ABSTRACT

The smartphone patent wars sparked a crisis. As global patent litigation accelerated, an arms race characterized by competing alliances and massive portfolio acquisitions ensued. Inevitably, 4G and 3G wireless protocols adopted by standard-setting organizations (SSOs) came under fire. Because UMTS, GSM, LTE, and other specifications are indispensable for mobile devices, standard-essential patents (SEPs) became a central object of procurement and assertion efforts. A recurring claim was hold-up: certain SEP owners, having assured SSOs that they would license their essential technologies on reasonable and nondiscriminatory (RAND) terms, sought to enjoin smartphone makers from practicing industry standards. Charged with protecting consumers, antitrust enforcers experienced pressure to do something.

The FTC and other competition agencies responded aggressively, clamping down on perceived efforts by owners of RAND-encumbered SEPs to hold-up standard implementers. They happened upon the rule that such patentees violate antitrust law if they try to enjoin a “willing licensee”—essentially a “no-injunction rule.” While that approach has intuitive appeal, it violates core antitrust principles. In America, part of the problem lies in the FTC’s reliance on section 5 of the FTC Act to capture conduct that goes beyond the reach of the Sherman Act.

The no-injunction rule breezes past the key question, which is whether the pertinent conduct harms competition. Seemingly oblivious to the fact that they challenge behavior outside antitrust’s remit, enforcers the world over have made an antitrust problem of acts that do not always—or even generally—damage the competitive process. This Article explains that certain SEP-related conduct assailed by antitrust-enforcement bodies is not a problem born of the competitive process.
Rather, it reflects incomplete contracting at the time of standardization, ensuing choices by firms to lock into technologies for which they lack licenses, and harm that can occur only when a court would likely grant the sought-after relief. Absent deception that harms competition in an upstream technology-licensing market, such situations do not involve anticompetitive conduct by an SEP owner. Divorced from such harm, attempted hold-up in breach of a RAND-licensing promise sounds in contract.

These considerations require rethinking contemporary enforcement actions in the standard-setting arena. They also call into question how the FTC and other antitrust agencies view the laws that they are responsible for enforcing. Yes, antitrust plays an important economic role, but only in policing market-imposed constraints on conduct. The tortured jurisprudence in the standard-setting field would regain coherence were enforcers to cabin antitrust to its appropriate role. For standards, that means allowing the institutions that society has entrusted to resolve disputes—the courts and International Trade Commission—to do so, and to tackle larger questions of hold-up under the rubric of contract law when harm to competition is absent.
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I. INTRODUCTION

Competition agencies have lost sight of core antitrust principles. In their zeal to address negative market outcomes, enforcers have condemned behavior that does not harm competition. For instance, many competition regimes today prohibit “unfairly” high prices. We have seen enforcement actions in Asia where an underlying allegation seems to be excessive royalty charges. Some enforcers require holders of valuable intellectual property (IP) rights to license them. And in the United States, the Federal Trade Commission (FTC) has employed its authority in section 5 of the FTC Act to stop efforts by owners of standard-essential patents (SEPs) to enjoin infringement by “willing licensees” when the SEPs are subject to


Such agency intervention, though well intentioned, has undermined the integrity of the antitrust enterprise by silently expanding the sphere of liability. It has done so by employing antitrust laws against actions that do not eliminate a market constraint on price or other forms of competition. This development is troublesome not merely because it departs from fundamental theory, but also because it blurs the lines between antitrust enforcement and industry regulation. Competition law should not be a mechanism to rework industry dynamics to align outcomes with enforcers' preferred market vision.

This Article examines the core principles that define antitrust's reach. The law distinguishes negative market outcomes, which may or may not flow from harm to competition, from injury to the competitive process itself.\footnote{See discussion infra Section I.B.} Only the latter phenomenon implicates antitrust law. The distinction may be nuanced, but it is fundamental. Antitrust does not condemn higher prices, reduced output, diminished choice, or even suppressed innovation, unless those harms flow from conduct that lifted a demand- or supply-side market constraint.

These issues are most pronounced in industries where voluntary standards loom large. U.S. and international antitrust agencies have lost their way in recent interventions in the standard-setting space. Commentators have spilled much ink on alleged hold-up by owners of SEPs.\footnote{See, e.g., Mark A. Lemley & Carl Shapiro, Patent Holdup and Royalty Stacking, 85 TEX. L. REV. 1991, 1992-93 (2007); Daniel I. Prywes & Robert S.K. Bell, Patent Hold-Up: Down but Not Out, ANTITRUST, Summer 2015, at 25.\footnote{See, e.g., Lemley & Shapiro, supra note 7, at 1992-93; Layne S. Keele, Holding Standards for RANDsome: A Remedial Perspective on RAND Licensing Commitments, 64 U. KAN. L. REV. 187, 187 (2015).} They worry that once an industry invests in adopting and can no longer cheaply abandon a standard, it becomes vulnerable to demands for outsized royalties by SEP owners who may previously have had little bargaining power.\footnote{See FTC Statement In re Google Inc., supra note 5; FTC Statement In re Robert Bosch GmbH, supra note 5; see also Fed. Trade Comm'n, Analysis of Proposed Consent Order to Aid Public Comment: In the Matter of Negotiated Data Solutions LLC 5 (Jan. 23, 2008), https://www.ftc.gov/sites/default/files/documents/cases/2008/01/080122analysis.pdf [https://perma.cc//96BMI-B2BN] (purporting to find an "adverse effect . . . on competition" from behavior that did not lift a demand- or supply-side constraint on market power because of "the conduct’s adverse impact on prices for autonegotiation technology") [hereinafter FTC Statement In re Negotiated Data Solutions LLC]. While that outcome is indeed a potential threat to competition, the larger economic picture is more complicated. Wielding antitrust broadly to nip possible hold-up in the bud, enforcers have expanded liability to capture behavior and outcomes divorced from harm to competition.\footnote{See FTC Statement In re Google Inc., supra note 5; FTC Statement In re Robert Bosch GmbH, supra note 5; see also Fed. Trade Comm'n, Analysis of Proposed Consent Order to Aid Public Comment: In the Matter of Negotiated Data Solutions LLC 5 (Jan. 23, 2008), https://www.ftc.gov/sites/default/files/documents/cases/2008/01/080122analysis.pdf [https://perma.cc//96BMI-B2BN] (purporting to find an "adverse effect . . . on competition" from behavior that did not lift a demand- or supply-side constraint on market power because of "the conduct’s adverse impact on prices for autonegotiation technology") [hereinafter FTC Statement In re Negotiated Data Solutions LLC].} They have tried to shoehorn
conduct within antitrust proscriptions that simply does not fit. Such a procrustean approach breezes past important antitrust limiting principles. It also threatens to upset the balance between patent holders’ rights and consumers’ access to technology.

These examples reflect a common failure. In each case, enforcers erroneously direct antitrust liability at outcomes rather than at conduct that damages market processes. It is time to correct the misapplication of competition law. Part I explains the proper scope of antitrust liability. Part II applies those insights to the standard-setting context in which concerns of hold-up have led competition agencies to intervene beyond their remit.

II. ANTITRUST PROTECTS THE COMPETITIVE PROCESS

A. Distinguishing Competition from Market Outcomes

What are we talking about when we talk about antitrust? More simply, what defines an antitrust violation? Although that issue is fundamental, it is increasingly overlooked or misunderstood.

The answer is that antitrust guards the competitive process, but says little about the outcome of that process at a particular point in time. This principle, framed over decades of jurisprudence, establishes the scope of antitrust liability. Antitrust guards market forces that society entrusts to deliver favorable outcomes. But competition law is not a regulatory tool that intervenes when markets fail to produce results that enforcers perceive to be suboptimal. It plays a well-calibrated role within the larger free-marketer framework by setting boundaries on acceptable firm behavior and thus allowing markets to function as efficiently as possible. Its function, as its name suggests, is simply to protect competition. That key insight is particularly important for the new economy, where antitrust meets technology.

Unfortunately, although this principle is uncontroversial in the abstract, in practice policymakers often blur the lines when they face aggressive conduct or unpopular market outcomes. In some such cases, the distinction between antitrust and regulation becomes distorted, with negative repercussions for sound competition policy. That dynamic is evident in the standard-setting space, where antitrust agencies have proscribed conduct having no discernible effect on competitive market constraints.


The antitrust laws bar restraints, practices, and mergers that harm competition. Section 1 of the Sherman Act prohibits agreements that unreasonably restrain trade, section 2 condemns monopolization and attempted monopolization, and section 7 of the Clayton Act forbids acquisitions that may substantially lessen competition or tend to create a monopoly. Antitrust injury is not an element of a violation, but instead a requirement for a private litigant to state a claim. For example, to bring an action for unlawful conspiracy, direct purchasers must show that the unlawful agreement caused them to pay higher prices or otherwise injured them in a way that Congress passed the antitrust laws to prevent. By contrast, government antitrust agencies—namely, the FTC and the Justice Department (DOJ)—need not prove antitrust injury. They must only establish a substantive violation to bring an action. In short, antitrust injury results from a practice that harms competition. The injury flows from the antitrust violation, but does not define it.

This principle is often overlooked. Injury to the competitive process is the cornerstone of every antitrust violation. Such harm typically produces unfavorable market outcomes, in particular, higher prices, lower output, diminished quality, or compromised incentives to innovate. That is a causal chain. It is imperative, however, not to conflate cause and effect. Unfortunately, too many people overlook the distinction. A classic error is to equate an increase in price, or harm to a competitor, with injury to the competitive process. As Part II explains, the latest regrettable example comes from the standard-setting space, where the FTC, DOJ, European Commission, and other competition enforcers have condemned SEP owners for seeking injunctions against potentially willing licensees. That rule is unsound because it looks only to possible market outcomes, like higher royalties or product exclusion, without showing that those effects flow from degraded competition.

Part II.B explores the case law underlying these principles. The discussion focuses, in particular, on matters that reflect the difference between (1) harm to competition and (2) negative market outcomes.

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17. Id.
B. Antitrust Protects the Competitive Process

Competition is the process by which purveyors of substitute goods or services vie for sales opportunities by offering lower prices, higher quality, or superior terms than their rivals. Market forces benefit consumers by providing them with more for less. Competition limits firms' ability to behave as they choose. It constrains pricing, makes companies respond to consumer preferences, and leads firms to introduce better products. "Competition" is continuously variable, filling a spectrum from its complete absence (monopoly) to perfect competition in which no incumbent has market power. In practice, few markets reflect those extremes.

U.S. industrial policy reflects a free-market premise. It reasons that, when unfettered by artificial restraints and supported by appropriate regulation, markets will tend toward efficiency. It presumes that such conditions allow markets to produce more superior outcomes over the long run than any other economic system would do. By contrast, central planners lack the information needed to allocate scarce resources, as well to incentivize economic actors to invest in infrastructure and technology. Market forces, when protected from distortions, are the best generators of economic wealth available to society. Trust in the powers of competition drives that supposition.

The Sherman Act prohibits firms from corrupting the competitive process. It does not, however, require particular market outcomes at a particular time or punish those that it does not like. That restraint is not a deficiency, but rather an important feature of the antitrust enterprise. There are good reasons not to interfere with industry dynamics. Even negative conditions may have a silver lining, not least because market processes lead firms to respond to changing incentives. "Undesirable" market outcomes, such as monopoly prices, encourage competitors to increase production and new firms to enter. They may also spur more innovation, as well as induce purchasers to ration during times of excess demand. Above all, monopoly profits are the ultimate carrot, driving firms to innovate and achieve productive efficiencies. Take away the prize, and you blunt the core incentive that drives competition. Instead of proscribing certain outcomes, antitrust properly focuses on protecting the process by which markets tend to produce efficient results. Even results that appear suboptimal may only be so from a short-run perspective.

Hence, the fact that antitrust law guards a process that typically delivers

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20. See Nat'l Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 695 (1978) (embracing the "assumption that competition is the best method of allocating resources in a free market").
21. See N.C. State Bd. of Dental Exam'rs v. FTC, 135 S. Ct. 1101, 1109 (2015) ("Federal antitrust law is a central safeguard for the Nation's free market structures.").
24. That is why the Supreme Court has explained that "charging . . . monopoly prices . . . is an important element of the free-market system." Verizon Commc'ns v. Law Offices of Curtis V. Trinko, 540 U.S. 398, 403 (2004).
efficient outcomes does not mean that it imposes liability when that process fails. Nor does antitrust law require firms to increase the amount of competition. Instead, it prohibits behavior that lifts competitive constraints on market power. Having explored the role of competition, I now consider the nature of an antitrust violation.

1. The Supreme Court Focuses on the Competitive Process

The Supreme Court has made this principle clear, explaining that “antitrust laws were passed for the protection of competition, not competitors.” Hence, a firm is free to launch an all-out war on its competitors by offering low prices and better terms. “The law directs itself not against conduct which is competitive, even severely so, but against conduct which unfairly tends to destroy competition itself.” Even a dominant firm may outdo its rivals, forcing them from the market. As Judge Easterbrook has explained, antitrust and bankruptcy go hand in hand.

Those rules show that competition is a function not merely of the number of firms, but the power of incentives. To say that a firm hurt a competitor, or even raised its costs, does not itself answer the antitrust question. Under competition, market forces discipline incumbents, encourage price-cutting, spur cost-cutting, and drive investment in R&D. Eliminating a competitor does not always harm the competitive process, but may actually enhance it in certain circumstances. The latter is most likely if a firm injures its rivals through its superior ability to satisfy consumer demand. By allowing the prevailing firm to reap its bounty, the law encourages all firms to compete on the merits. As the Supreme Court has explained:

The mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system. The 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. To safeguard the incentive to innovate, the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive conduct.

Antitrust steps in only when conduct threatens the competitive process itself. In the Third Circuit’s view, conduct that does “not harm[] the competitive process


28. See, e.g., id. at 458-59.


itself[] is not anticompetitive.\textsuperscript{32} Similarly, the Seventh Circuit explains that the "purpose of the Sherman Act is to rectify the injury to consumers caused by diminished competition."\textsuperscript{33} As a result, "the plaintiff must allege, not only an injury to himself, but an injury to the market as well.\textsuperscript{34} Indeed, one court has observed that the "antitrust laws are concerned with the competitive process, and their application does not depend in each particular case upon the ultimate demonstrable consumer effect."\textsuperscript{35} It is the injury to the market that defines the antitrust violation.\textsuperscript{36}

Why does eliminating a rival not inherently harm competition? After all, surely one cannot have competition without competitors. The answer is that the Darwinian process, by rewarding success and punishing failure, imparts the right incentives. If companies fail because they cannot match their rivals’ efficiency, that outcome reflects competition. To equalize outcomes would be to undermine the competitive process itself.\textsuperscript{37} When a firm with significant market power adopts a practice that can exclude an equally or more efficient competitor, however, ensuing harm to rivals may diminish competition.\textsuperscript{38}

The law thus recognizes liability in the event of unilateral, predatory pricing, for instance, but only where there is a dangerous probability of recoupment—i.e., when the competitive process is diminished to the point that it may not constrain the exercise of post-predation market power.\textsuperscript{39} In part, such rules reflect concern over the risk of false positives, but they also show that degraded market processes must accompany below-cost pricing in order to prove a section 2 violation.\textsuperscript{40}

Just as antitrust will not condemn a firm for competing on the merits even if monopoly results, so the law will not punish a company merely for exercising market power.\textsuperscript{41} That principle holds true even if the company’s pricing power could not endure in a competitive market. Hence, a firm can lawfully increase price, reduce output, or harm its rivals so long as it does not eliminate a constraint on its market power. Monopolists can charge whatever price the market will bear.\textsuperscript{42} Absent preexisting cooperation, dominant firms almost never have an antitrust

\begin{footnotes}
\item 32. Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 308 (3d Cir. 2007).
\item 33. Car Carriers, Inc. v. Ford Motor Co., 745 F.2d 1101, 1107 (7th Cir. 1984).
\item 34. Id.
\item 35. Fishman v. Estate of Wirtz, 807 F.2d 520, 536 (7th Cir. 1986).
\item 36. See e.g., Roland Machinery Co. v. Dresser Indus., Inc., 749 F.2d 380, 394 (7th Cir. 1984) ("The exclusion of competitors is cause for antitrust concern only if it impairs the health of the competitive process itself."); Car Carriers, 745 F.2d at 1107 ("[I]t is the function of § 1 to compensate the unfortunate only when their demise is accompanied by a generalized injury to the market.").
\item 37. As Judge Learned Hand famously observed, "The successful competitor, having been urged to compete, must not be turned upon when he wins." United States v. Aluminum Co. of Am., 148 F.2d 416, 430 (2d Cir. 1945).
\item 38. See RICHARD A. POSNER, ANTITRUST LAW 195 (2d ed. 2001).
\item 40. Id.
\item 42. Id. at 398.
\end{footnotes}
obligation to license their physical or intellectual property to their rivals to increase competition. Acting unilaterally, inventors can lawfully monopolize a market by asserting valid IP rights against their competitors.

All of these examples involve market outcomes that are, in at least some respects, suboptimal. Yet no antitrust violation follows. An important reason is that intervention to force a “better” outcome would be short-sighted, potentially yielding lower prices in the near term, but compromising the long-term incentives that Darwinian competition imparts. As the Supreme Court recently explained, the “Sherman Act . . . serves to promote robust competition, which in turn empowers the States and provides their citizens with opportunities to pursue their own and the public’s welfare.”

2. Negative Market Outcomes Are Not Themselves an Antitrust Problem

The courts distinguish injury to competition and negative market effects. Consider three Supreme Court cases that illustrate that principle. The first two cases rejected antitrust liability under the Sherman Act, despite suboptimal, short-run outcomes for consumers—higher consumer prices and lower output. Conversely, the third case involved actionable anticompetitive conduct, even though a possible short-run effect of the behavior was lower prices for consumers. The holdings show that antitrust violations involve harm to competition, rather than mere high prices, low output, or other conditions often associated with—but not defined by—a lack of competition. Indeed, as the third example shows, harm to the competitive process can ensue even if consumers benefit in the short run.

First, consider the Supreme Court’s 2006 decision in Verizon Communications v. Law Offices of Curtis V. Trinko. The 1996 Telecommunications Act spurred competition in local telephony by requiring incumbent local exchange carriers

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43. Id.; see also U.S. DEP’T OF JUSTICE & FED. TRADE COMM’N, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION 6 (2007), goo.gl/vtSxS1 [https://perma.cc/76HD-5XCK] (“Antitrust liability for mere unilateral, unconditional refusals to license patents will not play a meaningful part in the interface between patent rights and antitrust protections.”).

44. See generally United States v. Colgate & Co., 250 U.S. 300, 306 (1919) (observing “the manufacturer’s undoubted right to specify resale prices and refuse to deal with any one who failed to maintain the same”).

45. Cf., e.g., United States v. Line Materials Co., 333 U.S. 287, 308 (1948) (noting that a “valid patent excludes all except the owner from the use of the protected process or product”; Tyco Healthcare Grp. v. Mutual Pharma. Co., 762 F.3d 1338, 1343 (Fed. Cir. 2014) (“A party is ordinarily exempt from antitrust liability for bringing a lawsuit against a competitor.”); C.R. Bard, Inc. v. M3 Sys., Inc., 157 F.3d 1340, 1369 (Fed. Cir. 1998) (“Neither the bringing of an unsuccessful suit to enforce patent rights, nor the effort to enforce a patent that falls to invalidity, subjects the suitor to antitrust liability.”).


ILECs) to interconnect their networks with those of entrants. Among other requirements, ILECs had to unbundle their network elements and sell them to competitive local exchange carriers (CLECs) on just, reasonable, and nondiscriminatory terms. In *Trinko*, a purported class of AT&T customers sued Verizon, the ILEC for the New York area, for monopolization. The theory was that Verizon had refused sufficiently to interconnect with its CLECs, thus impeding their entry. An antitrust-imposed duty to deal—in line with duties that the 1996 Act imposed—may have allowed AT&T and other CLECs to compete on more equal footing, resulting in lower prices, greater output, and more varied choice for consumers. The Second Circuit held that the plaintiffs had stated a claim, but the Supreme Court reversed.

In *Trinko*, section 2 liability did not turn on whether the alleged exclusion caused higher prices and restricted supply. Something more fundamental was at stake. Market forces impart incentives to compete only if the law allows prevailing firms to reap what they sow. Taking away that prize would undermine the competitive process, replacing market forces with a more "competitive" market structure conducive of low prices, but devoid of incentives driving long-term investment in infrastructure, technology, and advancement. *Trinko* made that rationale clear:

> To safeguard the incentive to innovate, the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive conduct. Firms may acquire monopoly power by establishing an infrastructure that renders them uniquely suited to serve their customers. Compelling such firms to share the source of their advantage is in some tension with the underlying purpose of antitrust law, since it may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities. Enforced sharing also requires antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing—a role for which they are ill suited.

Equally telling is the Supreme Court's decision in *NYNEX Corp. v. Discon, Inc.* There, the Court found that the per se rule against group boycotts did not apply to a buyer's decision to choose one supplier over another without a legitimate business reason. Hence, "the plaintiff here must allege and prove harm, not just to

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50. 540 U.S. at 404.
51. Id.
52. Id.
53. Id. at 416.
54. See, e.g., United States v. Aluminum Co. of Am., 148 F.2d 416, 430 (2d Cir. 1945) ("A single producer may be the survivor out of a group of active competitors, merely by virtue of his superior skill, foresight and industry. In such cases 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.*").
55. *Trinko*, 540 U.S. at 407-08.
a single competitor, but to the competitive process, i.e., to competition itself. Discon and AT&T Technologies competed in selling removal services for telecommunications equipment. Both entities competed for the business of Material Enterprises, which provided removal services to a local telephone monopoly. That monopolist, in turn, could pass removal costs on to telephone consumers through regulator-approved rates. Having gone out of business, Discon alleged that Material chose AT&T’s more expensive removal services, without justification, based on a conspiracy. The purported antitrust violation was that Material, AT&T, and the telephone monopoly agreed to pass on the higher prices to customers by defrauding consumers and the regulator, with AT&T paying Material a rebate to cover its higher service price.

The Supreme Court found that the per se rule did not apply. Although the alleged fraud would have led consumers to pay higher prices, it would not have harmed the competitive process. Specifically:

Discon[] claim[s] that the petitioners’ behavior hurt consumers by raising telephone service rates. But that consumer injury naturally flowed not so much from a less competitive market for removal services, as from the exercise of market power that is lawfully in the hands of a monopolist, namely, New York Telephone, combined with a deception worked upon the regulatory agency that prevented the agency from controlling New York Telephone’s exercise of its monopoly power.

A final example is Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber, where a sawmill accused its competitor of forcing it out of the market by bidding up the price of logs to unaffordable levels. The case implicated similar principles to those in predatory-pricing cases, where firms sell below cost to exclude their rivals and then raise price to supracompetitive levels to recoup their losses. Buyer-side predatory bidding, by contrast, elevates input prices to supracompetitive levels in the hope of recouping the costs incurred through elevated post-predation market power by paying lower input costs in the long run.

Exclusionary input bidding—like predatory pricing—raises interesting questions about downstream market effects. Usually cast in terms of advancing consumer welfare, antitrust policy takes a dim view of conduct that tends to raise price and decrease output. Focusing on buyers inverts the dynamic, to a degree, because the short-run implication of enhanced power on the purchasing side of the market may be lower prices. If the purchaser is a downstream customer, monopsonistic pricing seems to create a literal “consumer” gain. More often, the

57. Id. at 135.
58. Id. at 131–32.
59. Id. at 132.
60. Id.
61. Id.
62. Id. at 136.
63. 549 U.S. 312 (2007).
64. Id. at 315.
65. Id. at 320–21.
issue arises in upstream markets where firms purchase inputs in the manufacturing process. Hence, the "actions taken in a predatory-bidding scheme are often 'the very essence of competition.'" This holds true even if the conduct tends to erode competitors' profit margins.

Liability thus requires demonstrable harm to competition, meaning that the conduct will degrade market forces to the point that they can no longer constrain the exercise of monopsony power. Hence, the Supreme Court recognizes a cause of action only where the predator enjoys a dangerous probability of recouping its losses from predatory bidding or pricing. When the facts satisfy that condition, the result will be liability despite the fact that consumers to that point may have benefited from the conduct.

The Trinko, NYNEX, and Weyerhaeuser cases reflect nuanced regard for the competitive process and its propensity to deliver long-term benefits for consumers. There is much more to competition than whether the restraint at issue tends to increase price in the short run. The mere fact that consumers benefit or suffer from market outcomes in the short term says nothing in itself about a violation of substantive antitrust law. As the three cases just discussed illustrate, it is the dilution of market forces through restraints, acquisitions, or unilateral exclusionary conduct that defines the violation.

3. Competition to Obtain a Monopoly

In exploring the relationship between competitive harm and consumer injury, one rare phenomenon is especially insightful. That is competing for a natural monopoly. In such cases, firms vie to own a regulated monopoly or to run a franchise for which no good economic substitute exists. Usually, competition benefits downstream consumers, but if a single monopolist ensues regardless of who wins the race, it potentially severs the link between the competitive process and downstream market effects. Why are such cases useful for our analysis here? If antitrust law recognizes a claim at all in such circumstances, it can only be because it focuses on the competitive process, as opposed to demonstrable market effects. That outcome would protect competition, even if market processes cannot deliver their typical benefits in a given case.

To be clear, I do not proffer the following examples as cases that the agencies should necessarily prioritize. It is right to focus enforcers' limited resources on matters in which anticompetitive conduct threatens to impose the greatest consumer harm. Rather, the cases I discuss in this Subpart illuminate the defining hallmark of an antitrust violation: harm to the competitive process, rather than negative market outcomes.

Several decisions recognize antitrust liability in competition-for-monopoly cases. The leading example is the Seventh Circuit's decision in Fishman v. Estate of

67. Id. at 318-19, 325.
Chicago Professional Sports Corporation (CPSC) competed with the plaintiffs, Illinois Basketball, Inc. (IBI) and Fishman, to buy the Chicago Bulls. The plaintiffs won the contract, which was contingent upon the subsequent blessing of the NBA, which in turn required a stadium lease. The owner of the Chicago Stadium, however, refused to lease it to the plaintiffs, who thus ultimately lost out to CPSC. The plaintiffs alleged a conspiracy and group boycott among CPSC, certain NBA members, and others to deny them access to the Chicago Stadium, which the district court held to be an essential facility. The district court found violations of sections 1 and 2 of the Sherman Act.

On appeal, the defendants argued that competition between IBI and CPSC to acquire a natural monopoly was not protected by the antitrust laws because substitution of one competitor for another would not injure competition: Whether CPSC or IBI ultimately managed to acquire the Bulls was a matter of indifference to the Chicago fans, who would face a monopolist in any event.

That position goes to what defines an antitrust violation. Is it identifiable consumer harm that flows from a restraint, or is it the restraint that corrupts the competitive process, even if discernible antitrust injury does not result? As this Part has argued, violations of the Sherman Act harm or, in per se cases, presumptively harm competition. The short-run result of that harm is typically—but not always—consumer injury.

Writing for the Seventh Circuit, Judge Cudahy considered the issue to be profound: "This proposition, we think, presents a difficult question requiring the most careful analysis and the weighing of conflicting policies and lines of authority in the application of the antitrust laws.\textsuperscript{75} After carefully exploring relevant jurisprudence, the court found that the "antitrust laws are concerned with the competitive process, and their application does not depend in each particular case upon the ultimate demonstrable consumer effect. A healthy and unimpaired competitive process is presumed to be in the consumer interest."\textsuperscript{76} Judge Cudahy explained that the Supreme Court "has never given us [reason] to believe that anything save unfettered competition is the key to consumer well-being."\textsuperscript{77} For that reason, "we should not be so quick to assume that there is no consumer interest in this case," and "there seems to be no way of telling whether IBI or CPSC would be a 'better' owner from the perspective of basketball fans."\textsuperscript{78} Thus, "the Sherman Act...

\textsuperscript{68} 807 F.2d 520 (7th Cir. 1986).
\textsuperscript{69} Id. at 525.
\textsuperscript{70} Id.
\textsuperscript{71} Id.
\textsuperscript{72} Id.
\textsuperscript{73} Id.
\textsuperscript{74} Id. at 532.
\textsuperscript{75} Id. at 535.
\textsuperscript{76} Id. at 536 (emphasis in original).
\textsuperscript{77} Id. at 537.
\textsuperscript{78} Id.
requires that the choice between them result from unconstrained competition on the merits.\textsuperscript{79}

Several decisions, some preceding and others following Fishman, confirm the principle. They hold that harm to the competitive process defines the antitrust violation, even if one cannot trace that harm to an identifiable consumer injury.\textsuperscript{80} An antitrust jurisprudence that began with the quality of market outcomes and traced those observable causal effects to a restraint or unilateral practice would not obviously reach the same result. The rationale for these cases provides perhaps the most fundamental support for this Part’s proposition.

To round out the discussion, it bears noting that some threshold uncertainty lingers in the law governing competition for monopoly. Even within the Seventh Circuit, for instance, there is some question whether identifiable consumer injury is a sine qua non of an antitrust violation.\textsuperscript{81} That ambiguity is best resolved by distinguishing the elements of antitrust standing that a private litigant must satisfy to bring a claim under the Clayton Act—elements that include antitrust injury—from the distinct question whether a substantive violation of the Sherman Act exists. A firm can violate section 1 or section 2 without inflicting antitrust injury sufficient to create a private claim under sections 4 or 16 of the Clayton Act.\textsuperscript{82}

There are competition-for-monopoly situations in which judges may decline to recognize injury to the competitive process.\textsuperscript{83} Although a minority view, it may arise in cases where the connection between upstream market forces, realized through firms’ vying efforts to win the market, and downstream consumers is severed altogether. Judge Easterbrook, dissenting, thought that that was the reality required for a Section 2 violation, even if the firm threatened monopoly power, in National Reporting Co. v. Alderson Reporting Co.\textsuperscript{84}

\textsuperscript{79} Id.; see also Omega Satellite Prods. Co. v. City of Indianapolis, 694 F.2d 119, 127 (7th Cir. 1982) (“[T]he antitrust laws protect competition not only in, but for, the market—that is, competition to be the firm to enjoy a natural monopoly, and by a modest extension competition to replace the existing natural monopolist.”) (citation omitted).

\textsuperscript{80} See, e.g., Nat’l Reporting Co. v. Alderson Reporting Co., 763 F.2d 1020, 1024 (8th Cir. 1985) (accepting the argument, at least in theory, that “if a natural monopolist has attained its position by unfair means, for example, predatory pricing, then it is guilty of a violation of Section 2 even though the market is a natural monopoly”); Central Telecomm., Inc. v. TCI Cablevision, Inc., 610 F. Supp. 891, 908 (W.D. Mo. 1985) (“[T]he notion that the antitrust laws protect competition for the market in a natural monopoly situation enjoys ample support in the law.”); TV Signal Co. of Aberdeen v. Am. Tel. & Tel. Co., No. CIV 70-6N, 1981 WL 2049, at *4 (D.S.D. Mar. 13, 1981) (“We must believe that CATV business competition is beneficial even if, as Defendants assert, it often results in a natural monopoly.”); Ovitron Corp. v. Gen. Motors Corp., 295 F. Supp. 373, 378 (S.D.N.Y. 1969) (even in “a market which cannot support more than one supplier[,]” a natural monopolist violates Section 2 if it acquires its position by “means which are ‘exclusionary, unfair or predatory’”) (citation omitted).

\textsuperscript{81} See Banks v. NCAA, 977 F.2d 1081, 1097 (7th Cir. 1992) (Flaum, J., concurring in part and dissenting in part); see also Flip Side Prods., Inc. v. Jam Prods., Inc., 843 F.2d 1024, 1032 (7th Cir. 1988) (“[I]njury to . . . consumers is . . . an essential ingredient of liability.”) (quoting Fishman, 807 F.2d at 568 (Easterbrook, J., dissenting in part)) (internal quotation marks omitted).

\textsuperscript{82} See, e.g., Brief for Fed. Trade Comm’n as Amicus Curiae Supporting No Party, supra note 14, at 8–16.

in *Fishman*. Judge Holmes expressed a similar view in 2014 in *JetAway*, where a two-judge panel of the Tenth Circuit issued a short per curiam opinion affirming the district court. There, Montrose County in Colorado decided to privatize fixed-base operator services at the county airport. It received two competing bids, and did not choose JetAway. JetAway sued for a Sherman Act violation, alleging that the County and various private actors had conspired to oust it. The two-judge panel affirmed the district court’s judgment against JetAway on the ground that it lacked antitrust standing. The judges disagreed, however, on the basis for the lack of antitrust standing. In concurrence, Judge Holmes argued, “The mere fact that one monopolist is able to successfully replace another does not harm competition and, therefore, does not effect an antitrust injury. . . . Regardless of which entity controls a monopoly, it remains ‘free to reduce output and increase prices, the standard evils of monopoly power.’”

The more common view, however, appears to be that harm to competition—even in natural monopolies—presumptively translates into consumer injury. In other words, we should be skeptical that competition fails to promote social benefits. Even if two firms cannot viably endure in a market, the threat of entry may constrain incumbent pricing. The D.C. Circuit explained in 2014 that “even in a naturally monopolistic market the threat of competitive entry (e.g., through competitive bidding) will lead firms to lower their costs, which thereby generally lowers cost-based utility rates.” Similarly, Judge Tymkovich in *JetAway* opined:

> Assuming the relevant market is a “natural monopoly,” I still think competitive forces could play a pro-consumer role. Although Judge Holmes’s reasoning is appealing on its surface, its logic is actually a self-fulfilling prophecy. If demand in a certain market is so low that only one firm can survive, then whether the incumbent firm behaves as a monopolist depends entirely on the rule we adopt. If, as Judge Holmes reasons, the incumbent firm is insulated from antitrust liability because it got there first, then the incumbent will indeed behave as a monopolist—because we said it can. But if, as I believe, the incumbent firm deserves no privileged position simply by virtue of already being there, then the very threat of an upstart entering the market will at least marginally constrain the incumbent’s ability to extract monopoly rents. That does benefit consumers. And in any event, we have no right to enshrine the incumbent in its monopoly position simply because it is already there. That choice belongs to consumers.

In sum, an antitrust violation’s definitive quality is injury to the competitive process. That reality sometimes becomes obscured by the correct, but potentially

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84. *Fishman*, 807 F.2d at 563 (Easterbrook, J., dissenting in part).
86. *Id.* at 827.
87. *Id.* at 825.
88. *Id.* at 826.
89. *Id.* at 838 (Holmes, J., concurring) (internal citations omitted).
91. *JetAway*, 754 F.3d at 856 (Tymkovich, J., concurring).
misunderstood, observation that antitrust promotes consumer welfare. It does so by preventing firms from corrupting market forces. Competitive markets benefit consumers, even if snap-shot pictures of market outcomes show imperfect results at a static moment in time. A well-functioning market spurs firms to invest in the hope of surpassing rivals and achieving monopoly. That is why antitrust courts and enforcers properly evaluate claimed Sherman Act violations not solely by industry structure, prices, output, or quality, but by potential corruption of the competitive process.

4. Transitioning to Section 5

It is with those considerations that we turn to Section 5 of the FTC Act, under which the Commission enforces antitrust law. The basis for most FTC antitrust enforcement actions is that the challenged conduct violates the Sherman Act and thus, by extension, section 5. The FTC Act’s proscription of “unfair methods of competition,” however, may extend beyond the Sherman Act. Section 5’s true expanse, however, remains unknown. The next Subpart explores whether a “standalone” section 5 violation—i.e., actions that contravene section 5, but do not violate the Sherman Act—must corrupt the competitive process. In my view, the answer is yes. Section 5 should not capture harm to consumers or other undesirable market outcomes unless they flow from injury to market forces. Nor should the FTC seek to make markets more competitive (in the short run) by engineering preferred market outcomes, such as by imposing duties to deal that go beyond the Sherman Act.

Were the FTC to construe section 5’s unfair competition prong contrary to those principles, it would no longer enforce antitrust. Rather, it would regulate an industry’s outcomes, thereby jettisoning market processes for its own desired view of a competitive market structure. Unfortunately, the FTC has lost its way in standalone section 5 cases. Over my dissent, the Commission has employed section 5’s unfair competition provision without asking whether the challenged behavior corrupts the competitive process or whether the price or other effects

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94. See, e.g., Times-Picayune Publ’g Co. v. United States, 345 U.S. 594, 609 (1953) ("In either case, the arrangement transgresses § 5 if the Federal Trade Commission Acts, since minimally that section registers violations of the Clayton and Sherman Acts.").

95. See discussion supra Part I.C.2.

96. As I have noted, the antitrust agencies and the Federal Communications Commission have often diverged in their understandings of competition because the FCC sees competition as reflecting a desired market structure, rather than a process that incentivizes firms to respond to consumer demand. See Maureen K. Ohlhausen, Antitrust over Net Neutrality: Why We Should Take Competition in Broadband Seriously, 16 COLO. TECH. L.J. 119 (2016). Antitrust economists and lawyers do not share that view of "competition."
deemed problematic flow from impaired market constraints. Though well-intentioned, such enforcement efforts are a profound error.

C. Pandora’s Box: Making Sense of Section 5 of the FTC Act

Section 5 provides, in relevant part, that “[u]nfair methods of competition in or affecting commerce . . . are hereby declared unlawful.” That phraseology drives the FTC’s enforcement mandate, but its ambiguity is problematic. Fairness is neither a workable nor a coherent organizing principle for antitrust policy. It is a subjective term, inviting impassioned claims of injury by firms that think themselves wronged for reasons that may go beyond injury to market forces. A free-floating source of liability, untethered to limiting principles, would be problematic.99

1. Section 5 Protects the Competitive Process

I submit that substantial harm to the competitive process—the hallmark of every antitrust violation—is the key ingredient.100 At a high level of abstraction, there appears to be consensus within the FTC and the larger antitrust community that a standalone section 5 violation requires harm to competition.101 The problem is that the FTC has not always rigorously applied that condition. Rather than construe “injury to the competitive process” as the Sherman Act requires, the Commission has substituted disfavored market outcomes as its target in a few matters.102 If the FTC perceives that certain conduct may raise price, diminish choice, encumber a valuable activity, or otherwise yield negative market outcomes, it has found that the harm-to-competition condition is satisfied. That is wrong because it allows the FTC to condemn acts that do not lift demand- or supply-side limits on market power.

Unfair methods of competition should not capture acts that tenuously affect the competitive process. We occupy an uncertain world in which an array of

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97. See Ohlhausen, supra note 1, at 3 n.5, 11-13; infra Part II.C.
99. Comments of Robert Pitofsky, Transcript of Fed. Trade Comm’n Workshop on Section 5 of the FTC Act as a Competition Statute 130 (Oct. 17, 2008), https://www.ftc.gov/sites/default/files/documents/public_events/section-5-ftc-act-competition-statute/transcript.pdf [https://perma.cc/DV9A-4ZXH] (“[M]y proposal was for where the practice causes very substantial harm, the remedy does not affect efficiencies or other good business reasons, and a clear line can be developed that allows predictability.”).
102. See Ohlhausen, supra note 1, at 11-13.
probabilistic outcomes flow from any given action. We only prohibit actions that we know are likely to reduce consumer welfare by lifting a market constraint on behavior. Even presumptively beneficial conduct bears some small propensity to work future mischief. For instance, low pricing by a dominant firm generally benefits consumers, though game-theoretic models show that, under certain strict assumptions, it could potentially harm competition.\(^{103}\) The Sherman Act, however, does not prohibit low prices in themselves.\(^{104}\) Even if less-efficient rivals cannot match above-cost rates and thus bleed market share, no liability follows.\(^{105}\) Further, even below-cost “predatory pricing” will not violate section 2 unless the dominant firm enjoys a “dangerous probability” of recouping its losses.\(^{106}\)

Hence, properly understood, section 5 liability requires injury to the competitive process in the same way that the Sherman Act does, though neither statute always requires proof of actual injury to the competitive process. As in section 1 cases involving anticompetitive acts lacking redeeming virtue, one can sometimes presume harm to competition.\(^{107}\) Hence, there is a general consensus that section 5 captures horizontal invitations to collude, even though the recipient of the invitation declines it and thus fails to enter into an anticompetitive agreement that violates section 1.\(^{108}\) That is a largely uncontroversial proposition, likely because the Type I error cost of banning conduct that is simply one “yes away from a felony” is minimal.

I now turn to consider the limited case law to date bearing on standalone section 5 violations. My goal is to convince the reader that, despite broad judicial pronouncements in decades past about the scope of section 5 liability, harm to


\(^{105}\) Id. at 223 (“[W]e have rejected elsewhere the notion that above-cost prices that are below general market levels or the costs of a firm’s competitors inflict injury to competition cognizable under the antitrust laws.”) (citing Atl. Richfield Co. v. USA Petroleum Co., 495 U.S. 328, 340 (1990)).

\(^{106}\) Id. at 222 (quoting Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447, 455 (1993)).

\(^{107}\) See, e.g., InterVest, Inc. v. Bloomberg, L.P., 340 F.3d 144, 158-59 (3d Cir. 2003) (“Under the ‘per se’ standard, conduct that is ‘manifestly anticompetitive’ or ‘would always or almost always tend to restrict competition,’ . . . is conclusively presumed to unreasonably restrain competition . . . .” (first ellipses in original) (quoting Rossi v. Standard Roofing, Inc., 156 F.3d 452, 461 (3d Cir. 1998))).

competition remains a condition of liability. A prominent development in this regard, of course, is the FTC’s 2015 statement of enforcement principles, from which I dissented. ¹⁰⁹ I focus, however, on the input to date of the federal courts.

2. The Courts Explore the Limits of Section 5

Historically, section 5 arguably enjoyed such a broad judicial interpretation that the statute could reach conduct that did not even violate the spirit of the antitrust laws. ¹¹⁰ In Sperry & Hutchinson, the Supreme Court suggested in the early 1970s that the FTC Act “empower[s] the Commission to proscribe practices as unfair or deceptive in their effect upon consumers regardless of their nature or quality as competitive practices or their effect on competition.”¹¹¹

On one reading, that language would allow the FTC to employ its authorizing legislation as a morality statute. Business conduct deemed odious or otherwise not to the FTC’s liking could violate section 5, even if it promoted competition, enhanced efficiency, or benefited consumers. That would be a perverse interpretation, of course, permitting an enforcement agenda at odds with sound antitrust policy. I am quite sure that the courts would not acquiesce today in the face of any effort by the Commission to do so. Despite the Supreme Court’s expansive language, subsequent appellate decisions have held the FTC to its proof and required evidence of harm to competition.

I submit that, today, conduct must violate the spirit of the antitrust laws, and more, must be an unfair method of competition. No doubt buoyed by the perceived free rein handed it by the Supreme Court, the FTC tested the bounds of its authority in the 1980s, only to be firmly and repeatedly rebuked.¹¹² If the courts had broadly interpreted Sperry & Hutchinson to dispense with harm to competition, they would not have reached those results. More importantly still, the question of how far the courts would let the FTC go in constraining the bounds of its section 5 authority does not answer how the FTC should interpret that authority in the twenty-first century. As an agency at the forefront of antitrust thought leadership, the FTC must interpret section 5’s “unfair methods of competition” prong using the most rigorous, modern economic learning.

The case law supports the proposition that harm to competition defines section 5’s reach. Appellate courts in the 1980s decided three standalone section 5


¹¹¹. Id. at 239; see also FTC v. Indiana Fed’n of Dentists, 476 U.S. 447, 454 (1986) (“The standard of ‘unfairness’ under the FTC Act is, by necessity, an elusive one, encompassing not only practices that violate the Sherman Act and the other antitrust laws, but also practices that the Commission determines are against public policy for other reasons.”) (internal citations omitted).

¹¹². E.I. du Pont de Nemours & Co. v. FTC, 729 F.2d 128 (2d Cir. 1984); Boise Cascade Corp. v. FTC, 637 F.2d 573 (9th Cir. 1980); Official Airline Guides, Inc. v. FTC, 630 F.2d 920 (2d Cir. 1980).
cases, in each instance finding that the FTC had exceeded the bounds of its authority. Those decisions establish that section 5 is indeed bounded and that the FTC may not stray from conduct that degrades the competitive process.

In the first such matter, *Boise Cascade*, the FTC ruled that an industry-wide practice for computing freight charges, despite a lack of express collusion, was an unfair method of competition because the conscious parallelism stabilized prices for plywood. The Ninth Circuit granted the petition for review, finding no proof of anticompetitive effects. It rejected the argument that “a different result is warranted by the unique features of the FTCA,” holding that “the Commission must find either collusion or actual effect on competition to make out a section 5 violation for use of delivered pricing.” Importantly, the panel concluded that, absent overt conspiracy, “to allow a finding of a section 5 violation on the theory that the mere widespread use of the practice makes it an incipient threat to competition would be to blur the distinction between guilty and innocent commercial behavior.”

What to make of *Boise Cascade*? Its inconsistency with an unbounded construction of section 5 is striking. Tacit collusion is a problem for antitrust policy because it can harm consumers every bit as much as price-fixing cartels. Yet, standing alone, it is outside the reach of the Sherman Act. The reason it does so is instructive: consciously parallel pricing involves no conduct that harms the competitive process, whether by lifting a market constraint or otherwise. It simply reflects a condition in which firms maximize profit based on what they perceive to be the likely price- or output-decisions of their rivals. Here, again, we have an example of negative market outcomes that do not flow from injury to competition. The solution to tacit collusion lies in market forces themselves, which ought to attract entry in response to supracompetitive profits.

Some might argue that tacit collusion is the kind of Sherman Act loophole that section 5 would properly fill. Indeed, that seems to have been the view of the FTC during part of the time between 1940s and the events leading up to *Boise Cascade*. That view is wrong because it violates the principle at the heart of this Article: antitrust law protects the competitive process. It does not ban negative market outcomes in themselves or require conduct to improve consumer welfare. The Ninth Circuit’s decision was telling because it rejected a construction of section 5 that would allow the FTC to impose liability without even showing that the

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113. 637 F.2d at 573.
114.  Id. at 579 (“There is a complete absence of meaningful evidence in the record that price levels in the southern plywood industry reflect an anticompetitive effect.”).
115.  Id. at 582.
116.  Id.
117.  See generally Ohlhausen, supra note 100, at 4 n.11 (“In the 1970s, using authority under section 5 haphazardly and without meaningful standards, the Commission embarked on a vast enterprise to transform entire industries.”) (citing Timothy J. Muris and Paloma Zepeda, *The Benefits, and Potential Costs, of FTC-Style Regulation in Protecting Consumers*, 8 COMPETITION L. INT’L 11, 14 (2012)).
parallel conduct at issue actually fixed or stabilized prices.\textsuperscript{118} Yes, the court declined “finally to resolve whether conscious parallelism might ever support a section 5 violation,” though given the opinion’s larger discussion it seems unlikely that the panel would have answered yes.\textsuperscript{119}

Later the same year, the Second Circuit decided \textit{Official Airline Guides}.\textsuperscript{120} There, the FTC challenged an airline-flight-schedule publisher for refusing to include information about connecting flights by commuter airlines. The Official Airline Guide was then the industry’s “bible,” on which travel agents, firms, and the public relied for planning flight schedules.\textsuperscript{121} By excluding commuter airlines, the OAG owner competitively disadvantaged them.\textsuperscript{122} The FTC found that the owner’s arbitrary refusal to publish the connecting flight schedules was an unfair method of competition under section 5.\textsuperscript{123} The critical fact was that, while the OAG owner may have been a monopolist in publishing airline schedules, it did not compete with commuter or other airlines.\textsuperscript{124}

The OAG owner, then, obviously could not monopolize airline markets under section 2.\textsuperscript{125} Nevertheless, the FTC argued that the refusal to publish harmed the carrier markets in which commuter airlines sought to compete. The Second Circuit noted the great judicial deference given the FTC, as an expert agency, about what constitutes an unfair method of competition.\textsuperscript{126} On the facts at hand, the court granted that the FTC had “some justification” in arguing that “the arbitrary refusal of a monopolist to deal leaves the disadvantaged competitor, even though in another field, with no recourse to overcome the disadvantage . . . .”\textsuperscript{127} In other words, the FTC’s implicit position was that a gap in the Sherman Act’s coverage possibly had negative implications for consumers.

That context would have allowed the Second Circuit to deny the petition for review if it literally construed \textit{Sperry & Hutchinson}’s charge that the FTC is free to condemn, as unfair methods of competition, practices that breached neither the letter nor the spirit of the antitrust laws. But the court faced a factual record arguably showing a violation of the spirit of the Sherman Act. Indeed, the panel

\begin{itemize}
  \item \textsuperscript{118} \textit{Boise Cascade}, 637 F.2d at 577 ("We thus hold that in the absence of evidence of overt agreement to utilize a pricing system to avoid price competition, the Commission must demonstrate that the challenged pricing system has actually had the effect of fixing or stabilizing prices. Without such effect, a mere showing of parallel action will not establish a section 5 violation.").
  \item \textsuperscript{119} \textit{Id.} at 576.
  \item \textsuperscript{120} \textit{Official Airline Guides, Inc. v. FTC}, 630 F.2d 920 (2d Cir. 1980).
  \item \textsuperscript{121} \textit{Id.} at 921.
  \item \textsuperscript{122} \textit{Id.} at 922.
  \item \textsuperscript{123} \textit{Id.} at 922-23.
  \item \textsuperscript{124} \textit{Id.} at 926 ("Donnelley, though possibly a monopolist in the airline schedule publishing industry, admittedly had no anticompetitive motive or intent with respect to the airline industry and is engaged in a different line of commerce from that of the air carriers.").
  \item \textsuperscript{125} Indeed, the FTC itself acknowledged that "[t]he question we are presented with is outside the mainstream of law concerning monopolies and monopolization." See \textit{id.} at 925.
  \item \textsuperscript{126} \textit{Id.} at 927.
  \item \textsuperscript{127} \textit{Id.}
\end{itemize}
suggested that it would have sustained an antitrust violation had the OAG owner competed with the commuter airlines. The question was “whether Donnelley as a monopolist had some duty under section 5 of the FTC Act not to discriminate unjustifiably between the competing classes of carriers so as to place one class at a significant competitive disadvantage.”

The Second Circuit found no section 5 violation. It rejected the notion arguably implicit in Sperry & Hutchinson that the FTC could properly “delve into . . . ‘social, political, or personal reasons’ for a monopolist’s refusal to deal.” Even if a monopolist’s decision “arguably affects competition in another industry,” that fact is irrelevant to the antitrust laws, even under section 5. In part, the panel was concerned that the FTC’s rule would lead the agency and courts down the rabbit hole, given the absence of an obvious limiting principle. Firms subject to the FTC’s section 5 jurisdiction would see their decisions subject to second-guessing by the Commission. Ultimately, the fact that a practice—even by a monopolist—harmed some firms and injured consumers in the short run does not sustain a section 5 violation. The Second Circuit hence rejected the proposition that “if the only supermarket in town decides to stock Birdseye vegetables but not Green Giant vegetables, the FTC would be able to require it to stock Green Giant vegetables if it were to find Green Giant competitively disadvantaged.” In the broader antitrust context, this case illustrates that imposing mandatory dealing obligations on firms, even monopolists, may reduce competition itself by diluting incentives.

Finally, in 1984, the Second Circuit in E.I. du Pont again repudiated the FTC’s efforts to go beyond the Sherman Act. There, the FTC attempted once more to make an antitrust problem out of oligopolistic interdependence. Targeting the concentrated lead antiknock gasoline market, the Commission found that four competitors had violated section 5 by independently engaging in certain facilitative practices. All four firms sold their products at a price that included transportation costs, while two firms gave advance notice of price increases and used “most favored nation” clauses. The FTC determined that those practices,

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128. Id. at 925, 927 (observing that “the FTC with some justification states that the arbitrary refusal of a monopolist to deal leaves the disadvantaged competitor, even though in another field, with no recourse to overcome the disadvantage”, but distinguishing cases in which “a monopolist [was] seeking to preserve its own monopoly”).

129. Id. at 925.

130. Id. at 927.

131. Id. at 925.

132. Id. (“[T]he Commission’s own example in footnote 38 of its opinion of a monopolist newspaper refusing to take advertisements from a particular cigarette company because of the style of prior advertisements or the political views of its president shows just how far the Commission’s opinion could lead us.”).

133. Id. (“[W]e think enforcement of the FTC’s order here would give the FTC too much power to substitute its own business judgment for that of the monopolist in any decision that arguably affects competition in another industry.”).

134. Id.


136. Id. at 134–35.

137. Id. at 133.
though not overtly collusive, stabilized prices by enabling tacit collusion.\textsuperscript{138} The homogeneous nature of the products involved, uniform pricing, stable market shares, high profits, and above-marginal-cost pricing despite excess capacity all hinted at successful barometric price leadership.\textsuperscript{139}

Despite reiterating its deference to the Commission’s views on the reach of section 5 and its repeated embrace of Sperry & Hutchinson, the Second Circuit granted the petition for review. Its rationale reflects this Article’s core premise: to violate antitrust law, including section 5, a practice must harm the competitive process. Such a limiting principle is crucial, of course, because the “term ‘unfair’ is an elusive concept, often dependent upon the eye of the beholder.”\textsuperscript{140} The panel embraced a core argument expressed in this Article: the corruption of market forces defines an antitrust violation. Unpalatable market outcomes, which may or may not result from injury to competition, do not do so. In the Second Circuit’s words, “Section 5 is aimed at conduct, not at the result of such conduct, even though the latter is usually a relevant factor in determining whether the challenged conduct is ‘unfair.’”\textsuperscript{141} The court found insufficient evidence that the impugned conduct “significantly lessened competition in the antiknock industry or that the elimination of those practices would improve competition.”\textsuperscript{142} Hence, there was no violation.

Going the other way would allow the FTC to use section 5 as a regulatory tool to recalibrate industry structure, whether by ex ante rulemaking or ex post enforcement. The Second Circuit disclaimed any such possibility, rejecting the notion that the FTC could legitimately, “whenever it believed that an industry was not achieving its maximum competitive potential, ban certain practices in the hope that its action would increase competition.”\textsuperscript{143}

Since that trio of cases—Boise Cascade, Official Airline Guides, and E.I. du Pont—no U.S. Court of Appeals has scrutinized a standalone section 5 violation based on an unfair method of competition.\textsuperscript{144} In each case the FTC lost either because it did not substantiate its theory of anticompetitive harm or could not cabin the repercussions of its proposed interpretation of section 5. Jurisprudence surrounding “unfair methods of competition” remains incomplete and ambiguous. The 1980s cases make clear, however, that the FTC does not enjoy free reign to find companies liable. Standalone section 5 theories that purport to condemn behavior that does not harm the competitive process itself should—and under a fair reading of Boise Cascade, Official Airline Guides, and E.I. du Pont will—flounder.

In my view, the right approach is to interpret “unfair” to mean conduct that

\textsuperscript{138} Id. at 135.
\textsuperscript{139} Id.
\textsuperscript{140} Id. at 137.
\textsuperscript{141} Id. at 138.
\textsuperscript{142} Id. at 141.
\textsuperscript{143} Id. at 138–39.
substantially and disproportionately harms competition. That includes—and is typically limited to—behavior that violates the Sherman Act. We should step beyond the Sherman Act with great care. To go further, proscribing actions that benefit consumers but entail some sneaky or nefarious quality, would be to expand liability beyond competition issues.

It is one thing to agree in the abstract that section 5 requires harm to competition. It is another to apply that principle in practice. With respect, that is where I think today’s Commission has gone astray. It pays homage to the need for injury to competition. Yet, faced with business conduct that is not to its liking—but that does not flow from harm to the competitive process—the FTC has wielded its unfair competition weapon regardless. Part IV addresses that phenomenon in detail.

III. HOW ANTITRUST ENFORCERS MISSED THE MARK IN THE STANDARD-SETTING ARENA

A. Overview

Competition authorities have made the standard-setting process one of their most urgent priorities. Critical to the new economy, standards combine myriad technologies into a uniform specification that facilitates production creation and interoperability. Opportunistic conduct is an ever-present danger, however, because of how industries adopt and implement standards. Most firms participate in good faith in the standard-setting process, due to reputational and market constraints. After all, standard setting is a repeat game. But members might sometimes “ambush” standard implementers after the fact to extract supra-normal royalties. Antitrust enforcers in America and abroad have taken extraordinary measures to address that concern, especially prohibiting the owners of RAND-encumbered SEPs from even asking a court to enjoin infringers.146

145. See Ohlhausen, supra note 1, at 12; cf. E.I. du Pont, 729 F.2d at 139; Official Airline Guides, Inc. v. FTC, 630 F.2d 920, 927-28 (2d Cir. 1980); Boise Cascade Corp. v. FTC, 637 F.2d 573, 582 (9th Cir. 1980).

Surreptitious conduct can take various forms. Standard-setting organization (SSO) members might conceal their patented technologies, encourage industries to adopt standards that infringe, and then demand payment by those implementing the standards. Others may falsely promise to license their SEPs on RAND terms, only later to renege and to demand outsize royalties. In particular, owners of SEPs may capitalize on industry lock-in, which makes it difficult for technology users to abandon their adopted standard. As a result, an SEP owner could theoretically force licensees to pay greater royalties after lock-in than it could have before the SSO chose the infringing standard. That is the concept of “hold-up.” As explained below, however, a condition of hold-up is that courts would be likely to award the SEP owner greater royalties ex post than what the patentee and technology user would have negotiated before standard adoption.

Other dangers in standard setting include hold-out, where standard implementers refuse to bargain in good faith for an SEP license. Related to that phenomenon is reverse hold-up, as when technology users exert monopsonistic leverage to suppress the royalties that they will agree to pay. As a result, the SEP owner may receive suboptimal compensation for use of its technology. Of course, that phenomenon can arise only if a patentee cannot secure reasonable royalties in court. In practice, however, accused infringers can draw out proceedings, litigation is expensive, and cost-shifting is the exception rather than the rule in U.S. law. Furthermore, it is often cost prohibitive to litigate every patent in a large portfolio. The final danger implicated by standard setting is the most obvious: in collaborating in setting standards, rivals may try to collude secretly on price or output in the downstream product market.

Although the standard-setting process works well, some accusations of wrongdoing have occurred. Antitrust enforcers have responded in kind. In the United States, the FTC has been particularly active. In the 1990s and 2000s, it sued...

Zhishichuan De Fanlongduan Zhifa Zhinan (Di Qi Gao) (关于滥用知识产权的反垄断执法指南(第7稿)) [Guidelines for Anti-Monopoly Enforcement against Abuse of Intellectual Property Rights (7th draft)] (released by the St. Admin. for Indus. & Commerce, Feb. 4, 2015), ch. 6, art. 28; KFTC IP Guidelines, supra note 4, III.5.A. On the U.S. response, see infra notes 152-153.

147. For an influential article explaining the economic theory of holdup, see Lemley & Shapiro, supra note 7.

148. It would seem unlikely that courts would facilitate hold-up in this way, not least in light of recent case law emphasizing that royalty determinations for SEPs, whether RAND-encumbered or not, must exclude value tied to the patent’s incorporation in a standard. See CSIRO v. Cisco Sys., Inc., 809 F.3d 1295, 1305 (Fed. Cir. 2015); Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1235 (Fed. Cir. 2014).


Dell, Rambus, and Unocal for deceiving SSOs about the nature of their patent holdings or the circumstances in which they would license technology to users.152 More recently, the FTC has found reason to believe that N-Data, Robert Bosch, and Google-Motorola Mobility violated section 5 by reneging on RAND commitments.153 The last three matters differ in that the FTC did not allege that the patentee deceived the SSO. Rather, the Commission alleged that attempted “hold-up” of competitors in breach of a RAND promise is an unfair method of competition.154 To round out the overview of relevant enforcement, in 2012, the Antitrust Division opened (and subsequently closed) an investigation of Samsung for trying to exclude certain Apple products from the U.S. market using RAND-limited SEPs.155 Hold-up was again the predominant concern. Across the Atlantic, the European Commission investigated Motorola Mobility and Samsung for suing for injunctive relief on similarly encumbered patents.156

Commentators have spilled much ink analyzing those actions, which received much attention given the smartphone wars from which they arose. Regulators around the globe came under pressure to find a solution to the escalating litigation. Ultimately, the FTC allowed holders of RAND-encumbered SEPs to try to enjoin only those technology users that were unwilling licensees.157 The circumstances surrounding the FTC’s Google-Motorola investigation, however, suggest that a technology user would be “unwilling” only in outlier circumstances.158 In practice,
then, the FTC has adopted a "no injunction rule" for SEP owners who have agreed to license on RAND terms. This Part argues that there is no basis in competition law for adopting such a rule. Meanwhile, the European Court of Justice approved a procedure by which SEP owners could establish that a technology user was unwilling to pay a reasonable royalty and hence was properly subject to injunction.\textsuperscript{159} As noted, the Justice Department closed its investigation in 2014 after Samsung failed to exclude certain Apple products and agreed not to seek similar injunctive relief.\textsuperscript{160}

Many of those enforcement actions contradict sound antitrust policy. A patentee may harm competition and hence violate antitrust law by deceiving an SSO about its patent holdings or the terms on which it will license them. But that holds true only if that conduct led the SSO to choose the patentee’s technology over an alternative, thus eliminating a competitive constraint in an upstream technology-licensing market. If technologies A and B are substitutes that vie for inclusion in a standard, the false promise by the owner of A to license on RAND terms may lead the SSO to reject B in favor of A. In that setting, the deception harms the competitive process. Similarly, if the SSO would not have adopted the standard at all but for the RAND promise, that false assurance would eliminate a constraint in the technology market. Absent such exclusion, there is no harm to the competitive process and hence no antitrust issue. Any injury to competition or competitors in the downstream product market represents the exercise of market power inherent in a patented technology for which no good substitute exists.

The Google, Robert Bosch, and N-Data matters missed that core point. To be sure, an SEP owner that reneges on its promise to license on RAND terms may commit an actionable breach of contract.\textsuperscript{161} But that breach does not necessarily create an antitrust problem, even if price rises or output falls in the downstream market as a result. As Part II explained, market outcomes do not themselves define an antitrust violation. It is corruption of a competitively imposed market constraint that does so. Hence, if competition from a substitute technology led an SEP owner to agree to license on RAND terms so that its technology would feature in the standard, then violating the RAND promise may complete an antitrust violation.\textsuperscript{162} But if a patentee voluntarily encumbered its freedom through a RAND guarantee, even though no alternative to its technology existed, its subsequently reneging has no antitrust significance.\textsuperscript{163} Absent some alternative in the upstream technology

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\textsuperscript{159} Case C-170/13, Huawei Tech. v. ZTE Corp., 2015 E.L.R. I-477.

\textsuperscript{160} See Case AT.39939—Samsung—Enforcement of UMTS Standard Essential Patents, supra note 146.

\textsuperscript{161} See, e.g., Microsoft Corp. v. Motorola, Inc., 795 F.3d 1024 (9th Cir. 2015); Realtek Semiconductor Corp. v. LSI Corp., 946 F. Supp. 2d 998 (N.D. Cal. 2013); Apple, Inc. v. Motorola, Inc., 869 F. Supp. 2d 901, 913-14 (N.D. Ill. 2012).

\textsuperscript{162} Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 314 (3d Cir. 2007); see also Rambus Inc. v. FTC, 522 F.3d 456, 466 (D.C. Cir. 2008).

\textsuperscript{163} See Rambus, 522 F.3d at 466.
market, a patent confers monopoly power that the owner is free to enjoy under antitrust law. The patentee may limit that freedom by agreement, of course, but repercussions for breach lie within the law of contracts.

The FTC missed those critical insights in its enforcement efforts in the standard-setting arena. The standout culprit is section 5’s amorphous unfair competition provision, which the FTC has failed to define rigorously. The price of antitrust agencies’ intervention in the standard-setting space has been the integrity of competition law itself. The lack of analytic rigor is apparent to anyone reading the FTC’s complaints in Google, Robert Bosch, and N-Data. The Commission did not allege any competitive alternatives to the asserted SEPs that the relevant SSO could have adopted instead. It identified no anticompetitive effects, but merely stated that certain negative market outcomes were “likely” to follow. Allegations about market power, like others in the complaints, were conclusory. The FTC could dispense with those fundamentals because it alleged standalone section 5 violations, rather than Sherman Act violations. Such laxity with economic fundamentals is inconsistent with the ideals of modern competition enforcement.

This Article’s core thesis is that antitrust enforcers should protect the competitive process alone. Antitrust opposes conduct that degrades competition by removing market constraints posed by substitute products, services, or technologies. As Part II explained, negative market outcomes flow from harm to the competitive process and can impose the injury needed for private plaintiffs to have antitrust standing. Yet high prices and other perceived market imperfections in themselves shed no light on antitrust issues. The cost of an overbroad antitrust rule in the standard-setting space—one that effectively prevents SEP owners from even asking for injunctions—is hold-out and patentee undercompensation. That is a danger that antitrust agencies have overlooked.

This Part explores the issues associated with the assertion of RAND-encumbered SEPs. It begins with some contextual remarks before pivoting to circumstances in which misconduct by SEP owners can indeed harm the competitive process and thus properly trigger antitrust liability. It addresses the FTC’s and other agencies’ more recent enforcement efforts, which go beyond anticompetitive conduct in the form of deception of an SSO to tackle requests for relief alone. It shows that such behavior does not in itself lift a competitive constraint on market power or otherwise undermine competition.

B. Standard Setting and Technology Licensing in New-Economy Industries

1. The Value of Standardization

Today's leading technology firms design intricate, multi-component products that must seamlessly interact with one another. The process is challenging. Companies must overcome network-coordination difficulties in engineering rival products, which could function using an array of alternative—but incompatible—technologies. Sometimes “standards wars” between rival, proprietary systems break out, leading a de facto standard to emerge from a winner-takes-all contest. Famous examples include Blu-Ray v. HD-DVD and VHS v. Betamax. The result is a closed system that the prevailing owners control. More often—and typically more efficiently—industries choose common standards, collaborating on optimal specifications for product designs and picking the best technologies for next-generation products. Electrical devices sold in America use common plug sockets, while mobile phones can “speak” with one another. In both of these cases and countless more, the reason lies in industry standards.

SSOs are the private industry groups that adopt standards on a consensual basis. Thousands of SSOs exist in fields spanning from agriculture to wireless. SSOs foster interoperability, facilitate competition, avoid duplicative investment in inconsistent communications protocols and technological designs, and promote competition in product markets. Prominent examples include IEEE, which has published more than 1,600 standards in the field of electrical engineering, computer science, and electronics;166 ETSI and ITU, which have published thousands of telecommunications standards;167 W3C, which adopts open standards governing the Internet;168 and JEDEC, which releases standards for microelectronics.169

Intellectual property is a recurring issue for SSOs and their members. Standards can implicate thousands of potentially patent-eligible technologies. In the mobile-telephony space, for example, RPX has estimated that a quarter of a million active patents may exist.170 For 3G standards like GSM, CDMA, and UMTS and

168. About W3C , WORLD WIDE WEB CONSORTIUM (May 18, 2017), http://www.w3.org /Consortium [https://perma.cc/M5W7-7LDY].
170. Registration Statement (Form S-1) filed by RPX Corp., SEC. & EXCH. COMM’N (Sept. 2,
4G standards like LTE, a single standard may contain hundreds of pages of information. Many thousands of patents can thus read on various aspects of a standard. Each patent that claims any one of the myriad technologies imbedded in the adopted protocol is thus “standard essential.” To adopt a standard without infringing proprietary technologies, then, a manufacturer must obtain the necessary licenses.

2. The Economics of Patent Licensing

The competitive dynamics in which patent licensing negotiations occur between SEP owners and standard implementers are, of course, critical. Typically, an SSO has a wide degree of choice in how it crafts a particular standard, because an industry can achieve its sought functionalities through myriad iterations. For a particular component of a standard, an SSO may have several design choices between technologies, some of which may be open (nonproprietary) and others patented. Under competition, owners of functionally interchangeable processes would compete with each other and with open technologies for adoption in the standard. Such adoption opens up the technology to widespread industry usage, which may in turn be lucrative. If a nonproprietary method is a good alternative to patented technologies, however, the competitive royalty may be close or equal to zero. So, too, the availability of fungible patented processes may result in Bertrand competition with prices again resulting in zero.

In some situations, however, one technological solution may be superior. In that case, its owner would command a royalty rate reflecting its marginal value vis-à-vis other alternatives. Finally, situations may arise in which a core technology simply has no substitute at all. Then, the SEP owner is a monopolist. If it maximizes profit in licensing its technology, then it will charge a monopoly royalty. Some SSO members, however, are repeat players that realize much of their revenue from selling products in the downstream market. Reputational constraints and fear of spurring royalty increases across other technologies embedded in the standard may lead some SEP owners to license their technologies at below-market rates. Of course, that is not a rule or even a general case, but it bears noting as part of the realities of the incentives under which SSO members operate.

One might imagine that, before choosing and then adopting a standard, technology users would negotiate the requisite patent licenses. Such ex ante licensing—i.e., contracting that occurs before an SSO picks a standard—would

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171. Accord Ericsson, Inc. v. D-Link Sys., Inc., 773 F.3d 1201, 1233 (Fed. Cir. 2014) (“When a technology is incorporated into a standard, it is typically chosen from among different options.”).

172. Cf. id. (“This is not meant to imply that SEPs never claim valuable technological contributions. We merely hold that the royalty for SEPs should reflect the approximate value of that technological contribution, not the value of its widespread adoption due to standardization.”).
reflect the competitive process described above. Owners of substitute technologies would vie for the opportunity, by trying to offer a price-quality combination superior to that of their rivals. SSOs faced with excessive royalty demands could often redesign the relevant part of the standard to use a noninfringing or more competitive technology, thus limiting the patentees’ market power. Meanwhile, the owners of truly superior technologies would command significant royalties that reflect the unique value that their claimed processes offer. With licenses in place, and a clearing position thus established, SSO members could then implement the standard with full knowledge of the royalties that they would pay and to whom.  

Unfortunately, it does not work that way in the real world. SSOs focus on engineering solutions. They have little interest in hashing out the details of patent licensing. Their members deal with claimed infringement ex post—that is, after industry has adopted the infringing standard—by negotiating with alleged SEP owners at that point. SSOs do not ignore patent licensing issues entirely; however, they adopt IP rights policies that involve some combination of disclosure and licensing obligations. The specifics vary considerably between standard-setting bodies. But it is common for an SSO to require its members to disclose the patents of which they are aware that may read on candidate standards and to agree to license such patents on reasonable and nondiscriminatory (RAND) terms. Although some SSOs, most notably IEEE in 2015, have spelled out what RAND licensing entails, more typically the term goes undefined.

Before delving into the crucial issue of RAND-licensing promises, it is useful to explain how the SEP-licensing process changes when one moves from the ex ante to the ex post setting. As noted above, SSOs typically enjoy some choice in how they design a standard and which technologies they use. Once an SSO decides upon a particular standard and its members invest huge sums in implementing it through a new product range, those alternative design choices no longer exist. This is the phenomenon of lock-in, by which firms can no longer cheaply adopt an alternative, non-infringing standard when confronted with claimed infringement of a SEP. This is the point at which an SEP owner might extract greater royalties than it could have obtained through an ex ante negotiation.

That theoretical possibility, however, requires some examination. Ex ante, when a patentee approaches an SSO and its members, the array of alternative technologies cabins its demanded royalty. Ex post, that constraint on the patentee's market power does not exist. That is not the end of the analysis, though, because what happens next depends on what the patentee can credibly threaten. On its own, a patent is simply a document that allows its owner to ask the court or International


Trade Commission for a remedy for unauthorized practice of the claimed technology. When an SEP owner approaches a standard implementer ex post, the expected cost of an infringement lawsuit to the accused infringer is the ceiling for a royalty, assuming risk neutrality. A critical issue, then, is whether courts properly calculate damages for infringement. There is some debate on that question, and particularly on the propensity for lay jurors who struggle to understand complex technologies to award outlier damages. Nevertheless, it seems reasonable initially to suppose that courts endeavor to get it right. In the SEP context, the law now holds that reasonable royalties do not include any premium for the lock-in effects of adopting an infringing standard.\footnote{See CSIRO v. Cisco Sys., Inc., 809 F.3d 1295, 1304-05 (Fed. Cir. 2015).} The important point is that, if courts succeed on average in identifying the right royalty, then hold-up will not occur simply because a licensing dispute arises ex post instead of ex ante.

Injunctions are a complicating factor. If a patent relates to a candidate standard, but good substitutes are available to the SSO, the patentee will have little or no market power ex ante. That holds true even if the law protects its ownership right with a property rule (injunction). Ex post, however, the dynamic changes. If the law were to award injunctive relief and a technology user implements a standard without first securing a license, then the accused infringer is at the SEP owner's mercy ex post. In that setting, the patentee can credibly threaten to shut down the infringer's implementation of the standard. As a matter of economic theory, the SEP owner could rationally demand a royalty approaching the full private value of practicing the standard to the accused infringer. In that eventuality, a gulf could emerge between the "competitive" ex ante royalty and the ex post royalty secured under threat of injunction. That situation would involve hold-up.

Before we consider whether such hold-up is a plausible danger in practice, one must recognize a fact about that hypothetical: the change in market power realized by the SEP owner ex post is not a function of its conduct. Hold-up resulting from an ex post licensing dispute flows from the technology user's decision to proceed without first securing a license. The fact that an injunction allows the patent owner to extract punitive terms is no accident. It is the goal of protecting entitlements with a property rule. The aim is to induce those who would appropriate another's property to bargain for permission first. The prospect of a heavy sanction ex post induces voluntary bargaining ex ante. When a firm risks infringement by proceeding without a license, the fact that it is subject to a heavy royalty ex post does not necessarily implicate competition or antitrust law in itself.

Nevertheless, a property rule is not always the most efficient way to protect an entitlement. For example, when transaction costs rise to the point that ex ante bargain is infeasible, then imposing a punitive sanction on an infringer ex post will not spur licenses ex ante. It would bestow a windfall on the property owner. In the SSO context, the combination of the number of patented technologies, the difficulty of establishing which patents are essential, the fact of evolving standards under consideration, and above all the impetus for SSOs to get down to the business of solving technical problems results in high bargaining costs. Hence, in the standard-
setting world, it would be a mistake to make injunctions the default remedy. Doing so would simply encourage opportunistic behavior by SEP owners to “ambush” standard implementers ex post in the hope of extracting supranormal royalties. The courts recognize the danger. Ever since the Supreme Court’s 2006 decision in eBay, which held that injunctions are no longer a default remedy for infringement, owners of SEPs have struggled to enjoin standard implementers in federal court. That phenomenon may explain why some SEP owners have gone to the ITC, which cannot award damages, but can issue exclusion and cease-and-desist orders that have effects comparable to an injunction.

Yet, just because injunctions may sometimes facilitate hold-up does not mean that they always will or that they may not sometimes be an efficient remedy. There are two sides to a bargain, and depriving an SEP owner of injunctive relief affects the incentives of accused infringers. Absent the threat of an injunction, implementers know that they will only have to pay what a court orders them to pay. If the litigation process is protracted and the law does not adequately punish recalcitrance and strategic delay, standard implementers could postpone payment and hence reduce the value of SEP owners’ proprietary technology. The problem may be most acute where the SEP owner commands a large portfolio of patents relevant to an industry standard. It is rarely viable to litigate more than a small percentage of the patents in such a portfolio, meaning that technology users may get a free pass on the many infringed patents that the owner cannot afford to assert. Although a court will order the payment of reasonable royalties on those patents litigated to judgment, that outcome does nothing for the patents not in suit. The effective tool for a portfolio owner seeking to monetize a large portfolio is the threat of an injunction. Without it, large-scale patent licensing may be possible only at suboptimal royalties. This is the danger of hold-out, against which injunctive relief is a necessary tool.

Overall, this state of affairs means that SEP licensing raises complex economic questions and absolute positions on the propriety of injunctions and the prevalence of hold-up and hold-out are seldom right. I conclude this discussion with an important observation about hold-up, divorced from deception of an SSO. To the extent that it actually materializes and does so as a function only of the ex post timing of licensing negotiations, hold-up is a consequence of the law’s protection of property rights and an infringer’s decision to proceed without first securing all

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177. The Federal Circuit has held that there is no hard rule against enjoining infringers of RAND-encumbered SEPs, but nevertheless observed that “a patentee subject to FRAND commitments may have difficulty establishing irreparable harm.” Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1331-32 (Fed. Cir. 2014), overruled on other grounds by Williamson v. Citrix, Online, Inc., 792 F.3d 1339 (Fed. Cir. 2015). Indeed, courts generally approach requests by SEP owners for injunctive relief with skepticism. See, e.g., Microsoft Corp. v. Motorola, Inc., No. C10-1823, 2012 WL 5993202, at *6-7 (W.D. Wash. Nov. 30, 2012).
178. In some instances, courts have valued portfolios of RAND-encumbered SEPs. See Microsoft Corp. v. Motorola, Inc., 795 F.3d 1024 (9th Cir. 2015) (affirming the valuation of 26 SEPs). But there are limits to the number of patents for which a court or jury can realistically calculate reasonable royalties in one proceeding.
requisite licenses. It is not an antitrust issue in all cases.

3. **RAND-Licensing Promises and the Risk of Anticompetitive Hold-up**

In the last section, we saw that ex post licensing of standard-essential technology can raise hold-up dangers if the courts grant royalties exceeding the ex ante value of the patents to the standard. SSOs understand that the market dynamics of patent licensing are more efficient ex ante than ex post, but—as noted—they prefer not to get involved at that stage. Instead, they embrace patent-disclosure and licensing requirements that often include RAND-licensing promises. Although most SSOs have not historically defined RAND licenses, the emerging consensus today is that a RAND-licensing assurance “freezes” the SEP owner’s licensing freedom to what it could have commanded ex ante, before the SSO and industry adopted the infringing standard.179

It is important to understand that “RAND” is a nebulous concept even outside disputes about hold-up. “Reasonable” is conclusory, meaning different things to various people. Of course, one can bestow RAND with deeper meaning by equating the appropriate royalty to the outcome of a hypothetical ex ante negotiation. That approach is correct in economic theory. But it requires the reconstruction of a counterfactual that cannot be identified. In practice, courts try to calculate a RAND royalty by drawing parallels, for instance, to the royalties charged by similarly situated patent pools that license comparable technologies.180 Yet, such analogies will not always be available and the outcome of an ex ante bargain that never took place may sometimes be unknowable. There may be no reliable way to approximate the outcome of an ex ante bargain in all cases. In such situations, the RAND promise reduces to the reputational constraint that would bind the SSO member in any case. In other circumstances, however, a RAND promise may serve to cabin an SEP holder’s ex post market power, if only by making it less likely that a court will award injunctive relief.

The standard-setting process is guaranteed to produce patent licensing disputes. That is the inevitable consequence of punt ing on hard negotiations in favor of vague—and hence easy-to-secure—commitments to grant licenses on “reasonable” terms later. The world became familiar with those problems during the smartphone patent wars that kicked off in earnest in 2009. The antitrust question, however, is whether the making and breaking of RAND-licensing promises are themselves problems for competition policy. Here, we reach the core issue. The answer is that, to the extent that a RAND-licensing assurance limits ex post royalties, its evasion or violation does not in itself implicate antitrust law without additional conduct, such as deception of an SSO.

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179. See, e.g., Apple, Inc. v. Motorola, Inc., 869 F. Supp. 2d 901, 913 (N.D. Ill. 2012) (“The purpose of the FRAND requirements, the validity of which Motorola doesn’t question, is to confine the patentee’s royalty demand to the value conferred by the patent itself as distinct from the additional value—the hold-up value—conferred by the patent’s being designated as standard-essential.”), aff’d in part & rev’d in part, 757 F.3d 1286 (Fed. Cir. 2014).

180. See, e.g., Microsoft, 795 F.3d. at 1042-44.
Multiple technologies claim a technical function; the SSO will not include proprietary technologies absent a RAND promise.

Suppose that an SSO is working on a new high-speed wireless standard, one feature of which encrypts secure information sent between two mobile devices. The state of the art is such that multiple solutions are available to the standard-setting body. The pertinent technologies are P1, P2, and P3, all of which are reasonable substitutes for one another. Those three processes constitute a relevant technology market, such that the owners of P1, P2, and P3 should at least in theory compete with one another for licensing opportunities. The owners are members of the relevant SSO committee. Due to the dynamics explored above, however, the SSO does not negotiate an ex ante license with the owners of those technologies. Instead, it requires its members both to disclose relevant patents of which they are aware and to promise to license them on RAND terms.

a. Anticompetitive Concealment

The owners of P1 and P2 duly disclose their patents. Eyeing a lucrative opportunity, however, the P3 owner conceals its technology, falsely and deliberately certifying that it has no patents that may read on the candidate standard. It then lobbies the SSO committee to adopt the technological solution that infringes its patent. The SSO obliges, thinking that it is incorporating an equally effective, but nonproprietary, alternative to P1 and P2.

After the SSO adopts the new wireless standard and industry invests in adopting it in a new line of mobile handsets, the owner of P3 sues its competitors. In doing so, it demands large royalties and injunctive relief. This situation is likely an antitrust problem. Ex ante, the owner of P3 would have had little market power in licensing its technology because P1 and P2 are good substitutes. Competition would have limited royalty rates to low levels, even potentially to zero. The loss of competition here does not simply flow from standardization and market participants’ willingness to adopt a new protocol without first securing a license. Rather, the P3 owner harmed the competitive process by deceiving the SSO to abandon good alternatives in favor of P3.

A tricky consideration is whether hold-up is even possible here. The courts will likely reject the P3 owner’s extravagant requests for relief. The courts have in several cases awarded dramatically lower royalties than RAND-encumbered SEP owners had previously demanded. Nevertheless, good-faith implementers of the relevant standard are subject to the risk of hold-up (courts can make mistakes) and the cost of defending litigation to which they would not otherwise have been subject. Those costs may allow the owner of P3 to extract royalties exceeding what it could have obtained in an ex ante negotiation. That change in market power

flows from harm to competition in the upstream technology licensing market. It is no surprise, then, that the Third Circuit has recognized the possibility of a Sherman Act violation based on such conduct. 182

b. Intentionally False RAND Promise

Similar analysis applies if the owner of P3, instead of strategically concealing its proprietary rights and leading the SSO to adopt its technology, reveals its patent but falsely promises to license it on RAND terms. The key here is that the SSO would not incorporate P3 into the standard without a RAND-licensing assurance, such that the P3 owner’s intentionally false promise to license on those terms leads the SSO to drop P1 and P2 as competitive substitutes. Thus freed of competition, and with its technology adopted in next-generation mobile devices, the owner of P3 may exercise greater market power than would have been possible ex ante. If it demands monopoly prices exceeding the ex ante level—thus breaching its RAND promise—an antitrust violation may follow. Once more, that change in power is not simply a function of the standard-setting process, but arises from anticompetitive conduct that cause P1 and P2 no longer to constrain price in the relevant technology market. Here, too, the Third Circuit has recognized a plausible cause of action under the Sherman Act. 183

c. No False Promise, but the SEP Changes Hands

Now suppose that the owners of P1, P2, and P3 all act as model SSO members, disclosing their patents and agreeing to license all standard implementers on RAND terms. Based on a slight technological advantage, the SSO chooses P1. After the wireless industry adopts the new high-speed standard, however, the original owner of P1 assigns the technology to a different firm.

The new owner of P1 decides to monetize the technology and demands monopoly royalties, on pain of threatened injunction, from all the firms in the market. Assume that the demanded terms are, in fact, significantly greater than the competitive royalty rate in the ex ante technology market and hence inconsistent with RAND licensing. Is there an antitrust violation? Absent collusion between the former and new owners, the answer is no. The original, SSO-member owner of P1 did not engage in any anticompetitive conduct. The SSO selected P1 over alternative technologies pursuant to competition on the merits. The problem is that neither the SSO, nor its members, negotiated licenses to P1 before implementing the new standard. Nor did they contractually protect themselves against alienation of RAND-encumbered SEPs. Does the new owner of P1 commit anticompetitive conduct? No. Any market power that it exercises flows from the SSO’s voluntary and informed adoption of the technology. No deception led the SSO to pick P1 over substitute processes.

183. Id.
This situation may appear to be a gaping loophole. But that view holds true only if one construes antitrust as a market cure—all that can regulate behavior to ensure preferred market outcomes. As Part II explored in detail, that is not the case. Antitrust protects the competitive process itself. If harm to consumers in the form of higher prices, lower output, or diminished choice or quality ensues from behavior that does not lift competitive constraints on market power, then it is not an antitrust issue. In the instant hypothetical, there may be a solution to the potential hold-up, but the answer lies in contract law rather than antitrust. If the RAND-licensing promise encumbers P1 and travels with it, standard implementers may be third-party beneficiaries of that promise and entitled to sue for its breach. But it is not an antitrust problem, whether under the Sherman Act, Clayton Act, or section 5. Any harm simply does not flow from anticompetitive conduct.

As I discuss below, over the correct dissenting views of then-Chairman Majoras and then-Commissioner Kovacic, the FTC made precisely this error in its 2008 N-Data decision.

d. Only One Technological Solution Is Available to the SSO

Finally, we encounter the important situation where just one solution exists for a particular function in the candidate standard. In that case, the relevant technology-licensing market is a monopoly, allowing the patentee to charge supracompetitive royalties. Or it may be that some alternatives exist, but they are not good options, meaning that the patentee nevertheless enjoys significant market power. We shall focus on the former case, but similar principles apply to the latter hypothetical, albeit with some room for possible antitrust implications.

Consider what happens when an SSO encounters a “must-have” technology. In that setting, the choice is either to adopt the standard with that technology or to abandon the standard-setting process.

i. No RAND-Licensing Guarantee

The SSO chooses to adopt the monopolist-licensor’s technology into its standard, which the industry then adopts into a new product line. The SEP owner does not participate in the standard-setting process and does not promise to license on RAND terms. If the SEP owner later demands large royalties and threatens to enjoin those technology users that do not pay up, is there an antitrust problem? There is not, even if the SEP owner competes in the downstream product market with the accused infringers. The law allows an inventor to enjoy the return that flows from the lawful patent grant. As long as innovators do not defraud the patent office, use anticompetitive practices to impair market constraints on the exercise of their intellectual-property rights, or engage in sham litigation, they should be free to reap lawful monopoly profits. This is not a bug of the patent system, but its key feature. We want to encourage the most valuable inventions, which is why our IP

184. Microsoft, 795 F.3d at 1033.
and antitrust laws respect monopoly profits flowing from a lawful patent.

**ii. A Monopolist Falsely Promises to License on RAND Terms**

Does the calculus change if the monopolist-licensor is an SSO member and agrees, perhaps out of a sense of fair play or community, to license its technology on RAND terms? No, unless—perhaps—the SSO would not have adopted the standard at all but for the RAND assurance. In this situation, however, the RAND guarantee arguably does not mean anything. If a RAND-licensing promise means that the patentee will not seek greater compensation ex post than it could have negotiated when the SSO was evaluating candidate technologies, then the true monopolist’s market power is identical in the ex ante and ex post periods. But maybe the SSO in question defines “RAND licensing” to mean no injunctive relief or otherwise to limit the value of the encumbered patent. In that situation, even a monopolist in a technology-licensing market would voluntarily cede some value in agreeing to license on RAND terms.

Suppose that the monopolist-SEP owner agrees voluntarily to encumber its market power with a contractual RAND promise. Nevertheless, it subsequently reneges on its RAND-licensing assurance, suing its competitors in the downstream product market for injunctive relief and treble damages for willful infringement. There is no antitrust problem, unless the SSO would not have adopted the standard at all but for the RAND promise. It is true that the monopolist-SEP owner breached its promise with attendant negative consequences for market price and output. The patentee’s competitors may suffer higher costs, and consumers may pay higher prices in the short run. It is even possible that such conduct may deter participation in the standard-setting process.

But none of those harms flows from injury to the competitive process. No technological substitutes for the SEP owner’s method existed, so there was no competitive market constraint for the technology owner to harm. Any negative market outcomes that result from the SEP owner’s demand for non-RAND relief flow from a valid, infringed patent for which no good substitute exists. That is the end of the antitrust analysis. The FTC missed those crucial points in Google-MMI and Robert Bosch, as explained below. The monopolist-SEP owner in the hypothetical is not off the hook, however. Its conduct in seeking non-RAND relief may be a breach of contract, making it liable to standard implementers harmed by its breach.

Importantly, though, SSOs may inadvertently suppress participation in the standard-setting process if they define RAND and other mandatory licensing promises in a manner that reduces ex post relief to an SEP owner below the ex ante level. This is the danger of reverse hold-up. A famous SSO, IEEE, adopted new IP rights policies in 2015 with the Justice Department’s blessing. Some have argued that those policies threaten just that danger: suppressing the value of members’ patented technology. Without getting into whether such an outcome occurred with respect to IEEE, the fact is that several leading technology companies, which realize much of their revenue from patent licensing—announced that they would not
honor IEEE’s patent licensing policies. For example, Qualcomm stated:

Qualcomm will not make licensing commitments under the new policy; when Qualcomm has a choice of where to participate in standardization activity, Qualcomm will favor standard-setting organizations with neutral policies for intellectual property rights over the IEEE; and for future Qualcomm contributions to IEEE standards, Qualcomm will make alternative licensing commitments that will be decided on a case-by-case basis.

That outcome warrants concern. 186

5. Summing up

This Subpart applied the core antitrust principles identified in Part II to SEPs, hold-up, and hold-out. The proper resolution of antitrust questions in the SSO space requires nuanced regard for what defines an antitrust violation. The essence of an antitrust violation is harm to the competitive process, which means that a practice dissolved a competitively created supply- or demand-side limit on market power. As the next Subpart explores, the FTC and certain of its international counterparts have not approached SSO problems with the requisite level of rigor. Instead of exploring whether a given practice, like violation of a RAND-licensing guarantee, harmed or flowed from harm to competition in a relevant market, the FTC has favored informal and impressionistic assessments of harm under a standalone section 5 theory.

C. Where is the Harm to Competition? Antitrust Agencies Overlook Core Principles

Competition enforcers have approached hold-up in the standard-setting space with insufficient regard for antitrust principles. This Subpart explores the FTC’s foray into this field, showing how the agency failed to heed the principles outlined in Part II above. We begin with Rambus, where the FTC advanced a theory of monopolization under section 2 of the Sherman Act that failed scrutiny upon judicial review. 187 The failure of proof lay in the lack of established harm to competition. Rather than internalize the lessons of Rambus, the FTC has since relied on a standalone section 5 theory to challenge perceived hold-up without having to prove harm to competition. This Article seeks to correct that

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186. See also Richard Lloyd, Ericsson and Nokia the Latest to Confirm That They Will Not License Under the New IEEE Patent Policy, IAM (Apr. 10, 2015), http://www.iam-media.com/blog/detail.aspx?g=d07d0bde-e8b6-495a-aa72-4eeb99ad67d [https://perma.cc/F8P6-S9WY] (“Ericsson and Nokia have told IAM that they will not be making licensing commitments under the new patent policy introduced by the Institute of Electrical and Electronics Engineers (IEEE).”).
shortcoming.

1. *The D.C. Circuit Rejects a Section 2 Theory in Rambus*

In 2002, the FTC filed a Part 3 administrative complaint against Rambus. During its time as a member of JEDEC—an SSO that was developing standards related to dynamic random access memory for the semiconductor industry—Rambus allegedly concealed its existing patents and patent applications in violation of JEDEC’s rules. Rambus then withdrew from JEDEC and, once the industry adopted the pertinent JEDEC standard, approached all the major DRAM and chipset manufacturers in the industry and sued those that did not agree to pay its demanded royalties. In 2004, the administrative law judge (ALJ) held in Rambus’s favor, finding no deceptive conduct or link between Rambus’s conduct and any acquisition of monopoly power.  

In 2006, the FTC unanimously overturned the ALJ’s ruling. It found that Rambus had deceived the relevant JEDEC committee, held-up the industry, and distorted the standard-setting process. It held that Rambus had engaged in unlawful exclusionary conduct under section 2 of the Sherman Act, monopolizing markets for four technologies embedded in the three pertinent JEDEC standards. The critical feature of the FTC’s opinion involved the link between Rambus’s deception and JEDEC’s adoption of the DRAM standards. Specifically, the FTC found that, “but for Rambus’s deceptive course of conduct, JEDEC either would have excluded Rambus’s patented technologies from the JEDEC DRRAM standards, or would have demanded RAND assurances, with an opportunity for ex ante licensing negotiations.” Indeed, in later fashioning a remedy, the FTC elected not to require royalty-free licensing due to lack of proof that, “absent Rambus’s deception, JEDEC would not have standardized Rambus technologies, thus leaving Rambus with no royalties.”

This conclusion is telling. Under the FTC’s theory, Rambus still unlawfully monopolized the relevant technology markets even if JEDEC would have adopted the same infringing standards regardless of Rambus’s disclosure or concealment. Yet in that event, the alleged wrongdoing would not have caused the SSO to choose alternative technologies. There would be no harm to competition in the relevant licensing markets, because JEDEC would have chosen Rambus’s proprietary

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188. Complaint, Rambus Inc., *supra* note 152.
191. Id. at 118.
192. Id. at 74.
technologies either way.

But what about the RAND-licensing commitment? If JEDEC would not have incorporated the SEPs without a RAND promise, then the deception would be actionable exclusionary conduct. But the FTC envisioned liability even if JEDEC did not exclude Rambus's patented technologies. Assuming that the SSO would have persevered without a RAND-licensing promise, then the deception only caused the SSO and the semiconductor memory industry to lose out on a contractual limit on Rambus’s market power. That constraint, however, would not be the result of competition between substitute technologies. Hence, Rambus’s alleged wrongdoing may have caused price to rise without harming the competitive process. Therefore, no antitrust liability would ensue.

That is a subtle point, which is why the principles explored in Part II are so crucial. They are consistent with the D.C. Circuit’s holding in favor of Rambus.194 The court based its decision on the principle that conduct violating antitrust law must “harm the competitive process[].”195 Regarding the challenged deception, the FTC had made clear in its remedial opinion that “there was insufficient evidence that JEDEC would have standardized other technologies had it known the full scope of Rambus’s intellectual property.”196 The question, then, was whether Rambus’s avoidance of the possibility of being subject to a RAND-licensing commitment harmed competition. The D.C. Circuit held that the answer is no, stating “Even if deception raises the price secured by a seller, but does so without harming competition, it is beyond the antitrust laws’ reach.”197 Unlike in deceptive-behavior cases in which courts recognize section 2 liability, Rambus’s conduct did not “impair[] rivals in a manner tending to bring about or protect a defendant’s monopoly power.”198 If JEDEC would have adopted Rambus’s technology irrespective of disclosure, then Rambus effectively held a lawful monopoly in relevant upstream licensing markets. The alleged deception served only to avoid a RAND-promise-created limit on price. “But an otherwise lawful monopolist’s use of deception simply to obtain higher prices normally has no particular tendency to exclude rivals and thus to diminish competition.”199

Relying on NYNEX v. Discon—discussed in Part II—the D.C. Circuit held that the Commission expressly left open the likelihood that JEDEC would have standardized Rambus’s technologies even if Rambus had disclosed its intellectual property. Under this hypothesis, JEDEC lost only an opportunity to secure a RAND commitment from Rambus. But losing such a commitment is not a harm to competition with alternative technologies in the relevant markets.

The D.C. Circuit’s 2008 holding explained the law of monopolization

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195. Id. at 463 (quoting United States v. Microsoft Corp., 253 F.3d 34, 58 (D.C. Cir. 2001) (en banc) (per curiam)).
196. Id. at 464.
197. Id. at 457.
198. Id.
199. Id.
200. Id. at 466.
governing hold-up claims in the standard-setting space. Rather than heed the judiciary’s call, however, the FTC veered toward a standalone section 5 theory. Importantly, the FTC limited its theory of liability in Rambus to monopolization under section 2. Hence, it is technically possible that a standalone section 5 allegation of unfair methods of competition may go beyond the rule in Rambus. The question whether section 5’s unfair competition prong should extend to conduct that does not injure the competitive process, however, is a different matter.

2. The FTC Challenges Alleged Hold-up Using a Standalone Section 5 Theory

In 2008—the same year it lost its section 2 case in Rambus—the FTC moved against SSO-related conduct that did not involve deception. N-Data involved an Ethernet networking standard promulgated by IEEE. National Semiconductor Corporation (National), a member of the relevant IEEE committee, disclosed its ownership of potentially relevant patents and patent applications. National agreed to license its technology for a one-time fee of $1,000 and in a nondiscriminatory manner. IEEE adopted a standard that included National’s proprietary technology in 1995.

Three years later, National assigned its SEPs to Vertical Networks, which took the patents subject to the licensing encumbrances. Vertical reneged on those promises, however, suing firms for unauthorized practice of the IEEE standard and extracting royalties larger than $1,000 apiece. In 2003, Vertical assigned the encumbered SEPs to N-Data, which in turn sought to monetize the patents in violation of National’s licensing promises.

The potential hold-up in N-Data was plain for all to see. But that does not necessarily make it an antitrust issue. The FTC alleged no wrongdoing by National in the standard-setting process. National did not conceal patents from the IEEE committee or falsely promise to license on its proffered terms. Rather, IEEE adopted the technology with full knowledge of its merits and the licensing terms on which National made it available. Although substitute technologies may have been available, IEEE concluded that National’s solution was preferable. The inclusion of the relevant SEPs therefore reflected competition on the merits. There was no distortion of the competitive process in the upstream technology licensing market. Absent such a distortion—or sham litigation or fraud at the PTO—it is unclear how subsequent patent assertion could illegally harm competition in the downstream product market. Any such harm would lie within the lawful patent grant. But even if it were otherwise, the FTC did not allege that Vertical or N-Data competed with prospective licensees downstream or sought to raise their costs. In sum, the record in N-Data was devoid of harm to competition. The FTC could not have maintained an action based on a violation of the Sherman Act.

Instead, the FTC challenged the conduct as a standalone violation of section 5.

201. Id. at 462.
202. Complaint, Negotiated Data Solutions, supra note 164.
Its reasoning was conclusory and lacked fidelity to the core antitrust principles explored in Part II. The Commission granted that "unfair methods of competition" must engender some limiting principles, but it interpreted section 5 expansively under *Sperry & Hutchinson*. In the FTC's view, it could—and should—reach conduct that does not even violate the spirit of the antitrust laws, as long as the challenged behavior was in some respect oppressive and had some de minimis relationship to competition. In the FTC's view, coercive behavior is lawful under section 5 only "if it has no adverse effect at all on competition." That is a low threshold, of course, but its significance depends on its interpretation. In *N-Data*, however, the FTC erroneously construed "harm to competition." It concluded that the facts satisfied the harm-to-competition prong "given the conduct's adverse impact on prices for autonegotiation technology and the threat that such conduct poses to standard-setting at IEEE and elsewhere."

That holding is wrong as a matter of competition law. In fact, it gets the analysis backwards. As Part II showed, the fact that a practice raises price sheds no light on a possible corruption of the competitive process. Indeed, the D.C. Circuit made the same point in *Rambus*, holding that higher prices flowing from a foregone RAND-licensing commitment have no bearing on a substantive antitrust violation. The necessary ingredient is dissolution of a market constraint otherwise imposed by a substitute technology or alternative standard available to the SSO. In *N-Data*, the price increase was a function of contract, which is not an antitrust issue. Indeed, if Vertical and N-Data took the encumbered SEPs for value and with notice, implementers of the IEEE standard may have been intended third-party beneficiaries with standing to sue for breach of contract. If contract liability would not have ensued, that would be a failure of the contracting process. The solution to that shortcoming would be to revise IP rights licensing procedures for the SSO. In either case, there is no principled case for antitrust liability absent harm

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204. Id.

205. Id.

206. The FTC’s departure from antitrust principles did not escape attention. Then-Chairman Majoras and -Commissioner Kovacic dissented in N-Data. Dissenting Statement of Commissioner William E. Kovacic: In the Matter of Negotiated Data Solutions LLC, File No. 051-0094 (Jan. 23, 2008), https://www.ftc.gov/sites/default/files/documents/cases/2008/01/080122kovacic.pdf [https://perma.cc/W5MU-5RK7]; Dissenting Statement of Chairman Majoras: In the Matter of Negotiated Data Solutions LLC, File No. 0510094 (Jan. 23, 2008), https://www.ftc.gov/sites/default/files/documents/cases/2008/01/080122majoras.pdf [https://perma.cc/3T98-PJS9] (hereinafter Dissenting Statement of Chairman Majoras). They both agreed that N-Data departed from prior antitrust-enforcement actions by the FTC in the SSO space, like *Unocal*, *Dell*, and *Rambus*, which all involved deception. By contrast, N-Data involved no exclusionary conduct, no antitrust violation, and no proper section 5 violation. The Chairman worried that, if "the evasion of contractual price constraints triggers liability under Section 5 without a concurrent determination that the conduct violates the Sherman Act, then we are headed down a slippery slope," See Dissenting Statement of Chairman Majoras at 4.

that flows from a lifted market constraint. Nor is there a public-policy need for agency intervention to solve a contracting issue. If third-party assignments and subsequent breach of licensing promises threaten the standard-setting process, stakeholders can both sue for breach and contract around the problem in the future.

The FTC compounded its error in N-Data in two subsequent matters that came in quick succession. In Robert Bosch in 2012, the FTC investigated the proposed acquisition by Bosch of its competitor, SPX Services, in the market for automobile air-conditioning servicing equipment. As part of its investigation, the FTC learned of Bosch’s efforts to enjoin implementers of two standards using “potentially standard-essential patents.” As part of a consent decree, the FTC issued a complaint alleging that Bosch’s seeking an injunction against willing licensees using such patents is an unfair method of competition under section 5. Again, the Commission alleged no deception of an SSO and no facts showing harm to competition in a relevant technology market. Nor did it even proffer a theory of harm to the competitive process in the air-conditioning market. Rather, the agency’s rationale for a section 5 violation was that violating a RAND-licensing promise may “reinstate the risk of patent hold-up that FRAND commitments are intended to ameliorate.” There was no explanation why SSOs could not address that risk through contract or why that risk was, in itself, an appropriate object of antitrust scrutiny. As explained above, breaching a contract in order to exercise otherwise-lawful market power is not an antitrust problem. Any negative market outcome associated with such conduct does not flow from harm to the competitive process, which is the sine qua non of any antitrust violation, including an unfair method of competition under section 5. I dissented, accordingly.

Just three months after Robert Bosch, in Google-MMI, the FTC again alleged a standalone section 5 violation. The allegation was that, in trying to enjoin its rivals with RAND-encumbered SEPs when they were “willing” to pay a reasonable royalty, Motorola engaged in an unfair method of competition. Specifically, the

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210. Id. (containing only conclusory assertions about “harm to competition” and alleging no facts showing that the respondent had eliminated a competitive constraint on its market power).

211. Id.


purported section 5 violation lay in Motorola’s “breaching its commitments to standard-setting organizations . . . to license its standard essential patents . . . on fair, reasonable, and nondiscriminatory . . . terms.” As in Robert Bosch, the FTC presented no theory of harm to the competitive process. It identified no market constraint from competing technologies that Motorola had diluted or eliminated. The entirety of the section 5 theory was that Motorola’s alleged breach of contract may have caused prices to rise. That theory flouts the D.C. Circuit’s holding in Rambus and could not support a Sherman Act violation. Because it does not derive from harm to the competitive process, such a breach of contract also should not constitute an unfair method of competition. The lack of analytic rigor was evident in the conclusory treatment of market power and anticompetitive effects, despite the prominence of the case. For reasons I explained at the time, and more fully in this Article, I dissented.

3. In Summary

I revisit these standalone section 5 “competition” cases not to quibble with difficult questions of judgment. Rather, I perceive a fundamental failure of analysis in the FTC’s enforcement actions under that provision. The Commission’s 2015 statement does not alleviate my concerns. Its brevity and ambiguity allow one to interpret the statement potentially to support almost any position. For instance, Chairwoman Ramirez has opined that the statement is consistent with the FTC’s recent actions, such as Google-MMI, Robert Bosch, and N-Data. Meanwhile, former Commissioner Wright has argued that the statement means that those actions would no longer be possible. Principles so malleable as to allow two authors of the guiding document to reach diametrically opposed conclusions have little value. Subsequent action by the Commission in a complaint against Qualcomm shows that Chairwoman Ramirez’s view of the lack of limits in the statement was correct.

The answer to these developments is to reorient competition enforcement

215. Id. ¶ 1.


217. See supra notes 134, 137.


back to core principles. As Part II explained, injury to the competitive process itself defines all antitrust violations, including—and perhaps especially—section 5’s unfair-methods-of-competition provision.

IV. CONCLUSION

This Article has explored the danger of straying from antitrust principles. Firms vie to win business from one another. Antitrust protects that process. By competing on price, quality, service, reliability, and technology firms limit each other’s ability to exercise significant market power. Sellers react to consumer demand because they will lose profit if they do not. That competitive milieu imposes powerful incentives, which antitrust protects. Companies do not simply improve efficiency to cut costs; they try to out-innovate their competitors in the hope of securing the ultimate prize: monopoly. This is the environment of concern to antitrust. Firms violate the law when they collapse dimensions along which they compete. When they suppress market constraints on their behavior, they impede the competitive process. But antitrust will not try to force “better” outcomes when markets fail to produce them. Doing so might corrupt core incentives bestowed by a capitalist economy. These basic principles inform responsible antitrust enforcement.

Of course, enforcers and courts must grapple with subtleties. A recurring source of confusion lies in the relationship between harm to competition, anticompetitive effects, and antitrust injury. Lifting a competitive constraint yields poor market outcomes, which in turn inflict the antitrust injury necessary for a private litigant to state a claim.221 But the violation focuses on the dissolved market constraint, not the ultimate price and output effects.222 Antitrust doctrine does not focus on consumer harm directly. It scrutinizes the means by which that harm materializes. Of course, market effects matter to the larger analysis, but in meritorious antitrust cases they represent a symptom of an injury to the competitive process. Market outcomes do not define the antitrust violation.

That fact does not make ultimate effects irrelevant to the analysis. To the contrary, “Congress designed the Sherman Act as a ‘consumer welfare prescription.’”223 Antitrust enforcers place the consumer-welfare effects of challenged restraints and mergers on center stage. But we focus on negative consequences when they flow from anticompetitive conduct. It is easy, but misleading, to conflate the two-step inquiry into a single question. As a matter of analytic convenience, the agencies rarely highlight the distinction. That is because market processes corrupted by anticompetitive restraints or exclusionary conduct typically lead to consumer harm. That is why the Supreme Court condemns per se horizontal price-fixing, market-sharing, and certain group boycotts: “the practice

222. Ohlhausen, supra note 1, at 10.
facially appears to be one that would always or almost always tend to restrict competition and decrease output. Similarly, conduct swiftly dispatched under the "quick look" rule of reason "impairs the ability of the market to advance social welfare" and lacks "countervailing procompetitive virtue.[.]"

It is the tendency of particular restraints to inflict negative market outcomes—the association between cause and effect—that leads enforcers to focus on consumer-welfare implications. But it is a mistake to simplistically tie negative market outcomes to an antitrust violation. Even the worst static outcomes—monopoly prices and output levels—are consistent with markets that anticompetitive practices have not corrupted. For example, the lawful acquisition of monopoly—like tacit collusion unaccompanied by facilitative practices—harms consumers in the short run by denying them the lower prices that greater static competition would provide. But neither outcome results in antitrust liability.

Some recent enforcement actions by competition agencies, however, have not held true to those principles. Focusing on America, the courts hold the FTC and DOJ to the strictures of the law governing the Sherman and Clayton Acts. As Part II demonstrated, that law requires harm to competition. The FTC, however, may enjoy broader latitude in interpreting section 5. It is not the judiciary, but the Commission, that has responsibility for giving its section 5 authority its optimal definition. Alas, the FTC has not exercised that discretion properly.

My central thesis is that section 5's proscription of unfair methods of competition, like the Sherman and Clayton Acts, is an antitrust law. Properly construed, it concerns itself only with conduct that degrades the competitive process. "Harm to competition" here has a specific meaning. It captures restraints, practices, and mergers that eliminate demand- or supply-side constraints on the exercise of market power. Emphatically, it does not mean simply behavior that leads to higher prices, lower output, restricted choice, inhibited quality, or less innovation. That last observation may seem counterintuitive, since the courts often frame the antitrust laws as a consumer-welfare prescription. The mystery lifts when one appreciates that antitrust protects the incentives created by well-functioning market processes, not the outcome of those processes. Over time, competition provides the full panoply of consumer benefits. But in the short run high prices, low output, and other conditions perceived as negative may be consistent with an efficient market. That is why antitrust enforcers do not engineer "better" market outcomes through forced sharing, mandatory price caps, and obligatory terms. Doing so replaces the free-market process with a regulatory system that dictates outcomes.

For those reasons, it is a profound error to equate a negative market outcome with harm to competition. Yet it is a mistake to which even an expert antitrust agency—the FTC—has fallen prey. In applying its standalone section 5 authority to condemn "unfair methods of competition," the FTC has gone beyond the competitive process to challenge behavior as unfair simply because it produces

suboptimal market outcomes in the short run. In Google-MMI, Robert Bosch, and N-Data, it moved against practices simply because they may arguably lead to higher prices. As Part II explained, such a showing is inadequate to demonstrate harm to competition.

The FTC’s recent forays into standalone section 5 theories is unfortunate. At an academic level, section 5’s unfair competition provision has the potential to be a useful tool in the antitrust arsenal. It is possible, though rare, for truly anticompetitive practices to arise that do not violate the Sherman or Clayton Acts for idiosyncratic reasons. For example, if a duopolist invites its competitor to fix prices, the danger to competition is severe. In exceptionally rare cases, there may be other situations in which economic analysis could show that a restraint or practice harms the competitive process, though the Sherman and Clayton Acts do not reach that anticompetitive conduct. The FTC could hold itself to powerful limiting principles, such as rigorous proof of disproportionate harm to competition. It could resist the human tendency toward over-zealousness in enforcement and, above all, define section 5’s “competition” provision only to reach antitrust violations. In that world, the FTC’s standalone authority could represent a real—albeit only occasionally realized—contribution to competition enforcement. Unfortunately, that vision is far removed from the lackadaisical manner in which the FTC has wielded its section 5 competition authority. As N-Data, Robert Bosch, and Google-MMI show, the FTC does not always apply section 5 as an antitrust statute. In doing so, the FTC’s purported focus on competition has been symbolic, if not illusory. We can do better.