726–40.
Other commentators have raised antitrust concerns about algorithmic pricing systems in which digital platforms harness user data to estimate online purchasers’ willingness-to-pay and craft personalized prices.\footnote{140 See, e.g., JASON FURMAN ET AL., UNLOCKING DIGITAL COMPETITION: REPORT OF THE DIGITAL COMPETITION EXPERT PANEL 111 (2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf [https://perma.cc/NCW7-5F9G] (United Kingdom report on competition in digital platform markets) (“Concerns have been raised that the increasing availability of data and use of algorithms by businesses will enable them to personalise their product and service offerings. At the extreme, personalised pricing could lead to each customer being offered an individual price based on what the business infers they are willing to pay.”); Morgan Wild & Marini Thorne, A Price of One’s Own: An Investigation Into Personalised Pricing in Essential Markets, CITIZENS ADVICE (Aug. 2018), https://www.citizensadvice.org.uk/Global/CitizensAdvice/Consumer%20publications/A%20price%20of%20one’s%20own%20final.pdf [https://perma.cc/H3EV-AMBV].} Such price discrimination schemes extract additional surplus from consumers, but they do not extend sellers’ market power. Compared to the situation in which a seller with market power charges a single supracompetitive price, personalized pricing may enhance total market output and reduce deadweight loss, as buyers who value the product by more than its incremental cost but less than the single supracompetitive price are brought into the market.\footnote{141 See Carlton & Heyer, supra note 123, at 291 (“Antitrust hostility to [surplus-extractive price discrimination] is in some respects quite surprising from the perspective of an economist, given that simple monopoly pricing produces a clear and well-recognized static deadweight loss to the economy, while these other forms of unilateral conduct are believed frequently (though not always) to increase output, provide incentives for more effectively marketing a firm’s products, or otherwise enhance[e] welfare.”).}

Commentators have also raised antitrust concerns about sharp business practices that, while perhaps unsavory (or even tortious), do not extend market power. John Newman, for example, points to what he calls “digital blackmail.”\footnote{142 John M. Newman, Antitrust in Digital Markets, 72 VAND. L. REV. 1497, 1535 (2019).} That practice occurs when a digital platform manipulates the publication of information in order to extract value from some group of users.\footnote{143 Id.} The platform may implicitly threaten either to publish “bad” or to suppress “good” information.\footnote{144 Id. (“Digital blackmail can occur when a dominant platform extracts rents by displaying (or threatening to display) unwanted information, then charging victims for its removal or concealment. Digital blackmail may also involve the inverse strategy: threatening to remove desirable information, then charging victims for the ‘privilege’ of continuing to make it available.”).} Real estate comparison site Zillow allegedly engages in the former sort of digital blackmail; it publishes market value estimates of listed properties, but it will remove those that are below a listed property’s sale price (and thus have a depressive effect) in exchange for payments from the listing agent.\footnote{145 Id. at 1536–37.} Restaurant review site Yelp allegedly engages in the “suppress-the-good” version of digital blackmail; it has purportedly threatened to remove or demote favorable reviews of restaurants that decline to purchase...
advertisements on its site. Both forms of digital blackmail would appear to involve significant business risk for the perpetrator. By manipulating the information presented on their purportedly neutral sites, firms like Zillow and Yelp risk turning off users. Rather than extending their market power, they threaten it by inviting competition from truly neutral rivals.

In the short term, each of the aforementioned behaviors may reduce consumer surplus and enhance the profits of the perpetrator. Some instances might violate other provisions of law (e.g., prohibitions on deceptive trade practices) and could well merit condemnation on non-antitrust grounds. But none of the practices extend market power. Given the impracticability of forbidding, and the dynamic efficiencies that result from allowing, mere surplus extraction, antitrust courts should follow Judge Learned Hand in embracing the maxim *finis opus coronat*—i.e., the end of the work is the crown. They should tolerate mere exercises of market power, reserving antitrust liability for behaviors that extend it.

C. Does Another Body of Law or Some Sort of Private Ordering Adequately Address the Potential Anticompetitive Problem?

A third screening mechanism for twenty-first century antitrust attempts to account for the law’s unique enforcement structure. Enforceable by private parties, the federal antitrust statutes entitle successful plaintiffs to treble damages. The rationale for damage-trebling is that many antitrust violations—price-fixing conspiracies, etc.—occur in secret and often are not detected and proven: if there is a one-third chance of getting caught, requiring the defendant to pay three times the damage caused will ensure optimal deterrence. But damage-trebling may lead to overdeterrence when the challenged behavior is (1) “mixed bag” (i.e., sometimes efficient and sometimes inefficient), so that it should not be universally deterred, and (2) not hidden, so that the likelihood that the conduct will be detected and proven is greater than one-in-three. Given the difficulty of parsing pro- from anti-competitive business conduct, mixed bag behavior is often wrongly

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146. *Id.* at 1537.
147. United States v. Aluminum Co. of Am., 148 F.2d 416, 430 (2d Cir. 1945) (“[A] strong argument can be made that, although the result may expose the public to the evils of monopoly, the Act does not mean to condemn the resultant of those very forces which it is its prime object to foster: *finis opus coronat*. The successful competitor, having been urged to compete, must not be turned upon when he wins.”).
149. See Hovenkamp, The Antitrust Enterprise, supra note 128, at 67 (2005) (“Treble damages make no sense at all when they are assessed for public acts and reasonable minds can differ about substantive illegality.”); Richard A. Posner, Antitrust Law 271–73 (2d ed. 2001) (acknowledging that mandatory trebling may over-deter and advocating that damages multiplier be adjusted to account for likelihood of concealment).
condemned. If the behavior is open and notorious, it is certain to be detected. Consider, then, a firm contemplating some pro-competitive, non-clandestine conduct that might create difficulties for its competitors and could therefore be wrongly condemned as anticompetitive. The firm will engage in the contemplated conduct only if it would provide the firm with private benefits greater than three times the harm to its rivals, discounted by the likelihood of erroneous conviction. The upshot is that many procompetitive instances of non-clandestine, mixed bag behavior will be wrongly deterred.\(^{150}\)

To account for potential overdeterrence resulting from trebling the damages occasioned by non-clandestine competitive conduct, antitrust should stay its hand when a potentially anticompetitive behavior occurs in the open and another body of law or some sort of contract is likely to prevent any anticompetitive harm the behavior may produce. The U.S. Supreme Court appears to have endorsed this screening mechanism when some regulation would avert anticompetitive concerns.\(^{151}\) Courts should similarly limit antitrust’s reach when common law doctrines and privately ordered solutions are likely to prevent anticompetitive concerns without the distortive effects that may result from damage-trebling.

Application of this filter would likely have prevented several recent enforcement actions against holders of standard essential patents (SEPs). When a patented technology is incorporated into a technology standard (so that the patent becomes “standard essential”), there is a risk that producers utilizing the standard (implementers) will invest extensively and then face unreasonable royalty demands from SEP-holders, who will know that the implementers cannot utilize a different technology without incurring exorbitant switching costs.\(^{152}\) To avert the risk of such “patent holdup,” standard setting organizations (SSOs) typically procure upfront

150. Suppose, for example, that the non-clandestine, procompetitive conduct under consideration by a firm would benefit it by $500,000 and consumers by $1.5 million but would cause rival harm of $1 million. If there were a 25% chance of wrongful condemnation, the firm would not engage in the welfare-enhancing conduct. Its expected liability of $750,000 ($3 million * 0.25) would exceed its expected gain. Absent damage-trebling, which is unnecessary here to account for a lack of detection, the firm would engage in the conduct. Its expected gain of $500,000 would exceed its expected liability of $250,000 ($1 million * 0.25).

151. See, e.g., Credit Suisse Secs. (USA) LLC v. Billing, 551 U.S. 264, 279–84 (2007) (declining to impose antitrust liability on the basis of initial public offering marketing practices that were arguably unreasonable restraints of trade because practices were regulated by federal securities laws and subject to active monitoring by Securities and Exchange Commission); Verizon Commc’ns, Inc. v. Law Offices of Curtis V. Trinko, 540 U.S. 398, 412–15 (2004) (refusing to impose antitrust duty to deal with rivals when telecommunications statute imposed analogous regulatory duties).

commitments from potential SEP-holders that if their technology is included in the standard they will license it on fair, reasonable, and nondiscriminatory (FRAND) terms.  

In recent years, the federal enforcement agencies have occasionally concluded that antitrust should be used to police patent holdup, despite these privately ordered solutions. For example, in separate actions against Bosch and Motorola (along with its acquirer, Google), the FTC took the position that a SEP-holder’s pursuit of injunctive relief amounts to an unfair method of competition. In In re Negotiated Data Solutions, LLC, the FTC reasoned that antitrust precludes a SEP-holder from seeking to renegotiate implementers’ royalty agreements. In the pending FTC v. Qualcomm Inc. case, which is currently on appeal, the FTC procured a district court ruling that a SEP-holder has an antitrust duty—apart from any FRAND commitment—to license its SEP to all its rivals if, at some point in the past, it has profitably licensed the patent to any rival. In each of these cases, the allegedly anticompetitive behavior—pursuit of injunctive relief, attempted renegotiation of royalties, refusal to license to a rival—was not conducted in secret. Each challenged behavior can be efficient: a holder of a FRAND-encumbered SEP might seek injunctive relief because the infringer is judgment-proof or has rejected (or expressed


154.  See Robert Bosch GmbH, No. C-4377, 2012 WL 5944820, at *3, *20 (F.T.C. Nov. 21, 2012); Motorola Mobility LLC, No. C-4410, 2013 WL 3944149, at *30–32 (F.T.C. July 23, 2013); see also Joshua D. Wright & Douglas H. Ginsburg, Whither Symmetry? Antitrust Analysis of Intellectual Property Rights at the FTC and DOJ, 9 COMPETITION POL’y INT’L L. 41, 46 (2013) (observing that the complaints and consent orders in Bosch and Motorola, “taken together, logically and necessarily depend upon the presumption that protecting a valid SEP against infringement by obtaining injunctive relief is itself anticompetitive.”). The U.S. Department of Justice expressed a similar view about SEP-holders’ pursuit of exclusion orders. See U.S. DEP’T OF JUSTICE & U.S. PATENT & TRADEMARK OFFICE, POLICY STATEMENT ON REMEDIES FOR STANDARD-ESSENTIAL PATENTS SUBJECT TO VOLUNTARY FRAND COMMITMENTS 6 (2013) (withdrawn 2019) (endorsing the view that an exclusion order based on a SEP generally should not be granted because “[a] decision maker could conclude that the holder of a FRAND-encumbered, standards-essential patent had attempted to use an exclusion order to pressure an implementer of a standard to accept more onerous licensing terms than the patent holder would be entitled to receive consistent with the FRAND commitment.”). This statement was withdrawn in 2019 and replaced with a new policy statement. See U.S. PATENT & TRADEMARK OFFICE, NAT’L INST. OF STANDARDS & TECH. & U.S. DEP’T OF JUSTICE, POLICY STATEMENT ON REMEDIES FOR STANDARDS-ESSENTIAL PATENTS SUBJECT TO VOLUNTARY FRAND COMMITMENTS (2019).

155.  See Negotiated Data Solutions LLC, No. C-4234, 2008 WL 4407246 (F.T.C. Sept. 22, 2008) (decision and order). The FTC argued that Vertical Networks engaged in unfair practices when it attempted to break their licensing commitment. See id.

the intent to reject) a FRAND royalty; a SEP-holder might legitimately renegotiate royalties in light of some market shift that undermines the original royalty rate; a SEP-holder could refuse to license to its direct rivals to prevent the sort of free-riding that diminishes incentives to innovate. Finally, in each case, the alleged anticompetitive harm could have been addressed—with less distortion from potential treble damages actions—by another body of law:

- **Pursuit of Injunctions and Exclusion Orders.** Anticompetitive holdup from SEP-holders’ pursuit of injunctive relief or exclusion orders would be prevented by patent and tariff laws, both of which require the patent holder to establish that the requested relief is in the public interest.\(^{157}\) A SEP-holder that was just seeking to gain bargaining leverage to enhance its royalties—rather than seeking the injunction for a legitimate reason, such as the fact that the implementer was judgment-proof or had expressed an intention to reject a FRAND royalty—could not make such a showing.

- **Renegotiation Attempts.** The duress defense under contract law polices (by denying the enforceability of) renegotiations induced by the sort of economic pressure involved in a patent holdup situation.\(^{158}\) Yet, contract law permits good faith renegotiations—the sort of renegotiation a SEP-holder might legitimately seek in light of a market shift that undermines the original royalty rate.\(^{159}\) Contract law is thus fully capable of preventing anticompetitive holdup, while permitting reasonable renegotiations of SEP royalties.

- **Refusals to License to Rivals.** A SEP-holder’s obligation to license to its rivals can be—and routinely is—imposed by the FRAND commitment it makes to the SSO responsible for the technology standard.\(^{160}\) (Indeed, the *Qualcomm* court held that Qualcomm had


\(^{158}\) See, e.g., *Restatement (Second) of Contracts* §§ 175, 176 (AM. LAW INST. 1981) (explaining when duress by threat renders a contract voidable and when a threat is improper); see also Austin Instrument, Inc. v. Loral Corp., 272 N.E.2d 533, 535 (N.Y. 1971) (recognizing defense of economic duress); Alaska Packers’ Ass’n v. Domenico, 117 F. 99, 102 (9th Cir. 1902) (invoking consideration doctrine to police economic duress resulting from holdup).

\(^{159}\) See *Restatement (Second) of Contracts* § 89 (AM. LAW INST. 1981) (providing for modifications of executory contract terms in certain situations).

a contractual duty to license its technology to rival chipmakers.\textsuperscript{161})

As intended third-party beneficiaries of FRAND agreements, rivals may enforce them.\textsuperscript{162} Imposition of an antitrust duty to deals is thus unnecessary, is likely to impair the quality of contracts between SSOs and SEP-holders (why contract for a duty if a court is going to impose it under positive law?), and denies SEP-holders and SSOs the freedom to strike other bargains (e.g., limiting the duty to license in appropriate circumstances).

When either another body of law or private ordering via contract is likely to avert competitive harm, the marginal benefit afforded by antitrust intervention will be low. If the behavior at issue is not hidden, so that the likelihood of successful challenge is greater than one-in-three, antitrust will tend to over-deter by chilling borderline procompetitive conduct, which implies that the marginal cost of using antitrust to address the competitive harm will be relatively high. In light of these low marginal benefits and high marginal costs, antitrust should stay its hand when another body of law would likely prevent competitive harms stemming from open and notorious behavior.

\textbf{D. Does the Contemplated Remedy Require an Excess of Particularized Knowledge or Endow Government Officials with a Great Deal of Discretionary Authority?}

A market failure, by itself, does not justify governmental intervention. Policymakers should also have confidence that a contemplated intervention will, not itself, impose losses greater than those stemming from the market failure. This point is implicit in Easterbrook’s directive to craft antitrust policies that minimize the sum of error and decision costs: losses from improvident interventions are Type I (false conviction) error costs that must be balanced against the losses from allowing market power to persist Type II (error costs).\textsuperscript{163} A final screening mechanism, which should operate more as a guiding principle than a strict filter, highlights considerations that are particularly important in striking this balance.

Just as markets may systematically fail under certain conditions (e.g., externalities, public goods, and market power), so may government interventions.\textsuperscript{164} Government failure is particularly likely in two circumstances. First, as F.A. Hayek famously observed, when the

\begin{itemize}
\item 162. See \textit{Restatement (Second) of Contracts} § 304 (Am. Law Inst. 1981) ("[T]he intended beneficiary [of a contract] may enforce the duty.").
\item 163. See Easterbrook, \textit{supra} note 13, at 21.
\item 164. See generally THOMAS A. LAMBERT, \textit{HOW TO REGULATE: A GUIDE FOR POLICYMAKERS} (2017) (examining systematic market and government failures).
\end{itemize}
contemplated intervention requires central planners to acquire and process troves of information that is widely dispersed among economic actors, losses are likely to occur as the planners, who cannot gather and process such information, misallocate productive resources away from their highest and best ends.\textsuperscript{165}

Second, losses are particularly likely when interventions endow government officials with great discretion over the allocation of productive resources. As scholars associated with the “public choice” economic tradition have demonstrated, discretionary authority invites special interest manipulation of governmental power for private ends.\textsuperscript{166} Rather than using their authority to maximize social welfare, government officials—who retain their rational, self-interested natures when acting in their official capacities—will frequently exercise state power in a manner that benefits them personally.\textsuperscript{167} Organized groups—often incumbent firms—will find ways to exploit this tendency in their favor (e.g., by lobbying officials or wooing them with the prospect of future employment). The general public, which is injured by this special interest manipulation, typically will not exert a counterbalancing influence over government officials; because the costs of special interest manipulation are widely dispersed, individual members of the public do not have an adequate incentive to mount a response even if their losses, in the aggregate, exceed the benefits that are concentrated on the organized group(s).\textsuperscript{168}

In light of the Hayekian knowledge problem and public choice concerns, courts and enforcers should typically avoid antitrust interventions that either require a great deal of particularized knowledge or endow government officials with a large store of discretionary authority. This general guideline calls into question a number of recent antitrust proposals.

One such proposal is to treat the user data collected by digital


\textsuperscript{167}See Shughart, supra note 166, at 428 (“[P]ublic choice, like the economic model of rational behavior on which it rests, assumes that people are guided chiefly by their own self-interests and, more important, that the motivations of people in the political process are no different from those of people in the steak, housing, or car market. They are the same human beings, after all.”)

platforms like an essential facility that must be made available to rivals.169 In order to preserve the incentive to collect, store, and organize valuable data, firms subject to a sharing duty must receive some sort of compensation. Moreover, because user data vary in both usefulness and difficulty of collection, the firms providing data to their rivals should be entitled to different compensation for different types and quantities of data. This means that a court imposing a duty to share data with rivals would have to create an elaborate price schedule that takes into account such information as the cost of collecting and organizing different sorts of data and the value each sort provides—information that is largely inaccessible and likely to change over time. Courts are ill-equipped to gather and process all that information.

The Hayekian knowledge problem also bedevils recent calls to break up the largest digital platforms—Google, Facebook, and Amazon.170 A breakup of any firm requires a tremendous amount of knowledge about the operation of the business and its various components, and the record on antitrust breakups is far from encouraging.171 Indeed, in a detailed analysis of seven major breakups under Section 2 of the Sherman Act, economist Robert Crandall concluded that only one—the 1984 breakup of AT&T—increased industry output and lowered prices.172 That unimpressive record is for breakups of “old economy” firms that divided along natural fault lines. Figuring out how to dissect highly integrated technology firms without causing consumer harm would be far more difficult.

As Will Rinehart has observed, the leading digital platform firms utilize business models, teams, and technologies that greatly complicate


170. See, e.g., Elizabeth Warren, Here’s How We Can Break Up Big Tech, MEDIUM (Mar. 8, 2019), https://medium.com/@teamwarren/heres-how-we-can-break-up-big-tech-9ad9ef0da324 [https://perma.cc/SHW6-4W3A].


172. Robert W. Crandall, The Failure of Structural Remedies in Sherman Act Monopolization Cases, 82–83 (AEI-Brookings Joint Ctr. for Reg. Studies, Working Paper No. 01-05, 2001), https:// www.brookings.edu/wp-content/uploads/2016/06/03_monopoly_crandall.pdf [https://perma.cc/KER 9-ZRH7]. Crandall observed that even the breakup of AT&T “turns out to be a case of overkill because the same results could have been obtained through a simple regulatory rule, obviating the need for vertical divestiture of AT&T.” Id. at Executive Summary.
their division.\footnote{Rinehart, Breaking Up Tech Companies, supra note 173.} With respect to business models, the firms operate multisided platforms where the value to users of one side (e.g., advertisers) is largely dependent on the number and intensity of users on the other side (e.g., individuals engaged in search or social networking).\footnote{Id. (“Both companies rely upon flexible teams to solve problems that tend to cross the normal divisional and functional bounds.”).} Moreover, the firms tend to engage in internal cross-subsidization, using revenues from one line of business (e.g., Google search) to support less profitable services (e.g., Google’s YouTube, which is widely assumed not to be profitable on its own).\footnote{See David S. Evans & Richard Schmalensee, Markets with Two-Sided Platforms, 1 ISSUES COMPETITION L. & POL’Y 667, 670–71 (2008).} With multi-sided platform businesses engaged in extensive cross-subsidization, an adverse effect on one part of the business due to a government intervention can wreak havoc on other, seemingly unrelated lines of business. To avoid consumer harm, a breakup plan would have to accurately account for a highly complex set of interrelationships.

Breaking up the digital platforms is also complicated by the fact that they employ teams that work across the entire platform.\footnote{Id. (“Both companies rely upon flexible teams to solve problems that tend to cross the normal divisional and functional bounds.”).} Facebook’s software engineers, for example, support Facebook, Messenger, Instagram, and WhatsApp.\footnote{See Mike Isaac, Zuckerberg Plans to Integrate WhatsApp, Instagram and Facebook Messenger, N.Y. TIMES (Jan. 25, 2019), https://www.nytimes.com/2019/01/25/technology/facebook-instagram-whatsapp-messenger.html [https://perma.cc/FD8Y-LNTF].} Google uses common teams to support Google Search, YouTube, Gmail, and more obscure parts of Google’s business, such as the Google File System, Bigtable, Spanner, MapReduce, and Dremel.\footnote{See Rinehart, Breaking Up Tech Companies, supra note 173; see also Why Breaking Up Big Tech Could Do More Harm Than Good, KNOWLEDGE@WHARTON (Mar. 26, 2019), https://knowledge.wharton.upenn.edu/article/why-breaking-up-big-tech-could-do-more-harm-than-good/ [https://perma.cc/4QMQ-6PTR].} As Rinehart explains, “The result is a complex webbing of distinct yet clearly interconnected organizational divisions. This webbing makes implementing a Standard Oil-style trust-busting effort difficult at best.”\footnote{Rinehart, Breaking Up Tech Companies, supra note 173.}

Adding further complexity is the fact that the different parts of each digital platform utilize a common suite of technologies (referred to as the platform’s technology “stack”). Facebook’s stack, for example, includes a number of proprietary technologies designed to assist with common tasks engaged in by all its various services: “BigPipe” serves...
pages faster, “Haystack” stores “billions of photos efficiently,” “Unicorn” searches the social graph, “TAO” stores graph information, “Peregrine” assists with querying, and “MysteryMachine” helps with performance analysis.\(^1\) Facebook has also invested billions of dollars in data centers designed to deliver video quickly, and it installed (with Microsoft) an undersea cable to speed up information transmission.\(^2\) Google has similarly developed a suite of technologies that are commonly used by its various business units.\(^3\) As Rinehart observes, this technical integration of the digital platforms raises a vexing question: “Where do you cut these technologies when splitting up the companies?” Mistakes in technological disintegration are likely to decrease productive efficiencies substantially. As Wordsworth put it, “[w]e murder to dissect.”\(^4\)

Whereas proposals to treat user data as an essential facility and to break up major digital platforms involve significant knowledge problems, other recent antitrust proposals would endow government officials with significant discretionary authority and thus raise public choice concerns. One such proposal, discussed above, is to jettison the relatively cabined consumer welfare standard in favor of a more amorphous public interest standard.\(^5\) Another proposal is to create a federal agency with broad powers to regulate digital platforms.\(^6\) A third proposal is aimed at stemming anticompetitive harms from institutional investors’ common ownership of the stock of competing firms.\(^7\)

Responding to claims that horizontal shareholding has increased prices by diminishing the incentive of commonly held firms to compete with each other, Eric Posner, Fiona Scott Morton, and Glen Weyl have proposed that the FTC and DOJ adopt an enforcement policy that would encourage institutional investors to avoid intra-industry diversification in concentrated industries that are susceptible to oligopolistic pricing.\(^8\)

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1. Id.
2. Id.
3. Id. (describing Google’s technology stack and back-end integration).
4. Id. (William Wordsworth, *The Tables Turned; An Evening Scene, on the Same Subject*, in *WILLIAM WORDSWORTH & SAMUEL T. COLERIDGE, LYRICAL BALLADS, WITH A FEW OTHER POEMS* (1798) (“Our meddling intellect / Mis-shapes the beauteous form of things; / —We murder to dissect.”)).
5. See supra notes 91–92 and accompanying text.
8. Id.
Under the proposed policy, the agencies would annually compile a list of oligopolistic industries.\textsuperscript{190} Investors in such industries could avoid antitrust liability by holding less than one percent of total industry equity or, if they held more than that amount, by holding stock of only one firm per industry.\textsuperscript{191}

Because the term oligopoly (unlike “market” in the antitrust context) lacks any agreed-upon meaning, agency officials would have wide discretion in determining what industries made the list.\textsuperscript{192} Moreover, designation as an official oligopoly could have significant consequences beyond the context of common ownership. As Michael Sykuta and I have elsewhere detailed, Posner et al.’s proposal, which would move the FTC and DOJ out of their traditional role as ex post law enforcers and in the direction of ex ante regulators, would create significant public choice concerns:

If the agencies were to designate entire industries as oligopolistic... interest groups would almost certainly join the fray. Having their industry designated oligopolistic would raise the antitrust risk firms face from all sorts of practices. . . In light of this enhanced antitrust risk (not to mention the risk that official designation as an oligopoly could spark direct regulation), industry participants could be expected to mount a vigorous opposition to any attempt to designate their industry as oligopolistic. At the same time, groups with an interest in heightened antitrust scrutiny within an industry—e.g., consumer groups, vertically related firms that could benefit from greater restriction on industry participants—would invest resources to secure the industry’s inclusion on the list of oligopolies. Indeed, the proposal by Posner et al. invites interest group involvement (and the social costs associated therewith) by specifying that “[t]here would be some mechanism to solicit comments from any interested parties.”\textsuperscript{193}

None of this is to say, of course, that antitrust interventions should

\textsuperscript{190} The proposed enforcement policy contemplates that:
Prior to the start of each calendar year, the DOJ and FTC would make a list of industries constituting oligopolies . . . There would be some mechanism to solicit comments from any interested parties. The DOJ and FTC would then finalize the list with at least a month before the beginning of the new year to allow the institutional investors time to rearrange their holdings to comply with the policy.

\textit{Id.} at 708–09.

\textsuperscript{191} \textit{Id.} at 678.

\textsuperscript{192} Thomas A. Lambert & Michael E. Sykuta, \textit{The Case for Doing Nothing About Institutional Investors’ Common Ownership of Small Stakes in Competing Firms}, 13 Va. L. & Bus. Rev. 213, 260 (2019) (“The term ‘industry’ . . . has no . . . economically informed, tractable definition . . . . Moreover, once an industry is defined, there will have to be criteria for declaring it to be oligopolistic.”).

\textsuperscript{193} \textit{Id.} at 260–61 (quoting Posner et al., \textit{supra} note 188, at 709).
never involve complicated fact-finding or confer discretionary authority on government officials. As noted, this final screening mechanism is more a guideline than a strict filter. But just as antitrust courts learn from experience with business practices and adjust presumptions accordingly, courts and policymakers should do the same with experiences of government practices. Because experience has shown that interventions are especially likely to misfire when they entail high knowledge requirements or excessive discretion, such interventions should be examined under a (rebuttable) presumption of error.

CONCLUSION

As Dan Crane has observed, “[a]ntitrust law stands at its most fluid and negotiable moment in a generation.” 194 Popular commentators and scholars alike are questioning such seemingly settled doctrines as the consumer welfare standard. Widespread discontent with various social conditions—from economic inequality, to political polarization, to concerns about data privacy—has generated calls for antitrust to do more.

But antitrust remains a fundamentally limited enterprise, as Judge Easterbrook famously observed. 195 While a few of Easterbrook’s specific suggestions require adjustment in light of market developments and advances in economic learning, his overarching directive, and several of his proposed screening mechanisms, remain sound.

As courts and enforcers confront an ever-growing chorus calling for bigger and bolder antitrust, they would do well to embrace Easterbrook’s general model, revise some specifics, and supplement it with four additional filters that limit antitrust’s reach. In particular, they should limit interventions to instances of consumer harm arising from behavior that extends market power, where no other body of law or instance of private ordering is likely to prevent the harms at issue with less distortive effect, and the remedy imposed does not entail excessive knowledge requirements or conferral of discretionary governmental authority. Such an approach may disappoint those who imagine that antitrust can solve a host of social problems, but it alone will ensure that twenty-first century antitrust actually succeeds at the things antitrust in fact does well.

195. See generally Easterbrook, supra note 13.