ARTICLE

NASCENT COMPETITORS

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A nascent competitor is a firm whose prospective innovation represents a serious threat to an incumbent. Protecting such competition is a critical mission for antitrust law, given the outsized role of unproven outsiders as innovators and the uniquely potent threat they often pose to powerful entrenched firms. In this Article, we identify nascent competition as a distinct analytical category and outline a program of antitrust enforcement to protect it. We make the case for enforcement even where the ultimate competitive significance of the target is uncertain, and explain why a contrary view is mistaken as a matter of policy and precedent. Depending on the facts, troubling conduct can be scrutinized under ordinary merger law or as unlawful maintenance of monopoly, an approach that has several advantages. In distinguishing harmful from harmless acquisitions, certain evidence takes on heightened importance. Evidence of an acquirer's anticompetitive plan, as revealed through internal communications or subsequent conduct, is particularly probative. After-the-fact scrutiny is sometimes necessary as new evidence comes to light. Finally, our suggested approach poses little risk of dampening desirable investment in startups, as it is confined to acquisitions by those firms most threatened by nascent rivals.

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INTRODUCTION

A nascent competitor is a firm whose prospective innovation represents a serious future threat to an incumbent. The firm's potency as a competitor is as yet not fully developed and hence unproven. For example, a new, fast-growing, and evolving online platform is a nascent competitor to the currently dominant platform. A promising but unproven cure for a disease represents nascent competition for an incumbent selling a therapy that is the current standard of care.

Nascent rivals play an important role in both the competitive process and the process of innovation.[1] New firms with new technologies can challenge and even displace existing firms; sometimes, innovation by an unproven outsider is the only way to introduce new competition to an entrenched incumbent. That makes the treatment of nascent competitors core to the goals of the antitrust laws. As the D.C. Circuit has explained, "it would be inimical to the purpose of the Sherman Act to allow monopolists free rei[]n to squash nascent, albeit unproven, competitors at will . . . ."[2]

Government enforcers have expressed interest in protecting nascent competition, particularly in the context of acquisitions made by leading online platforms.[3] However, enforcers face a dilemma. While nascent competitors often pose a uniquely potent threat to an entrenched incumbent, the firm's

1 *See infra* Section I.B.

2 United States v. Microsoft Corp., 253 F.3d 34, 79 (D.C. Cir. 2001) (en banc) (per curiam).

3 *See, e.g.*, Terrell McSweeny & Brian O'Dea, *Data, Innovation, and Potential Competition in Digital Markets—Looking Beyond Short-Term Price Effects in Merger Analysis*, CPI ANTITRUST CHRON., Feb. 2018, at 5-6; D. Bruce Hoffman, Dir., Bureau of Competition, Fed. Trade Comm'n, Remarks at GCR Live Antitrust in the Digital Economy: A Snapshot of FTC Issues (May 22, 2019), https://www.ftc.gov/system/files/documents/public_statements/1522327/hoffman_-_gcr_live_san_francisco_2019_speech_5-22-19.pdf [https://perma.cc/F8FP-PAVD]; Jeffrey M. Wilder, Acting Deputy Assistant Attorney Gen., Antitrust Div., Dep't of Justice, Remarks as Prepared for the Hal White Antirust Conference: Potential Competition in Platform Markets (June 10, 2019), https://www.justice.gov/opa/speech/file/1176236/download [https://perma.cc/ARR4-QXMQ].

eventual significance is uncertain, given the environment of rapid technological change in which such threats tend to arise. That uncertainty, along with a lack of present, direct competition, may make enforcers and courts hesitant or unwilling to prevent an incumbent from acquiring or excluding a nascent threat. A hesitant enforcer might insist on strong proof that the competitor, if left alone, probably would have grown into a full-fledged rival, yet in so doing, neglect an important category of anticompetitive behavior.

In this Article, we identify nascent competition as a distinct analytical category and outline a program of antitrust enforcement to protect it. Nascent competition means different things to different people. Our approach emphasizes prospective innovation by a future direct competitor. We consider both exclusionary conduct and acquisitions, with a particular focus on the latter. We confine ourselves to liability and bracket questions of remedy.

We favor an enforcement policy that prohibits anticompetitive conduct that is reasonably capable of contributing significantly to the maintenance of the incumbent's market power.[4] That approach implies enforcement even where the competitive significance of the nascent competitor is uncertain. Uncertainty is a ground for caution, but we argue that the overall balance favors a bias to action, given the importance of the innovation at issue and resulting costs of underenforcement. The proper approach does not require proving, as some have argued, that successful competitive entry in the "but-for" world by the excluded innovator would necessarily or probably have occurred. Such a standard is not compelled by the relevant case law and serves no clear policy related to the goals of antitrust. Instead, it would lead the law to miss out on obvious efforts to destroy competition, and also create a perverse incentive for threatened incumbents to accelerate their anticompetitive programs.[5]

The acquisition of a nascent competitor raises several particularly challenging questions of policy and doctrine. First, acquisition can serve as an important exit for investors in a small company, and thereby attract capital necessary for innovation. Blocking or deterring too many acquisitions would be undesirable. However, the significance of this concern should not be exaggerated, for our proposed approach is very far from a general ban on the acquisition of unproven companies. We would discourage, at most, acquisition by the firm or firms most threatened by a nascent rival. Profitable acquisitions by others would be left alone, as would the acquisition of merely complementary or other nonthreatening firms. While wary of the potential for overenforcement, we believe that scrutiny of the most troubling

4 *See infra* Section II.A.

5 *See Microsoft*, 253 F.3d at 79 (describing a monopolist's incentive, if a different and more stringent standard were employed, "to take more and earlier anticompetitive action").

acquisitions of unproven firms must be a key ingredient of a competition enforcement agenda that takes innovation seriously.

Second, as a matter of enforcement practice, the question of how to distinguish harmful from harmless acquisitions is important and sometimes difficult. Many acquisitions have important procompetitive justifications or are harmless overall. A small, unproven firm might be acquired in order to acquire expertise, to add a specific technical capability, or to make a bet on a "moon shot"—a risky, unproven technology in another market. Identifying anticompetitive conduct is a familiar and pervasive problem in antitrust enforcement, but it is heightened by the uncertainties associated with innovation and technological change.

We think evidence of an anticompetitive plan is a particularly important guide in this area.[6] Such intent might be subjectively expressed through testimony or internal writings. The enforcer or factfinder essentially borrows a party's expertise to help form a judgment about competitive effects. Alternatively, intent might be revealed through conduct, such as paying too much for a rival (unless the anticompetitive benefits are taken into account) or a broader pattern of buying nascent competitors.

Third, uncertainty and product evolution also influence the timing of antitrust intervention, whether for exclusionary conduct or acquisitions.[7] Where nascent competitors are concerned, agencies can intervene early—before an acquisition closes or, in an exclusion case, when evidence of exclusion first surfaces. Given the inherent informational limits when it comes to nascent competitors, however, it can sometimes be better to wait.[8] At a minimum, the passage of time should not be disqualifying.

Waiting often permits enforcers to acquire critical information that is unavailable at an earlier period. Enforcers can uncover the true intent of the conduct, as hidden information comes to light or (more prosaically) as multiple bad acts gradually fill in an overall picture. They may also learn about the adverse effect of the conduct, including the plausible potency of the nascent competitor and the durable market power of the incumbent. Making use of such new information does not indulge in unwarranted hindsight bias. These benefits often offset the costs of waiting, including the disruption associated with some ex post remedies. Our emphasis on stronger ex post enforcement offers an alternative to recent proposals emphasizing the need for new ex ante regulation.[9]

6 *See infra* Section III.A.

7 *Cf.* Tim Wu, *Taking Innovation Seriously: Antitrust Enforcement if Innovation Mattered Most*, 78 ANTITRUST L.J. 313, 325-28 (2012) (emphasizing the importance of timing).

8 *See infra* Section III.B.

9 *See, e.g.*, JASON FURMAN ET AL., DIGITAL COMPETITION EXPERT PANEL, UNLOCKING DIGITAL COMPETITION 2 (Mar. 13, 2019), https://assets.publishing.service.gov.uk/government/

This Article proceeds in three parts. Part I defines what we mean by nascent competitors and provides paradigmatic examples. Part II sets out and defends our overall approach to protecting nascent competition and analyzes its fit with existing antitrust law. Section 7 of the Clayton Act, which prohibits certain anticompetitive acquisitions, is a particularly useful tool where the nascent competitor already has a presence in the incumbent's market. We argue that Section 2 of the Sherman Act is also an effective enforcement tool in the context of incumbents with monopoly power. Here, the D.C. Circuit's opinion in *United States v. Microsoft* provides a helpful framework. Part III assesses several types of evidence that are important components of an antitrust enforcement program aimed at protecting nascent competition from anticompetitive acquisitions.

I. What Is a Nascent Competitor?

As we use the term, a nascent competitor is a firm whose innovation represents a serious, albeit not completely certain, future threat to an incumbent. We begin by presenting several real-world examples of nascent competition, then turn to an explication of the key features of our definition.

A. *Examples*

Operating systems for personal computers. In the 1990s, Microsoft identified an emergent threat to its Windows operating system monopoly. The rise of Netscape's Internet browser was central to a paradigm shift that threatened Microsoft's dominance. This threat was amplified by Sun's development of the Java programming language and Intel-developed hardware that was designed for use with Java. Microsoft CEO Bill Gates catalogued these threats in internal communications, most famously the "Internet Tidal Wave" memo that ultimately provided a road map to the antitrust case against the firm.[10]

Netscape and Sun posed a nascent competitive threat. Neither were plausibly, at the time, substitutes for Windows. Netscape's offering did not

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uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf [https://perma.cc/59LL-9VAR] [hereinafter FURMAN REPORT] (recommending new *ex ante* rules for digital platforms); GEORGE J. STIGLER CTR. FOR THE STUDY OF THE ECON. AND THE STATE, UNIV. OF CHI. BOOTH SCH. OF BUS., REPORT OF THE COMMITTEE FOR THE STUDY OF DIGITAL PLATFORMS MARKET STRUCTURE AND ANTITRUST SUBCOMMITTEE 9 (2019), https://research.chicagobooth.edu/-/media/research/stigler/pdfs/market-structure-report.pdf [https://perma.cc/GQ8E-MWKZ] (recommending the creation of a new regulatory agency for digital platforms).

10 Memorandum from Bill Gates, Chairman and CEO of Microsoft Corp., to Exec. Staff and Direct Reports, Microsoft Corp. (May 26, 1995), https://www.justice.gov/sites/default/files/atr/legacy/2006/03/03/20.pdf [https://perma.cc/K8CX-ZDFQ].

compete with Windows.[11] However, Microsoft feared that over time they would evolve into substitutes,[12] and acted to neutralize the competitive threat.

DNA sequencing. Illumina is the leading manufacturer of instruments that identify the order of nucleotides in a DNA sample, with a market share of 80 percent or more.[13] A second firm, PacBio, also makes sequencing equipment. PacBio uses a "long read" technology in contrast to Illumina's "short read" technology.[14] Historically, long read sequencing has been less cost-effective on a cost per genome basis, but over time, the cost and throughput of long-read technology have improved.[15] By 2018, according to the Federal Trade Commission (FTC), PacBio had become an increasing threat to Illumina's monopoly, with the expectation of further convergence to come.[16] Thus, PacBio posed a nascent threat to Illumina, which Illumina sought to eliminate by acquiring PacBio.

Social network services. In 2012, Facebook was the world's leading social network provider.[17] Facebook in the 2010s, like Microsoft in the 1990s, carefully scanned the horizon for nascent threats that might displace it.[18] CEO Mark Zuckerberg observed the rise of popular new social networks that centered on mobile devices, such as Instagram, a fast-growing photo sharing

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11 United States v. Microsoft Corp., 253 F.3d 34, 53-54 (D.C. Cir. 2001) (en banc) (per curiam) (assessing the perceived threat to Windows posed by Netscape's browser).

12 *See id.* at 54 (describing "middleware technologies that threatened to become viable substitutes for Windows").

13 *See* Maxx Chatsko, *What Happens Next for Illumina and Pacific Biosciences?*, MOTLEY FOOL (Dec. 28, 2019, 10:00 AM), https://www.fool.com/investing/2019/12/28/what-happens-next-for-illumina-and-pacific-bioscie.aspx ("Illumina boasts an 80% market share of the global next generation sequencing (NGS) market, making it the undisputed king of reading genomes."); *see also* Complaint at 6, Illumina, Inc., No. 9387 (F.T.C. filed Dec. 17, 2019) [hereinafter Illumina Complaint] (alleging market share greater than 90%).

14 *See* David McLaughlin & Kristen V. Brown, *U.S. Moves to Block DNA-Sequencing Deal on Competition Fears*, BLOOMBERG (Dec. 17, 2019, 4:08 PM), https://www.bloomberg.com/news/articles/2019-12-17/u-s-moves-to-block-dna-sequencing-merger-on-competition-fears [https://perma.cc/93LG-YZX5] (describing the two technologies).

15 *See* Shanika L. Amarasinghe et al., *Opportunities and Challenges in Long-Read Sequencing Data Analysis*, 21 GENOME BIOLOGY, 2020, at 2, https://genomebiology.biomedcentral.com/articles/10.1186/s13059-020-1935-5 [https://perma.cc/DS8H-YUV9] (describing this trend).

16 Illumina Complaint, *supra* note 13, at 7.

17 *See* Presentation of Sheryl Sandberg, COO of Facebook, Inc., to Vodafone Board of Directors 2 (Jan. 30, 2012), https://judiciary.house.gov/uploadedfiles/00057113_picture.pdf [https://perma.cc/MW4R-9MB7] (stating that "[t]he industry consolidates as it matures" and "Facebook is now 95% of all social media in the US"); *see also* Alexis Madrigal, *The Fall of Facebook*, ATLANTIC, Dec. 2014, https://www.theatlantic.com/magazine/archive/2014/12/the-fall-of-facebook/382247 [https://perma.cc/725F-KDPS] ("A decade after Facebook emerged from the Ivy League dorms in which it started, it is the most powerful information gatekeeper the world has ever known.").

18 *See* Sam Schechner & Parmy Olson, *Facebook Feared WhatsApp Threat Ahead of 2014 Purchase, Documents Show*, WALL ST. J. (Nov. 6, 2019, 6:37 PM), https://www.wsj.com/articles/facebook-feared-whatsapp-threat-ahead-of-2014-purchase-documents-show-11573075742 [https://perma.cc/5YTG-SGLG] (describing competitive surveillance of other firms).

app.[19] Zuckerberg wrote: "The businesses are nascent but the networks are established, the brands are already meaningful and if they grow to a large scale they could be very disruptive to us."[20] He proposed "going after one or two of them"[21] and explained the case for acquisition as a combination of "neutralizing a competitor" and improving Facebook's services.[22] Instagram posed a nascent competitive threat, and later that year, Facebook acquired the firm for about $1 billion.[23]

By 2014, Facebook executives regarded messaging apps as "the biggest competitive threat we face as a business."[24] Zuckerberg wrote colleagues, in an echo of the Tidal Wave memo, that messaging apps "are trying to build social networks and replace us."[25] WhatsApp, a leading messaging app, was a particular focus of these concerns. One senior executive wrote that "WhatsApp launching a competing platform is definitely something I'm super-paranoid about."[26]

WhatsApp posed a nascent competitive threat. In 2014, it was not a fully-fledged social network. The competitive concern was that WhatsApp might

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19 Instagram reached forty million users in eighteen months. Matt Burns, *Instagram's User Count Now at 40 Million, Saw 10 Million New Users in Last 10 Days*, TECHCRUNCH (Apr. 13, 2012), https://techcrunch.com/2012/04/13/instagrams-user-count-now-at-40-million-saw-10-million-new-users-in-last-10-days [https://perma.cc/6UNW-K29K].

20 Email from Mark Zuckerberg, Chairman and CEO of Facebook, Inc., to David Ebersman, CFO of Facebook, Inc. (Feb. 27, 2012), https://judiciary.house.gov/uploadedfiles/0006322000063223.pdf [https://perma.cc/4B6V-S42E].

21 *Id.*

22 Email from David Ebersman to Mark Zuckerberg (Feb. 28, 2012), https://judiciary.house.gov/uploadedfiles/0006322000063223.pdf [https://perma.cc/4B6V-S42E] (suggesting, as motivations for an acquisition, "(1) neutralize a potential competitor? . . . (3) integrate their products with ours in order to improve our service?"); Email from Mark Zuckerberg to David Ebersman (Feb. 28, 2012), https://judiciary.house.gov/uploadedfiles/0006322000063223.pdf ("It's a combination of (1) and (3)."). In this exchange, Ebersman expressed skepticism that the neutralization strategy would work, given the likelihood that other firms would arise to take its place. Zuckerberg responded:

> One thing that may make (1) more reasonable here is that there are network effects around social products and a finite number of different social mechanics to invent. Once someone wins at a specific mechanic, it's difficult for others to supplant them without doing something different. It's possible someone beats Instagram by building something that is better to the point that they get network migration, but this is harder as long as Instagram keeps running as a product.

Id.

23 Evelyn Rusli, *Facebook Buys Instagram for $1 Billion*, N.Y. TIMES, April 9, 2012. Part of the purchase price was in stock, and the final transaction value was lower.

24 Schechner, *supra* note 18 (quoting Javier Olivan, Facebook's head of growth).

25 *Id.*

26 *Id.* (quoting Mike Vernal, a senior Facebook executive).

"morph into Facebook" over time.[27] Facebook acquired WhatsApp for $22 billion, thereby eliminating the threat.[28]

B. *Significance and Definition*

Our definition of nascent competition has three components, drawn from the facts and reasoning of *Microsoft*. There, the court's understanding that Netscape was a "nascent . . . competitor" had three important features: (1) that the Netscape browser held promise as the foundation of an innovative new software development platform; (2) that the potential of Netscape's innovation had not fully come to fruition but might have done so in the future; and (3) that this prospect posed a serious threat to Windows.

Innovation. First, a nascent competitor is an innovator. Innovation can take the form of technical progress or new business models that better serve consumer needs. Protecting the fruits of innovation is important because new products and services drive economic growth. Such competition is valuable both because the entrant's product may represent a real advance and because the entrant increases the pressure on the incumbent to innovate in anticipation or response.[29] Competition also opens the door to further entry in this and other businesses. Finally, and perhaps most obviously, competition can benefit consumers by lowering the price paid for these innovations.

Over the last century and a half, small, innovative firms have played a particularly important role in the process of innovation and competition. This is not to discount the important history of innovation at big firms with large research laboratories, such as Bell Labs, Xerox PARC, and research labs at General Electric and Merck.[30] However, over the same period, a significant number of disruptive innovations—those that transform industry—have come out of very small firms with new technologies unproven at the time: examples include the Bell Telephone Company, RCA, MCI, Genentech, Apple, Netscape, and dozens of others.[31]

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27 *Id.* (quoting Olivan).

28 *Id.* (noting the completion of the transaction for approximately $22 billion).

29 *Cf.* U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N., HORIZONTAL MERGER GUIDELINES § 6.4 (2010) [hereinafter 2010 HMG], https://www.justice.gov/atr/horizontal-merger-guidelines-08192010 [https://perma.cc/CQ5M-8PDD] (describing, as possible effects from a horizontal merger, a "reduced incentive to continue with an existing product-development effort or . . . to initiate development of new products").

30 *See generally* JON GERTNER, THE IDEA FACTORY: BELL LABS AND THE GREAT AGE OF AMERICAN INNOVATION (2013); FRAN HAWTHORNE, THE MERCK DRUGGERNAUT: THE INSIDE STORY OF A PHARMACEUTICAL GIANT (2005); MICHAEL A. HILTZIK, DEALERS OF LIGHTNING: XEROX PARC AND THE DAWN OF THE COMPUTER AGE (2000).

31 Small and large firms have different advantages and disadvantages when it comes to innovation: the relevant point here is that both have been, over history, important contributors. *See* TIM WU, THE MASTER SWITCH: THE RISE AND FALL OF INFORMATION EMPIRES 19-20 (2010).

There is a particular competitive significance of the big innovations at the smaller firms, for they also represent competitive entry, and sometimes completely transform the industry.[32] New, unproven innovators are a key source of disruptive innovation.[33] Consider that Bell's telephone did not improve the telegraph, but replaced it, or the impact of Apple's personal computer on the computing industry. As this suggests, nascent competitors can hold the promise of offering fresh competition *for* the market, not just *in* the market. They have the capacity to displace an incumbent through a paradigm shift—for example, a new platform for developing software or decoding a genome. Nascent competition tends to be important in industries marked by rapid innovation and technological change. Software, pharmaceuticals, mobile telephony, e-commerce, search, and social network services are leading examples.

Future potency. Second, a nascent competitor is relevant due to its promise of *future* innovation. Its potency is not yet fully developed and hence unproven. Whether that innovation will make a difference in the marketplace is subject to significant uncertainty. That is due to the unpredictable rate and direction of technological change. This uncertainty stems from the same forces of technological progress that make innovation so valuable. The nascent competitor may fail in various ways: the unproven cure, despite highest hopes, may flunk its clinical trials; the technologies thought to be the future might, in fact, be overrated. This uncertainty may not be a quantifiable risk, like the odds in a casino, but closer to Knightian true uncertainty—in other words, not readily susceptible to measurement.[34]

The unpredictable path of innovation often results in product plasticity, in which products evolve and are used for purposes different than the original. For example, in the 1990s, mobile telephones gained popularity as a complement to a wired telephone, as a means for making calls on the go.[35] Today, they compete with land lines, cameras, computers, televisions, and credit cards. General purpose technologies such as computing and Internet connectivity act as powerful fuel for unpredictable change.[36] Uncertainty

32 *See id.* at 18-22, 159.

33 *Cf.* Joseph L. Bower & Clayton M. Christensen, *Disruptive Technologies: Catching the Wave*, HARV. BUS. REV., Jan.-Feb. 1995, at 43-44 ("[M]ost well-managed, established companies . . . are rarely in the forefront of commercializing new technologies that don't initially meet the needs of mainstream customers . . . .").

34 FRANK H. KNIGHT, RISK, UNCERTAINTY AND PROFIT 232-33 (1957) (noting that the "practical difference between . . . risk and uncertainty . . . is that in the former, the distribution of the outcome in a group of instances is known," whereas "true uncertainty" is "not susceptible to measurement").

35 Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, 68 Fed. Reg. 730, 736 (Jan. 7, 2003) ("Historically, most consumers used their mobile phones as a mobile complement to their wireline phones by using their mobile handsets only when away from their homes or places of work.").

36 *See generally* Timothy F. Bresnahan & Manuel Trajtenberg, *General Purpose Technologies: "Engines of Growth"?*, 65 J. ECONOMETRICS 83 (1995).

about what products the incumbent and the nascent competitor will actually offer in the future has a further consequence—uncertainty about the degree to which those products will actually compete.

In some cases, a nascent competitor may already have begun to compete in the incumbent's market, even if its potency is not yet fully proven. For example, at the time of its announced acquisition, PacBio competed with Illumina for sequencing business, and Instagram competed with Facebook for the attention of social network users.[37] Existing competition, where present, may be merely partial: the Netscape browser competed with Microsoft's browser but not (yet) with Windows.

Where competition has already begun, its existence might inform a positive prediction about future competition. In addition, a particular acquisition might be challenged on account of lost current competition. However, current competition is not an essential feature of nascent competition. It is the further, future developments that give nascent competition its distinctive importance.[38]

Threat to the incumbent. Finally, a nascent competitor poses a serious threat to the incumbent. The owner of a tech platform, focused on holding on to its position, may continually scan the horizon for dangerous new technologies or fast-growing firms that might evolve into competitive threats. Microsoft in the 1990s and Facebook in the 2010s are good examples of firms that were highly concerned with their own displacement.

The prospect of disruptive competition for the market raises the stakes, intensifying an incumbent's attentiveness to the risk of being usurped. Some incumbents are particularly aware of this possibility, having been the

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37 *See* Tim Wu, *Blind Spot: The Attention Economy and the Law*, 82 ANTITRUST L.J. 771, 774-76 (2019).

38 Our definition matches the usage of the D.C. Circuit in *Microsoft*, which viewed Netscape as a nascent competitor even though Netscape did not offer current competition to Windows. United States v. Microsoft Corp., 253 F.3d 34, 54 (D.C. Cir. 2001) (en banc) (per curiam); *see also* United States v. Socony-Vacuum Oil Co., 310 U.S. 150, 224 n.59 (1940) ("It is the 'contract, combination . . . or conspiracy, in restraint of trade or commerce' which § 1 of the Act strikes down, whether the concerted activity be wholly nascent or abortive on the one hand, or successful, on the other."). An alternative definition requires some degree of current competition. *See, e.g.*, Paul T. Denis, Partner, Dechert LLP, Address at the Fed. Trade Comm'n Hearing on Competition and Consumer Protection in the 21st Century: Nascent Competition: Is the Current Analytical Framework Sufficient?, at 187 (Oct. 17, 2018), https://www.ftc.gov/system/files/documents/public_events/1413712/ftc_hearings_session_3_transcript_day_3_10-17-18_1.pdf [https://perma.cc/3YNJ-X29E] (acknowledging "common usage [of] the term . . . to refer to competition that we've yet to see" but criticizing this definition as "incorrect" because "[t]he word itself implies some degree of competition that's present but . . . not yet fully realized"); *see also Competition in Digital Technology Markets: Examining Acquisitions of Nascent or Potential Competitors by Digital Platforms: Hearing Before the Subcomm. on Antitrust, Competition Policy, and Consumer Rights of the S. Comm. on the Judiciary*, 116th Cong. 2 (2019) (statement of John M. Yun, Professor, Antonin Scalia Law School), https://www.judiciary.senate.gov/imo/media/doc/Yun%20Testimony.pdf [https://perma.cc/46JG-J5PJ] (adopting and paraphrasing Denis's view).

beneficiary of such a paradigm shift at an earlier time: consider that Microsoft, for example, replaced the CP/M operating system when computing moved from microcomputers to personal computers. Not every technology that poses a future threat is perfectly obvious on its face. A technology might stay complementary in one firm's hands, but in the hands of another, provide a foothold for evolution into a substitute.

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Our definition of nascent competition is restrictive in certain respects. It leaves out future competition where innovation plays no major role[39] or is uncertain for reasons unrelated to the rate and direction of technological change.[40] Such cases might concern "nascent competition" in a broad sense and merit protection from antitrust law, depending on the facts. Our definition also excludes firms producing complements that, absent exclusion or acquisition by the incumbent, might facilitate third-party competition.[41] We limit ourselves here to focus on a subset of cases that present important, real-world challenges for antitrust enforcement.

II. PROTECTING NASCENT COMPETITION

A. *Overall Approach*

As a matter of antitrust policy, the importance of protecting innovation by nascent competitors requires searching scrutiny of incumbents' actions to neutralize such competition. Nurturing innovation is properly regarded as a central goal of antitrust enforcement.[42] Moreover, as discussed above, new, unproven innovators are a key source of disruptive innovation.[43] Given the incentive and ability of incumbents to destroy or coopt innovative threats,

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39 We discuss other forms of lost future competition *infra* Section II.B.

40 *See, e.g.*, Complaint at 11-12, FTC v. Mallinckrodt ARD Inc., No. 1:17-cv-00120 (D.D.C. Jan. 30, 2017), https://www.ftc.gov/system/files/documents/cases/170118mallinckrodt_complaint_public.pdf [https://perma.cc/SG65-KUA5] (alleging that a U.S. drug maker violated antitrust law by acquiring a low-priced, chemically similar treatment for same condition, approved in Europe but not the United States).

41 *See, e.g.*, Kevin Bryan & Erik Hovenkamp, *Startup Acquisitions, Error Costs, and Antitrust Policy*, 87 U. CHI. L. REV. 331 (2020) (focusing on this issue); Thomas Kadri, *Digital Gatekeepers*, 99 TEX. L. REV. (forthcoming 2021) (manuscript at 20-21, 33-38), https://ssrn.com/abstract=3665040 (discussing this issue in the context of "adversarial interoperability"); Mark A. Lemley & Andrew McCreary, *Exit Strategy* 19 (Stan. L. & Econ. Olin Working Paper No. 542, 2020), https://ssrn.com/abstract=3506919 [https://perma.cc/Y8EZ-F8LX] (emphasizing Instagram's platform agnosticism, which facilitated competition with Facebook by Twitter and others).

42 Herbert Hovenkamp, *Antitrust and Innovation: Where We Are and Where We Should Be Going*, 77 ANTITRUST L.J. 749, 751 (2011) ("[T]here seems to be broad consensus that the gains to be had from innovation are larger than the gains from simple production and trading under constant technology.").

43 *See supra* Section I.A.

avoiding that outcome is an important target for enforcement. The risk of lost innovation strongly tips the balance in favor of a bias to action.

We favor an enforcement policy that prohibits anticompetitive conduct that is reasonably capable of contributing significantly to the maintenance of the incumbent's market power. That approach is not only consistent with antitrust law, but directly drawn from *Microsoft*,[44] the leading example of antitrust enforcement to preserve nascent competition. This approach implies a particular decision rule. Where an incumbent (1) eliminates or impedes a nascent competitor through acquisition or exclusion, (2) that poses the requisite level of competitive threat, and (3) without fully offsetting competitive benefits, such conduct should be prohibited. Several features of our approach bear particular note.

Uncertain threats. Notably, the approach does not require proving that successful competitive entry, in the but-for world, would necessarily have occurred. Even a modest probability of a highly detrimental outcome is a large loss, in expected value terms, and ought to be avoided.[45] It is therefore no surprise that the *Microsoft* court, other courts, and enforcement agencies have all recognized the antitrust violation that arises even if the competitive but-for world is highly uncertain or otherwise incompletely specified.[46]

We therefore disagree with recent suggestions that an enforcer, to establish antitrust liability, should be asked to prove that competition in the but-for world is more likely than not.[47] The implication is that, when the

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44 *See infra* Section II.C (discussing *Microsoft* in more detail).

45 *See, e.g.*, FURMAN REPORT, *supra* note 9, at 13, 99-101 (favoring a "balance of harms" approach that condemns mergers resulting in harm in expected value terms, and criticizing a more-likely-than-not test as "unduly cautious"); Giulio Federico et al., *Antitrust and Innovation: Welcoming and Protecting Disruption*, *in* 20 INNOVATION POLICY AND THE ECONOMY 125, 142-43 (Josh Lerner & Scott Stern eds., 2019) (making a similar point); Doni Bloomfield, Getting to "May Be": Probability, Potential Competition, and the Clayton Act 36-47 (June 8, 2020) (unpublished manuscript), https://ssrn.com/abstract=3589820 (favoring an expected value approach to horizontal mergers); *see also* Aaron Edlin et al., *Activating* Actavis, ANTITRUST, Fall 2013, at 16 (concluding that the Supreme Court adopted an expected consumer harm approach in the evaluation of certain horizontal agreements).

46 *See infra* Section II.C (discussing case law under Section 2 of the Sherman Act that follows this approach); FTC v. Actavis, Inc., 570 U.S. 136, 157 (2013) (concluding that a reduction in the likelihood—the "risk"—of competition due to certain conduct is a "consequence [that] constitutes the relevant anticompetitive harm," even if the likelihood is low); 2010 HMG, *supra* note 29, § 5.3 (targeting mergers for challenge where "competitive significance of the potential entrant" is high); Michael R. Moiseyev, *Potential and Nascent Competition in FTC Merger Enforcement in Health Care Markets*, CPI ANTITRUST CHRON., May 2020, at 6 ("The 'competitive significance' of the entrant is the product of both its probability of successful entry *and* its impact if, and when, it occurs.").

47 *See, e.g.*, Timothy J. Muris & Jonathan E. Nuechterlein, *First Principles for Review of Long-Consummated Mergers*, 5 CRITERION J. ON INNOVATION 29, 30 (2020) (taking this view); Jonathan Jacobson & Christopher Mufarrige, *Acquisitions of "Nascent" Competitors*, ANTITRUST SOURCE, Aug. 2020, at 1, 13-14, https://www.americanbar.org/content/dam/aba/publishing/antitrust_source/2020/august-2020/aug20_full_source.pdf [https://perma.cc/BD5D-CYTP] (advocating a "50.01%+" standard in evaluating acquisitions of nascent competitors).

government observes the elimination of a nascent competitor, it must prove decisively that, absent the conduct, the competitor would have seized market share from the incumbent. But the proposed requirement is a transparent effort to impose an extra and unwarranted burden on the government. Such a standard is inconsistent with case law and with the core policy goals of protecting innovation and avoiding anticompetitive harms.

In the economic language of error costs, such an approach fails to manage costly "false negatives" (harmful clearances) by setting a rule in which the frequency of false negatives may be low but their size is large. Hobbling enforcement in this manner would also produce a perverse incentive on the incumbent's part, as *Microsoft* recognized, "to take more and earlier anticompetitive action."[48]

The need for such proof is particularly out of place where evidence demonstrates the incumbent's anticompetitive plan. If an acquirer's management team holds the considered view that, but for its purchase, the target would pose a future competitive threat, why should the government be required to prove that the threat was even clearer and stronger than management believed?

Our approach, though it addresses competitive threats that had only a modest probability of materializing, does not apply to every threat, no matter how remote. We would confine enforcement to conduct that targets *serious* threats to the incumbent—in particular, those threats that are reasonably capable of significantly contributing to displacement of the incumbent. For example, hiring a talented engineer who otherwise might conceivably go on to build a giant killer doesn't count; the threat is not far enough along. Moreover, under our approach, the target must pose an incremental threat. If a large number of firms are equally positioned to pose the same competitive threat, removing one of them is harmless.

Monopoly power. Our proposed approach applies to monopolists and oligopolists alike. That said, when the threatened incumbent has monopoly power, concerns about lost competition are heightened in two respects.[49] First, an incumbent with a high market share has a heightened incentive to suppress an entrant, given that it internalizes most or all of the benefits from doing so.[50] Relatedly, the threat places a great deal of value at risk. For the same acquisition price, as the value at risk rises, the threshold probability of threat needed to motivate costly anticompetitive conduct falls. Thus, as the size of the acquirer's

48 United States v. Microsoft Corp., 253 F.3d 34, 79 (D.C. Cir. 2001) (en banc) (per curiam).

49 *See* 2010 HMG, *supra* note 29, § 2.1.5 (noting heightened concern when "one of the merging firms has a strong incumbency position and the other merging firm threatens to disrupt market conditions with a new technology or business model").

50 *Cf. id.* § 5.3 ("The lessening of competition resulting from such a merger is more likely to be substantial, the larger is the market share of the incumbent . . . .").

threatened profits increases, the threshold probability goes down. Put another way, we would expect the biggest firms to chase down the smallest threats.

Second, such an incumbent has a greater capacity to resist and suppress competition. Its advantages may include superior information about the threat posed and relationships with suppliers and customers that it can recruit or coerce into joining its scheme. Meanwhile, the public benefits of preserving a firm's chance to compete for the market may be unusually great, particularly in markets where there are few or no other candidates available to challenge the incumbent for the market in the near term,[51] and in markets whose characteristics make competition within the market difficult.[52]

Acquisitions. Our approach applies equally to exclusionary conduct and the acquisition of a nascent competitor. Unlike exclusion, the acquisition target welcomes the attention, but that is hardly a guarantee of public benefit. So-called "killer acquisitions" are a real-world problem.[53] So are deals that leave the acquired product on the market while removing it as a threat to the existing firm.

It might be argued that acquisitions are different because acquisition is an important means of exit for investors.[54] If acquisitions were unduly curbed, pre-acquisition investments in risky startups might dry up, resulting in lost innovation. Moreover, synergies might be lost, as incumbents steered clear of buying and incubating promising new technologies.

These concerns merit attention, but they are not powerful critiques of our proposed approach, which applies only to deals eliminating a sufficiently substantial competitive threat. This is very far from a ban on the acquisition of small firms or even a ban on acquisitions by dominant firms. First, most deals involve merely complementary or otherwise noncompetitive technology. Such deals—deals without expectation that the acquired firm poses a serious threat of becoming a rival—are not targeted.

Second, most promising firms that threaten a major incumbent have multiple suitors. Our suggestion is that, at most, the firm or firms most threatened by the nascent competitor should not be allowed to buy out the threat. For most acquisition targets, that approach would block acquisition by (at most) one suitor. Thus, investors can expect a payout even if payment by

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51 *Cf. id.* ("The lessening of competition resulting from such a merger is more likely to be substantial, . . . the greater is the competitive threat posed by this potential entrant relative to others.").

52 *See, e.g.*, Carl Shapiro, *Antitrust in a Time of Populism*, 61 INT'L J. INDUS. ORG. 714, 741 (2018) ("As a general principle, the greater and more durable is the market power of an incumbent firm, the larger is the payoff from preventing that firm from acquiring the smaller firms that, if left to grow on their own, would become its strongest challengers."); Federico et al., *supra* note 45, at 152, 160 (favoring a more assertive approach under these circumstances).

53 Colleen Cunningham et al., Killer Acquisitions (Apr. 22, 2020) (unpublished manuscript), https://ssrn.com/abstract=3241707.

54 *See* Lemley & McCreary, *supra* note 41 (examining this phenomenon); D. Daniel Sokol, *Vertical Mergers and Entrepreneurial Exit*, 70 FLA. L. REV. 1357 (2018) (discussing the motivations for exit).

the threatened incumbent is blocked. And so, for example, if Google instead of Facebook had bought WhatsApp, investors would still see a substantial return with less competitive concern.[55] These limits greatly reduce concerns about overenforcement that might otherwise chill desirable behavior.[56] Such concerns are further reduced if care is taken to avoid false positives, an issue we return to in Part III.

To be sure, limiting anticompetitive acquisitions will sometimes eliminate the highest bidder, and to that extent reduces the returns from investing in the startup in the first place. However, startups are not an end in themselves. Investments are desirable to the extent that the public actually sees some benefit from the innovation and competition they provide. Lowered investment in startups that fail to provide these benefits, because they end up in the hands of an incumbent, is a feature of antitrust enforcement rather than a bug.

Finally, while removing a suitor may lower the acquisition price in some instances, all else equal, allowing anticompetitive deals is likely to have this effect too, and for a larger set of acquisitions. That is because allowing anticompetitive deals reduces the set of future acquirers. The resulting reduction in bidders for future startups with complementary technology can be expected to reduce the purchase price.[57]

B. *Section 7 of the Clayton Act*

Enforcers have several options for protecting nascent competition, including Section 7 of the Clayton Act, Section 2 of the Sherman Act, and, for the FTC, Section 5 of the FTC Act.[58] Section 7 applies to acquisitions and is the standard antitrust tool for drawing the line between dangerous and benign mergers, prohibiting deals whose effect "may be substantially to lessen competition, or to tend to create a monopoly."[59]

In some nascent competition cases, a well-crafted Section 7 complaint can provide an effective enforcement tool. As noted above, sometimes a nascent

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55 For an FTC matter raising a similar issue, see Complaint, CDK Global, Inc., No. 9382 (F.T.C. Mar. 26, 2018), https://www.ftc.gov/system/files/documents/cases/docket_no_9382_cdk_automate_part_3_complaint_redacted_public_version_0.pdf [https://perma.cc/GGC2-ELV4] (challenging the acquisition of a nascent challenger to CDK's position in a market for car dealership software; incumbent bought nascent rival based on fears it would otherwise be acquired by a wealthy outsider).

56 Any chilling effect is further diminished if enforcement is confined to acquisitions by dominant firms. For further discussion, see *infra* Section II.C.

57 *Cf.* Bryan & Hovenkamp, *supra* note 41, at 344-45 (making the related argument that bargaining power falls as incumbents exit due to startups shifting their efforts toward technologies that disproportionately benefit the market leader).

58 Section 5 has a broader scope than Section 2 and might target, for example, a non-monopolist firm that abuses government process or engages in egregious predatory conduct to exclude nascent competitors.

59 15 U.S.C. § 18 (2018).

competitor has already begun to compete directly in the incumbent's market.[60] In such cases, an enforcer may make use of the presumption of illegality that applies to horizontal mergers that significantly increase concentration.[61]

By contrast, where the nascent competitor offers solely future competition, matters are more complex. Some acquisitions have been challenged under the so-called potential competition doctrine, an aspect of horizontal merger doctrine that focuses upon certain forms of anticipated competition between the two firms.[62] To fix ideas, suppose one bank serves customers in Seattle and another bank serves customers in Spokane.[63] The Seattle firm has the interest and ability to enter and compete in the geographically adjacent Spokane market. A merger would eliminate this competitive constraint.

The potential competition doctrine is concerned with two distinct forms of competitive constraint. The first version is that potential entry constrains present pricing. For example, if the Spokane bank recognizes the potential entry should it decide to raise prices, that prospect tends to constrain its behavior.[64] A merger is unlawful because it removes this constraint. This version goes by the unfortunate name of "perceived potential competition." It is a *present* constraint on the firm's conduct, and hence quite different from the future competition that is the focus of nascent competition.

The second version, called "actual potential competition" (APC), focuses on the future competitive benefits that would result if the Seattle bank actually entered the Spokane market. As interpreted by lower courts, such mergers are actionable only where "the competitor 'probably' would have entered the market [and] its entry would have had pro-competitive effects."[65] Under this interpretation of the law, the acquisition of a nascent competitor would be nearly impossible to challenge, given the difficulty in establishing the but-for world with sufficient precision and certainty. Thus, if this approach were the exclusive avenue for challenging acquisitions of nascent competitors, effective enforcement would be impossible.

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60 *See supra* Section I.B (discussing PacBio and Instagram as examples of actual competition).

61 *See* United States v. Phila. Nat'l Bank, 374 U.S. 321, 363 (1963); 2010 HMG, *supra* note 29, § 5.3.

62 *See* 2010 HMG, *supra* note 29, § 1 (noting application to "actual or potential competitors"); *see also id.* § 2.1.4 ("The Agencies consider whether the merging firms have been, or likely will become absent the merger, substantial head-to-head competitors.").

63 This scenario is drawn from *United States v. Marine Bancorporation*, 418 U.S. 602 (1974).

64 *Cf.* United States v. El Paso Nat. Gas Co., 376 U.S. 651, 658 (1964) (noting that acquisition target was already "a substantial factor" in acquirer's home market at the time of acquisition).

65 FTC v. Steris Corp., 133 F. Supp. 3d 962, 966 (N.D. Ohio 2015) (quoting FTC's view of its burden); *see also id.* at 978 (accepting this view). The exact language varies. *See, e.g.*, Yamaha Motor Co. v. FTC, 657 F.2d 971, 977 (8th Cir. 1981) ("probably"); Tenneco, Inc. v. FTC, 689 F.2d 346, 352 (2d Cir. 1982) ("would likely"); Mercantile Tex. Corp. v. Bd. of Governors of the Fed. Reserve Sys., 638 F.2d 1255, 1268-69 (5th Cir. 1981) (requiring a "reasonable probability" of entry, and construing that test to require more than "probability," with "probability" requiring a greater than fifty percent chance).

This unappetizing outcome, however, is not inevitable. APC case law has developed in a context and with a focus quite different from acquisitions of nascent competitors, and hence is distinguishable. One difference is that APC case law has substantially focused on the well-established acquirer as the potential entrant.[66] In this context, the absence of a well-defined plan to enter might well be informative about the (un)likelihood of future entry. By contrast, in nascent competition cases, it is the target, a newcomer, that offers future competition. Here, the absence of clear evidence of future entry is seldom probative.

A second difference is that APC case law has ignored innovation. Its focus is anticipated entry using existing products, by firms with established capabilities already selling in related markets (often other geographic markets).[67] For example, the court considers whether the existing bank is likely to expand its scope, as to a product that it already sells, to a new geographic market.[68]

By contrast, as we have emphasized, nascent competition is important precisely because of its innovative potential. The appropriate analytic focus is the nature and potential of the unproven competitor's product, rather than anticipated competition in existing products from an established firm. APC case law has not addressed or wrestled with the distinctive features of innovation competition, including its unusually important benefits, the prospect of competition for the market, the distinctive nature of the uncertainties associated with innovation competition, and the heightened importance of protecting innovative entrants when the incumbent resisting innovative displacement is a monopoly. This neglect is a significant limitation on the reach of APC doctrine.

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66 *See, e.g.*, *Marine Bancorporation*, 418 U.S. 602 (considering acquirer bank as potential competitor in target's geographic market); United States v. Falstaff Brewing Corp., 410 U.S. 526 (1973) (considering acquirer brewery as potential competitor in target's geographic market); Alberta Gas Chems. Ltd. v. E.I. Du Pont de Nemours & Co., 826 F.2d 1235, 1254 (3d Cir. 1987) (Becker, J., dissenting) (summarizing APC doctrine as "usually presented" to require that "absent the acquisition, the acquiring firm would have entered the market in the near future"); *see also* Donald F. Turner, *Conglomerate Mergers and Section 7 of the Clayton Act*, 78 HARV. L. REV. 1313, 1382 (1965) (noting the problem of establishing the significance of "the loss of the acquiring firm as an independent new competitor").

67 *See* JONATHAN B. BAKER, THE ANTITRUST PARADIGM: RESTORING A COMPETITIVE ECONOMY 151-52 (2019) (concluding that potential competition case law "address[es] the loss through merger of anticipated rivalry in current products, not the loss of rivalry in innovation or future products").

68 *See, e.g.*, *Marine Bancorporation*, 418 U.S. 602 (considering whether a Seattle bank would expand into Spokane); *Falstaff Brewing Corp.*, 410 U.S. 526 (considering whether a regional brewery would expand into New England); *Yamaha Motor Co.*, 657 F.2d 971 (considering whether a Japanese outboard motor producer would expand into the United States); *Steris*, 133 F. Supp. 3d 962 (considering whether a provider of x-ray sterilization services in Europe would expand into the United States).

Relatedly, future innovation often creates uncertainty that the existing APC case law is not well equipped to handle. APC doctrine emphasizes the fact that the entrant's capabilities are fully established.[69] In an ordinary APC case, the consequences of entry may be easy to assess given previous entry episodes by the same firm or analogous entry by others. For future innovation, these bases for prediction are generally absent, and the nature of the resulting uncertainty is generally more resistant to measurement. In the language used above, nascent competition is characterized by the Knightian uncertainty of an unproven technology or an emerging ecosystem that may evolve in unexpected directions.

These differences suggest that APC case law should be distinguished in favor of a distinctive doctrinal approach centered on nascent competition. Otherwise, the requirements of APC case law ought to be relaxed to take account of the distinctive features of nascent competition where it is present.[70] Such a step is consistent with the text of Section 7, which prohibits acquisitions whose result merely "may be" anticompetitive harm, and antitrust's openness to doctrinal adjustments that are welfare improving.[71]

C. *Section 2 of the Sherman Act*

A second tool for protecting nascent competition is Section 2 of the Sherman Act, which applies to incumbents with monopoly power. This is a setting in which our concerns about lost competition are heightened, for reasons discussed in Section II.A.

Section 2 prohibits "monopoliz[ation],"[72] and applies to exclusionary conduct and acquisitions undertaken by defendants with monopoly power to maintain that power. Section 2 case law implements our proposed approach. A government enforcer must show that the anticompetitive conduct was reasonably capable of contributing significantly to the maintenance of market

69 *See* PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW ¶ 1121b (4th ed.) (emphasizing the potential competitor's "requisite economic capabilities for substantial de novo entry").

70 To be clear, we are not arguing that such cases asserting lost future innovation are necessarily impossible to litigate as APC cases under existing law. And indeed, enforcers have used the APC frame to challenge mergers with a significant innovation component. *See, e.g.*, Complaint at 6, Amgen Inc., No. C-4053 (F.T.C. July 12, 2002) (alleging reduced innovation competition and reduced potential competition as to certain products under development); Complaint at 9, Ciba-Geigy Ltd., No. C-3725 (F.T.C. Mar. 24, 1997) (similar).

71 *See* Kimble v. Marvel Entm't, 576 U.S. 446, 461 (2015) (explaining the "less-than-usual force" of stare decisis in antitrust cases). For proposals to alter the existing rules, see Mark Glick & Catherine Ruetschlin, *Big Tech Acquisitions and the Potential Competition Doctrine: The Case of Facebook* 6-7 (Inst. for New Econ. Thinking Working Paper No. 104, Oct. 2019); Bloomfield, *supra* note 45, at 57-62 (proposing a presumption of illegality for certain acquisitions of potential competitors); John E. Kwoka, *Non-Incumbent Competition: Mergers Involving Constraining and Prospective Competitors*, 52 CASE W. RES. L. REV. 173 (2001) (urging focus on a firm's technological capability to become a competitor).

72 15 U.S.C. § 2 (2018).

power. This point bears emphasis: the government need not establish that absent the deal, successful entry was more likely than not to occur.[73]

An important illustration is the D.C. Circuit's opinion in *Microsoft*. There the court reviewed a district court determination of liability for unlawful maintenance of monopoly. A central fact in the litigation, discussed previously, was that the competitive threat posed by Netscape was not fully fledged. Netscape made browsers, not operating systems. It had not developed into a real competitor to Windows and might never have done so. That fact, however, was not an insuperable barrier to antitrust enforcement. As the court explained, "[n]othing in § 2 . . . limits its prohibition to actions taken against threats that are already well-developed enough to serve as present substitutes."[74]

The court adopted a rule of reason-like approach to the assessment of anticompetitive conduct that culminated in a balancing of anticompetitive and procompetitive effects. Two types of anticompetitive conduct satisfy the court's test: conduct that lacks any procompetitive justification, and conduct that is anticompetitive on balance, taking into account a partly offsetting procompetitive justification.[75] Balancing is not some minor feature of the court's approach to Section 2, but an important part of its enduring influence.[76] Applying this approach, the court held that twelve acts were anticompetitive and lacked any procompetitive justification. The court conducted balancing as to several other aspects of Microsoft's conduct, and determined that they were not unlawful.[77]

Later in its opinion, the court gave separate consideration to causation. The court noted the absence of any finding that Netscape would have "developed into [a] serious enough cross-platform threat" to erode Microsoft's market power.[78] Microsoft had argued that DOJ never proved that, absent the challenged conduct, more competition would have resulted.

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73 *See* C. Scott Hemphill, *Disruptive Incumbents: Platform Competition in an Age of Machine Learning*, 119 COLUM. L. REV. 1973, 1984-87 (2019) (discussing the use of Section 2 to challenge the elimination of nascent competition).

74 United States v. Microsoft Corp., 253 F.3d 34, 54 (D.C. Cir. 2001) (en banc) (per curiam).

75 *Id.* at 59.

76 *See, e.g.*, Deborah Platt Majoras, Chairman, Fed. Trade Comm'n, Remarks at Hearing on Section 2 of the Sherman Act: The Consumer Reigns: Using Section 2 to Ensure a "Competitive Kingdom" (June 20, 2006), https://www.justice.gov/atr/deborah-platt-majoras-remarks [https://perma.cc/NAG9-WQ9X] (applauding *Microsoft*'s "weighted balancing" approach).

77 *Microsoft*, 253 F.3d at 63 (concluding, as to a ban on user interfaces that replaced the Windows desktop, that a cognizable justification—preventing the "drastic alteration of Microsoft's copyrighted work"—"outweighs the marginal anticompetitive effect"); *id.* at 67 (concluding, as to product design overriding the user choice of default browser, that Microsoft's justification should be credited, and that DOJ had failed to show that the anticompetitive effect outweighed this justification); *see also* New York v. Microsoft Corp., 224 F. Supp. 2d 76, 144 (D.D.C. 2002) (treating the D.C. Circuit's analysis of incompatible Java as conduct where the procompetitive effect was "found to outweigh" the anticompetitive effect).

78 *Microsoft*, 253 F.3d at 79.

The court rejected this argument as setting too high a bar, holding that only a "rather edentulous" causation test applied.[79]

This "toothless" test requires merely that the "exclusion of nascent threats is the type of conduct that is reasonably capable of contributing significantly" to monopoly maintenance, and that the targets of exclusion "reasonably constituted nascent threats."[80] On the same page of its opinion, the court offered, as a virtually identical formulation, that causation may be inferred from conduct that "reasonably appear[s] capable of making a significant contribution to . . . maintaining monopoly power."[81]

This understanding of *Microsoft*'s causation holding is widely accepted.[82] Courts and enforcers have followed the D.C. Circuit's lead.[83] The scope of this holding is subject to debate. But at a minimum, it applies to conduct targeting a nascent competitor in order to maintain a monopoly, challenged as a violation of § 2 in a government enforcement action seeking equitable relief.[84]

To be clear, *Microsoft*'s causation holding applies only to liability, not remedy.[85] A government enforcer may establish liability without proving that the conduct actually made a real difference in maintaining monopoly power. The court expressly and repeatedly contrasted the required showing to the higher showing that would be needed to support a remedy such as divestiture.[86]

Critics of this approach have denied that *Microsoft*'s causation holding applies to acquisitions of nascent competitors, but their arguments are not persuasive. First, critics argue that *Microsoft* causation applies "by its terms"

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79 *Id.*

80 *Id.*

81 *Id.* (quoting AREEDA & HOVENKAMP, *supra* note 69).

82 *See, e.g.*, 1 ABA SECTION OF ANTITRUST LAW, ANTITRUST LAW DEVELOPMENTS § 2C (8th ed. 2017) (stating that *Microsoft* "held that courts can infer causation from the fact that a defendant has engaged in anticompetitive conduct that 'reasonably appear[s] capable of making a significant contribution to . . . maintaining monopoly power'").

83 *See, e.g.*, McWane, Inc. v. FTC, 783 F.3d 814, 833 (11th Cir. 2015) ("To prevail, the FTC must establish that McWane has engaged in anti-competitive conduct that reasonably appears to be a significant contribution to maintaining monopoly power.") (internal quotation marks omitted); United States v. Dentsply Int'l, Inc., 399 F.3d 181, 187 (3d Cir. 2005) ("Unlawful maintenance of a monopoly is demonstrated by proof that a defendant has engaged in anti-competitive conduct that reasonably appears to be a significant contribution to maintaining monopoly power."); Illumina Complaint, *supra* note 13, at 12 ("The Acquisition is anticompetitive conduct reasonably capable of contributing significantly to Illumina's maintenance of monopoly power."). As these examples suggest, some courts use a slightly different verbal formulation—that the conduct reasonably appears to make a significant contribution.

84 *See* United States v. Microsoft Corp., 253 F.3d 34, 79 (D.C. Cir. 2001) (en banc) (per curiam) (articulating rule for "§ 2 liability in an equitable enforcement action" (emphasis omitted)).

85 *Id.* (limiting attention to "§ 2 *liability* in an equitable enforcement action").

86 *Id.* at 80 (requiring a stronger causal connection at the remedy stage to provide "some measure of confidence that there has been an actual loss to competition that needs to be restored"); *id.* at 106 (insisting on "sufficient causal connection," not yet established, between conduct and maintenance of monopoly in order to support certain remedies).

only where the defendant's conduct lacks any procompetitive justification.[87] Even if correct, *Microsoft* causation would still apply to a deal that lacked such a justification, such as a transaction that lacked a merger-specific, verifiable efficiency. The textual basis for the critics' contention is the phrase "undesirable conduct" in this sentence of the court's opinion: "[t]o some degree, 'the defendant is made to suffer the uncertain consequences of its own undesirable conduct.'"[88] The idea is that "undesirable conduct" is limited to conduct "bereft of any procompetitive rationale."[89]

However, the *Microsoft* opinion is not so confined. By referring broadly to "undesirable conduct," the court did not rule out conduct that was undesirable on balance. The court's causation analysis and holding are framed generally, rather than narrowly limited.[90] To be sure, the court did not actually condemn any conduct after balancing. However, each type of conduct was evaluated within a balancing framework that clearly contemplated the identification of anticompetitive conduct with partly offsetting procompetitive aspects.[91] Narrowing the scope of *Microsoft* to omit conduct that is anticompetitive on balance would abandon an important aspect of the case's enduring influence.

Second, critics argue that the analysis is controlled by a later D.C. Circuit case.[92] In *Rambus Inc. v. FTC*, the court rejected an FTC challenge to deceptive conduct in the standard setting process, concluding that the FTC had "failed to demonstrate that Rambus's conduct was exclusionary."[93] However, *Rambus* analyzed a different form of monopolizing conduct—monopoly *acquisition*, rather than maintenance.[94] It also addressed a different

87 Muris & Nuechterlein, *supra* note 47, at 39 (arguing that *Microsoft* causation "applies by its terms only to exclusionary conduct lacking any procompetitive justification—and thus not to typical mergers, particularly those that were reviewed by the government itself before consummation"); Douglas H. Ginsburg & Koren W. Wong-Ervin, *Challenging Consummated Mergers Under Section 2*, COMPETITION POL'Y INT'L (May 3, 2020), https://www.competitionpolicyinternational.com/challenging-consummated-mergers-under-section-2-2 [https://perma.cc/59Q9-HF6D] (arguing that *Microsoft* causation "applies by its terms only to exclusionary conduct lacking any procompetitive justification—and, therefore, not to the typical merger, particularly if it was reviewed and approved by the Department of Justice ('DoJ') or the FTC itself before consummation").

88 *Microsoft*, 253 F.3d at 79 (quoting AREEDA & HOVENKAMP, *supra* note 69).

89 Muris & Nuechterlein, *supra* note 47, at 40.

90 *Microsoft*, 253 F.3d at 79. Nor does the quoted source, the Areeda–Hovenkamp treatise, use the phrase "undesirable conduct" in the narrow fashion urged by critics.

91 *See supra* notes 75-77 and accompanying text.

92 *See, e.g.*, Ginsburg & Wong-Ervin, *supra* note 87 ("In *Rambus v. FTC*—a Section 2 case the D.C. Circuit decided after *Microsoft*—the court held that the agency failed to prove that 'but-for' the defendant's conduct, there would have been harm to the competitive process.").

93 Rambus Inc. v. FTC, 522 F.3d 456, 462 (D.C. Cir. 2008).

94 *See* Avishalom Tor, *Unilateral, Anticompetitive Acquisitions of Dominance or Monopoly Power*, 76 ANTITRUST L.J. 847, 848-49 (2010) (discussing heightened false positive concerns in monopoly acquisition cases); *see also* AREEDA & HOVENKAMP, *supra* note 69, at ¶ 803a (concluding that "evidence of causation is particularly critical" in monopoly acquisition cases).

question: whether the conduct actually excluded a rival, as opposed to (as in the causation discussion of *Microsoft*) whether such exclusion had a competitive consequence.[95] These differences make it particularly unlikely that the panel opinion in *Rambus* silently overruled *Microsoft*'s en banc holding on causation.

Finally, critics seek to weaponize the fact that Section 7 was enacted as a plaintiff-friendly enforcement tool. If Section 7 has a lower bar than Section 2, and Section 7 requires a clear demonstrated harm to competition, it must then be the case, the argument goes, that the Section 2 hurdle is equally high. The problem here is that, as discussed in the previous Section, judicial interpretations of Section 7 are too demanding. There is no good reason to extend this error to Section 2. This argument is also flatly contrary to *Microsoft*'s causation holding.

The typical monopolization case, illustrated by *Microsoft*, focuses on exclusionary conduct. However, Section 2 also reaches acquisitions.[96] One famous example of monopolization through acquisition was the consolidation of market power by Standard Oil.[97] If Microsoft had sought to acquire Netscape simply in order to eliminate a competitive threat, that deal would violate Section 2.[98] Such an acquisition would be unlawful, just like analogous exclusionary conduct, even though future competition from Netscape was an uncertain and merely probabilistic prospect. Otherwise we would face the

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95 *See* Ankur Kapoor, *What Is the Standard of Causation of Monopoly?*, ANTITRUST, Summer 2009, at 38, 40 (making this point).

96 *See, e.g.*, AREEDA & HOVENKAMP, *supra* note 69, at ¶ 912b (concluding that the acquisition of a nascent rival "tends to maintain a monopoly by cutting off an avenue of future competition before it has had a chance to develop" and thereby violates Section 2).

97 Standard Oil Co. of New Jersey v. United States, 221 U.S. 1, 73-75 (1911) (agreeing with the court below that the 1899 consolidation of control in Standard Oil of New Jersey "operated to destroy the 'potentiality of competition' which otherwise would have existed"). The Supreme Court affirmed the lower court's conclusion that this conduct violated Sections 1 and 2 of the Sherman Act. *Id.* at 72-77.

98 In fact, at one point, Microsoft apparently approached Netscape about buying or licensing Netscape's browser code. Plaintiffs' Joint Proposed Findings of Fact ¶ 64.1, United States v. Microsoft Corp., 84 F. Supp. 2d 9 (D.D.C. 1999) (No. 98-1232), https://www.justice.gov/atr/us-v-microsoft-proposed-findings-fact-1 (citing deposition testimony of a Microsoft executive describing the 1994 overture, prior to Microsoft's full recognition of the browser threat, to license Netscape browser software); *id.* ¶ 64.2 (quoting a Netscape executive's testimony that Microsoft had "offered a flat fee of a couple of million dollars to take us out of the game[, which] would have killed our product in their space"). Microsoft later sought a market allocation arrangement in which Netscape would cease competing for PC-compatible browser business. *Id.* ¶ 67 (describing evidence of a June 1995 meeting in which Microsoft proposed that Netscape not develop a browser for Windows 95); *see also Microsoft*, 84 F. Supp. 2d at 30-33 (describing efforts to "[d]issuade Netscape from [d]eveloping Navigator as a [p]latform"); Email from Bill Gates to Paul Maritz (May 31, 1995, 1:17 PM), https://www.justice.gov/sites/default/files/atr/legacy/2006/03/03/22.pdf [https://perma.cc/4EGL-PV99] ("I think there is a very powerful deal of some kind we can do with Netscape. . . . I would really like to see something like this happen!!"). Microsoft also discussed internally the possibility of investing in Netscape. *Id.* ("Of course over time we will compete on servers but we can help them a lot in the meantime. We could even pay them money as part of the deal buying some piece of them or something.").

absurd result that a firm with monopoly power could freely acquire rather than exclude its nascent rivals.

The Section 2 approach that we describe here is limited to incumbents with monopoly power.[99] This is precisely the subset of cases in which, as we explain above, vigorous protection of nascent competition is particularly important.[100] Some observers wary of broad enforcement may regard this as a helpful limiting principle.

A significant feature of Section 2 enforcement, beyond its treatment of uncertain threats, is that it positions a court to collectively evaluate a larger set of acts. Section 7, by contrast, is directed to the scrutiny of a single acquisition. The broad aperture of Section 2 matters because the cumulative effect of multiple acts is greater than a single act. Consider, as a hypothetical example, the dominant player who faces a series of ten nascent competitors, each of which has a 10% chance of displacing it. By acquiring them all, the incumbent eliminates a set of competitive forces that collectively had a strong chance of displacing the incumbent.[101] In this example, liability may be found even if (contrary to our view) a more-likely-than-not harm must be shown.[102]

Under a Section 2 approach, the target need not participate in the market dominated by the incumbent. This feature is not unique to Section 2. The same is true if a Section 2-type approach is pursued within a Section 7 merger challenge. Section 7 is not limited to horizontal mergers; the statute prohibits transactions that "tend to create a monopoly,"[103] which includes the acquisition of a nascent competitor not currently in the same market as the acquirer. An enforcer is therefore free to sue under Section 7, arguing that the acquisition improperly tends to preserve the incumbent's monopoly power. In such a case, the presumption of illegality would not apply. Case law on this use of Section 7 is scant. The analysis would center upon an evaluation of market power and competitive effects, and thus roughly track the contours of a Section 2 inquiry.[104]

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99 Our focus is maintenance of monopoly. An alternative approach under § 2 is to challenge an acquisition as an unlawful attempt to monopolize. That route may be appropriate where existing monopoly power is not clearly established and the evidence demonstrates a specific intent to monopolize.

100 *See supra* Section II.A.

101 For example, if the probabilities of success by nascent competitors are independent, the collective probability that at least one would succeed is $1 - 0.9^{10}$, or approximately 65%. *Cf.* Standard Oil Co. of Cal. v. United States, 337 U.S. 293, 314 (1949) (aggregating foreclosure effect of multiple firms).

102 We thank Mark Lemley for suggesting this point. *Cf.* United States v. Microsoft Corp., 253 F.3d 34, 78 (D.C. Cir. 2001) (en banc) (per curiam) (describing without endorsing DOJ's course-of-conduct theory of liability).

103 15 U.S.C. § 18 (2018).

104 *Cf.* Scott A. Sher, *Closed but Not Forgotten: Government Review of Consummated Mergers Under Section 7 of the Clayton Act*, 45 SANTA CLARA L. REV. 41, 65 (2004) (arguing that Section 2 grants greater latitude to challenge acquisitions based on later market conditions).

III. IDENTIFYING ANTICOMPETITIVE ACQUISITIONS

We now take a closer look at what an antitrust case premised on exclusion through acquisition might look like as a practical matter.

When an incumbent acquires a nascent competitor, the government, to build a prima facie case, will be required to make some demonstration that the acquisition is anticompetitive. In that undertaking, several forms of evidence may be relevant, including the beginnings of direct competition, or the existence of competition in markets adjacent to the incumbent's primary market, which would be lost if the deal is permitted.

Also relevant will be any evidence that suggests the motive for the acquisition or the intent behind it.[105] In other words, as we discuss in greater detail in Section III.A, intent evidence may clarify whether the acquisition is anticompetitive, or as the Supreme Court has put it, "whether the challenged conduct is fairly characterized as 'exclusionary' [or] 'anticompetitive . . . .'"[106] Other forms of evidence typically used to build a prima facie case, such as evidence of higher prices, will not typically be available, given that a nascent competitor, by its nature, has not begun to fully compete at the time of acquisition.

If the plaintiff presents evidence sufficient to build a prima facie case that the acquisition is anticompetitive, the parties will have the opportunity to offer a procompetitive justification for the transaction. Incumbents, of course, make acquisitions for many reasons, many of which are procompetitive or otherwise benign. For example, an incumbent might buy a small, unproven firm to acquire complementary technology or expertise or simply to make a bet on a moon shot.[107] Careful consideration of the asserted justification helps to limit enforcement to those acquisitions which are truly anticompetitive. In some cases, though not all, the available evidence will make clear that the claimed justification is merely pretextual.

One particularly important justification is "incubation": that the acquirer improves the targeted business in a fashion that would otherwise never occur. However, credit for incubating a startup is subject to the caveat, common to all merger analysis, that the benefit must be a merger specific efficiency.[108] Consider, for example, Facebook's acquisition of Instagram. Facebook has argued that the purpose of this acquisition was to incubate a promising company,

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105 *See* Bd. of Trade of Chi. v. United States, 246 U.S. 231, 238 (1918) ("[K]nowledge of intent may help the court to interpret facts and predict consequences.").

106 Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585, 602 (1985).

107 Anticompetitive acquisitions may result in adding talent, so the fact that talent was acquired does not, by itself, suggest that the deal was harmless.

108 2010 HMG, *supra* note 29, § 10 ("The Agencies credit only those efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects.").

not to cabin a future threat,[109] and that Instagram only proved a success because of the care, attention, and engineering talent that it supplied.[110]

Incubation claims merit careful consideration. To make the case that its acquisition was a merger-specific efficiency, an acquirer would need to present evidence that similar benefits could not have been achieved if the target had been allowed to grow on a standalone basis or in the hands of an alternative acquirer.[111] Such a case would need to contend with contrary evidence, where present, of the funding and support offered (or available) from alternative acquirers or independent investors.[112] When one or more alternatives are similarly well positioned to fuel the firm's growth, a claim of merger-specific efficiencies is likely to fail.

A. *Evidence of an Anticompetitive Plan*

As this suggests, in the evaluation of the competitive effects, the difficult challenge is to distinguish an anticompetitive acquisition from a harmless or procompetitive deal. Given the uncertainties and faced with a lack of clear economic evidence of effects, we suggest that strong evidence of anticompetitive intent is a fruitful way to draw the line.

The relevant intent that we have in mind is that the incumbent sought to eliminate a competitive threat, and that the acquisition was designed to accomplish that goal. Intent evidence of this kind is useful as a way to shed light on the acquisition's effects. It "help[s] the court to interpret facts and to predict consequences."[113] An enforcer should look for, and the court should weigh, such evidence in its various forms.

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109 For an argument along these lines, see Jacobson & Mufarrige, *supra* note 47, at 14-15.

110 *See* The Aspen Inst., *A Conversation with Mark Zuckerberg*, YOUTUBE (June 26, 2019), https://www.youtube.com/watch?v=uHk2WfL5Gs4 [https://perma.cc/P8SH-437G].

111 The 2010 Horizontal Merger Guidelines state:

> [I]t is incumbent upon the merging firms to substantiate efficiency claims so that the Agencies can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), how each would enhance the merged firm's ability and incentive to compete, and why each would be merger-specific.

2010 HMG, *supra* note 29, § 10.

112 *See, e.g.*, Kara Swisher, *The Money Shot*, VANITY FAIR (May 6, 2013), https://www.vanityfair.com/news/business/2013/06/kara-swisher-instagram [https://perma.cc/2GDV-26UQ] (describing, in the particular context of Instagram, a competing acquisition offer and funding from venture capital investors).

113 Bd. of Trade of Chi. v. United States, 246 U.S. 231, 238 (1918); *see also* United States v. Microsoft Corp., 253 F.3d 34, 59 (D.C. Cir. 2001) (en banc) (per curiam) (considering intent evidence "relevant only to the extent it helps us understand the likely effect").

Intent evidence in antitrust cases is frequently criticized,[114] and we agree with some of the criticism. To be clear, we do not favor liability simply because an investigation uncovers a sales manager's expressed wish "to destroy the competition." Such evidence lacks probative value. What agencies and courts should care about, as always, is evidence of an anticompetitive plan, design, or program. We do not attempt to enumerate all the types of evidence that might be relevant to an evaluation of intent, but focus on several that are particularly important in practice.

The simplest form of intent evidence is documents showing a specific concern with future threats, coupled with conduct that eliminates the threat. When the parties say something specific and detailed about their anticompetitive plan, we should believe them. Leading examples include Microsoft's Tidal Wave memo and Facebook's detailed internal assessments of particular threats and what to do about them.[115]

Beyond documentary evidence, an anticompetitive design might also be shown by conduct. For example, a firm's broader pattern of acquiring nascent competitors sheds light on its intent in making each acquisition. Such evidence might be reinforced by proof of an internal program to identify rising competitors that matches the firm's completed and attempted acquisitions.[116]

Economic evidence of sacrifice, though not an essential identifying feature, would buttress the proof of intent. For example, an overpayment to acquire the firm, compared to the benchmark offers of other would-be acquirers, may suggest an anticompetitive purpose,[117] though consideration must be given to benign explanations for the premium, including an incumbent's superior information about the standalone value of the firm. Moreover, a firm pursuing a defensive acquisition strategy may be willing to repeatedly overpay to acquire relative longshots in order to preserve its position, as opposed to developing the business. A track record of multiple acquisitions of nascent competitors that turned out in retrospect to be duds is a further indication of such sacrifice.

114 *See, e.g.*, AREEDA & HOVENKAMP, *supra* note 69, at ¶ 1506 ("Emphasizing purpose frequently masks a failure to analyze the conduct. The judge or jury seems more comfortable examining the defendant's soul than analyzing his conduct and why antitrust policy calls for its prohibition or toleration."); Frank H. Easterbrook, *Monopolization: Past, Present and Future*, 61 ANTITRUST L.J. 99, 102 (1992) (broadly criticizing the use of intent evidence while acknowledging its utility, in principle, to "distinguish acts and plans that will reduce rivals' elasticity of supply from those . . . that increase market share by offering more goods at lower prices").

115 *See supra* Section I.A.

116 *See, e.g.*, Schechner & Olson, *supra* note 18 (describing such a program at Facebook).

117 *See* Joshua S. Gans & Scott Stern, *Incumbency and R&D Incentives: Licensing the Gale of Creative Destruction*, 9 J. ECON. & MGMT. STRATEGY 485, 505 (2000) (discussing an incumbent's higher willingness to pay for an innovation in order to maintain monopoly market structure). For an example of overpayment as a form of sacrifice that provides evidence of anticompetitive effect, see generally FTC v. Actavis, Inc., 570 U.S. 136 (2013).

B. *Later-Acquired Evidence*

Some enforcement actions to protect nascent competitors may take the form of challenges to consummated mergers. Enforcers have legal latitude to bring such a case.[118] Antitrust law has a statute of limitations, but it does not apply to injunctive relief.[119] Moreover, laches—an unreasonable delay in bringing the suit—does not apply to the government.[120]

Most legal adjudication is backward looking. In contrast, since the passage of the Hart–Scott–Rodino Act in 1976, most merger adjudication has been forward looking: decisions under the Clayton Act have been based on projections as to what the effects of a merger might be, not what they were.[121]

Due to this forward-looking posture, the enforcement agency and the court, considering an acquisition of a nascent competitor before the fact, are in the unusual position where delay may be expected, in some respects, to increase the accuracy of decision. Facts that the enforcer has trouble seeing today often become clearer later. There may be costs to waiting—notably, the difficulty and disruptiveness of after-the-fact divestiture, if that is the chosen remedy[122]—but accuracy considerations tend to favor delay.[123]

The benefits of waiting are more pronounced when there is an initial asymmetry of information between the parties and the enforcer.[124] If an incumbent acts expeditiously to dispatch a nascent threat, that will occur at a point in time at which it is difficult to tell what is really going on. This problem is particularly evident in industries marked by rapid technological

118 *See* Hemphill, *supra* note 73, at 1986-87.

119 15 U.S.C. § 15b (2018) (establishing a four-year statute of limitations for suits seeking monetary damages); AREEDA & HOVENKAMP, *supra* note 69, at ¶ 1205b ("[T]he four-year limitation applies only to damage suits, not to actions in equity.").

120 *See* Int'l Tel. & Tel. Corp. v. Gen. Tel. & Elecs. Corp., 518 F.2d 913, 928 (9th Cir. 1975) ("Laches cannot ordinarily be asserted against the sovereign."), *overruled on other grounds by* California v. Am. Stores Co., 495 U.S. 271 (1990); United States v. Pennsalt Chems. Corp., 262 F. Supp. 101, 101 (E.D. Pa. 1967) ("Laches is no defense in a suit by the government to vindicate a public right."); *see also* AREEDA & HOVENKAMP, *supra* note 69, at ¶ 320g (describing this as the "usual proposition").

121 Hosp. Corp. of America v. FTC, 807 F.2d 1381, 1389 (7th Cir. 1986) (Posner, J.) ("A predictive judgment, necessarily probabilistic and judgmental rather than demonstrable . . . is called for.").

122 *See, e.g.*, Sher, *supra* note 104, at 81-82 (discussing practical difficulties of divestiture).

123 The usual expectation is that, all else being equal, the passage of time will lead to reduced accuracy. Witnesses disappear or forget things, documents are lost, and physical evidence decays. These are typical justifications for a statute of limitations. Of course, delays that are justified for factfinding, such as delays to allow discovery and trial, may increase accuracy, and there may be ways, specific to certain laws, that delay leads to greater accuracy. *See, e.g.*, Douglas Lichtman, *Patient Patents: Can Certain Types of Patent Litigation Be Beneficially Delayed?*, 46 J. LEGAL STUD. 427, 429 (2017) (emphasizing the benefits of delay for accurate patent adjudication).

124 *Cf.* Marco Ottaviani & Abraham L. Wickelgren, Policy Timing Under Uncertainty: Ex Ante Versus Ex Post Merger Control (Aug. 2008) (unpublished manuscript), https://pdfs.semanticscholar.org/c28a/3c4483077369fda4db01adc7cad556f4ce53.pdf [https://perma.cc/5JJC-HLG9] (noting the importance of private information held by parties).

change. The incumbent, centered in its industry, and highly sophisticated, is likely to see any threat more clearly, and uniquely so. This asymmetry is exacerbated when the incumbent sits at the center of a larger platform ecosystem, and (relatedly) when it acts as a middleman, giving it a privileged view into developments on the edges.[125]

The incumbent has an incentive to exploit its information advantage and acquire a nascent rival during a period when the enforcer has low confidence about the benefits of enforcement. However, this period of asymmetry is not necessarily permanent. Several types of evidence may emerge with the passage of time.

Testimony and documentary evidence. New witnesses and documents may surface as employees exit the merged firm or leaks occur. This evidence might shed light on the acquirer's true intent or its understanding of competitive effects, namely fears that the acquired firm posed a serious competitive threat. Such documentary and testimonial evidence might have been discoverable, in principle, during a pre-acquisition investigation. However, in practice this evidence might be suppressed at first, given the parties' strong incentive to leave enforcers in the dark. Also probative is an after-the-fact assessment by the parties evaluating the competitive effects of the deal.[126]

Pattern of acquisitions. Other evidence is available only after the fact. For example, a firm's broader pattern of acquiring many nascent competitors sheds light on its intent, relative to what is apparent from a single transaction. An ongoing program of buying up any and all serious nascent threats to maintain dominance might not be clear to the world until much later.

Actual effects of the acquisition. Waiting until after the deal has been completed also produces new objective evidence about its competitive effects. Most obviously, the post-transaction world produces data about what actually happened—for example, that prices increased or quality worsened. This is an obvious point as applied to a horizontal merger that actually raises prices; the price rise is no longer a prediction but an observed fact.[127] The same idea applies to anticompetitive harms arising from the acquisition of a nascent

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125 *See, e.g.*, Lina Khan, *The Separation of Platforms and Commerce*, 119 COLUM. L. REV. 973, 977-78 (2019) (emphasizing this issue in the context of online platforms).

126 *See, e.g.*, Evanston Nw. Healthcare Corp., No. 9315 (F.T.C. Aug. 6, 2007) (slip op. at 73) ("[O]ur analysis is a retrospective inquiry based on empirical evidence and documents reflecting the parties' post-merger assessments of the deal.").

127 Orley Ashenfelter et al., *Did Robert Bork Understate the Competitive Impact of Mergers? Evidence from Consummated Mergers*, 57 J.L. & ECON. S67 *passim* (2014); Nathan H. Miller & Matthew C. Weinberg, *Understanding the Price Effects of the MillerCoors Joint Venture*, 85 ECONOMETRICA 1763, 1763 (2017) (concluding that the MillerCoors joint venture increased prices); *see also* JOHN KWOKA, MERGERS, MERGER CONTROL, AND REMEDIES: A RETROSPECTIVE ANALYSIS OF U.S. POLICY 154 (2014) (collecting and assessing a large set of merger retrospectives).

competitor. This point extends to efficiencies, whose likelihood and magnitude are difficult to assess ex ante.[128]

To make use of post-transaction data in this way is not necessarily straightforward, because it entails a prediction about an unobserved state of the world—namely, what would have happened in the but-for world where the deal was blocked. Moreover, in nascent competition cases, there is relatively little or no direct competition at the time of the transaction; thus, the effect may be difficult to detect using price or quality data. Indeed, even though the transaction is anticompetitive as compared to the proper but-for world, one might well see no change in the observed world before versus after the transaction.

Market conditions. It is sometimes hard to assess, at the time of acquisition, whether the incumbent's market power will last. The importance of a particular barrier to entry may become clearer over time. For example, in the early 2000s, not everyone understood the longer-term significance of data, and that control of data might have significant competitive implications. Another way to say this is that in setting enforcement priorities, the expected cost of inaction changes. Ex ante, it may seem low. But enforcers may recognize later that failing to act is unexpectedly costly, given the seriousness of preexisting barriers.

For example, when Facebook acquired WhatsApp in 2014, the durability of its dominance in social network services was not entirely clear. Many industry observers believed Facebook's dominance was under threat as new firms ate away at its user base.[129] Only some of those firms survived, and they collectively failed to supplant Facebook. This suggests that the barriers to successful entry were higher than they might have appeared.

Conversely, the passage of time may also demonstrate the lack of durable market power. For example, when AOL merged with Time Warner in 2000, enforcers crafted a remedy premised on concerns about AOL's power over the market for instant messaging.[130] However, AOL's position was ephemeral. Its hold over instant messaging was a function of its relative share of Internet users, which declined due to increased competition from other Internet service providers.[131]

Furthermore, the general-purpose nature and disruptive importance of a particular technology may become clearer to everyone over time. For example, Microsoft predicted early on the long-term importance of the Internet and the

128 Joseph F. Brodley, *The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress*, 62 N.Y.U. L. REV. 1020, 1048-49 (1987); Brian A. Facey, *The Future of Looking Back: The Efficient Modeling of Subsequent Review*, 44 ANTITRUST BULL. 519, 524-25 (1999); Menesh S. Patel, *Merger Breakups*, WIS. L. REV. (forthcoming 2020-21) (manuscript at 30), https://ssrn.com/abstract=3469984.

129 *See* Madrigal, *supra* note 17.

130 Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and America Online, Inc, Transferors, to AOL Time Warner Inc., Transferee, 16 FCC Rcd. 6547, 6627 (2001).

131 *See* WU, *supra* note 31, at 264-68 (describing the rise of competing Internet service providers).

browser;[132] the correctness of that prediction gradually became clear. Instagram was onto something by being "mobile first." We know today that mobile was the future; at the time, this was suspected but not established.

To be clear, we are not arguing that liability exists if technological change, subsequent to the transaction, results in a convergence of markets that no one anticipated at the time. Such a development cuts off the causal link between the acquisition and subsequent poor market performance. But it might be, for example, that the incumbent, with a keen understanding of its own industry, understood well that a firm was highly likely to be a future competitor, in a manner not yet recognized by the enforcer.

New economic learning. Finally, the passage of time may also furnish new economic evidence and new tools that are useful for evaluating the effects of a particular transaction. One source of insight about competitive effects is the outcome of other closely related market contexts. For example, by looking at the average effects of other (permitted) transactions, we can form a prediction about the effects of this deal.[133] New economic tools, much like improved DNA analysis of a crime scene, might improve the accuracy of adjudication as well. These are benefits of waiting to bring a suit, as opposed to benefits of ex post review as such.

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These are just examples of existing facts that might become clearer over time. It is true that some of these matters might be estimated or guessed at the time of acquisition or other forms of alleged exclusion. And, of course, waiting is sometimes the wrong call. By the time the enforcer acts, it may be too late.

That said, waiting can have an important benefit in reducing agency uncertainty about key facts. Over time, the fog may clear. Key facts known only to the incumbent may become common knowledge. And relying on the facts that emerge may, moreover, be helpful to a generalist judge, whose daily diet is backward-looking cases, and for whom the complex economic projections relied on for merger cases may be mystifying.

Ex post enforcement nevertheless troubles some observers, particularly when it takes the form of a challenge to a consummated transaction.[134] This

132 *See supra* note 10 and accompanying text.

133 A leading example is the FTC's retrospective analyses of hospital mergers. *See* Edith Ramirez, Chairwoman, Fed. Trade Comm'n, Remarks at ABA Retrospective Analysis of Agency Determinations in Merger Transactions Symposium: Retrospectives at the FTC: Promoting an Antitrust Agenda 3-5 (June 28, 2013), https://www.ftc.gov/sites/default/files/documents/public_statements/retrospectives-ftc-promoting-antitrust-agenda/130628aba-antitrust.pdf [https://perma.cc/2F9P-G7VA)] (discussing this work, begun in 2002, and its results).

134 *See, e.g.*, Muris & Nuechterlein, *supra* note 47 (proposing a high bar for challenges to consummated transactions).

position is in tension with the view that a high degree of certainty is required in any merger challenge. If (contrary to our view) a high degree of certainty is required to challenge the acquisition of a nascent competitor, we should be more willing to wait, if necessary, for the level of confidence to increase. It might sometimes appear that a cautious approach is desirable; but if so, a corollary is that once the requisite facts are available to enforcers, it is appropriate to act. Indeed, the virtues of a cautious approach ex ante are increased by retaining the option to act ex post; otherwise enforcers are precipitated into acting even when doing so might be premature.[135]

CONCLUSION

The acquisition or exclusion of unproven innovators is properly regarded as a core concern of antitrust law. Evidence of anticompetitive intent—particularly evidence of a larger anticompetitive design that spans multiple acts—can help to resolve the difficult question of distinguishing salutary from anticompetitive acquisitions.

Enforcement agencies must be ready to intervene ex post when a pattern of anticompetitive conduct becomes clearer. As we have explained, ex post enforcement is sometimes inevitable and has some desirable features. The distinctive setting of nascent competition tends to lend support to later evaluation and to longstanding remedial proposals that incorporate ex post scrutiny, such as conditional clearance that effectively places a merger on parole.[136]

Our analysis highlights a gap in the enforcement agencies' guidance directed toward horizontal and nonhorizontal mergers. Neither set of

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135 A subtle issue arises with ex post enforcement against certain exceptional deals that are beneficial overall in ex ante expected value terms but anticompetitive ex post. *See* Marco Ottaviani & Abraham L. Wickelgren, *Ex Ante or Ex Post Competition Policy? A Progress Report*, 29 INT'L J. INDUS. ORG. 356, 357-58 (2011) (identifying this issue). For example, suppose that the deal confers upon consumers a merger-specific benefit of fifty together with a harm of twenty, and that the harmful effect is also the source of profits motivating the deal. Such a deal might be permitted given the net benefit of thirty. If the harm is probabilistic—a 20% chance of a harm of 100, let's say—the deal is still beneficial in expected value terms. Evaluated on a purely ex post basis, however, it might be found unlawful in those instances where the anticompetitive effect is realized. The result is a false positive, judged from the standpoint of encouraging ex ante beneficial deals. We expect such outcomes to be rare, but if they arise, merging parties should be free to defend their deal on the ground that they are the exceptional case.

136 For advocates of ex post review, see Brodley, *supra* note 128, at 1049 ("The conclusion seems inescapable that if an efficiencies defense is to be recognized in antitrust law, the efficiency claim must be subject to ex post review."); Robert Pitofsky, Chairman, Fed. Trade Comm'n, Address to the ABA Antitrust Section: Subsequent Review: A Slightly Different Approach to Antitrust Enforcement (Aug. 7, 1995) ("The advantages of this approach are obvious. The parties are allowed to complete the transaction, and achieve claimed efficiencies, and the Commission has an opportunity to observe whether anticompetitive effects actually emerge."); *see also* Steven C. Salop, *Modifying Merger Consent Decrees to Improve Merger Enforcement Policy*, ANTITRUST, Fall 2016, at 15, 15 (advocating "more frequent reviews of consummated mergers that have been cleared without challenge, particularly those that were close calls").

guidelines distinctively addresses nascent competitors in the sense described in this Article.[137] The absence of separate attention to nascent competition steers enforcers too strongly toward an assessment of standard horizontal issues, including limited accommodation of future competition under the banner of potential competition, when nascent competition requires a distinct analysis. An expansion of the guidelines may therefore be warranted to account for acquisitions that eliminate a nascent, innovative threat.

137 *Cf.* note 62 and accompanying text (discussing potential competition).