Prophylactic Merger Policy

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TABLE OF CONTENTS

INTRODUCTION ... 46
I. IMPROPER USES OF INCIPIENCY TESTS ... 49
II. MERGERS THREATENING HORIZONTAL COORDINATED INTERACTION ... 51
III. HORIZONTAL MERGERS FACILITATING UNILATERAL ANTICOMPETITIVE EFFECTS ... 55
IV. INCIPIENCY AND VERTICAL ACQUISITIONS ... 57
V. ANTICOMPETITIVE ACQUISITIONS OF PATENTS OR OTHER IP RIGHTS ... 66
VI. ACQUISITIONS OF SMALL BUT HIGHLY INNOVATIVE FIRMS ... 70
CONCLUSION ... 73

INTRODUCTION

An important purpose of the antitrust merger law is to arrest certain practices in their "incipiency," by preventing business firm acquisitions that are likely to facilitate them. Many decisions involving both mergers and other practices had recognized this idea as an important purpose of the Clayton Act as early as the 1920s.[1] The Supreme Court doubled down on the incipiency idea in its *Brown Shoe Co. v. United States* merger decision, where it expressed concern about a "rising tide of economic concentration" and attributed to Congress a desire to halt this trend "at its outset and before it gathered momentum."[2] Speaking of the legislative history of the 1950 Celler-Kefauver amendments to the merger statute,[3] the Court attributed to Congress a "provision of authority for arresting mergers at a time when the trend to a lessening of competition in a line of commerce was still in its incipiency" before they would "justify a Sherman Act proceeding."[4] The importance of *Brown Shoe* was not its

1. *See, e.g.*, United States v. E.I. Du Pont De Nemours & Co., 353 U.S. 586, 588, 592–93 (1957) ("[I]t is the purpose of the Clayton Act to nip monopoly in the bud" (quoting Transamerica Corp. v. Bd. of Governors of Fed. Reserve Sys., 206 F.2d 163, 169 (3d Cir. 1953)). Even earlier the Supreme Court made similar observations about the Federal Trade Commission Act. *See* Fed. Trade Comm'n v. Motion Picture Advert. Serv. Co., 344 U.S. 392, 394–95 (1953) ("It is also clear that the Federal Trade Commission Act was designed to supplement and bolster the Sherman Act and the Clayton Act—to stop in their incipiency acts and practices which, when full blown, would violate those Acts, as well as to condemn as 'unfair methods of competition' existing violations of them" (citations omitted)); Fashion Originators' Guild of Am., Inc. v. Fed. Trade Comm'n, 312 U.S. 457, 466 (1941) (ascribing incipiency purpose to FTC Act in boycott case); Fed. Trade Comm'n v. Raladam Co., 283 U.S. 643, 647–48 (1931) (consumer protection decision attributing incipiency test to Clayton Act); *see also* Hamilton Watch Co. v. Benrus Watch Co., 206 F.2d 738, 741 (2d Cir. 1953) (noting incipiency rationale in merger case); *cf.* Corn Prods. Ref. Co. v. Fed. Trade Comm'n, 324 U.S. 726, 738 (1945) (ascribing incipiency rationale to price discrimination provision of section 2 of the Clayton Act, as amended in 1936 by the Robinson-Patman Act); Standard Fashion Co. v. Magrane-Houston Co., 258 U.S. 346, 356 (1922) (applying Clayton Act incipiency to exclusive dealing under section 3 of the Clayton Act: "[t]he Clayton Act sought to reach the agreements embraced within its sphere in their incipiency . . . .").

2. 370 U.S. 294, 315, 318 (1962).

3. Celler-Kefauver Act, Pub. L. No. 81-899, 64 Stat. 1125 (1950) (codified as amended at 15 U.S.C. § 18 (2012)).

4. *Brown Shoe*, 370 U.S. at 317, 318 n.32 (quoting S. REP. NO. 81-1775, at 4–5 (1950)); *accord* S. REP.

recognition of an incipiency rationale as such, which was already well established, but rather its reading of the legislative history of the 1950s amendments as giving Congress' imprimatur on a particular theory linking merger policy to market concentration.

Today *Brown Shoe*'s particular application of an incipiency test seems excessive and ill-conceived. The merger in question increased the defendant's market share from 5.6% to 7.2%,[5] in an unconcentrated market and would not receive so much as a second glance from the antitrust enforcement agencies today. As one commentator later observed, this incipiency test permitted the government "to halt mergers well before any adverse economic effects could be discerned through econometrics or other empirical techniques."[6]

Most importantly, the Court did not explain why an incipiency test would be necessary to address the particular problem it identified. In the future, merger law could always be brought to bear if the relevant numbers became larger, and market share numbers are readily available. That is, once structural thresholds for identifying problematic mergers are identified there is no need to condemn mergers that fall below that threshold. There is no principle of either law or fact that precludes the courts from enjoining a merger once the threshold has been exceeded.[7]

This does not mean that incipiency tests are unimportant. They have a proper place, but it is not the one that the Supreme Court identified in *Brown Shoe*.[8] The appropriate use of incipiency tests is to prevent certain bad outcomes early when antitrust rules make it difficult or impossible to prevent them later.

The language of the merger statute, section 7 of the Clayton Act, is very broad. It prevents mergers whose effect "may be substantially to lessen competition, or to tend to create a monopoly."[9] The thing that triggers it is an acquisition of either equity shares or productive assets.[10] Section 7 has no agreement requirement, such as that which limits enforcement of section 1 of the Sherman Act.[11] Nor is it limited by the severe constraints that the law has

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NO. 81-1775, at 4–5 (1950) ("The intent here . . . is to cope with monopolistic tendencies in their incipiency and well before they have attained such effects as would justify a Sherman Act proceeding.").

5. *Brown Shoe*, 370 U.S. at 345; *see also* Thomas W. Hazlett*, Is Antitrust Anticompetitive?*, 9 HARV. J.L. & PUB. POL'Y 277, 320 tbl.11(1986) (market shares measured by number of stores).

6. Stephen M. Axinn, *In Search of Congruence Between Legislative Purpose and Administrative Policy*, 2003 COLUM. BUS. L. REV. 431, 436. An analogous criticism can be applied to some of the pre-*Brown Shoe* decisions involving practices other than mergers. See, for example, Justice Frankfurter's dissent in *Motion Picture Advert.*, 344 U.S. at 398–99, complaining that the exclusive contracts in question ran for one year and covered only about six percent of the country's theaters; as a result, they caused no competitive harm.

7. *See generally* Ward S. Bowman, Jr., *Incipiency, Mergers and the Size Question: Section 7 of the Clayton Act*, 1 ANTITRUST BULL. 533 (writing in response to the Celler-Kefauver Act, but prior to the Court's decision in *Brown Shoe*, and objecting that the incipiency test threatened to be overdeterrent).

8. On the proper way to evaluate market structure in merger cases, see Herbert Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure, and Burdens of Proof*, 127 YALE L.J. 1996, 1997 (2018).

9. 15 U.S.C. § 18 (2012).

10. 5 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1201a (4th ed. 2016).

11. *Compare* 15 U.S.C. § 1 (reaching contracts, combinations, and conspiracies), *with* Clayton Act, ch. 323, § 7, 38 Stat. 730, 731–32 (1914) (current version at 15 U.S.C. § 18) (pertaining only to corporations that

quite properly placed on the use of antitrust law to limit single firm conduct,[12] which includes conduct that seeks to enforce the patent laws.[13] Beyond that, section 7 of the Clayton Act shares the general antitrust goal of identifying and preventing business mergers that enable the post-merger firm to reduce market-wide output and impose higher prices on consumers. Its effects test is indifferent to the mechanisms by which a merger lessens competition, provided that the anticompetitive effect can be attributed to the merger.[14]

Incipiency tests for mergers are most valuable in cases where a merger is likely to lead to conduct or behavior that is both anticompetitive and also is difficult or impossible for antitrust law to reach once the merger has occurred. This can happen in a variety of situations, some of which have been recognized while others have not.

Antitrust merger law does not have a "regulatory" mandate, and this makes incipiency tests particularly important. Nothing in the statute or its legislative history suggests that Congress believed the federal courts should use ongoing supervision of post-merger firms in order to limit anticompetitive conduct that might occur later on. Some merger consent decrees have lost sight of this by seeking to control conduct that might occur long after the merger was consummated.[15] Consent decrees are contracts and can specify whatever the parties want, provided the parties' agreements are not independently unlawful. Nevertheless, such decrees can blur the important line between antitrust and regulation, sometimes thrusting general jurisdiction Article III courts into roles for which they are not well-suited. The language of section 7 authorizes courts to *condemn* mergers whose effect may be substantially to limit competition. It does not authorize them to supervise the behavior of post-merger firms as if they were public utilities.

Today, most mergers are challenged before they occur.[16] As a result, the feared post-merger conduct has not occurred either and courts are limited to evidence of predicted rather than actual effects. This fact makes it important to place some limits on merger law's prophylactic reach. First, the language of section 7 requires causation. It prohibits mergers where the effect may be substantially to lessen competition. This requires a showing that the merger is what is likely to facilitate the feared anticompetitive conduct. Second, we need to be satisfied that this conduct, if it should occur, will be both anticompetitive and difficult to reach through direct application of the antitrust laws. Third, the

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"acquire" some or all of the stock or assets of other corporations); *see also* 6 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1400 (4th ed. 2017); 7 *id.* ¶¶ 1437–60.

12. 15 U.S.C. § 2; *see also* 3 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 771, at 202–06 (4th ed. 2015); 3A *id.* ¶ 726, at 57–83; 3B *id.* ¶ 773, at 256–84.

13. *See* 3 AREEDA & HOVENKAMP, *supra* note 12, ¶¶ 704–13.

14. Specifically, "where . . . the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly." 15 U.S.C. § 18 (2012).

15. *E.g.*, United States v. Comcast Corp., 808 F. Supp. 2d 145, 149–50 (D.D.C. 2011) (ordering consent decree lasting two years).

16. *See* 4 AREEDA & HOVENKAMP, *supra* note 12 ¶ 941i ("Most government challenges to mergers occur prior to their consummation, when there is no actual record of post-acquisition entry.").

merger must raise a significant risk that the conduct will occur. This calls for an objective test, assuming profit maximizing and then considering the alternatives that are realistically available to the post-merger firm. Finally, as with all merger cases, there must not be offsetting gains that serve to justify the merger notwithstanding these threats to competition.[17]

The range of behaviors for which merger law's prophylactic reach can be relevant includes the following:

(1) A horizontal merger might facilitate coordinated interaction, which would be either difficult to detect as collusion, or difficult to challenge given the "agreement" requirement contained in section 1 of the Sherman Act.[18]

(2) A horizontal merger might create either a monopoly or else enable a post-merger firm to increase its price, or engage unilaterally in some other output-limiting practice that is unreachable under section 2 of the Sherman Act, given antitrust's broad tolerance for unilateral conduct.[19]

(3) A vertical merger might facilitate a post-merger unilateral price increase, price discrimination, refusal to deal, or other exclusion that, once again, would be very difficult to reach when the conduct in question is that of a single firm.[20]

(4) An intellectual property (IP) acquisition, particularly of a patent developed by an outside inventor, might result in exclusionary enforcement that would be impossible for antitrust to reach unless the patent is invalid or unenforceable.[21]

(5) Acquisitions of small but highly innovative startups might enable a large firm to continue its domination of a market in the face of entry threats, but in ways that are not reachable as unilateral conduct.[22]

This Article discusses the legitimate and illegitimate rationales for incipiency tests, as well as important limitations. First it looks at some improper uses of such tests. Then it discusses appropriate uses, beginning with those that are relatively well recognized in the case law and literature and moving on to those that are largely unrecognized.

I. IMPROPER USES OF INCIPIENCY TESTS

Merger incipiency tests are unjustified in two situations. One is when we are unable to predict with sufficient confidence that a certain anticompetitive outcome will occur and that it can be attributed to the merger. The other is when

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17. *See* Herbert Hovenkamp, *Appraising Merger Efficiencies*, 24 GEO. MASON L. REV. 703, 716 (2017).

18. *See* discussion *infra* text accompanying notes 32–39.

19. *See* discussion *infra* text accompanying notes 40–52.

20. *See* discussion *infra* text accompanying notes 53–86.

21. *See* Walker Process Equip., Inc. v. Food Mach. & Chem. Corp., 382 U.S. 172, 175–78 (1965) (enforcement of a patent procured by fraud on the Patent Office may violate section 2 of the Sherman Act, as long as all the other elements to establish monopolization are proved); discussion *infra* text accompanying notes 87–109.

22. *See* discussion *infra* text accompanying notes 111–119.

the feared post-merger anticompetitive conduct is readily remedied by the antitrust laws if it should occur. In both these cases, concerns about possible anticompetitive outcomes down the road must give way to the promise of merger efficiencies.

Most mergers are lawful because they are thought to generate cost savings from economies of scale, integration, elimination of market transactions, or some other efficiency.[23] To be sure, once a prima facie case against a merger is established, efficiency defenses are very difficult to prove. But the assumption that many mergers produce efficiencies is built into our prima facie case to begin with.[24] As a result, we do not want to condemn a merger based on mere speculation that it might lead to some anticompetitive outcome. Nor do we want to condemn a merger when some practice, which may or may not occur later, is readily remedied at that time.

Post-merger predatory pricing is a good example of a practice that does not become likely merely because a merger may make it structurally conceivable. Only a dominant firm can succeed in monopolistic predatory pricing as condemned by the Sherman Act.[25] But that hardly means that every firm with a minimum sufficient market share is likely to engage in predatory pricing. Predatory pricing is a risky strategy even for a dominant firm and very likely is relatively uncommon.[26] As a result, a merger should not be condemned merely because it creates a firm with a sufficiently large market share to make predatory pricing factually plausible.[27] The same thing is true about a firm's acquisition of a patent portfolio that is likely to contain some weak patents. Ownership of an invalid or unenforceable patent is a prerequisite to *Walker Process* liability for filing an infringement action based on a worthless patent.[28] Nonetheless, the

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23. *See* 4A AREEDA & HOVENKAMP, *supra* note 10, ¶ 970 (discussing the efficiency defense); Hovenkamp, *supra* note 17, at 706.

24. Hovenkamp, *supra* note 17, at 708–11.

25. Am. Acad. Suppliers, Inc. v. Beckley-Cardy, Inc., 922 F.2d 1317, 1320 (7th Cir. 1991) (suggesting that only monopolists can engage in predatory pricing); 3 AREEDA & HOVENKAMP, *supra* note 12, ¶¶ 725–27 (describing the structural requirements of predation). Non-monopolistic predatory pricing intended to shore up a faltering oligopoly could be condemned under the Robinson-Patman Act were it not for the severe constraints imposed by *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 226 (1993); *see also* 3 AREEDA & HOVENKAMP, *supra* note 12, ¶ 726.

26. For an attempt to test for the frequency of predatory pricing, see Kenneth G. Elzinga & David E. Mills, *Testing for Predation: Is Recoupment Feasible?*, 34 ANTITRUST BULL. 869, 889–93 (1989), wherein the authors found predatory pricing to be relatively rare.

27. *Cf.* Cargill, Inc. v. Monfort of Colo., Inc., 479 U.S. 104, 118–19 (1986) (refusing to condemn a merger based on the mere possibility of predatory pricing).

28. Walker Process Equip., Inc. v. Food Mach. & Chem. Corp., 382 U.S. 172, 175 (1965) (finding a basis for antitrust liability in a patentee's suit over a patent known to be invalid). Antitrust liability can also attach when the patent is valid, but the infringement plaintiff knows that the defendant is not infringing. *See, e.g.*, Moore U.S.A., Inc. v. Standard Register Co., 139 F. Supp. 2d 348, 362 (W.D.N.Y. 2001) (refusing to dismiss a Sherman section 2 counterclaim allegation that patentee filed an infringement claim while knowing that the counterclaimant's product did not infringe); Ecrix Corp. v. Exabyte Corp., 95 F. Supp. 2d 1155, 1158–59 (D. Colo. 2000) (holding that, for purposes of filing an antitrust claim, the infringement defendant was entitled to discovery of the factual basis for the infringement allegations); United States v. Besser Mfg. Co., 96 F. Supp. 304, 312 (E.D. Mich. 1951) (finding the infringement plaintiff did not have good reason to believe that the

mere acquisition of a portfolio that contains such patents hardly suggests that the acquiring firm intends to do just that.

The other set of circumstances when prophylactic rules are unnecessary and counterproductive is when the feared post-merger practice is readily remedied with a more direct antitrust rule if it should occur. A good example here is the use of section 7 to condemn mergers on the theory that they might condemn anticompetitive tying or reciprocity.[29] Most of the case law suggests that unlawful tying requires a minimum market share in the range of thirty to forty percent.[30] So a horizontal merger might create the requisite minimum market share to make unlawful tying possible.[31] Alternatively, a nonhorizontal merger, such as a union of complements, might create an opportunity for tying two products together.[32] Anticompetitive tying and reciprocity are readily detected, however. They cannot be done secretly because the person upon whom these restraints are imposed, and a likely plaintiff, must be aware of it. Further, very few people would argue that the existing rules for addressing these practices are underdeterrent. In addition, many instances of tying and reciprocity are competitively benign. As a result, condemning a merger on the theory that it might later lead to tying or reciprocity is doubly overdeterrent. First, it condemns a merger without knowing whether this particular conduct will occur and, secondly, without knowing whether it will be anticompetitive if it does occur.

II. MERGERS THREATENING HORIZONTAL COORDINATED INTERACTION

Merger incipiency analysis is most fully developed for the traditional horizontal merger that makes an industry more concentrated, thus increasing the likelihood of collusion or collusion-like behavior. If a merger of two competitors reduces the number of firms in a market from, say, four to three, the three-firm post-merger market might be more susceptible to traditional price fixing, or the firms might be in a better position to engage in coordinated interaction that permits them to raise their prices. Because collusion is done in secret, it is not

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infringement defendant's technology infringed), *aff'd*, 343 U.S. 444 (1952).

29. Reciprocity resembles tying except that the two products move through the market in opposite directions. For example, a firm that both processes chickens and produces chicken feed might purchase chickens from growers only on the condition participating growers use its feed. *See* FTC v. Consol. Foods Corp., 380 U.S. 592, 594–95 (1965) (condemning a merger on the theory that it would facilitate compelled reciprocity); HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE § 13.3a, at 751 (5th ed. 2016).

30. *E.g.*, Jefferson Par. Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 7 (1984) (holding thirty percent insufficient); *see also* 5 AREEDA & HOVENKAMP, *supra* note 10, ¶¶ 1735–36.

31. A merger that created a firm with a thirty percent market share could result in a post-merger Herfindahl-Hirschman Index (HHI) under 1500, provided other firms in the market were small. That would make the post-merger market "unconcentrated" under the 2010 Horizontal Merger Guidelines and the merger would be approved with "no further analysis," even though the thirty percent share could make anticompetitive tying possible. *See* U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, 2010 HORIZONTAL MERGER GUIDELINES § 5.3, at 19 (2010) [hereinafter 2010 HORIZONTAL MERGER GUIDELINES].

32. *E.g.*, Betaseed, Inc. v. U & I, Inc., 681 F.2d 1203, 1221 (9th Cir. 1982); Spartan Grain & Mill Co. v. Ayers, 581 F.2d 419, 424 (5th Cir. 1978); *see also* 5 AREEDA & HOVENKAMP, *supra* note 12, ¶ 1143.

always detected and can be difficult to prove. Further, collusion-like behavior can be condemned only if the conduct satisfies the "agreement" requirement of section 1 of the Sherman Act. Many instances of acknowledged conscious parallelism do not.[33]

In this case, the Horizontal Merger Guidelines recognize the danger. They state their purpose as interdicting mergers that might "create, enhance, or entrench market power or [] facilitate its exercise."[34] They also articulate the incipiency concern that some mergers might facilitate collusion-like practices that are "not otherwise condemned by the antitrust laws."[35]

Horizontal merger law would be more difficult to justify if every anticompetitive instance of collusion-like behavior could be promptly detected and remedied when it occurred. In that case the better approach would often be to wait and see. We could permit the merger to go forward, which would allow whatever efficiencies the merger creates, confident that if collusive behavior should ever occur the courts would be able to detect and prevent it. Robert Bork, who believed that oligopoly existed only in economics textbooks, held this view and thus absolutely rejected an incipiency test for horizontal mergers.[36]

By contrast, Judge Richard Posner believed that an incipiency test was essential to antitrust policy against horizontal mergers. In *Hospital Corp. of America v. FTC*, he observed that a concentration-increasing merger among hospitals in Chattanooga Tennessee increased the likelihood of coordination leading to lower output and higher prices.[37] If such collusion should occur it

33. *E.g.*, Valspar Corp. v. E.I. Du Pont de Nemours & Co., 873 F.3d 185, 191 (3d Cir. 2017) (finding that section 1 of the Sherman Act did not reach acknowledged oligopoly pricing, including inter-firm communication, in a concentrated market for a fungible chemical); *In re* Text Messaging Antitrust Litig., 782 F.3d 867, 871–79 (7th Cir. 2015) (ruling conscious parallelism insufficient to establish conspiracy under section 1 of the Sherman Act); Williamson Oil Co. v. Philip Morris U.S.A., 346 F.3d 1287, 1299 (11th Cir. 2003) (ruling the same); Clamp-All Corp. v. Cast Iron Soil Pipe Inst., 851 F.2d 478, 484 (1st Cir. 1988) (ruling the same).

34. 2010 HORIZONTAL MERGER GUIDELINES, *supra* note 31, § 1, at 2.

35. *Id.* § 7, at 25. Specifically, the guidelines state:

> Coordinated interaction includes a range of conduct. Coordinated interaction can involve the explicit negotiation of a common understanding of how firms will compete or refrain from competing. Such conduct typically would itself violate the antitrust laws. Coordinated interaction also can involve a similar common understanding that is not explicitly negotiated but would be enforced by the detection and punishment of deviations that would undermine the coordinated interaction. Coordinated interaction alternatively can involve parallel accommodating conduct not pursuant to a prior understanding. Parallel accommodating conduct includes situations in which each rival's response to competitive moves made by others is individually rational, and not motivated by retaliation or deterrence nor intended to sustain an agreed-upon market outcome, but nevertheless emboldens price increases and weakens competitive incentives to reduce prices or offer customers better terms. Coordinated interaction includes conduct not otherwise condemned by the antitrust laws.

Id. § 7, at 24–25.

36. ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 131 (1978) (arguing that an incipiency test for mergers has "no value whatever"); *see also id.* at 221 (doubting that oligopoly behavior existed "outside of economics textbooks").

37. 807 F.2d 1381, 1387, 1389 (7th Cir. 1986) ("The reduction in the number of competitors is significant in assessing the competitive vitality of the Chattanooga hospital market. The fewer competitors there are in a market, the easier it is for them to coordinate their pricing without committing detectable violations of section 1

might be both difficult to condemn and difficult to prosecute, given antitrust law's "agreement" requirement. Further, he reasoned:

> Section 7 does not require proof that a merger or other acquisition has caused higher prices in the affected market. All that is necessary is that the merger create an appreciable danger of [collusive practices] in the future. A predictive judgment, necessarily probabilistic and judgmental rather than demonstrable, is called for.[38]

That "appreciable danger" formulation seems to state the threat about right. "Certainty" is too strict; "possibility" is not strict enough.[39] Collusion or collusion-like behavior is much more likely to result from a concentration-increasing merger than is a practice such as predatory pricing.[40] Mergers significantly increasing the likelihood of such behavior represent a realistic threat of post-merger anticompetitive conduct that the antitrust laws will not be able to discipline effectively in many instances.

An incipiency test for coordination-facilitating mergers should thus attempt to identify situations where market structure or other features make anticompetitive coordination profitable, difficult to detect, difficult to prove under Sherman section 1 legal standards, or difficult to remedy at an early stage. Taking these factors seriously will likely result in increased scrutiny of coordination-facilitating mergers, particularly when the number of substantial firms in the market prior to the merger exceeds three, where entry barriers as historically measured are not all that high, or where efficiencies might otherwise be thought to tip the scale in favor of the merger.

Numerous Sherman Act section 1 decisions involving tight oligopoly industries have rejected price fixing allegations by concluding that conspiracies are more difficult to prove in such markets than in those that are more competitively structured. This outcome, which is completely perverse from an enforcement perspective, is that the very factors that make unspoken coordinated interaction more likely also undermine many types of evidence of a qualifying

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of the Sherman Act, which forbids price fixing.").

38. *Id.* at 1389 (citation omitted).

39. As one recent district court decision put it:

> By using "the words 'may be substantially to lessen competition'" in Section 7, Congress indicated "that its concern was with probabilities, not certainties." Although certainty of harm is not necessary to prove a Section 7 violation, neither is the "mere possibility" of harm sufficient. Rather, to grant injunctive relief under the Clayton Act, the Court *must* conclude that the Government has introduced evidence sufficient to show that the challenged "transaction is likely to lessen competition substantially." As part of satisfying that burden, Section 7 "demand[s] that a plaintiff demonstrate that the substantial lessening of competition will be 'sufficiently probable and imminent' to warrant relief."

United States v. AT&T, Inc., 310 F. Supp. 3d 161, 189–90 (D.D.C. 2018) (first quoting FTC v. Whole Foods Mkt., Inc., 548 F.3d 1028, 1042 (D.C. Cir. 2008); then quoting FTC v. H.J. Heinz Co., 246 F.3d 708, 713 (D.C. Cir. 2001); then quoting United States v. Baker Hughes, Inc., 908 F.2d 981, 985 (D.C. Cir. 1990); and then quoting FTC v. Arch Coal, Inc., 329 F. Supp. 2d 109, 115 (D.D.C. 2004)), *appeal docketed*, No. 18-5214 (D.C. Cir. July 13, 2018).

40. *See* discussion *supra* text accompanying notes 25–26.

"contract," "combination," or "conspiracy," as the Sherman Act requires.[41] The 2017 Third Circuit *Valspar Corp. v. E.I. Du Pont De Nemours & Co.* decision was particularly candid:

> In non-oligopolistic markets, "[p]arallel behavior among competitors is especially probative of price fixing because it is the *sine qua non* of a price fixing conspiracy." But in an oligopolistic market, parallel behavior "can be a necessary fact of life," and "[a]ccordingly, evidence of conscious parallelism cannot alone create a reasonable inference of a conspiracy." Therefore, to prove an oligopolistic conspiracy with proof of parallel behavior, that evidence "must go beyond mere interdependence" and "be so unusual that in the absence of an advance agreement, no reasonable firm would have engaged in it."[42]

In sum, it becomes much easier to prove a "conspiracy," and thus obtain Sherman Act liability, in a less concentrated market, or one that is not conducive to coordinated interaction for other reasons, than in a market that is highly prone to noncompetitive performance.

In *Valspar* the relevant product was titanium dioxide, a chemical sold in an acknowledged oligopoly. Five firms sold most of the product, although there were others.[43] In the *Chocolate Confectionary* case, the Third Circuit reached essentially the same conclusion in a market dominated by three companies that controlled seventy-five percent of the market.[44] The same thing was true of *In*

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41. 15 U.S.C. § 1 (2012).

42. 873 F.3d 185, 193 (3d Cir. 2017) (first quoting Southway Theatres, Inc. v. Ga. Theatre Co., 672 F.2d 485, 501 (5th Cir. 1982); then quoting *In re* Baby Food Antitrust Litig., 166 F.3d 112, 122 (3d Cir. 1999); then quoting *In re* Chocolate Confectionary Antitrust Litig., 801 F.3d 383, 398 (3d Cir. 2015); and then quoting *Baby Food*, 166 F.3d at 135); *see also In re* Flat Glass Antitrust Litig., 385 F.3d 350, 358 (3d Cir. 2004) ("[T]his Court and others have been cautious in accepting inferences from circumstantial evidence in cases involving allegations of horizontal price-fixing among oligopolists."). In *Flat Glass*, the court went on to state:

> The theory of interdependence posits the following: In a market with many firms, the effects of any single firm's price and output decisions "would be so diffused among its numerous competitors that they would not be aware of any change." In a highly concentrated market (i.e., a market dominated by few firms), however, any single firm's "price and output decisions will have a noticeable impact on the market and on its rivals." Thus when a firm in a concentrated market (i.e., an "oligopolist") is deciding on a course of action, "any rational decision must take into account the anticipated reaction of the other [ ] firms."
>
> The result, according to the theory of interdependence, is that firms in a concentrated market may maintain their prices at supracompetitive levels, or even raise them to those levels, without engaging in any overt concerted action.

Id. at 359 (alteration in original) (first quoting 6 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1429, at 206 (2d ed. 2000); then quoting *id.*; and then quoting *id.* at 207). For a broad discussion about parallel oligopostic behavior, see generally William H. Page, *Tacit Agreement Under Section 1 of the Sherman Act*, 81 ANTITRUST L.J. 593 (2017). For attempts to get around the problem by substituting a more economic understanding of agreement, or eliminating the common law agreement requirement, see generally Robert H. Porter, *Detecting Collusion*, 26 REV. INDUS. ORG. 147, 147–48 (2005). *See generally* Louis Kaplow, *Direct Versus Communications-Based Prohibitions on Price Fixing*, 3 J. LEGAL ANALYSIS 449 (2011); Louis Kaplow, *On the Meaning of Horizontal Agreements in Competition Law*, 99 CALIF. L. REV. 683 (2011); Louis Kaplow, *An Economic Approach to Price Fixing*, 77 ANTITRUST L.J. 343 (2011); Richard A. Posner, *Oligopoly and the Antitrust Laws: A Suggested Approach*, 21 STAN. L. REV. 1562 (1969).

43. *See* Valspar Corp. v. E.I. Du Pont De Nemours, 152 F. Supp. 3d 234, 238–39 (D. Del. 2016) (identifying DuPont, Huntsman, Kronos, Millennium, and Tronox as the largest firms).

44. *In re Chocolate Confectionary Antitrust Litigation*, 801 F.3d 383, 391 (3d Cir. 2015).

re Baby Food Antitrust Litigation, where four firms controlled about ninety-eight percent of the market.[45] Several other cases involved markets with similar structures.[46]

So, one important trigger for horizontal merger enforcement should be a market, as the *Valspar* case suggests, where existing Sherman section 1 case law would be unlikely to infer a section 1 violation from parallel conduct in the post-merger market. This makes more aggressive merger enforcement necessary to limit the number of such situations.

Further, merger law permits mergers to be challenged prior to their occurrence and thus before the harm from coordinated interaction has materialized. Once again, this is particularly valuable in situations where coordinated interaction is difficult to detect and remedy directly under section 1 of the Sherman Act.

III. HORIZONTAL MERGERS FACILITATING UNILATERAL ANTICOMPETITIVE EFFECTS

A small but important subset of mergers create a monopoly or dominant firm in the affected market.[47] Once such a firm has been created, its unilateral dealing and pricing decisions are virtually out of reach of the antitrust laws.[48]

A much larger subset of mergers falls into the general category of anticompetitive "unilateral effects" actions. Today, the agencies analyze more mergers under unilateral effects theories than they do under traditional coordinated effects theories. According to one paper by insiders, unilateral effects investigations at the FTC account for about three-fourths of the total.[49] The most frequently used of these theories applies when the merging firms offer relatively close substitutes in a product differentiated market. The merger facilitates a price increase by eliminating competition between them, forcing consumers either to pay more or else select a more remote substitute.[50] The price effects are said to be unilateral because only the post-merger firm charges the higher price; other firms in the market are generally unaffected. The theory does

45. 166 F.3d 112, 116 (3d Cir. 1999).

46. *In re Flat Glass*, 385 F.3d at 364 (finding market dominance with five firms); Williamson Oil Co., Inc. v. Philip Morris USA, 346 F.3d 1287, 1291 (11th Cir. 2003) (concluding there was product market dominance where the nation's four largest cigarette manufacturers produced more than ninety seven percent of cigarettes sold in the United States); Reserve Supply Corp. v. Owens-Corning Fiberglas Corp., 971 F.2d 37, 49, 55 (7th Cir. 1992) (finding dominance when three firms held eighty five to ninety percent of the market); Kleen Prods., LLC v. Int'l Paper, 276 F. Supp. 3d 811, 819 (N.D. Ill. 2017) (finding dominance with approximately five rivals).

47. *E.g.*, FTC v. Phoebe Putney Health Sys., Inc., 568 U.S. 216, 222 (2013) (merger gave one firm virtual monopoly in affected market); N. Sec. Co. v. United States, 193 U.S. 197, 322 (1904) (union of parallel railroad lines created monopoly).

48. *See* discussion *infra* text accompanying notes 84–86.

49. Malcolm B. Coate & Shawn W. Ulrick, How Much Does the Choice Between the Theories of Collusion and Unilateral Effects Matter in Merger Analysis? 22 (May 30, 2018) (unpublished manuscript) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2995679.

50. For further discussion on this theory, see 4 AREEDA & HOVENKAMP, *supra* note 12, ¶¶ 914–15, at 111–150.

not require conjectures about what type of interdependent pricing the post-merger firm might engage in with other firms in the market. It does require that they be maximizers across the range of products that they sell.

The theory for predicting a unilateral price increase from a merger is at least as robust as the theory for predicting price increases likely to result from coordinated interaction. While the link between market concentration and the dangers of coordinated interaction are well-established, the precise mechanism that the firms will employ is typically unknown at the time the merger occurs. For example, a merger that reduces the number of firms in a market from four to three creates an "appreciable danger" of collusion-like behavior,[51] but until it occurs we would not know how this coordination might occur, or whether that behavior would satisfy section 1's agreement requirement.

Significantly, however, merger policy does not require the court to know the precise strategy causing competitive harm. This is because the Clayton Act states an "effects" test—where "the effect of [the] acquisition may be substantially to lessen competition, or to tend to create a monopoly."[52] For unilateral effects cases the inference is more direct than in the case of coordinated effects. One hypothesizes a price increase of a given magnitude and then uses information about margins and cross elasticity of demand between the two merging firms as well as closer, non-merging substitutes. From this, one can estimate the post-merger firm's profit-maximizing output and price.[53]

One of the most important justifications for prophylactic merger policy occurs when the feared anticompetitive conduct is that of a single firm. This is true both in cases involving merger to monopoly and those causing anticompetitive unilateral effects. Under U.S. antitrust law, a firm acting unilaterally has very little obligation to deal with either rivals or customers.[54] Further, unilaterally set prices are beyond antitrust's reach, provided they are not predatory,[55] and price discrimination is virtually never an antitrust violation.[56] While the Robinson-Patman Act may reach the simple practice of charging two dealers different prices, the statute is not designed to pursue most kinds of price discrimination, and does not reach price discrimination in the provision of

51. *See* Hosp. Corp. of Am. v. FTC, 807 F.2d 1381, 1389 (7th Cir. 1986) ("All that is necessary is that the merger create an appreciable danger of such consequences in the future.").

52. 15 U.S.C. § 18 (2012). For a discussion on the merger law's statement of a test that requires only a showing of harmful effects, see generally Fiona Scott Morton & Herbert Hovenkamp, *Horizontal Shareholding and Antitrust Policy*, 127 YALE L.J. 2026 (2018).

53. *See* Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 ANTITRUST L.J. 49 (2010); Joseph Farrell & Carl Shapiro, *Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition*, 10 B.E. J. THEORETICAL ECON. 1, 14–15 (2010).

54. *See, e.g.*, Verizon Commc'ns. Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398, 411 (2004) (holding monopolist has no antitrust duty to interconnect with rival); United States v. Colgate & Co., 250 U.S. 300, 307–08 (1919) (holding firm has right to refuse to deal); *see also* 3B AREEDA & HOVENKAMP, *supra* note 12, ¶¶ 770–74, at 195–299.

55. 3 AREEDA & HOVENKAMP, *supra* note 12, ¶ 720.

56. *Id.* ¶ 721. For a broad discussion on the Robinson-Patman Act, se 14 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶¶ 2300–72, at 3–152 (3d ed. 2012).

services such as video content.[57] In any event, the focus of unilateral effects merger policy is on mergers that threaten simple price increases, and these are unreachable under antitrust law when they are being imposed by a single firm.

Two rationales are offered to justify the lenient rules that antitrust applies to single firm conduct under the Sherman Act. First, in most cases, a firm's unilateral pricing practices are not anticompetitive. That is, they do not create or enhance a firm's market power but rather reflect power that already exists. For that reason, the United States has never had a rule of no fault monopolization.[58] If a firm has market power, the antitrust laws permit it to set its profit-maximizing price or any other nonpredatory price it pleases, provided that it is acting unilaterally.

The second rationale for antitrust tolerance of a firm's unilateral pricing decisions as well as refusals to deal is at least as compelling. Administratively, it is very difficult to develop remedies against unilateral conduct that do not involve ongoing regulation of the firm in question. For example, a dealing order would require a judge to determine with some precision not only the price, but also precisely which assets must be shared and with whom. If costs or technology change in subsequent years, then the order would have to be adjusted. Such a dealing order requires ongoing supervision that virtually turns the firm into a public utility, except that it is regulated by a court of general jurisdiction rather than an agency.[59]

Under the same prophylactic rationale that justifies the antitrust concern with mergers that facilitate coordinated interaction, merger policy can likewise assist in avoiding ongoing regulation of the firm in question. While antitrust is powerless to regulate a single firm's prices, it can interdict a merger that is likely to put the firm into a position where it is able profitably to increase its prices above the competitive level.[60]

IV. Incipiency and Vertical Acquisitions

A vertical merger involves a buyer and a seller rather than two competitors. At least since the 1970s, the antitrust enforcement agencies have not challenged nearly as many vertical mergers as horizontal ones, and over the last three decades have been much less enthusiastic about doing so.[61] This is reflected in

57. *See* 14 Areeda & Hovenkamp, *supra* note 56, ¶ 2314, at 39–43. Coverage of the Robinson-Patman Act is limited to "commodities." *Id.* ¶ 2314a, at 33.

58. *See* 3 Areeda & Hovenkamp, *supra* note 12, ¶¶ 630–38, at 68–90 ("[W]hen Areeda and Turner spoke of a true "no fault" monopolist, they could not mean a monopolist created by a relatively recent merger, for the merger would then have been a qualifying unlawful practice.").

59. *See* 3B Areeda & Hovenkamp, *supra* note 12, ¶ 653b2.

60. *See, e.g.*, FTC v. Sysco Corp., 113 F. Supp. 3d 1, 62–64 (D.D.C. 2015) (finding merger would eliminate bidding competition between closest competitors, thus permitting post-merger firm unilaterally to increase its price); United States v. H & R Block, Inc., 833 F. Supp. 2d 36, 81–82 (D.D.C. 2011) (reasoning similarly, although ultimately concluding that analysis of unilateral effects was unnecessary).

61. Prior to the district court's decision in *United States v. AT&T Inc.*, 310 F. Supp. 3d 161 (D.D.C. 2018), *appeal docketed*, No. 18-5214 (D.C. Cir. July 13, 2018), the last fully litigated case on the merits was *Fruehauf Corp. v. FTC*, 603 F.2d 345 (2d Cir. 1979), which the Federal Trade Commission lost on appeal.

the fact that the most recent revision of the vertical merger guidelines was in 1984,[62] while the horizontal merger guidelines have been revised regularly through 2010.[63] That failure very likely contributed to the government's district court loss in the 2018 AT&T/Time-Warner litigation.[64] The bargaining theory that the government relied on in that case was nowhere developed in government merger guidelines specifically applied to vertical mergers.[65]

The 1984 Guidelines were drafted at a time when antitrust policy was dominated by a Chicago School analysis that saw vertical mergers as rarely creating competitive problems.[66] The purely vertical transaction itself does not make either the buyer's or the seller's market more concentrated, and does not increase the market share of either of the merging firms. In the longer run, a transaction that reduces the firm's costs may increase market share at either or both levels, but that shift in market share would usually be accompanied by an output increase and lower prices, rather than vice-versa. In any event, it is not the purpose of the antitrust laws to condemn cost savings.

Today, most vertical mergers are analyzed under an approach that looks for instances of anticompetitive foreclosure or discrimination against the customers of rivals, or, in some cases, constraints on the development of innovative technologies. In general, foreclosure refers to mechanisms by which a vertically related firm can raise the costs of rivals in the downstream market by reducing the availability of inputs or raising their price. Econometric techniques have been developed for analyzing these price effects, using bargaining theory that is well developed and conventional in economic analysis.[67] As in the case of horizontal mergers, these methodologies try to identify the pricing and other dealing strategies that will maximize the post-merger firm's profits. The models are thus similar to those applied in unilateral effects merger cases.[68] Basically, they query how the firm's incentives change as a result of the merger.

Cost savings tend to lower the post-merger firm's profit-maximizing prices, while foreclosure of rivals tends to increase them. The ultimate question is whether the vertical acquisition is likely to lead to higher consumer prices. This methodology is objective in the sense that it is based on predictions about

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62. *See generally* U.S. DEP'T OF JUSTICE, 1984 MERGER GUIDELINES (1984) [hereinafter 1984 GUIDELINES]. Vertical acquisitions are addressed in these Guidelines as "non-horizontal mergers." *Id.* §§ 4.0–4.2.

63. *See generally* 2010 HORIZONTAL MERGER GUIDELINES, *supra* note 31.

64. *AT&T*, 310 F. Supp. 3d at 165.

65. *See id*. at 207. The decision is currently on appeal to the D.C. Circuit. United States v. AT&T Inc., 310 F. Supp. 3d 161 (D.D.C. 2018), *appeal docketed*, No. 18-5214 (D.C. Cir. July 13, 2018).

66. Richard A. Posner, *The Chicago School of Antitrust Analysis*, 127 U. PA. L. REV. 925, 936–38 (1979).

67. *See* Serge Moresi & Steven C. Salop, *vGUPPI: Scoring Unilateral Pricing Incentives in Vertical Mergers*, 79 ANTITRUST L.J. 185, 186–87 (2013) (explaining how "pricing pressures resulting from unilateral incentives following a vertical merger can be scored with vertical gross upward pricing pressures indices (vGUPPIs)""); Michael H. Riordan, *Competitive Effects of Vertical Integration*, *in* HANDBOOK OF ANTITRUST ECONOMICS 145, 155–59 (Paolo Buccirossi ed., 2008).

68. *See* Steven C. Salop & Daniel P. Culley, *Revising the U.S. Vertical Merger Guidelines: Policy Issues and an Interim Guide for Practitioners*, 4 J. ANTITRUST ENFORCEMENT 1, 21 (2016).

what will be profit-maximizing for the firm subsequent to the merger.[69]

If a vertical merger is anticompetitive under an input foreclosure or discrimination theory, the incipiency rationale applies. That rationale is the same as for unilateral effects from horizontal mergers; namely, antitrust rules do not typically reach a single firm's decisions about the price of its products or its willingness to share them with rivals. A coherent approach to vertical merger policy is therefore to condemn vertical mergers that are reasonably likely to facilitate an anticompetitive refusal to deal, price discrimination, or price increases that would be lawful if undertaken subsequently by a single firm. Further, while these strategies would be unprofitable prior to the acquisition, they become profitable after.[70]

For example, suppose that one firm owned program distribution facilities such as DirecTV or cable systems while another firm owned nothing but programming. Prior to any acquisition the latter firm would maximize revenue by distributing as broadly as possible. Programming is nonrivalrous, meaning that an infinite number of copies can be distributed. From the program owners' point of view, the more the better. Once the programmer was acquired by the owner of distribution facilities, however, the incentives of the new firm would change. It might seek to black out, or exclude, some of the programming to customers of rival distributors, perhaps in order to induce them to switch distributors, or perhaps because its profit-maximizing price to customers of rival systems would be higher than it had been prior to the merger. Higher prices to customers of rivals will raise those rivals' costs.

These predictions are a consequence of ordinary economic modeling that assumes as a first principle that firms are profit-maximizers in whatever position they find themselves.[71] An important corollary is that the vertically integrated firm would maximize profits across all of its divisions. That is, the fact that it is organized into multiple divisions does not change the fact that its goal is to maximize overall firm value, or profits. One problem with the district court opinion in *AT&T* is that the court doubted this basic proposition. Instead, it credited testimony from the merging firms' employees that the post-merger firm would not seek to maximize profits generally, but rather to maximize each division separately.[72] Fundamental economics predicts the contrary: having acquired Time Warner (TW) as a collection of program assets, AT&T would employ them so as to maximize its bottom line. The important consideration is

69. *See, e.g.*, *AT&T*, 310 F. Supp. 3d at 222 (noting that the government's expert had presented such evidence).

70. *See* Steven C. Salop, *Invigorating Vertical Merger Enforcement*, 127 YALE L.J. 1962, 1979–80 (2018); William P. Rogerson, *A Vertical Merger in the Video Programming and Distribution Industry: The Case of Comcast-NBCU* (2011), *in* THE ANTITRUST REVOLUTION: ECONOMICS, COMPETITION, AND POLICY 534 (John E. Kwoka, Jr. & Lawrence J. White eds., 6th ed. 2014).

71. *See* Aviv Nevo, U.S. Dep't of Justice, Remarks as Prepared for the Stanford Institute for Economic Policy Research and Cornerstone Research Conference on Antitrust in Highly Innovative Industries: Mergers that Increase Bargaining Leverage 3–6 (Jan. 22, 2014), https://www.justice.gov/atr/file/517781/download.

72. *AT&T*, 310 F. Supp. 3d at 223 (finding "serious tension" between the economic proposition that firms maximize overall profits and defendant testimony that they do not).

not what maximizes TW's revenues individually as an independent profit-maximizing unit, but what maximizes the overall profits of the post-merger firm.

An employee might be perfectly sincere in testifying that she would not maximize profits for the firm but would continue in familiar ways, looking exclusively at the particular division that employed her. When confronted with a disappointing bottom line, however, such employees would either change their behavior or lose their jobs.

The merger challenger must also show that any refusal to deal or discriminatory pricing practice would likely cause competitive harm if it occurred. Many instances of vertical integration by merger result in refusals to deal. For example, a manufacturer of lawn mowers that acquires its own dealer in a community will very likely sell mowers through its newly acquired dealership, refusing to sell mowers to local independent dealers. Although the vertical merger might facilitate this refusal to deal, that does not establish that the refusal is anticompetitive. As a general matter, we expect manufacturers who own dealerships to sell through their own dealers.[73]

The fact that anticompetitive foreclosure or discrimination is not automatic does not mean that it never occurs, however. As *AT&T* suggests, a broadband internet provider that acquires substantial programming assets may be in a position to deny that programming to distributors on rival internet providers, or else charge them a higher price. The effect of the higher price could be either to increase consumer prices or else to induce them to switch away from a competitor's broadband service to that of the post-merger firm.[74] The government alleged mainly that the merger between AT&T, an internet provider whose assets include DirecTV and TW, which owned program content, would enable the post-merger firm to force rival distributors of TW programming to pay a higher price than TW's current position would permit.[75] The complaint also alleged that the merger would slow the development of "disruptive," procompetitive innovations such as direct online video distribution. This includes Sling TV and other "skinny" bundles that offer programming directly over the internet rather than traditional cable.[76]

The 2011 merger between Comcast Corp. and NBC reflected analogous concerns about denial of access to programming.[77] The Comcast merger was

73. For several years, vertical mergers were brought under the now largely defunct theory that the post-merger firm would favor its own subsidiaries at the expense of rivals. *See* United States v. E.I. Du Pont De Nemours & Co., 353 U.S. 586, 590–93 (1957) (accepting the government's position that the vertical ownership relationship between Du Pont and General Motors would incentivize General Motors to favor Du Pont when it purchased seat cover fabrics and automobile paint, both of which were manufactured by both Du Pont and other firms); Fruehauf Corp. v. FTC, 603 F.2d 345, 352–53 (2d Cir. 1979) (rejecting the theory that post-merger firms will favor its own subsidiaries at the expense of rivals).

74. *AT&T*, 310 F. Supp. 3d at 194.

75. Complaint at ¶¶ 5–6, United States v. AT&T, Inc., 310 F. Supp. 3d 161 (D.D.C. 2018) (No. 17-2511).

76. *Id.* at 6–7 ("AT&T/DirecTV perceives online video distribution as an attack on its business that could, in its own words, 'deteriorate[] the value of the bundle.'" (alteration in original)).

77. *See* United States v. Comcast Corp., 808 F. Supp. 2d 145, 148–49 (D.D.C. 2011) (ordering a consent decree).

resolved by a consent decree that permitted the merger but required the post-merger firm to share its programming and grant access to rival programming on fair and reasonable terms. The decree set up an arbitration mechanism to resolve disputes. Judge Richard Leon, the same judge who presided over *AT&T*, expressed considerable doubt about whether the arbitration scheme would work,[78] and there is evidence that it did not work all that well.[79] Nevertheless, he approved the consent decree.

Although it was not discussed in the *AT&T* decision, the Federal Communications Commission's December 2017 decision rolling back net neutrality should increase antitrust scrutiny of vertical mergers in this industry, at least if they involve a broadband provider.[80] The net neutrality rules that had been in place might have prohibited at least some of the vertical exclusion and discriminatory treatment that can result from a vertical telecommunications acquisitions.[81]

The argument that post-merger AT&T-TW will favor its own customers and discriminate against the customers of rivals may sound a little like rejected arguments from the 1970s. The concerns stated in earlier cases were that vertical mergers gave a firm's own customers preferential treatment over the customers of rivals.[82] There is one very important difference, however, although it is specific to communications mergers and perhaps a few others. The "favoritism" arguments in those earlier cases involved durable goods for which there was a naturally finite supply.[83] For example, in *Fruehauf Corp. v. FTC*, the FTC argued that in time of short supply the post-merger firm would favor its own subsidiary at the expense of rivals.[84] But in most cases we would expect a truck manager to use its wheel and brake subsidiary exclusively, and harm to competition would be exceptional.

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78. Complaint, *supra* note 75, ¶¶ 6–7.

79. *See* Jonathan Berr, *Regulators in AT&T-Time Warner Deal Try to Avoid Repeating Past Mistakes*, FORBES (Nov. 21, 2017, 3:30 PM), https://www.forbes.com/sites/jonathanberr/2017/11/21/regulators-in-att-time-warner-deal-try-to-avoid-repeating-past-mistakes/#5a57a95614e0 (discussing what occurred with the selling of Hulu).

80. *See* Press Release, Fed. Commc'ns Comm'n, FCC Acts to Restore Internet Freedom (Dec. 14, 2017), https://www.fcc.gov/document/fcc-takes-action-restore-internet-freedom.

81. *See* Tim Wu, Opinion, *Why Blocking the AT&T-Time Warner Merger Might Be Right*, N.Y. TIMES (Nov. 9, 2017), https://www.nytimes.com/2017/11/09/opinion/att-time-warner-merger-fcc.html?mtrref=www.google.com&assetType=opinion (arguing that erosion of net neutrality will increase anticompetitive potential of the merger); *see also* Jon Brodkin, *Comcast Accused of Violating NBC Merger Commitment and Net Neutrality Rule*, ARS TECHNICA (Mar. 3, 2016, 9:03 AM), https://arstechnica.com/information-technology/2016/03/comcast-accused-of-violating-nbc-merger-commitment-and-net-neutrality-rule/.

82. *E.g.*, Fruehauf Corp. v. FTC, 603 F.2d 345, 352–53 (2d Cir. 1979); *see also* United States v. E.I. Du Pont De Nemours & Co., 353 U.S. 586, 590–93 (1957).

83. *E.g.*, *E.I. Du Pont*, 353 U.S. at 588–89 (involving automobile fabrics and finishes); *Fruehauf*, 603 F.2d at 348 (involving heavy-duty truck wheels and antiskid brakes).

84. *Id.* at 354 (the FTC argued that "the merger violated § 7 with respect to the truck trailer market solely on the theory that in the event of a shortage . . . Kelsey would give Fruehauf a substantial competitive advantage over other trailer manufacturers by diverting to Fruehauf wheels that would otherwise go to Kelsey's other customers, some of which are trailer manufacturers").

By contrast, licensed films and television programming are nonrivalrous. Once a TW asset such as *Wonder Woman* or the *Harry Potter* films has been created, the digital files can be licensed an indefinite number of times. If post-merger AT&T-TW decides not to license *Wonder Woman* to a competing cable company or to charge it a higher price, it is manifestly not because *Wonder Woman* is in short supply and must be allocated among potential customers.

To think of this a little differently, an unintegrated programmer that owned *Wonder Woman* and nothing else would maximize revenue by licensing to all comers.[85] Each sale increases profits and there are no shortages to be allocated, for *Wonder Woman* can be licensed out an infinite number of times. As soon as DirecTV, an AT&T asset, comes to own *Wonder Woman*, however, the post-merger firm has different incentives. Now it can withhold or threaten to withhold *Wonder Woman* from the customers of competing internet providers as an inducement to get customers to switch to DirecTV as their carrier, or charge them higher prices. The result can be the creation or perpetuation of "silos" in which each internet provider gives preferred or exclusive access to its own internet customers. This results in reduced quality or variety of programming, which is a qualifying output reduction under antitrust's consumer welfare principle.

The Comcast consent decree referred to above[86] reflects a mechanism of resolving antitrust disputes in communications markets with a combination of antitrust and ongoing control. It has also been used in monopolization cases, such as the consent decree that broke up the AT&T telephone monopoly in the early 1980s.[87] That decree resolved an antitrust case by a combination of a structural remedy that broke the phone company into seven "Baby Bells," and ongoing oversight of interconnection disputes by a federal district judge.[88] This lasted until passage of the 1996 Telecommunications Act.[89]

As this history of antitrust regulation by consent decree suggests, antitrust and regulation represent alternative approaches to competition issues that should not be confused.[90] Notwithstanding Judge Harold Greene's heroic work

85. Although, it might be prevented from doing so by most-favored nation and similar agreements that are common in the industry. *See* Erik Hovenkamp & Neel U. Sukhatme, *Vertical Mergers and the MFN Thicket in Television*, ANTITRUST CHRON., Summer 2018, at 1.

86. United States v. Comcast Corp., 808 F. Supp. 2d 145, 149–50 (D.D.C. 2011) (ordering consent decree).

87. United States v. AT&T, 552 F. Supp. 131, 232 (D.D.C. 1982), *aff'd mem. sub nom.*, Maryland v. United States, 460 U.S. 1001 (1983). A similar consent decree terminated the Government's big section 2 case against Microsoft. United States v. Microsoft Corp., 231 F. Supp. 2d 144 (D.D.C. 2002); *see also* New York v. Microsoft Corp., 231 F. Supp. 2d 203 (D.D.C. 2002) (approving settlement).

88. The late Honorable Harold Greene provided oversight of the consent decree. Joseph D. Kearney, *From the Fall of the Bell System to the Telecommunications Act: Regulation of Telecommunications Under Judge Greene*, 50 HASTINGS L.J. 1395, 1400–03 (1999).

89. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 47 U.S.C.).

90. *See* Daniel A. Crane, *Bargaining in the Shadow of Rate-Setting Courts*, 76 ANTITRUST L.J. 307 (2009) (recalling, among other things, the history of rate setting under the ASCAP and BMI consent decrees that established what became the copyright royalty tribunal; also observing that even when a consent decree contemplates managed rates the parties are able to negotiate them in a significant majority of cases); *see also*

administering the AT&T breakup, antitrust is not a good vehicle for imposing ongoing regulatory restrictions on a firm's behavior. The "breakup" provision of the 1982 AT&T consent decree was very much an antitrust remedy, but the portion of the decree requiring ongoing supervision of interconnection disputes was not, and in the 1996 Telecommunications Act it was more realistically assigned over to the Federal Communications Commission and state telecommunications regulators.

The one important difference between the AT&T telephone case and the more recent vertical mergers is that AT&T was a single firm to begin with, and the action against it had been brought under section 2 of the Sherman Act.[91] This made Clayton Act incipiency irrelevant. The telephone consent decree expresses what antitrust can accomplish without a legislative assist in an action against a single firm. Eventually, however, Congress acted. The interconnection components of the consent decree were replaced by a regulatory provision that transferred these obligations away from a federal court and to federal and state agencies.[92]

Merger consent decrees with behavioral conditions are an attempt to avoid, or at least soften, the implications of the incipiency test by expanding the scope of antitrust so as to do things that antitrust could not accomplish on its own. Consent decrees are contracts, and as such they can impose much more specific and far reaching rules on the parties than would occur through ordinary antitrust litigation.[93] The one thing that they have difficulty providing, however, is closure.[94] Rather, they create ongoing obligations that need to be enforced until the decree expires or is withdrawn.[95]

This does not mean that every unlawful merger must be completely blocked. Select, targeted spinoffs are in fact structural forms of relief that ordinarily do not require ongoing judicial supervision. If a particular asset is likely to be a bottleneck, the appropriate solution may be to condemn the merger unless the firms agree to divest that bottleneck asset to a third party who can be expected to maintain it as a viable competitive presence. Or in the case of partial asset acquisitions that leave both merging partners as separate ongoing concerns,

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Daniel A. Crane, *Intellectual Liability*, 88 TEX. L. REV. 253, 266–67, 294 (2009).

91. The breakup occurred after one of the rare instances in which a court found a unilateral duty to deal, in this case under the "essential facility" doctrine, which the Supreme Court has never approved. *See* MCI Commc'ns Corp. v. AT&T Co., 708 F.2d 1081, 1133, 1144 (7th Cir. 1983).

92. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 47 U.S.C.).

93. *See, e.g.*, Flying J Inc. v. Comdata Network, Inc., 405 F.3d 821, 835–36 (10th Cir. 2005) (concluding contract principles rather than substantive antitrust law controlled in interpretation of antitrust consent decree); United States v. Microsoft Corp., 147 F.3d 935, 945–47 (D.C. Cir. 1998) (finding the same).

94. The problem is not a new one. *See generally* Note, *Flexibility and Finality in Antitrust Consent Decrees*, 80 HARV. L. REV. 1303 (1967) (noting problem of ongoing supervision in merger consent decrees).

95. For a discussion on antitrust consent decrees, see 2A AREEDA & HOVENKAMP, *supra* note 12, ¶ 327. For a discussion on the history of antitrust consent decrees, see generally Eric J. Branfman, *Antitrust Consent Decrees—A Review and Evaluation of the First Seven Years Under the Antitrust Procedures and Penalties Act*, 27 ANTITRUST BULL. 303 (1982).

the government might simply object to some asset transfers, leaving them with the original owner.[96] But in either case the goal is to leave a market structure that will sustain competition without the need for government oversight.

Another solution that is workable for some situations is insistence that IP rights be nonexclusive in perpetuity rather than exclusive. Superficially, forcing IP rights to be nonexclusive might sound "behavioral," but in fact it is a purely structural form of divestiture which permits multiple entities to make use of an asset. Nonexclusive rights give a firm everything it needs to operate its own business, enabling it to take advantage of expansion opportunities and up-to-date technology. The one thing that they do not grant is the right to prevent competitors from using that technology.[97] For example, the consent decree that broke up the telephone company provided for the compulsory licensing of AT&T patents on a nonexclusive, nondiscriminatory basis.[98] Antitrust consent decrees that require nondiscriminatory licensing of patents are not uncommon.[99]

In applying section 7's incipiency test to a vertical merger the challenger needs to show four things, or in a few cases five. *First*, that the acquisition makes particular behavior possible; *second*, that the post-acquisition market and the position of the firm creates a reasonable likelihood that this behavior will occur, which we can assume if it is profitable; *third*, that the behavior will be anticompetitive if it does occur, with the presumptive measure being lower output, higher prices, or reduced innovation; and *fourth*, that once the merger has occurred and the conduct has become that of a single firm, it will be much more difficult for antitrust law to detect and discipline. A possible fifth query, as noted above in the discussion of net neutrality, would be whether non-antitrust regulatory provisions are present and will police the feared conduct in a satisfactory manner.[100]

96. For example, the recently proposed union of 21st Century Fox and Walt Disney Company is a partial asset acquisition, in which Fox will sell some but not all of its assets to Disney. If a particular transfer is found to be anticompetitive, the result may be to force Fox to retain that particular asset, leaving the rest of the merger to proceed. Fox may, of course, later sell that asset to some other firm. For a discussion of the merger, see Steven Zeitchik, *Disney Buys Much of Fox in Megamerger that Will Shake World of Entertainment and Media*, WASH. POST (Dec. 14, 2017), https://www.washingtonpost.com/news/business/wp/2017/12/14/disney-buys-much-of-fox-in-mega-merger-that-will-shake-world-of-entertainment-and-media/?utm_term=.5b25155cc07c. The 2010 Horizontal Merger Guidelines have a section on partial acquisitions, but it is devoted largely to partial stock acquisitions, which raise very different issues. *See* 2010 HORIZONTAL MERGER GUIDELINES, *supra* note 31, § 13, at 33–34.

97. *See* U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY § 4.1.2, at 21 (2017) [hereinafter ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY] ("A non-exclusive license of intellectual property that does not contain any restraints on the competitive conduct of the licensor or the licensee generally does not present antitrust concerns.").

98. United States v. AT&T, 552 F. Supp. 131, 135 (D.D.C. 1982), *aff'd mem. sub nom.*, Maryland v. United States, 460 U.S. 1001 (1983); *see id.* at 176 (explaining why it was now appropriate to eliminate compulsory nonexclusive licensing requirements in a previous antitrust consent decree entered in 1956).

99. *See, e.g.*, United States v. Nat'l Lead Co., 332 U.S. 319, 328 (1947) (approving elaborate consent decree requiring licensing of patent on nondiscriminatory terms); *see also* United States v. Miller Indus., Inc., No. CIV. A. 00-CV-00 030, 2000 WL 33141220, at *1 (D.D.C. Dec. 12, 2000); United States v. Cookson Grp. PLC, Civ. A. No. 92 2206, 1993 WL 735029, at *1 (D.D.C. Feb. 5, 1993).

100. For a discussion of this query in the context of a Sherman Act section 2 case, see Verizon Commc'ns,

As the first two elements indicate, the fact finder must show not only that a merger makes certain conduct possible, but also that the post-merger firm would be likely to engage in it. In merger analysis this is ordinarily an objective exercise, querying whether a practice such as refusal to deal or price discrimination would be profitable for the firm in question. This is the way we analyze the analogous problem for horizontal mergers—that is, by querying whether a change in market position has increased the post-merger firm's profit-maximizing price when measured against pre-merger levels.[101]

To give a simple example, subsequent to the merger between AT&T and TW, the post-merger firm owns both DirecTV, which is an AT&T asset, and *Wonder Woman*, which is a TW asset. At that point it would be in a position to license *Wonder Woman* exclusively to DirecTV subscribers, thus excluding subscribers who obtain their programming from Comcast, Verizon, Dish Network, Mediacom, or several other suppliers of cable or wireless internet services. It might also deny access to video streamers such as Netflix or Amazon. Subsequent to the merger, this refusal to license would be an ordinary unilateral refusal to deal, and antitrust law would presumably not require the post-merger firm to share *Wonder Woman* with anyone else.[102]

While the merger makes this refusal to license possible, however, it does not necessarily make it profitable. *Wonder Woman* promises to be a very high margin product, producing high license fees even though the marginal cost of distributing an already produced film is very low. Further *Wonder Woman* is presumably not worth more to existing DirecTV subscribers simply because subscribers to rival services are not able to get it. If the strategy of refusing to supply *Wonder Woman* is to be profitable, the profits must come from somewhere else. For example, *Wonder Woman* might be used as a lever to induce customers of other services to switch to DirecTV. It is also possible that post-merger AT&T-TW might either refuse to license or else raise internet access costs of video streamers, including firms such as Netflix. Whether that is profitable behavior is an empirical question.

There are also other dangers. For example, a world of concentrated cable and internet companies who are also vertically integrated into programming might lead to an oligopoly of "silos" in which each firm shares less content than it would if content were independently owned. In more traditional markets for physical goods such silos are a natural result of vertical integration. For example, the major automobile manufacturers sell through their own dealerships. In the case of video programming, however, the result could be that people would receive less programming from a particular service. Unless these firms agree with each other not to share programming, the practice would not be reachable under section 1 of the Sherman Act unless the parties entered into a provable

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Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398 (2004). There, the Court declined antitrust liability because a regulator was present and its regime "was an effective steward of the antitrust function." *Id.* at 413.

101. *See supra* articles cited in note 53.

102. *See* 3B AREEDA & HOVENKAMP, *supra* note 12, ¶¶ 770–74.

contract or conspiracy, but merger policy could prevent the situation from occurring in the first place. Absent that, the result could be that each internet service provider offers a smaller range of programming than it otherwise would, injuring customers by loss of variety.

V. Anticompetitive Acquisitions of Patents or Other IP Rights

A patent or other intellectual property right[103] creates a power to exclude, whether or not the exclusion creates a product market monopoly.[104] The exclusion right is of course inherent in patent law and is the mechanism by which patenting encourages invention. If a patent, or even a portfolio of patents, should create a product monopoly antitrust nevertheless must keep its hand off, except in the situation where the patent owner attempts to enforce a patent that it knows or should know is invalid or unenforceable.[105]

However, patent law does not recognize a right to create a market monopoly through means other than those contemplated in the patenting process itself. The problem can arise when a firm assembles a market monopoly by acquiring patents from outside inventors, or perhaps by acquiring firms holding large patent portfolios.[106] If a process can be accomplished by two competing (that is, substitute) patent portfolios, the Patent Act authorizes whatever amount of market power is created when one of those portfolios is created by invention. It does not authorize the amount of additional monopoly that is created, however, when the two portfolios of existing but competitively owned patents come under common ownership.

Maintaining that line is particularly important because in most cases the threat of market monopoly by means of merger is far greater than the threat of market monopoly through internal invention and patenting. While a very strong, market shifting patent can create a monopoly, most do not.[107] A merger, by contrast, is a simple act of transaction, not of invention. If three groups of assets, patents or otherwise, collectively dominate a market a simple set of purchases

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103. On the anticompetitive use of copyrights (in motion pictures), see Prof'l Real Estate Inv'rs, Inc. v. Columbia Pictures Indus., Inc., 508 U.S. 49, 55–61 (1993).

104. On the relationship between patents or other intellectual property rights and market power, see 2B AREEDA & HOVENKAMP, *supra* note 12, ¶ 518. In *Illinois Tool Works, Inc. v. Independent Ink, Inc.*, 547 U.S. 28, 31 (2006), the Supreme Court held that market power in an antitrust tying challenge could not be inferred from the existence of a patent or copyright, but must be proven.

105. *E.g.*, Walker Process Equip., Inc. v. Food Mach. & Chem. Corp., 382 U.S. 172 (1965) (patent infringement suit brought by patentee who knew the patent was unenforceable could violate § 2 of the Sherman Act); *cf.* Oskar Liivak, *Overclaiming Is Criminal*, 49 ARIZ. ST. L.J. 1417 (2017) (arguing for similar liability for excessively broad claims).

106. *See* discussion *infra* text accompanying notes 92–97. Compare such a case to *United States v. Winslow*, 227 U.S. 202 (1913), in which Justice Holmes wrote the Court's opinion approving the merger of firms owning three complementary technologies for producing shoes (lasting machines, welt-sewing machines, and outsole-stitching machines), including their patents. The result was the creation of the United Shoe Machinery monopoly, which lasted roughly a half century. *See* CARL KAYSEN, UNITED STATES v. UNITED SHOE MACHINERY CORPORATION: AN ECONOMIC ANALYSIS OF AN ANTI-TRUST CASE 100 (1956).

107. *See* HOVENKAMP, *supra* note 29, § 3.9d, at 185–87.

can turn them instantly into a market monopoly.

A firm can thus threaten competition by buying up all of the patents necessary for production in a particular line of commerce.[108] For example, suppose that two inventors have developed the only two alternative processes for producing a particular type of microprocessor chip. Both are covered by portfolios of patents, each developed by the two inventors independently. These two owners could then either use the portfolios themselves or license them to others. Assuming that the manufacturers are not colluding and that the two alternatives are equally effective, the market could perform as competitively as we might expect from a two-firm market. It might be even more competitive if the two firms licensed their portfolios to third parties.

Suppose, however, that the owner of one of these competing patent portfolios should acquire the portfolio held by the other. This owner then continues to use its existing portfolio of patents but keeps the acquired portfolio unused. Alternatively, a non-practicing entity might acquire both portfolios and then license one or both of them. In both of these cases the acquisition would have created a market monopoly over the processes for making this chip, and in a way that is not authorized by the Patent Act.[109] One patentee may also purchase or license patents from another.[110] However, there is no right in the Patent Act to make an acquisition that creates a monopoly.[111] While competitively harmless patent acquisitions are authorized by the Patent Act, patents are also "assets" that are subject to the merger laws.[112] In addition, if one firm acquires another firm with a substantial patent portfolio, that merger is subject to condemnation under the merger laws.[113]

In *Intellectual Ventures I, LLC v. Capital One Financial Corp.*, the district

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108. *See* Erik Hovenkamp & Herbert Hovenkamp, *Buying Monopoly: Antitrust Limits on Damages for Externally Acquired Patents*, 25 TEX. INTELL. PROP. L.J. 39, 54 (2017); *cf.* Trebro Mfg., Inc. v. Firefly Equip., LLC, 748 F.3d 1159 (Fed. Cir. 2014) (permitting firm to acquire a patent from an outside inventor, keep it unusued, but then obtain an injunction against a competitor).

109. 35 U.S.C. § 271 (2012) (defining scope of patent infringement).

110. 35 U.S.C. § 261 (granting right to assign and license).

111. That is, the right to acquire a patent does not entail a right to do so anticompetitively. *See* Herbert Hovenkamp, *Antitrust and the Patent System: A Reexamination*, 76 OHIO ST. L.J. 467, 515–23 (2015).

112. W. Geophysical Co. of Am., Inc. v. Bolt Assocs., Inc., 440 F.2d, 765, 772 (2d Cir. 1971) (exclusive patent license with an obligation to develop sublicenses after two years could be covered by section 7 of the Clayton Act); Automated Bldg. Components, Inc. v. Trueline Truss Co., 318 F. Supp. 1252, 1261 (D. Or. 1970) (acquisition of various assets including patent applications covered by section 7); Dairy Foods, Inc. v. Farmers Coop. Creamery, 298 F. Supp. 774, 777 (D. Minn. 1969) (patent acquisition subject to section 7); *see also* Pharm. Research & Mfrs. of Am. v. FTC, 790 F.3d 198, 200 (D.C. Cir. 2015) (applying *Chevron* deference and approving FTC rule); Premerger Notification; Reporting and Waiting Period Requirements, 78 Fed. Reg. 68,705, 68,705–07 (Nov. 15, 2013) (to be codified at 16 C.F.R pt. 801) (revising FTC's requirement of reporting of significant acquisitions of exclusive rights in pharmaceutical patents). For a discussion on patents as "assets" covered by section 7 of the Clayton Act, see ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY, *supra* note 97, § 5.7, at 34; 1 HERBERT HOVENKAMP ET AL., IP AND ANTITRUST: AN ANALYSIS OF ANTITRUST PRINCIPLES APPLIED TO INTELLECTUAL PROPERTY LAW § 14.01 (3d ed. 2017).

113. FTC v. CCC Holdings, Inc., 605 F. Supp. 2d 26, 76–77 (D.D.C. 2009) (enjoining acquisition combining two firms whose principal assets were patented, specialized software); *see also* FED. TRADE COMM'N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY 2–3 (2003).

court dismissed a section 7 lawsuit that raised some of these issues.[114] Intellectual Ventures (IV), a non-practicing entity, had acquired from third-party inventors substantially all of the patents covering certain types of transactions in financial services industries. At the time the value or validity of the patents was largely undetermined, although some were later found invalid.[115] The antitrust challenger alleged that IV's strategy was to obtain patent ownership blanketing the entire market, making it impossible for banks to do business in this market without licensing IV's patents.[116] For purposes of this strategy the acquired patents would have to be treated as substitutes, or competitors, so this was a horizontal merger.[117]

In rejecting an antitrust merger challenge by the infringement defendant, the court reasoned that once the merger occurred and IV owned all the patents in question, then it would have a legal right to enforce them. This right would be limited only by the restraints that antitrust or patent law impose on the bringing of infringement actions on unenforceable patents.[118] Since the only way competition could be lessened by the merger was through the bringing of infringement suits, the court reasoned, the merger was lawful because that right was protected by the *Noerr-Pennington* doctrine, which creates a right to bring a lawsuit reasonably believed to be meritorious.[119] While *Walker Process* liability can condemn a lawsuit on a patent known to be unenforceable, both the Patent Act[120] and the First Amendment petitioning right recognized in the *Noerr-Pennington* doctrine permits suits on patents reasonably believed by the enforcer to be valid and infringed.[121]

Factually, of course, that is true. Once someone owns a portfolio of patents it has a right to enforce any or all of them. But, under the incipiency test, this counts against rather than in favor of the merger. The Patent Act permits both the invention of monopoly-creating technologies and the transfer of patents; however, it does not permit the creation of monopoly by means of transfer rather than invention. Here the merger incipiency test is essential because, once the anticompetitive acquisition has occurred, the infringement lawsuits will be

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114. 280 F. Supp. 3d 691, 694 (D. Md. 2017), *appeal filed*, No. 18-1367 (Fed. Cir. Jan. 2, 2018).

115. *See* Intellectual Ventures I, LLC v. Capital One Fin. Corp., 850 F.3d 1332, 1342 (Fed. Cir. 2017) (finding patents in question invalid as directed toward abstract ideas).

116. *Intellectual Ventures I*, 280 F. Supp. 3d at 697 ("Capital One characterizes IV's business model as comprised of three components: *accumulate* a vast portfolio of patents purportedly relating to essential commercial banking services, *conceal* the details of those patents so that the banks cannot determine whether their products infringe any of IV's patents, and serially *litigate* to force the banks to capitulate and license the portfolio at exorbitant cost.").

117. Portfolios of patents would naturally include both substitutes and complements, but a strategy of eliminating alternatives would naturally apply to their competitive relationship.

118. *Intellectual Ventures I*, 280 F. Supp. 3d at 705.

119. *Id.*

120. *See* 35 U.S.C. § 271(d)(3) (2012).

121. *See* United Mine Workers v. Pennington, 381 U.S. 657, 663 (1965); E. R.R. Presidents Conf. v. Noerr Motor Freight, Inc., 365 U.S. 127, 136–37 (1961). For a discussion on the use of the doctrine in antitrust litigation, see 2 PHILLIP C. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶¶ 201–08 (4th ed. 2014).

treated as the conduct of a single firm. In that case, an antitrust court is powerless to intervene except in the very narrow circumstances defined by the *Walker Process* doctrine.

Indeed, if given precedential effect, the district court's holding would effectively prohibit application of section 7 of the Clayton Act to virtually any acquisition of rights in intellectual property. The mechanism by which such an acquisition "lessens" competition will always be the power to assert the acquired right against infringers, a right that the *Noerr-Pennington* doctrine protects.[122]

It is worth noting that the right to enforce traditional property rights in court is also protected by the First Amendment petitioning immunity. For example, it protects the land owner's right to file a complaint against trespassers.[123] But that hardly means that all acquisitions of plant and equipment are immune from section 7 simply because these property rights, once acquired, can be legally enforced.

The problem of anticompetitive patent or other IP acquisitions can often be best addressed by insisting that IP acquisitions that would otherwise violate section 7 be limited to nonexclusive licenses. The acquisition of a non-exclusive license gives a firm, whether monopolist or not, all it needs to produce in the market in question, thus enabling it to use acquired patents to stay up to date with technology. What it does not do, however, is give the dominant firm a right to shut down or otherwise challenge the technology of others, as in the *Intellectual Ventures* litigation. The acquisition problem is doubly serious when the patents in question are not merely acquired from an outside inventor, but when they are acquired and *unused*.[124] The principal value of a patent license is to enable a firm to produce using the licensed technology. A nonexclusive license is all it needs for this purpose. Recognizing this, several merger decrees, both litigated and by consent, have conditioned acquisitions on the parties' agreement to turn patent assignments or exclusive licenses into nonexclusive licenses.[125]

To be sure, such an approach very largely undermines the *Intellectual Ventures* business model whenever the acquisitions in question are

122. *See* Brief for the U.S. & FTC as Amici Curiae in Support of Neither Party at 20–21, Intellectual Ventures I, LLC v. Capital One Fin. Corp., No. 18-1367 (Fed. Cir. Jan. 2, 2018) (quoting this Article and concluding that "[l]ikewise, *Noerr-Pennington* does not protect anticompetitive patent acquisitions from antitrust liability simply because the patent holder subsequently engages in protected litigation activity").

123. *See, e.g.*, Venetian Casino Resort, L.L.C. v. NLRB, 793 F.3d 85 (D.C. Cir. 2015) (concluding that a casino owner's summoning of police officers to enforce state law of trespass to land was protected by *Noerr-Penningon*, provided that the walkway in question was really a part of casino owner's private property).

124. For a discussion of this problem, see generally Erik Hovenkamp & Thomas F. Cotter, *Anticompetitive Patent Injunctions*, 100 MINN. L. REV. 871 (2016). For a discussion on the history of dominant firm strategies of filing infringement suits on externally acquired by unused patents, see Herbert Hovenkamp, *The Emergence of Classical American Patent Law*, 58 ARIZ. L. REV. 263, 285–89 (2016).

125. *E.g.*, Great Lakes Chem. Corp., 103 F.T.C. 467, 461 (1984) (applying section 7 to a patent acquisition and requiring a nonexclusive license as the remedy in consent decree); *see also* Ciba-Geigy Ltd., 123 F.T.C 842 (1997) (requiring merged firms to license several gene therapy patents to a different firm); Boston Sci. Corp., 119 F.T.C. 549 (1995) (conditioning merger approval on royalty free license in order to avoid abuse of dominant position).

anticompetitive. But that hardly means that the original patent owners in question are left without a remedy. To return to the hypothetical situation of two competing patent portfolios for making a microprocessor,[126] a producer would still have to acquire licenses to one of these two portfolios, and it would have the right that is consistent with both patent law and antitrust law, which is to acquire that right in a competitive market in which the rival patentees could bid for that manufacturer's licensing business.

To summarize, a patent gives its owner the right to profit from the patented technology by either practicing it or licensing it out in whatever market the patentee finds itself. It does not, however, create a right to create market monopoly by transfer as opposed to invention. The merger incipiency rule gives effect to this limitation.

VI. Acquisitions of Small but Highly Innovative Firms

A large firm's acquisition of a small, highly innovative firm can raise serious long run competition issues, even if the two firms are not competitors at the time of the acquisition. Such an acquisition may not have an immediate impact on price. Further, many of them have an efficiency justification—namely, that adding a complementary technology to the acquiring firm's product is good for consumers. For example, Facebook's 2014 acquisition of WhatsApp enabled it to expand its profile in the chat market, augmenting the value of its primary product.[127] Google's 2016 acquisition of Orbitera enabled it to compete more effectively with Amazon in the management of cloud-based software.[128] Since their founding, the large internet tech firms including Facebook, Alphabet (Google), Microsoft, and Apple have made more than 500 such acquisitions.[129]

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126. *See* discussion *supra* text accompanying notes 93–94.

127. *See* Josh Constine, *A Year Later, $19 Billion for WhatsApp Doesn't Sound So Crazy*, TECHCRUNCH, https://techcrunch.com/2015/02/19/crazy-like-a-facebook-fox/ (last visited Nov. 21, 2018).

128. *See* Justine Brown, *Google Acquires Orbitera to Help Encourage Multi-Cloud Environments*, CIODIVE (Aug. 9, 2016), https://www.ciodive.com/news/google-acquires-orbitera-to-help-encourage-multi-cloud-environments/424071/.

129. Wikipedia maintains lists of smaller firms acquired by large technology companies. *E.g.*, *List of Mergers and Acquisitions by Facebook*, WIKIPEDIA, https://en.wikipedia.org/wiki/List_of_mergers_and_acquisitions_by_Facebook (last visited Nov. 21, 2018) (listing sixty-eight acquisitions); *List of Mergers and Acquisitions by Alphabet*, WIKIPEDIA, https://en.wikipedia.org/wiki/List_of_mergers_and_acquisitions_by_Alphabet#List_of_mergers_and_acquisitions (last visited Nov. 21, 2018) (listing more than 200); *List of Mergers and Acquisitions by Microsoft*, WIKIPEDIA, https://en.wikipedia.org/wiki/List_of_mergers_and_acquisitions_by_Microsoft (last visited Nov. 21, 2018) (listing more than 200); *List of Mergers and Acquisitions by Apple*, WIKIPEDIA, https://en.wikipedia.org/wiki/List_of_mergers_and_acquisitions_by_Apple#Acquisitions (last visited Nov. 21, 2018) (listing ninety-nine acquisitions). In addition, eBay has acquired some sixty companies. *See List of Acquisitions by eBay*, WIKIPEDIA, https://en.wikipedia.org/wiki/List_of_acquisitions_by_eBay (last visited Nov. 21, 2018). Yahoo! has acquired 114. *See List of Mergers and Acquisitions by Yahoo!*, WIKIPEDIA, https://en.wikipedia.org/wiki/List_of_mergers_and_acquisitions_by_Yahoo! (last visited Nov. 21, 2018). Twitter has acquired fifty-five. *See List of Mergers and Acquisitions by Twitter*, WIKIPEDIA, https://en.wikipedia.org/wiki/List_of_mergers_and_acquisitions_by_Twitter (last visited Nov. 21, 2018). IBM has acquired more than 150. *See List of Mergers and Acquisitions by IBM*, WIKIPEDIA, https://en.wikipedia.org/wiki/List_of_mergers_and_acquisitions_by_IBM#Acquisitions_since_2000 (last

While many of these acquisitions are economically beneficial, a few pose serious competitive risks,[130] but assessing them is difficult. Small, highly innovative firms can grow into larger ones, offering more competition in the market in question, but their acquisition by large incumbents eliminates that possibility.[131] The *2010 Horizontal Merger Guidelines* contain a brief discussion of the issue, recognizing two dangers. First, an acquired firm might be involved in introducing "new products that would capture substantial revenues from the other merging firm."[132] Second is a long-run effect that might occur "if at least one of the merging firms has capabilities that are likely to lead it to develop new products in the future that would capture substantial revenues from the other merging firm."[133]

This is one area where merger law's substantiality test needs to do some real work. Courts should rely on the principle that the offense should be differentiated according to the remedy that is sought.[134] When the only remedy is an injunction against the transaction, enforcement agencies and courts should be more willing to stop the acquisition. In particular, when the acquiring firm cannot point to a particular, provable efficiency or product improvement the government's burden should be light.

Determining optimal structural remedies can be difficult. Limiting acquisitions to nonexclusive licenses may be a workable antitrust solution in some cases, but not all. Such a license would permit the acquiring firm to take advantage of the acquired firm's technology, thus improving its own product or range of products, but without giving it a right to exclude others. For example, all Facebook needed to improve its chatting function was a nonexclusive license to the WhatsApp technology.[135]

Offsetting this is the fact that a nonexclusive right can be worth less than an exclusive one. Small firms may be less valuable if they cannot transfer

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visited Nov. 21, 2018).

130. *See* Terrell McSweeny, FTC Comm'r, Remarks at the 18th International Conference on Competition in Berlin, Germany: Understanding Innovation and Its Role in U.S. Merger Review (Mar. 16, 2017), https://www.ftc.gov/system/files/documents/public_statements/1176893/berlin_international_conference_on_competition_final.pdf.

131. *See, e.g.*, United States v. Bazaarvoice, Inc., No. 13-cv-00133-WHO, 2014 WL 203966, at *2, 36–38 (N.D. Cal. Jan. 8, 2014) (enjoining acquisition of innovative competitor, although there were also concerns about elimination of price competition in a highly concentrated market); Complaint at ¶ 40, Verisk Analytics, Inc., No. 9363 (FTC Dec. 16, 2014) (challenging merger of highly innovative new entrant that could have offered greater competition to established firm).

132. 2010 HORIZONTAL MERGER GUIDELINES, *supra* note 31, § 6.4, at 23; *see also* Commission Guidelines on the Assessment of Horizontal Mergers Under the Council Regulation on the Control of Concentrations Between Undertakings, 2004 O.J. (C 31) ¶¶ 8, 20, 38, 45.

133. 2010 HORIZONTAL MERGER GUIDELINES, *supra* note 31, § 6.4, at 23; *see also* Gordon M. Phillips & Alexei Zhdanov, *R&D and the Incentives from Merger and Acquisition Activity* 1 (Nat'l Bureau of Econ. Research Working Paper No. 18346, 2012) (concluding that data suggests that the prospect of acquisition induces smaller firms to innovate more in hope of selling out, but larger firms to innovate less because they would prefer to obtain new technology by merger rather than internal development).

134. *See* 2 AREEDA & HOVENKAMP, *supra* note 121, ¶ 303c.

135. *See* Constine, *supra* note 127.

exclusive rights in their innovative technologies to a dominant firm. Acquisition of a nonexclusive license is also a partial asset acquisition, leaving the selling firm with the untransferred assets. As a result, one might think that such acquisitions may not provide the selling firms with an attractive means of exiting from the market. But that argument is a red herring. The fact that some part of the selling firm's assets remain with that firm does not obligate it to continue in business. Another alternative, which can avoid some of these problems, is to permit the acquisition but require the acquiring firm to license competitively problematic acquired assets to third parties.

Acquisitions of innovative startups are valuable to society because they enable the acquiring firm to improve its product or keep up with technological change. Accordingly, when a large firm acquires a highly innovative small firm and then either shuts that firm down or fails to deploy its technology, this opportunity for gain is lost. In that case the principal consequence of the acquisition is to prevent the acquired firm's technology from reaching the market at all. As a result, antitrust law should give close scrutiny to acquisitions of small firms whose assets are unlikely to be deployed into the market. Nondeployment of the acquired technology entails that there is no efficiency explanation for the acquisition, and this should justify a harsh rule.

Also deserving scrutiny are acquisitions of small firms whose product serves to duplicate the acquiring firm's product rather than providing a valuable complementary extension. The most prominent explanation of such an acquisition is elimination of the acquired firm's anticipated competition.

Another solution that is promising in some situations is post-acquisition challenges. Some mergers might not be predictably anticompetitive at the time of the transaction but become so later on. Further, a government action for an injunction is not governed by the Clayton Act's four year statute of limitation, but rather by the equitable, judge-made doctrine of laches, which in appropriate circumstances can permit such a lawsuit long after the merger has occurred.[136] The traditional rule is that the doctrine of laches as a limitation on equitable relief, as opposed to damages, does not run against the government, although it may bear on the type of relief to which the government is entitled. The courts generally look at the overall situation, shortening the period where it seems clear that the challenger could have acted earlier but did not do so, or lengthening it when the anticompetitive threat did not emerge until years after the acquisition occurred.[137] For example, if a merger presents a competitive threat only several

136. *See* California v. Am. Stores Co., 495 U.S. 271, 295–96 (1990) (holding that the government could bring equity challenge to merger even though time period for plaintiff had expired). Justice Kennedy concurred, but objected to the majority conclusion that laches might run more slowly against the government. *Id.* at 298 (Kennedy, J., concurring). For a discussion on the judge-made doctrine of laches governing equity suits in antitrust cases, see 2 PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW, ¶ 320g (4th ed. 2013).

137. United States v. Pullman Co., 50 F. Supp. 123, 127 (E.D. Pa. 1943) (noting that laches does not run against the government, but doubting that full remedial relief would be appropriate where the acquisition had occurred a half century earlier). *See, e.g.*, Ginsburg v. InBev NV/SA, 623 F.3d 1229, 1235 (8th Cir. 2010) (applying laches to completed merger where "the hardship and competitive disadvantage resulting from forced

years after an acquisition, then the government should be excused for not bringing its action earlier. In all events, it must be clear that the emergent competitive threat was caused by the merger, and this will not necessarily be easy when the challenge follows the merger by many years. On the other hand, it should be relatively clear when the firm's use of the acquired asset is the source of the harm. Harm is also clear when the acquired technology is not being used at all but the merger enables the acquiring firm to keep it away from rivals.

CONCLUSION

Government equity suits against mergers seem to require the courts to peer into a crystal ball. Most mergers today are challenged before they occur, but even afterwards certain effects may take years to materialize. As a result, there is a degree of long range prediction in merger litigation that goes far beyond what is common in other areas of law.

The need to predict the future would not be particularly important if every practice that a merger threatens could readily be detected and condemned should it occur later. In that case we could rest easy, permitting the merger to attain whatever efficiencies it is likely to produce, knowing that anticompetitive consequences can be interdicted if and when they materialize.

But too many anticompetitive practices do not fall into that category. Often post-merger conduct is likely to be anticompetitive but antitrust law has inadequate tools for dealing with it directly. This is particularly true of two classes of cases. One is coordinated, interdependent pricing that threatens reduced output or higher prices, but that is not readily reachable under antitrust law's "agreement" requirement.[138] The other is conduct that, once the merger occurs, becomes unilateral and is able to take advantage of antitrust law's general toleration for unilateral price setting and refusals to deal.[139]

Finally, the extent to which a court in a merger case must predict a probabilistic future varies with the situation. In traditional merger cases concerned with collusion-like conduct, the feared impact could occur soon after the merger transaction is completed. That is also true for most unilateral effects horizontal merger cases. Foreclosure from vertical acquisitions may take somewhat longer to materialize, and patent infringement suits based on monopolistic combinations of externally acquired patents may have an even longer timeline. The longest latency period is very likely the acquisition of small but highly innovative firms, which absent the acquisition might take several

divestiture would be both dramatic and certain"); Midwestern Mach. Co. v. Nw. Airlines, Inc., 392 F.3d 265, 265 (8th Cir. 2004) (concluding laches barred eleven-year delay in challenge to acquisition, at least where the transaction was known to plaintiff since it occurred); *cf.* Julius Nasso Concrete Corp. v. Dic Concrete Corp., 467 F. Supp. 1016, 1024 (S.D.N.Y. 1979) (concluding laches serves to bar a claim only if the delay prejudices a defense that was otherwise available); *see also* United States v. E.I. Du Pont De Nemours & Co., 353 U.S. 586, 622–24 (1957) (Burton, J., dissenting) (noting the traditional position that laches does not run against the government). Laches does apply to private plaintiffs).

138. *See* discussion *supra* text accompanying notes 10–11.

139. *See* discussion *supra* text accompanying notes 40–44.

years to grow into meaningful rivals, assuming they ever do.

Offsetting this is that the government equity action calls for no other remedy than a preemptive injunction against the acquisition. There are no prison sentences, large fines, private damages actions or other costly remedies other than prevention of the transaction itself.[140] Further, in the latter two sets of cases involving patent rights and highly innovative firms, acquisition of non-exclusive rights or selective compulsory licensing may provide the full set of economic benefits that the acquiring firm requires.

140. For a discussion on the importance of defining the breadth of the offense inversely to the permissible remedy, see 2 AREEDA & HOVENKAMP, *supra* note 121, ¶ 303c.