Marquette Law Review

Volume 104 Issue 3 Spring

Article 5

2021

Are We Dropping the Crystal Ball? Understanding Nascent & **Potential Competition in Antitrust**

John M. Yun

Follow this and additional works at: https://scholarship.law.marquette.edu/mulr



Part of the Law Commons

Repository Citation

John M. Yun, Are We Dropping the Crystal Ball? Understanding Nascent & Potential Competition in Antitrust, 104 Marq. L. Rev. 613 (2021).

Available at: https://scholarship.law.marquette.edu/mulr/vol104/iss3/5

This Article is brought to you for free and open access by the Journals at Marquette Law Scholarly Commons. It has been accepted for inclusion in Marquette Law Review by an authorized editor of Marquette Law Scholarly Commons. For more information, please contact elana.olson@marquette.edu.

MARQUETTE LAW REVIEW

Volume 104 Spring 2021 Number 3

ARE WE DROPPING THE CRYSTAL BALL? UNDERSTANDING NASCENT & POTENTIAL COMPETITION IN ANTITRUST

JOHN M. YUN*

Nascent and potential competitors can represent a vital source of innovation and dynamic growth for an industry and, in the process, can discipline the exercise of market power from incumbents. Yet are those benefits extinguished before they can fully ignite when powerful incumbents acquire these nascent and potential competitors? Moreover, how does the acquisition of these competitors fit into the larger antitrust framework? This Article offers a number of propositions to address these concerns and questions in regard to competition that has not been fully realized. First, this Article offers a clear legal and analytical delineation between the doctrines of nascent and potential competition—as there has recently been a degree of "semantic satiation" between these two concepts. Second, some have argued that the acquisition of nascent competitors should be adjudicated using legal standards developed under the Sherman Act, § 2, which covers monopolization, rather than under the traditional Clayton Act, § 7, which governs mergers and acquisitions. Yet the counterfactual exercise is fundamentally different between ex ante merger evaluations (§ 7) and ex post monopolization claims (§ 2). Consequently, based on this fact alone, courts should be cautious to adopt § 2 approaches to

^{*} Associate Professor of Law, Antonin Scalia Law School, George Mason University, and Director of Economic Education at the Global Antitrust Institute. Previously served as an Acting Deputy Assistant Director in the Bureau of Economics at the U.S. Federal Trade Commission. No outside funding was received or relied upon for this research. I thank Bruce Kobayashi, Howard Shelanski, Joshua Wright, Caroline Cecot, Eric Claeys, Nuno Garoupa, Julie Hill, Adam Mossoff, and workshop participants of the Manne Forum at Scalia Law School for valuable comments.

§ 7 issues. Third, when evaluating the wider set of proposals to address the nascent and potential competition problem, which the Article comments on, we must ask whether there is a problem in the first place. To that end, this Article examines a number of recent merger retrospectives. Finally, while using the past to predict the future can be a difficult and uncertain exercise even within mature markets, these hinderances can be overstated. Economic tools are available to frame our approach, and agencies and courts should focus particularly on whether the characteristics and nature of the acquired nascent competitor are sufficiently differentiated from the remaining competitors to warrant increased scrutiny.

I. Introduction	614
II. CLASSIFICATIONS	621
A. Potential Competitor	622
B. Nascent Competitor	626
C. Killer Acquisitions	629
D. Do these Classifications Matter?	630
III. COUNTERFACTUALS	636
A. Comparing § 7 and § 2 Counterfactuals	638
B. Nature of the Counterfactual Exercise for Potential and Nasc	ent
Competitors Under § 7	640
IV. THE STATE OF THE EVIDENCE REGARDING THE ACQUISITION OF	
POTENTIAL AND NASCENT COMPETITORS	643
V. RECENT PROPOSALS TO ADDRESS THE ALLEGED PROBLEMS OF NA	SCENT,
POTENTIAL, AND KILLER ACQUISITIONS	650
A. Hemphill & Wu's "Reasonably Capable" Standard	650
B. Furman Report's "Balance of Harms" Standard	652
C. Crémer Report's "Significant Impact on Effective Competitie	on
(SIEC)" Test	654
D. Presumption of Illegality for Acquisitions by Dominant Platt	forms
VI. GUIDANCE IN ASSESSING ACQUISITIONS OF NASCENT COMPETITOR	rs . 657
VII. CONCLUSION	660

I. Introduction

On February 27, 2012, Facebook CEO Mark Zuckerberg emailed the then-CFO of Facebook, David Ebersman, that Instagram represented a "nascent" business that "could be very disruptive to us." About a month later, on April 9, 2012, Facebook announced it was purchasing Instagram for approximately \$1 billion. The rest is history. Yet, in that same email, Zuckerberg also mentioned one other disruptive startup: Path. Path was started by ex-Facebook employee Dave Morin in November 2010, and, at one point, was adding 1 million users a week. Path also shed an early acquisition attempt by Google. What ever happened to Path? On September 17, 2018, Path said "Goodbye" and announced it was discontinuing the social media service. Arguably, the story of Instagram and Path represents a Tale of Two Apps: Instagram chose to develop its product within the larger umbrella of Facebook and Path chose to go it alone. Neither knew, at the time, how things would work out. After Path rejected Google's early offer, one news report closed with the following assessment of the wisdom of Path's decision: "Only time will tell "

We root for the underdog, and potential and nascent competitors are the antitrust version of underdogs.⁸ They introduce a promising product and

^{1.} E-mail from Mark Zuckerberg, CEO, Facebook, to David Ebersman, former CFO, Facebook (Feb. 27, 2012, 23:41 PST) (available at https://judiciary.house.gov/uploadedfiles/0002.pdf [https://perma.cc/Z6BK-UPFD]).

^{2.} See Press Release, Facebook, Facebook to Acquire Instagram (Apr. 9, 2012), https://about.fb.com/news/2012/04/facebook-to-acquire-instagram [https://perma.cc/3PQN-ZT66].

^{3.} See E-mail from Mark Zuckerberg to David Ebersman, supra note 1 ("One business questions [sic] I've been thinking about recently is how much we should be willing to pay to acquire mobile app companies like Instagram and Path that are building networks that are competitive with our own.").

^{4.} Mat Smith, *Path App is Adding 1 Million New Registered Users a Week*, ENGADGET (Apr. 26, 2013), https://www.engadget.com/2013-04-26-path-app-adding-1-million-new-users-a-week.html [https://perma.cc/7NUX-YMKQ].

^{5.} See Michael Arrington, Google Tried to Buy Path for \$100+ Million. Path Said No., TECHCRUNCH (Feb. 2, 2011, 1:31 PM), https://techcrunch.com/2011/02/02/google-tried-to-buy-path-for-100-million-path-said-no [https://perma.cc/26SB-CBH4].

^{6.} Jon Russell, *Mobile Social Network Path, Once a Challenger to Facebook, is Closing Down*, TECHCRUNCH (Sept. 17, 2018, 2:52 AM), https://techcrunch.com/2018/09/17/rip-path [https://perma.cc/H46A-QABA].

^{7.} See Arrington, supra note 5.

^{8.} A parallel argument, in the context of the macroeconomy, is that of infant industries in developing countries and whether they need trade protections, such as tariffs and quotas, to have time to grow and learn without the rigors of intense competition. The empirical evidence for the success of infant industry protection is mixed as "even if the industry becomes competitive in the long run, it is difficult to answer the counterfactual question of whether the industry would have become competitive anyway." Réka Juhász, *Temporary Protection and Technology Adoption: Evidence from the Napoleonic Blockade*, 108 AM. ECON. REV. 3339, 3340 (2018); see also Ann E. Harrison, An Empirical Test of the Infant Industry Argument: Comment, 84 AM. ECON. REV. 1090, 1090 (1994) ("[E]fforts to resolve the debate through empirical studies have met with mixed success.").

innovation with the hopes of challenging the incumbent for supremacy in a market. Yet are those hopes cancelled before they even begin with powerful incumbents acquiring these nascent and potential competitors? Certainly, this is the conclusion of a number of recent reports on the digital economy. Possible examples include Facebook's acquisition of Instagram and WhatsApp; Google's acquisition of YouTube, Android, and Waze; Amazon's acquisition of Goodreads; and pharmaceutical companies purchasing rival drugs still in development. Some even refer to a subset of these acquisitions as "killer." ¹⁰

Nascent and potential competition stories are ultimately about "what if." What if the upstart competitor grows into the next dominant platform or develops the next blockbuster drug? What if the incumbent knows its market position has a weakness that the entrant will exploit so it must end the competition before it even begins? On the other hand, what if the nascent competitor never fully develops its potential and engages in a series of missteps? What if the upstart's innovation can be improved upon and reach the

9. See, e.g., STIGLER COMM. ON DIGIT. PLATFORMS, STIGLER CTR., FINAL REPORT 111 (2019) [hereinafter STIGLER REPORT], https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digitalplatforms---committee-report---stigler-center.pdf [https://perma.cc/Q92L-UUHW] ("The behavior that may be of greatest concern to the many policymakers studying powerful digital businesses is their acquisition of potential competitors."); AUSTRALIAN COMPETITION & CONSUMER COMM'N, DIGITAL PLATFORMS INOUIRY FINAL REPORT 10 (2019)[hereinafter ACCC https://www.accc.gov.au/system/files/Digital%20platforms%20inquiry%20-%20final%20report.pdf [https://perma.cc/FAV8-A7P6] ("[A] range of factors contributed to each of Google's and Facebook's dominant positions in their respective markets. The acquisition of potential competitors by the dominant firms and economies of scope created via control of data sets are two such factors."); DIRECTORATE-GENERAL FOR COMPETITION, EUROPEAN COMM'N, COMPETITION POLICY FOR THE (2019)**DIGITAL ERA** 111 [hereinafter CRÉMER REPORT], https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf [https://perma.cc/TH6C-RW85] ("Concerns may, however, arise notably when such acquisitions result in a strengthening of dominance and thereby a significant impediment of effective competition, e.g. by eliminating a competitive threat and/or by raising barriers to entry for other (potential) competitors, thus further reducing the risk of attacks on a strongly entrenched market position from the fringe."); DIGIT. COMPETITION EXPERT PANEL, UNLOCKING DIGITAL COMPETITION 95 (2019) [hereinafter FURMAN

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/78 5547/unlocking_digital_competition_furman_review_web.pdf [https://perma.cc/3VQQ-Q3ST] ("[D]igital mergers are also more likely to involve theories of harm which relate to elimination of potential competitors or harming innovation.").

10. See Colleen Cunningham, Florian Ederer & Song Ma, Killer Acquisitions, 129 J. POL. ECON. 649 (2021); see also ACCC REPORT, supra note 9, at 75 ("The acquisition by an incumbent firm of smaller innovative companies (often active in closely connected markets), discontinuing the target's innovative projects and eliminating potential future rivals has been referred to as part of a so-called 'killer acquisition strategy'.").

market faster and more widely through the well-oiled machinery of the incumbent? What if another nascent competitor, that is not acquired, is the one that ultimately challenges the incumbent? These are all possible scenarios.

The fundamental problem is that the counterfactual world is not observable. Put plainly, we cannot predict the future with certainty. Given that speculative "what ifs," without more, cannot guide antitrust policy—whether in an overly permissive or aggressive manner in terms of enforcement—what are we left with? What should agencies, courts, and practitioners do in face of such uncertainty? This Article offers a number of proposals and a conceptual framework to address this uncertainty.

First, in recent policy debates, the terms nascent competitor, potential competition, and killer acquisitions all tend to be used somewhat interchangeably. In a sense, this is understandable. Potential and nascent competition sound like they are describing the same thing. Yet a careful reading of the development of the potential competition doctrine in merger cases and the more recent nascent competition cases reveals discernable differences. The primary difference is the strong technological and product differentiation component involved with nascent competition. In contrast, potential competition cases generally involve either a geographic market expansion or a simple product line extension. Importantly, this suggests that there are key analytical differences between the two that impact their economic and legal assessments. This Article illustrates these differences using a recently decided case involving immature levels of competition, FTC v. Steris Corp. 11 While the FTC brought the case under the potential competition doctrine, this Article argues that it was a nascent competition case. These classification issues are detailed and analyzed in Part II.

Second, ex ante evaluation of mergers under the Clayton Act, § 7 necessarily involves comparing two counterfactuals: a future world (1) with the acquisition and (2) without the acquisition. In "standard" merger analysis, that is, mergers involving actual, mature competitors, projecting the world without the acquisition tends to be straightforward: we presume it is largely the same as the present world that we observe. ¹² Of course, this is not the full story as there

^{11.} FTC v. Steris Corp., 133 F. Supp. 3d 962 (N.D. Ohio 2015).

^{12.} In fact, there is probably no other area of antitrust enforcement that is as well-developed and formalized as the review of horizontal mergers and acquisitions. *See, e.g.*, U.S. DEP'T OF JUST. & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES (2010) [hereinafter GUIDELINES], https://www.justice.gov/atr/horizontal-merger-guidelines-08192010 [https://perma.cc/VT8Z-8UVV] (the 2010 guidelines are based on a strong legacy of prior merger guidelines, including major revisions in 1982 and 1992).

could be post-acquisition supply- and demand-side changes to the market; nonetheless, antitrust practitioners, more or less, rely on this straightforward prediction that the future will be largely the same as the present or recent past. Even for the more uncertain prediction regarding the world with the acquisition, the current level of competition between mature competitors also gives us a reliable window into that counterfactual—as it involves predictable changes in incentives given the loss of a competitive constraint.¹³ Things are less certain in regard to the realization of efficiencies, and the law, in some sense, incorporates this increased uncertainty as courts rarely credit efficiencies.¹⁴

For mergers involving a nascent or potential competitor, however, we do not have the luxury of the longer history of competition that mature competitors provide. This point, however, should not be overstated. If a nascent or potential competitor represents a true threat to the market power of an acquirer, then agencies and courts will likely have some basis to make this determination. Nonetheless, we should acknowledge this fundamental increase in uncertainty when dealing with immature levels of competition.

^{13.} See Joseph Farrell & Carl Shapiro, Horizontal Mergers: An Equilibrium Analysis, 80 Am. ECON. Rev. 107, 113–14 (1990).

^{14.} See, e.g., Brian Facey, Navin Joneja, Paul Cuomo & Jeffrey Oliver, Mind the Gap: Merger Efficiencies in the United States and Canada, 32 ANTITRUST 64, 66 (2018) ("In the United States, the efficiencies defense generally lands like a dubious alibi—necessarily considered but very seldom credited."); Erin L. Shencopp & Nathaniel J. Harris, Using Efficiencies to Defend Mergers: The Current Legal Landscape, ANTITRUST SOURCE, Apr. 2019, at 1, 5 ("[C]ourts tend to conclude either that the efficiencies are not merger-specific or verifiable, or that the merger will not harm competition and appears to generate efficiencies."); Michael B. Bernstein & Justin P. Hedge, Maximizing Efficiencies: Getting Credit Where Credit is Due, ANTITRUST SOURCE, Dec. 2012, at 1, 1 ("Efficiencies are frequently a significant part of the business rationale for a transaction. However, receiving credit for the efficiency-enhancing aspects of a combination in a merger review is often difficult.").

^{15.} See, e.g., Jeffrey M. Wilder, Acting Deputy Assistant Att'y Gen., Antitrust Div., Dep't of Just., Remarks as Prepared for the Hal White Antitrust Conference: Potential Competition in Platform 2019) (transcript available (June 10. https://www.justice.gov/opa/speech/file/1176236/download [https://perma.cc/E7JW-VWEA]) ("[O]ur current economic tools are much better suited to a world in which we have evidence on current diversions and margins. Think merger simulation, UPP [upward pricing pressure], and critical loss. By comparison, we don't have the tools to accurately estimate the likelihood of, and consumer benefits from, entry and repositioning."); Tracy J. Penfield & Molly Pallman, Looking Ahead: Nascent Competitor Acquisition Challenges in the "TechLash" Era, ANTITRUST SOURCE, June 2020, at 1, 4 ("When a nascent competitor is involved . . . [t]his injects considerable uncertainty into the Agencies' evaluation, which will necessarily plague any assessment of a nascent competitor's future viability and competitive significance.").

In contrast, unilateral monopolistic conduct, such as exclusivity, involve comparing actual outcomes with a single, "but-for," counterfactual, that is, a world without the unilateral monopolistic conduct. For instance, in *United States v. Microsoft*, which introduced the doctrine of nascent competition, the court explicitly examined the outcome of Microsoft's exclusionary conduct toward Netscape on market performance. In Implicitly, the court still had to compare this actual outcome of the conduct with the but-for world—yet this comparison is fundamentally less demanding given the need to develop just one counterfactual. In a similar way, expost evaluations of consummated mergers—whether or not the acquisition, at the time, involved an immature or mature competitor—also fall under this umbrella of requiring one, rather than two, counterfactuals.

Crucially, based on the number of counterfactuals that have to be analyzed, there is an intrinsic asymmetry in the information burden needed to adjudicate ex ante versus ex post conduct. As discussed, ex ante evaluations of mergers, which are the predominant type of merger investigations since the passage of the Hart-Scott-Rodino (HSR) Antitrust Improvements Act of 1976, involve the need to compare two counterfactuals. Part III argues that, due to this asymmetry in counterfactual burdens, ex ante evaluations of nascent and potential competition cases should be solely evaluated under the Clayton Act, § 7 standard, and the associated precedents that developed—particularly after the HSR Act was passed. The reason is that these cases all involve the same

^{16.} United States v. Microsoft, 253 F.3d 34 (D.C. Cir. 2001).

^{17.} There is certainly an important legal question regarding the degree to which this "but-for" counterfactual needs to be developed and proven by the plaintiff to find a § 2 violation—that is, the issue of "but-for" causality. See id. at 79 ("To require that § 2 liability turn on a plaintiff's ability or inability to reconstruct the hypothetical marketplace absent a defendant's anticompetitive conduct would only encourage monopolists to take more and earlier anticompetitive action."). Yet, even without a legal requirement to show a specific but-for causality for each case, it does not negate the conceptual underpinning to determine the harm from certain conduct: the difference in outcomes between the world with the conduct and without. See *infra* Part II for a more detailed discussion on the requirements needed to establish this comparison.

^{18.} Hart-Scott-Rodino Antitrust Improvements Act of 1976, Pub. L. No. 94-435, 90 Stat. 1383 (1976) (codified as amended in scattered sections of 15 and 28 U.S.C.); 15 U.S.C. § 18(a) (requiring premerger notification to federal competition agencies for mergers above a certain dollar threshold).

^{19.} Pre-HSR cases can also be relevant, however, to the extent that they evaluate acquisitions before they were materially consummated because this implies that there has not been enough time to assess the actual effects of the merger. An example would be *United States v. El Paso Natural Gas Co.*, 376 U.S. 651 (1964), which involved a § 7 challenge by the Department of Justice shortly after El Paso Natural Gas acquired Pacific Northwest Pipeline Corp. See *infra* Part II.A for a more detailed discussion of the case.

prescriptive exercise of comparing two possible worlds, that is, with and without the proposed acquisition. This implies, for instance, that agencies and courts should be wary to adopt proposals to use the Sherman Act, § 2 monopolization standards, and precedents to examine ex ante nascent and potential competitor acquisitions. While these proposals are serious attempts to address some of the information burdens associated with assessing immature competition, using § 2 standards and cases are fundamentally trying to fit a square peg into a round hole. Section 2 precedents were neither intended nor geared for use when two, rather than one, counterfactuals must be developed. On the other hand, ex post evaluations of mergers—to the extent that there is a claim that a given merger, or series of mergers, contributed to the monopolization of a market, can be appropriately evaluated under § 2 standards—as it also involves the development of just one counterfactual because we can actually observe the outcome of the merger or series of mergers. ²¹

Third, we ought to use retrospective merger evaluations of potential and nascent competitors to determine whether the evidence, particularly for a class of markets or industries, suggests there is a sufficient basis to change our legal presumptions. To that end, Part IV reviews some recent empirical studies that assess prior nascent and potential acquisitions by large technology companies²² and pharmaceutical companies.²³ Thus far, the evidence is insufficient to presume agencies and courts are overly permissive in their merger policy toward nascent and potential acquisitions in digital markets. There is evidence,

^{20.} See C. Scott Hemphill, Disruptive Incumbents: Platform Competition in an Age of Machine Learning, 119 COLUM. L. REV. 1973, 1984–89 (2019); C. Scott Hemphill & Tim Wu, Nascent Competitors, 168 U. PA. L. REV. 1879, 1898–1903 (2020). Importantly, these articles argue that § 2 standards can be used for both ex ante and ex post challenges to acquisitions of nascent competitors.

^{21.} Hemphill, *supra* note 20, at 1984–89; *see also* Wilder, *supra* note 15; 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 7, 11–12 (although, it is not entirely clear whether their call to use § 2 to bring potential competition cases involves an ex ante or ex post challenge to an acquisition—or both).

^{22.} See Oliver Latham, Isabel Tecu & Nitika Bagaria, Beyond Killer Acquisitions: Are There More Common Potential Competition Issues in Tech Deals and How Can These Be Assessed?, CPI ANTITRUST CHRON., May 2020, at 26, 27; Axel Gautier & Joe Lamesch, Mergers in the Digital Economy 27 (CESifo, Working Paper No. 8056, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3529012 [https://perma.cc/JP9H-GL5H]; Elena Argentesi, Paolo Buccirossi, Emilio Calvano, Tomaso Duso, Alessia Marrazzo & Salvatore Nava, Merger Policy in Digital Markets: An Ex-Post Assessment 22 (CESinfo, Working Paper No. 7985, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3507256 [https://perma.cc/SF4Y-BT8K].

^{23.} See Cunningham, Ederer & Ma, supra note 10.

however, that continued diligence is required in the pharmaceutical industry.²⁴ Regardless of the industry, though, a greater body of empirical work is necessary before a clear consensus can be reached.

Finally, these various concerns with nascent and potential competition have led to policy proposals to address the unique challenges associated with assessing immature levels of competition. These proposals range from developing new evidentiary standards to imposing ex ante regulatory prohibitions against certain types of acquisitions. Part V examines a number of proposals including Hemphill & Wu's "reasonably capable" standard; the Furman Report's "balance of harms" standard; and the Crémer Report's "significant impact on effective competition (SIEC)" test. These proposals are well-argued and have elements that move the debate forward; although, ultimately, there are some concerns with their full adoption that should be considered.

In conclusion, Part VI summarizes the analytical issues raised in this Article and offers some policy guidance in the assessment of nascent competitors. Ultimately, if we have a firm grasp of the nature of the counterfactual exercise, we will have a firm grasp of the required burdens. This will lead us to proposals that will minimize error costs and lead to more predictable and reliable merger assessments.

II. CLASSIFICATIONS

Who are "nascent" and "potential competitors"? Both terms are attempts to describe, to one degree or another, competition that has not yet fully formed and has not reached its ultimate equilibrium. While nascent and potential competition are often, and increasingly, used synonymously and interchangeably, they have traditionally referred to two different concepts.

This Part examines the legal genesis and history of these terms. What emerges is that a potential competitor is a supplier that is not actively producing in a given market but the threat of entry either currently or in the near future disciplines competition. Further, the entry is either describing a geographic market expansion or a straightforward product line extension into an established market. In contrast, a nascent competitor has developed a product or technology that currently exists but has yet to fully mature into a significant competitor to the established incumbents in an adjacent relevant product market. While nascent competition, like potential competition, involves a forecast of "entry," it is more about the development of a product and

technology over time, that is, future product differentiation, and its likely market success. Therefore, a nascent competitor can be both an actual competitor in one market and a nascent competitor in another.

A. Potential Competitor

The term "potential competitor" has a longer history than "nascent competitor" and first emerged in the 1964 Supreme Court case United States v. El Paso Natural Gas, where the Court examined whether El Paso's acquisition of the stock and assets of the Pacific Northwest Pipeline Corp. violated the Clayton Act, § 7.25 The relevant market was considered to be the sale of natural gas in California, and El Paso was the sole out-of-state supplier.²⁶ Prior to the acquisition, Pacific Northwest attempted to enter the growing California market—as evidenced by its attempt to win the business of the largest industrial user of natural gas in Southern California, Edison Co.²⁷ While the attempt was ultimately unsuccessful, it resulted in El Paso offering a lower price to Edison Co.²⁸ In assessing the degree of competition between the two, the Court emphasized that "Pacific Northwest, though it had no pipeline into California, is shown by this record to have been a substantial factor in the California market Though young, it was prospering Edison's search for a firm supply of natural gas . . . illustrates what effect Pacific Northwest had merely as a potential competitor in the California market."²⁹

The case set forth the doctrine that the acquisition of a supplier that is not currently producing in the relevant market but could compete within a reasonable amount of time could be a § 7 violation.³⁰ More broadly, the doctrine can describe a number of similar, but slightly different, scenarios. First, the acquiring firm could be a current market participant and the acquired firm could be a potential market participant—as was the case in *El Paso*. Alternatively, if we flip the scenario around, the acquiring firm could be a potential market participant while the acquired firm is a current market

^{25.} United States v. El Paso Natural Gas Co., 376 U.S. 651, 657–59 (1964); see also William E. Dorigan, The Potential Competition Doctrine: The Justice Department's Antitrust Weapon Under Section 7 of the Clayton Act, 8 J. MARSHALL J. PRAC. & PROC. 415, 418 (1975).

^{26.} El Paso, 376 U.S. at 652.

^{27.} Id. at 654.

^{28.} Id. at 655.

^{29.} Id. at 658-59.

^{30.} Id. at 652.

participant.³¹ Finally, both firms could be potential entrants into an existing market.³²

In 1973, Justice Marshall, in his concurrence in *United States v. Falstaff Brewing*, created a distinction between a "perceived potential entrant" and "actual potential entrant." *Falstaff Brewing* involved a theory of potential competition where Falstaff, a near-national brewer, acquired Narragansett, the leading New England seller of beer. While there was evidence that Falstaff had no intention to enter the New England market de novo, the Court ultimately concluded that the acquisition "may nevertheless violate § 7 because the entry eliminates a potential competitor exercising present influence on the market." This firmly placed the case in line with the precedent set forth in *El Paso*.

In his concurrence, Justice Marshall established that, while present influence on the market is a key consideration, it is not a necessary condition to have a potential competition case under § 7.³⁷ Consequently, he reserved the term "perceived potential entrant" for cases like *El Paso* and *Falstaff Brewing* where "the removal of the firm from the fringe of the market has a present anticompetitive effect." In contrast, an "actual potential entrant" scenario is where "even if a firm at the fringe of the market exerts no present procompetitive effect, its entry by acquisition may end for all time the promise of more effective competition at some future date."

In sum, perceived potential competition (PPC) refers to a reduction in current competition due to the acquisition of a competitor, who is not an active producer, but the threat of entry disciplines—at least to some significant

^{31.} See, e.g., FTC v. Procter & Gamble Co., 386 U.S. 568, 578–80 (1967) ("The Commission also found that the acquisition of Clorox by Procter eliminated Procter as a potential competitor.... The evidence... clearly shows that Procter was the most likely entrant.").

^{32.} E.g., United States v. Penn-Olin Chem. Co., 378 U.S. 158, 182 (1964) (extending the doctrine to potential competition to a joint venture).

^{33.} United States v. Falstaff Brewing Corp., 410 U.S. 526, 559-62 (1973) (Marshall, J., concurring).

^{34.} *Id.* at 528–29 (majority opinion).

^{35.} Id. at 530.

^{36.} Id. at 532.

^{37.} Id. at 560 (Marshall, J., concurring).

^{38.} Id. at 559-60.

^{39.} *Id.* at 561; *see also* United States v. Marine Bancorporation, Inc., 418 U.S. 602, 623–26 (1974) (where the Court firmly established the difference between perceived potential competition with its present impact on competition and actual potential competition where the hypothetical entry has no current market effect).

degree—the current market. This type of competition is arguably not even "potential" competition but rather "actual" competition because it impacts current market performance from the threat of entry. 40 Perhaps a more descriptive phrase would be "actively-constraining potential competition." In contrast, an actual potential competitor (APC) is a firm that could impact future competition from future entry. In a sense, it is "actually" about potential competition because it does not impact current market outcomes.

If we turn to the 2010 Horizontal Merger Guidelines (HMGs), the focus appears to be primarily on perceived potential competition—although, the HMGs do not explicitly use this term. In doing so, the HMGs identify two types of PPCs. First, there are "[f]irms not currently earning revenues in the relevant market, but that have committed to entering the market in the near future." Second, there are "rapid entrants" who "would very likely provide rapid supply responses with direct competitive impact in the event of a SSNIP [small but significant and non-transitory increase in price], without incurring significant sunk costs." Both are considered current "market participants."

Do these distinctions within the potential competition umbrella matter? Some argue that it does not.⁴⁴ In some contexts, such as general policy overviews and the economic tools needed to assess competition, it perhaps does not matter and there are clear commonalities. Yet this Article advances that it ultimately does matter as PPC and APC describe two very different scenarios. PPC is the original formulation of the potential competition doctrine and, as mentioned, involves a potential competitor that impacts current market performance—whether it be output, price, quality, or innovation—which is not the case for APC, where that type of evidence will be nonexistent.

A key reason that the distinction between a PPC and APC matters is that courts, and agencies, have developed precedents based on this distinction.⁴⁵

^{40.} The notion that "perceived" competition impacts "actual" market outcomes is what makes the original Marshall-made labels somewhat less than intuitive.

^{41.} GUIDELINES, supra note 12, § 5.1.

^{42.} Id.

^{43.} Id.

^{44.} See, e.g., Gregory J. Werden & Kristen C. Limarzi, Forward-Looking Merger Analysis and the Superfluous Potential Competition Doctrine, 77 ANTITRUST L.J. 109, 112 (2010) ("What follows describes horizontal merger analysis in detail with little use of the labels 'actual' or 'potential' and no use of the labels 'actual potential' or 'perceived potential' competition.").

^{45.} See, e.g., Hemphill & Wu, supra note 20, at 1894–97 (providing examples of cases using these doctrines); Henry S. Klimowicz, Reinvigorating the Perceived Potential Competition Theory: An Analysis of the Potential Competition Doctrine and FTC v. Steris Corp., 49 SETON HALL L. REV. 173, 175, 179–80 (2018).

Given that antitrust laws have an evolutionary character akin to common law,⁴⁶ these iterative refinements are important to keep within strict boundaries of specific doctrines. To that end, in Part II.D, a recent case involving potential competition, *FTC v. Steris*,⁴⁷ is used to illustrate how distinctions between PPC, APC, and nascent competition can matter from an analytical and economic perspective.

Arguably, one final category of potential competition is what could be called a "potential-potential competition" theory used by the FTC when it put conditions on Nielsen's acquisition of Arbitron in 2013.⁴⁸ The FTC concluded that Nielsen and Arbitron were the two firms best positioned to enter the "national syndicated cross-platform audience measurement service" market,⁴⁹ where the critical wrinkle is that this market did not yet exist. Whatever the merits of the case,⁵⁰ it is reasonable to conjecture that an acquisition could significantly lessen competition in a projected good or service; although, there is undoubtedly an additional layer of uncertainty on top of the standard level of uncertainty when assessing potential competition.

^{46.} See, e.g., Appalachian Coals, Inc. v. United States, 288 U.S. 344, 359–60 (1933) ("As a charter of freedom, the [Sherman] Act has a generality and adaptability comparable to that found to be desirable in constitutional provisions."); see also State Oil Co. v. Khan, 522 U.S. 3, 20–21 (1997). In Khan, which overturned the per se condemnation of maximum resale price maintenance, Justice Sandra Day O'Connor wrote for a unanimous court that "the general presumption that legislative changes should be left to Congress has less force with respect to the Sherman Act in light of the accepted view that Congress 'expected the courts to give shape to the statute's broad mandate by drawing on commonlaw tradition." Khan, 522 U.S. at 5, 20–22 (quoting Nat'l Soc'y of Pro. Eng'rs v. United States, 435 U.S. 679, 688 (1978)); see also D. Bruce Johnsen, Wealth is Value, 15 J. LEGAL STUD. 263, 286 (1986) ("The notion that adjudication is an iterative process designed to minimize the judiciary's measurement costs by requiring only marginal decisions is therefore supported in the law of antitrust.").

^{47. 133} F. Supp. 3d 962 (N.D. Ohio 2015).

^{48.} See Press Release, FTC, FTC Puts Conditions on Nielsen's Proposed \$1.26 billion Acquisition of Arbitron (Sept. 20, 2013), https://www.ftc.gov/news-events/press-releases/2013/09/ftc-puts-conditions-nielsens-proposed-126-billion-acquisition [https://perma.cc/64G4-XBUX]. The theory, at least to some degree, also appeared in the FTC's consent order in The Upjohn Co., 121 F.T.C. 44–46 (Feb. 8, 1996), which involved two pharmaceutical companies who were close to commercializing a new drug.

^{49.} Press Release, FTC, *supra* note 48. The idea of dual potential entry harkens to *United States v. Penn-Olin Chem. Co.*, 378 U.S. 158 (1964).

^{50.} See Dissenting Statement of Commissioner Joshua D. Wright, Nielsen Holdings, N.V. and Arbitron Inc., FTC File No. 131-0058, at 1 (Sept. 20, 2013), https://www.ftc.gov/sites/default/files/documents/public_statements/dissenting-statement-commissioner-joshua-d.wright/130920nielsenarbitron-jdwstmt.pdf [https://perma.cc/HK2A-NDS4].

B. Nascent Competitor

The term "nascent competitor" is relatively new to antitrust and was largely developed in the late-1990s with the Department of Justice's (DOJ's) *Microsoft* case.⁵¹ In *Microsoft*, the term "nascent" refers to an emerging technology that is a "potential substitute," which involves the critical element of "a product's hypothetical technological development."

Amongst antitrust practitioners and scholars, various definitions have emerged for nascent competition. Paul Denis offers that nascent competition "[s]uggests that competition is felt presently, but not yet fully realized; acquisition of [a] nascent competitor extinguishes both current competition and the prospect for greater competition in the future." With this definition, there is a sense that the nascent competitor is currently competing with incumbents—but it has not fully realized its potential or its technology is still developing. Hemphill and Wu explicitly incorporate the notion of future competition with an incumbent: "A nascent competitor is a firm whose prospective innovation represents a serious future threat to an incumbent." Coupled with the language of the court in *Microsoft*, what emerges is that nascent competition is capturing something analytically different than potential competition. 55

Specifically, nascent competition is primarily focused on the idea that a product—particularly a product with a great deal of technology and associated

^{51.} United States v. Microsoft, 253 F.3d 34, 79 (D.C. Cir. 2001).

^{52.} *Id.* ("We may infer causation when exclusionary conduct is aimed at producers of nascent competitive technologies as well as when it is aimed at producers of established substitutes. Admittedly, in the former case there is added uncertainty, inasmuch as nascent threats are merely *potential* substitutes....[N]either plaintiffs nor the court can confidently reconstruct a product's hypothetical technological development in a world absent the defendant's exclusionary conduct."). *See generally* Douglas H. Ginsburg & Koren W. Wong-Ervin, *Challenging Consummated Mergers Under Section* 2, CPI COMPETITION POL'Y INT'L (May 25, 2020), https://www.competitionpolicyinternational.com/challenging-consummated-mergers-under-section-2-2/ [https://perma.cc/8FZ6-9RRE] (for an overview of the court's treatment of nascent competition in *Microsoft*).

^{53.} Paul T. Denis, Presentation at the FTC-Global Antitrust Institute Hearings on Competition and Consumer Protection in the 21st Century: Nascent and Potential Competition: The Current Analytical Framework (Oct. 15–17, 2018), https://www.ftc.gov/system/files/documents/public_events/1413712/cpc-hearings-gmu_1017.pdf [https://perma.cc/84CD-HWCS].

^{54.} Hemphill & Wu, supra note 20, at 1880.

^{55.} See also Princo Corp. v. Int'l Trade Comm'n, 616 F.3d 1318, 1338 (Fed. Cir. 2010) ("What Princo had to demonstrate was that there was a 'reasonable probability' that the Lagadec technology, if available for licensing, would have matured into a competitive force in the storage technology market.").

innovation—has not fully evolved. Further, the evolution is expected to develop in such a way that it would likely challenge incumbents with a more established product. Could you have a nascent competitor within the same relevant product market? Possibly, but if they are current competitors, then it would fall more naturally under standard merger analysis. Of course, the emergence could be such that the full effects are not yet realized. Yet, again, the strong focus on future differentiation of the product—based primarily on developing technologies and features—suggests an initially distinct, and somewhat distant, level of competition with established incumbents. Thus, nascent competition is more about currently adjacent competition, where there is substitution to some degree (or projected to exist in the near future) but not at such a level that the nascent competitor and established incumbents would be considered in the same relevant product market based on a strict application of the SSNIP test.

Of course, the mere existence of a product in an adjacent market does not make it a scenario with a nascent competitor. There must be some reasonable projection that the product will differentiate and develop in such a way as to materially challenge established incumbents. For instance, if a "nascent" competitor has long established itself in an adjacent or complementary market, then there must be some indication that it will reposition itself. We should not have a situation of convenience where the nascent competition doctrine is used in a manner to bring two non-overlapping markets together into a theory of harm based merely on speculative conjecture.⁵⁷

Therefore, we can consider potential competition as a forecast about entry, or the threat of entry, from a supplier that is not actively producing in a given market. Whereas, nascent competition describes rivalry or potential rivalry from a product or technology that exists but has not yet matured into a significant competitor and is likely outside the relevant product market.⁵⁸ Like potential competition, nascent competition can be a forecast of entry, but it also involves a forecast of future differentiation or development of a product or

^{56.} See, e.g., Werden & Limarzi, supra note 44, at 119 ("[L]abeling the eliminated competition 'potential' is unhelpful and misleading when that competition exists and is having salutary effects sufficient to make its elimination lawful under Section 7.").

^{57.} See Princo, 616 F.3d at 1338 ("It was not enough that there was some speculative possibility that Lagadec could have overcome the barriers to its technical feasibility and commercial success and become the basis for competing disc technology.").

^{58.} Even if the nascent competitor is technically considered in the same relevant market, it would be on the outer fringes of the market due to the high level of differentiation from the established incumbents.

technology and its likely market success.⁵⁹ Thus, a firm can be both an actual competitor in one market, perhaps in a market that is relatively undeveloped or small, and a nascent competitor to another market.

For example, back in 2005, Blockbuster's proposed acquisition of Hollywood Video was abandoned due to a challenge by the FTC.⁶⁰ The concern was a standard horizontal theory of harm involving in-store video rental competitors.⁶¹ Yet, at the time, there were clear indications of potential threats to the established in-store video rental model from both mail-based companies, such as Netflix with its ubiquitous red envelopes, and even proto-streaming services.⁶² While a strict application of the SSNIP test would likely have excluded these alternatives at the time of the investigation, arguably these emerging alternatives would have qualified as nascent competitive threats if Blockbuster were to acquire one of them, such as Netflix.⁶³ In other words, these alternative products and technologies were adjacent to the main relevant market at issue but could reasonably be projected to compete in the near future. It is conceivable that, if the same SSNIP were to be performed a few years later, the relevant market would include these various alternatives to in-store video rentals.

Finally, nascent and potential competition live in two separate areas of the law. Potential competition is firmly within the Clayton Act, § 7, while the

^{59.} Potential competition cases seem particularly focused on relevant geographic market differences where, for instance, a regional firm acquires another regional firm. Both *El Paso* and *Falstaff Brewery* fall under this umbrella. Further, potential competition seems particularly suited for fairly homogeneous products or technologies.

^{60.} See, e.g., Joe Flint, Blockbuster Drops Hollywood Bid, WALL ST. J. (Mar. 28, 2005, 12:01 AM), https://www.wsj.com/articles/SB111190652212190373 [https://perma.cc/Q36T-XY4E].

^{61.} Wendy Culverwell, *Antitrust Issues Could Jeopardize Video Deal*, PORTLAND BUS. J. (Nov. 21, 2004), https://www.bizjournals.com/portland/stories/2004/11/22/story6.html [https://perma.cc/ZM9M-W39K] ("The FTC has blocked similar horizontal mergers involving companies in highly competitive fields in the past....").

^{62.} See, e.g., Mike Musgrove, Blockbuster Withdraws Hollywood Merger Bid, SEATTLE TIMES (Mar. 26, 2005, 12:00 AM), https://www.seattletimes.com/business/blockbuster-withdraws-hollywood-merger-bid [https://perma.cc/4YHS-G6VD] (the article quotes Dan Stanek, an executive at the consulting firm Retail Forward, who finds that Blockbuster and Hollywood Video "are just being attacked from all angles now that consumers have more and more ways to get their entertainment They're competing against TiVo, cable television channels offering pay per view and Netflix. And, down the road, consumers will get the option of downloading their entertainment.").

^{63.} This raises a point of symmetry. If a theory of harm based on the acquisition of a nascent competitive threat is viable under § 7, then a standard § 7 case involving actual competitors should also consider nascent competitive threats as a factor that could mitigate or constrain predicted anticompetitive harm.

elimination of nascent competition has, thus far, been brought under the Sherman Act, § 2, or as a defense of patent misuse. However, there is no reason why a nascent competition case cannot be brought under § 7, for ex ante evaluations, and under both § 7 and § 2, for ex post evaluations. These issues are discussed in Part II.D and Part III.

C. Killer Acquisitions

Finally, what are "killer acquisitions"? The term is prominently used in a paper by Cunningham, Ederer, and Ma that empirically examines the fate of acquired drugs, that were in development, after an acquisition. Specifically, the authors use the term to describe a scenario where an acquiring pharmaceutical company acquires another company with an overlapping drug in development to "eliminate potentially promising, yet likely competing, innovation." The term has subsequently spread like wildfire in antitrust policy discussions and has been picked up by numerous scholars, practitioners, and enforcers. Its widespread use is not surprising as the term describes, in a very succinct and memorable way, the idea of an anticompetitive acquisition of a

https://www.ftc.gov/system/files/documents/public_statements/1577503/vmgchopradissent.pdf [https://perma.cc/3UJM-X4FP] ("Killer apps quickly become killer acquisitions.").

^{64.} United States v. Microsoft, 253 F.3d 34, 79 (D.C. Cir. 2001) (a § 2 case focused specifically on harm to nascent competition); Princo Corp. v. Int'l Trade Comm'n, 616 F.3d 1318, 1331 (Fed. Cir. 2010) (defense of patent misuse under the theory that licensing a bundle of patents involved eliminating a nascent technology).

^{65.} See Cunningham, Ederer & Ma, supra note 10, at 1. While Cunningham, Ederer, and Ma is where the term appears to have most prominently originated in antitrust, it has appeared in non-antitrust settings earlier with a much different meaning. See Tyrone M. Carlin, Nigel Finch & Guy Ford, A Deal Too Far: The Case of the Killer Acquisition, in MERGERS AND ACQUISITIONS 234, 235 (Greg N. Gregoriou & Karyn L. Neuhauser eds., 2007) ("Instead, the focus lies on transactions that lead not just to value dissipation for acquiring parties, but that result in such a profoundly negative outcome that the fact of the consummation of the transaction in fact results in the onset of financial distress and potential liquidation for the newly-enlarged firm. We refer to this as the 'killer acquisition problem'.").

^{66.} Cunningham, Ederer & Ma, supra note 10, at 1.

^{67.} See, e.g., Kevin A. Bryan & Erik Hovenkamp, Startup Acquisitions, Error Costs, and Antitrust Policy, 87 U. CHI. L. REV. 331, 345 (2020) ("[N]umerous innovative new firms are effectively terminated through 'killer acquisitions' by incumbent firms. In these acquisitions, the acquirer does not utilize or further develop the target's innovation, but instead merely prevents such innovation from entering into competition with the incumbent's own product."); Dissenting Statement of Commissioner Rohit Chopra, Regarding the Publication of Vertical Merger Guidelines, FTC File No. P810034, at 2 (June 30, 2020),

competitor where the primary intent is to stop a product's development or current sales without an offsetting efficiency rationale.⁶⁸

More recently, however, the term has somewhat morphed into a general reference to the suppression of future competition—regardless of whether the product is actually "killed." Further, it has spawned a related phrase "reverse killer acquisition," where, after the acquisition, the acquirer stops its own product development and uses the acquired innovation instead. A reverse killer acquisition is akin to the potential competition scenario where the acquiring firm is a potential market participant while the acquired firm is a current market participant. Further, unlike a straightforward killer acquisition, a reverse killer acquisition could result in efficiencies from bringing the product to market sooner or through synergies from combining technologies. This certainly does not suggest reverse killer acquisitions are presumptively procompetitive, rather it introduces a degree of complexity to the analysis.

D. Do these Classifications Matter?

Arguably, the terms *potential competition*, *nascent competition*, and *killer acquisitions* are in danger of "semantic satiation," where the repeated use of a word or phrase results in a loss of its original meaning.⁷² There are strong arguments to be made for maintaining discipline in the use of these terms to maintain their original meaning and, in the case of potential and nascent competition, as they have developed in antitrust jurisprudence. This is relevant

^{68.} See, e.g., Benoit D'Udekem, Divya Mathur & Marc Van Audenrode, Remember Stacker? Another Look at "Killer" Acquisitions in the Digital Economy, CPI ANTITRUST CHRON., May 2020, at 38, 39 (offering an example of a hypothetical killer acquisition: if a hard drive manufacturer purchased a software product that doubled the capacity of hard drives with the sole purpose of preventing its availability on the market).

^{69.} See David Pérez de Lamo, Assessing "Killer Acquisitions": An Assets and Capabilities-Based View of the Start-Up, CPI ANTITRUST CHRON., May 2020, at 50, 51 ("Subsequent conferences employed the term in a general way to include all acquisitions of promising companies by incumbent firms with the objective of suppressing potential competition, regardless of whether the target company and its innovative project were terminated post-transaction.").

^{70.} See Cristina Caffarra, Gregory S. Crawford & Tommaso Valletti, "How Tech Rolls": Potential Competition and "Reverse" Killer Acquisitions, CPI ANTITRUST CHRON., May 2020, at 13, 14 ("The pivot towards 'potential competition theories of harm' is significantly about these 'buy vs. build' cases and their potential to represent 'reverse' killer acquisitions that allow the incumbent to do away with its own innovation effort, and reduce innovation overall relative to a 'no deal' scenario.").

^{71.} See supra Part II.A.

^{72.} See Leon A. Jakobovits & Wallace E. Lambert, Semantic Satiation Among Bilinguals, 62 J. EXPERIMENTAL PSYCH. 576, 576 (1961).

from an analytical perspective because there is an argument that these terms describe very different entry scenarios.

In the following figure, we can visualize the difference between these concepts.

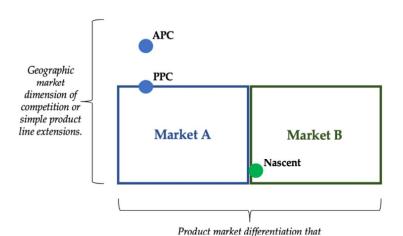


Figure 1: Potential v. Nascent Competitors

Focusing on potential competition, perceived potential competition (PPC) is capturing the idea of a current impact on competition in product Market A, due to pending, predicted, or possible entry. Relatedly, actual potential competition (APC) is capturing the idea of future competition from predicted or possible entry; yet the projected competition is sufficiently distant that it does not have a material effect on current market performance. In contrast, nascent competition is not just about one product market, that is, Market A, and the potential for entry into that market but also a second product market, that is, Market B, in which the nascent competitor current competes.⁷³ Thus, it

requires some degree of innovation to reposition.

^{73.} The figure purposely places the nascent competition dot on the outer edge of Market A to highlight the close relationship between the nascent competitor and Market A, even if it is not technically considered in Market A.

involves two adjacent, relevant product markets—whether those adjacent markets are substitutes or even, to a degree, complements.⁷⁴

The primary difference between potential competition and nascent competition is the strong technological and product differentiation component involved with nascent competition. While one could certainly argue that potential competition also involves "adjacent" markets in terms of competing in a nearby, but different, geographic market(s)—it does not have the same product and technical differentiation component. Take, for instance, pharmaceutical drug development. If an established incumbent acquires a pending generic supplier or a startup with very similar formulations, then this scenario would be an example of potential competition. In contrast, if an innovative pharmaceutical entrant is primarily focused on one type of disease, but could, with investment in R&D, naturally move development to another type of disease that competes with an incumbent, then the theory of harm would more naturally fit under nascent rather than potential competition.

Where do killer acquisitions fit into the analysis? Killer acquisitions describe a post-acquisition scenario that results in the acquired firm ending its development or production. Thus, while it is a specific theory of harm that could involve potential, nascent, or even actual competitors, it likely can only be used for ex post evaluations of consummated mergers—unless there is clear pre-merger evidence that the goal is to engage in a killer acquisition.

One recent example that illustrates how distinguishing between potential and nascent competition might matter is FTC v. Steris. In 2014, Steris

^{74.} This adjacency is not regarding relevant geographic markets—as geographic market considerations are more in line with potential competition as established in *El Paso*.

^{75.} A counter to this argument is potentially *United States v. Continental Can Co.*, 378 U.S. 441, 443–44 (1964), which can be considered a potential competition case involving differentiated products. For instance, Dorigan explains, "The Court, however, felt that the long range effect of this diversification would eventually result in diminished competition due to the likelihood that, were the merger denied, Hazel-Atlas would likewise seek to diversify into the metal container market, thus providing significant competition to Continental." Dorigan, *supra* note 25, at 421. While this seems focused on product differentiation, both glass and metal containers were established technologies (although, there were certainly some innovation) and the question that the Court dealt with was more about the relevant product market. Ultimately, the Court concluded that it could not "sweep aside the existence of a large area of effective competition between the makers of cans and the makers of glass containers. We know enough to conclude that the rivalry between cans and glass containers is pervasive and that the area of competitive overlap between these two product markets is broad enough to make the position of the individual companies within their own industries very relevant to the merger's impact" *Continental*, 378 U.S. at 456. Thus, the case is arguably more about actual, rather than potential, competition.

^{76. 133} F. Supp. 3d 962 (N.D. Ohio 2015).

proposed to acquire Synergy. Both offer services to sterilize various objects on a commercial scale: Steris uses gamma radiation for its sterilization while Synergy uses, among other technologies, x-ray radiation.⁷⁷ The case involved the potential for Synergy's x-ray technology to challenge the supremacy of gamma for the sterilization of medical equipment and devices in the United States. The FTC brought the case under the actual potential competition doctrine.⁷⁸ The district court ultimately ruled for the defendants based on a finding that the FTC had not carried its burden to show that, but for the acquisition, Synergy would have built an x-ray facility in the United States within a reasonable amount of time.⁷⁹

One legal commentator has argued that the FTC made an error when it brought the case under an APC theory of harm rather than PPC, given that PPC has more established precedents. ⁸⁰ Ultimately, however, it seems that neither of the potential competition doctrines fit particularly well with the facts of Synergy's x-ray technology. X-ray sterilization was both an established product (that is, at Synergy's Daniken, Switzerland facility) but also "an emerging... sterilization technology." At the time of the acquisition, x-ray had no presence in the U.S. market, where the predominant contract sterilization methods were gamma radiation, e-beam radiation, and ethylene oxide (EO). ⁸² The case hinged on the continued development of the x-ray technology, which, according to one Synergy document, was a "potential game changer" in the U.S. sterilization market, and "it could be lower cost than gamma, and would beat gamma service on every other metric." Yet, it was still a "project" that would require a "design team." There were significant hurdles to overcome in terms of developing the technology to have enough

^{77.} Id. at 964.

^{78.} *Id.* at 966 ("According to the FTC, the 'actual potential entrant' doctrine specifically addresses this factual scenario: where a potential entrant (i.e., Synergy) merges with a firm already competing in the market (i.e., Steris) and the effect lessens future competition. The FTC asserts that the acquisition of an actual potential competitor violates Section 7 if (1) the relevant market is highly concentrated, (2) the competitor 'probably' would have entered the market, (3) its entry would have had pro-competitive effects, and (4) there are few other firms that can enter effectively."). These four elements that the FTC used borrow heavily from *United States v. Marine Bancorporation, Inc.*, 418 U.S. 602 (1974).

^{79.} Steris, 133 F. Supp. 3d at 966.

^{80.} See Klimowicz, supra note 45, at 179-80.

^{81.} Steris, 133 F. Supp. 3d at 964.

^{82.} Id.

^{83.} Id. at 968.

^{84.} *Id*.

power and capacity to handle large scale commercial sterilization of medical products. Additionally, there were questions whether other sterilization technologies, such as e-beam, were also viable nascent competitive threats to gamma. 86

Ultimately, given the need to develop a more cost-effective x-ray machine and facility to compete head-to-head with gamma, Synergy's entry was more about a "nascent" technology than as a potential competitor to an established market. Further, at the time of the acquisition, x-ray and gamma were in adjacent relevant markets with a clear potential for x-ray to compete directly with gamma for the sterilization of medical device at some point in the future. This is the core nascent competition paradigm established in *Microsoft*. 87

Even so, would this distinction have mattered in how the case was administered? While the ultimate decision might not have changed, the reasoning and burdens would plausibly be quite different under a nascent competition approach. Importantly, the FTC imported a four-prong test that borrowed heavily from *Marine Bancorporation*. 88 The test is focused narrowly on examining one relevant market and determining whether it is concentrated. Additionally, the test has a demanding standard of proving that entry would have "probably" occurred, but-for the acquisition, and that no other competitors were poised to enter. 10 This singular focus on an existing relevant market is an inherently static approach and does not naturally lend itself to considering changing technologies and dynamic competitive conditions between two related, but also distinct, products and technologies. Further, demonstrating that entry would have probably occurred is significantly different when discussing a stable and established product market (where often the question is primarily about geographic expansion or entry or straightforward product

^{85.} *Id.* at 975 ("The TT300 [a dual-purpose e-beam and x-ray machine proposed by IBA to be used by Synergy] could not achieve the 400kW power level, and there was no dual-purpose machine in existence capable of reaching those power levels.").

^{86.} See, e.g., Jennifer Cascone Fauver & Subramaniam Ramanarayanan, Challenges for Economic Analysis of Mergers Between Potential Competitors: Steris and Synergy, ANTITRUST, Summer 2016, at 74, 76 ("[T]he FTC acknowledged that E-beam sterilization could become a closer substitute for gamma sterilization in the future as a result of customer concerns regarding the supply of cobalt 60, the principal input into gamma sterilization.").

^{87.} United States v. Microsoft, 253 F.3d 34 (D.C. Cir. 2001).

^{88.} *Steris*, 133 F. Supp. 3d 962; United States v. Marine Bancorporation, Inc., 418 U.S. 602 (1974).

^{89.} Marine Bancorporation, Inc., 418 U.S. 602.

^{90.} Id. at 639-40.

portfolio questions⁹¹) compared to a developing technology. On the other hand, assessing nascent competition should also involve evaluating other potential nascent technologies, such as e-beam in *Steris*. This evaluation of other emerging, nascent technologies does not fit naturally in the four-prong actual potential competition test used in *Steris*.

A considerable downside to bringing a nascent competition case under § 7 is that there are no court precedents for doing so. While nascent competition is firmly within § 2 case law, it has never been used—to my knowledge—for an ex ante challenge to an acquisition under § 7. Consequently, a court would need to develop new conditions and requirements to find a violation, which is certainly a major impediment to applying the nascent competition doctrine to § 7 cases. Yet, legal and economic scholarship is emerging in this area, and the agencies themselves can lay out factors to the court on how to adjudicate nascent competition mergers. There is a strong argument that this effort is worthwhile because PPC and APC doctrines have developed in certain ways based on the nature of the cases that typically fall under their umbrellas—including having a strong geographic market component, which is largely missing from nascent competition scenarios, and less emphasis on developing technologies and future product differentiation.

Consider the original *Microsoft* case. ⁹² Suppose that, rather than engage in unilateral conduct to hamper the distribution and growth of Netscape, Microsoft proposed to acquire Netscape. If so, then the acquisition would have involved two direct competitors in web browsers (where Netscape was the market leader). With these facts, the hypothetical acquisition would almost certainly be a § 7 violation within a web browser market. However, there is also another theory of harm involving Netscape as a nascent competitor in operating systems. The PPC and APC doctrines, in contrast, do not fit particularly well under this second theory of harm—as Netscape's projected entry into operating systems would involve some degree of technical change and product differentiation. Thus, while in this hypothetical scenario, the acquisition would have been blocked under a straightforward application of § 7 for a web browser market, there should also be the option to bring an additional count of a § 7 violation for an operating systems market under a theory of nascent competition.

^{91.} See, e.g., FTC v. Procter & Gamble Co., 386 U.S. 568, 575 (1967) (the FTC successfully litigated the divestiture of the Clorox Company, and its liquid bleach assets, from Procter & Gamble, which had purchased Clorox in 1957, based, in part, on the belief that "the merger would seriously diminish potential competition by eliminating Procter as a potential entrant into the industry").

^{92. 253} F.3d 34.

Perhaps Facebook's acquisition of both Instagram and WhatsApp could have been examined under a § 7 nascent competition theory. The theory does not require that Instagram and WhatsApp be technically in the same relevant market as Facebook. Rather, the question is whether—at the time of the acquisition—these social media platforms could potentially challenge Facebook based on projected technological developments and product differentiation.

While there are no court precedents, there are some agency settlements brought under the nascent competition doctrine. In 2017, the FTC, along with several states, brought a nascent competition case against Mallinckrodt ARD, formerly known as Questcor Pharmaceuticals, alleging that "Questcor illegally acquired the U.S. rights to develop a competing drug, Synacthen Depot. The acquisition stifled competition by preventing any other company from using the Synacthen assets to develop a synthetic ACTH [adrenocorticotropic hormone] drug, preserving Questcor's monopoly and allowing it to maintain extremely high prices for Acthar."93 Also in 2017, the FTC blocked the combination of CDK-Auto Mate based, in part, on a theory involving nascent competition: "The complaint alleged harm to current competition, but focused even more sharply on harm to future, or nascent competition. That harm arose from the smaller competitor's substantial efforts to remake itself into a greater competitive threat going forward."94 These agency settlements can also be part of the foundation for bringing ex ante § 7 challenges to the acquisition of nascent competitors.

III. COUNTERFACTUALS

Whenever a firm, big or small, acquires another firm, or set of assets, there are an infinite number of possible post-merger outcomes, but we can broadly categorize them into three buckets: (1) those that are good for consumers, (2) those that have no real impact on consumers, and (3) those that are bad for consumers. How do we determine "good" or "bad" in the realm of antitrust?

^{93.} See Press Release, Fed. Trade Comm'n, Mallinckrodt Will Pay \$100 Million to Settle FTC, State Charges It Illegally Maintained its Monopoly of Specialty Drug Used to Treat Infants (Jan. 18, 2017), https://www.ftc.gov/news-events/press-releases/2017/01/mallinckrodt-will-pay-100-million-settle-ftc-state-charges-it [https://perma.cc/96N3-R6AJ].

^{94.} D. Bruce Hoffman, Director, Bureau of Competition, Fed. Trade Comm'n, Remarks at GCR Live Antitrust in the Digital Economy: A Snapshot of FTC Issues 6 (May 2019) (transcript available at https://www.ftc.gov/system/files/documents/public_statements/1522327/hoffman_-gcr live san francisco 2019 speech 5-22-19.pdf [https://perma.cc/3A6E-9GZE]).

We base it on the consumer welfare standard.⁹⁵ More specifically, however, we base it on a comparison between two counterfactuals: (1) a world with the merger and (2) a world without the merger. It is this differential between these two unobservable outcomes that ultimately determines the "effect" of the merger.

Counterfactuals are fundamental to antitrust law and are necessary in virtually all antitrust decisions—even if only on a conceptual level. He the existence of counterfactuals introduces a degree of inherent uncertainty. Vet the existence of counterfactuals introduces a degree of inherent uncertainty. Yet the nature of the counterfactual exercise differs depending on whether we are discussing ex ante conduct versus ex post conduct. Since the passage of the HSR Act in 1976, all mergers and acquisitions above a certain monetary threshold are subject to agency review before they are consummated. This ex ante review of mergers can fundamentally change the nature of the counterfactual exercise.

^{95.} For a detailed description of the consumer welfare standard see, for example, Gregory J. Werden, *Cross-Market Balancing of Competitive Effects: What Is the Law, and What Should It Be?*, 43 J. CORP. L. 119, 139 (2017); Joshua D. Wright, Elyse Dorsey, Jonathan Klick & Jan M. Rybnicek, *Requiem for a Paradox: The Dubious Rise and Inevitable Fall of Hipster Antitrust*, 51 ARIZ. STATE L.J. 293, 296–313, 351–62 (2019).

^{96.} See, e.g., Timothy J. Muris & Jonathan E. Nuechterlein, First Principles for Review of Long-Consummated Mergers, 5 CRITERION J. INNOVATION 29, 36 (2020) ("Whether explicitly or implicitly, the question in any antitrust case is whether the challenged action made (or will make) the world less competitive than it would otherwise be; if not, there can be no liability."); cf. Justine S. Hastings & Michael A. Williams, What Is a "But-For World"?, ANTIRUST, Fall 2016, at 102, 102 (focusing on antitrust class action cases, the authors find "[w]hat constitutes a proper 'but-for world' and how one estimates 'but-for' prices in that world are central points of contention in many antitrust class action cases").

^{97.} See, e.g., Brown Shoe Co. v. United States, 370 U.S. 294, 323 (1962) ("Congress used the words 'may be substantially to lessen competition' (emphasis supplied), to indicate that its concern was with probabilities, not certainties. Statutes existed for dealing with clear-cut menaces to competition; no statute was sought for dealing with ephemeral possibilities.").

^{98.} See United States v. Microsoft, 253 F.3d 34, 79 (D.C. Cir. 2001) ("[N]either plaintiffs nor the court can confidently reconstruct a product's hypothetical technological development in a world absent the defendant's exclusionary conduct." (emphasis added)); Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 322 (3rd Cir. 2007) ("Hypothetical anticompetitive conduct, speculative monopoly power, and remote injuries do not merit the extreme remedy of divestiture.").

^{99.} See Hart-Scott-Rodino Antitrust Improvements Act of 1976, Pub. L. No. 94-435, 90 Stat. 1383 (codified at 15 U.S.C. § 18(a)).

^{100.} This point could be overstated if pre-HSR review of mergers were closer to ex ante than ex post in the sense that agencies challenged the acquisition soon after the merger is completed, which does not allow for much post-acquisition market data to develop.

A. Comparing § 7 and § 2 Counterfactuals

Specifically, let us compare Sherman Act, § 2 monopolization cases with Clayton Act, § 7 merger cases. As mentioned, under § 7, we are comparing a hypothetical market outcome (with the merger) with a hypothetical market outcome (without the merger). In contrast, under § 2, such as Microsoft, we are comparing the actual market outcome (with the conduct) to a counterfactual world (without the conduct).¹⁰¹ Thus, while we are again comparing two "worlds" for § 2 cases, one of these worlds actually exists and is, thus, observable to one degree or another. Within this framework, ex post evaluations of long consummated mergers are more akin to § 2 cases—in that we can see what happened to the market after the acquisition. This Article argues that this fundamental difference in counterfactual exercises makes ex ante § 7 cases and § 2 cases incompatible in terms of standards and precedents. In other words, we should be reticent to mix and match the case law particularly when they are built on different counterfactual foundations. Thus, the rationale for bringing § 2 liability into § 7 cases would need to overcome this fundamental issue. 102

Notably, the practicalities of antitrust investigations can mask these differences. For instance, for § 7 investigations in mature industries, the hypothetical market outcome without the merger can be closely proxied with past market outcomes—which are observable to one degree or another. While the past is not a perfect proxy for the future—even for stable markets—it is a reasonable basis to forecast outcomes. For some potential and nascent competition cases, however, there might not be this luxury. Especially for APC and nascent competition cases, predicting both the counterfactual world with and without the acquisition involves a forecast where something has not yet happened—whether it is the pending entry or repositioning, respectively. The

^{101.} This was also true in *Princo*, which involved the defense of patent misuse under the theory that the patentee eliminated a nascent competitor by bundling a competitor's patents with its own patents and not further developing the competing patents. Princo Corp. v. Int'l Trade Comm'n, 616 F.3d 1318, 1331 (Fed. Cir. 2010).

^{102.} See Hemphill & Wu, *supra* note 20, for a proposal to use § 2 standards for ex ante challenges to acquisitions involving nascent competitors; *see also infra* Part V.A.

^{103.} Matthew Elliott & Andrea Galeotti, *The Role of Networks in Antitrust Investigations*, 35 OXFORD REV. ECON. POL'Y 614, 619 (2019) (explaining that supermarket antitrust investigation "built on previous related investigations within the same sector (e.g. investigations into the Cooperative Group's acquisition of Somerfield, and the acquisition of Safeway by Morrisons) and so represents a mature understanding of these markets").

counterfactual exercise for potential and nascent competition cases is further detailed in Part III.B.

For § 2 cases, while the actual outcome is observable, that does not mean it is readily observable to regulators or even to the parties. The real world is messy and measuring performance is no simple exercise. That being said, it can be done. The further, antitrust has evolved in certain ways to reduce this burden. Take for instance price fixing, which is a per se violation of the Sherman Act, § 1. Thus, the act itself is sufficient to find a violation. No explicit counterfactual exercise is needed. The price fixing act, in and of itself, signals the essence of the issue that is the effect—in this case, a negative effect on consumer welfare from a non-market-based elevation of prices. A sign represents something other than itself—as smoke is a sign of a fire and a siren is a sign of an emergency. Similarly, the observation of price being fixed amongst competitors is a sign of market inefficiency and a loss of consumer welfare. This is a canonic example of using legal rules—in this case, a per se condemnation of price fixing—to economize on the cost of engaging in the counterfactual exercise.

As mentioned, this has strong implications on proposals to bring elements of § 2 case law into ex ante evaluations of nascent competition cases. Scott Hemphill and Tim Wu have recently argued for using § 2 causation standards to evaluate acquisitions of nascent competitors. Yet, even within § 2, while the courts do not require a specific showing of causation—that is, compared to the counterfactual world without the acquisition—it does require at least a general showing. In other words, while it is not necessary to show in each and every case that the conduct maintained the monopoly power compared to

^{104.} See Ginsburg & Wong-Ervin, supra note 52.

^{105.} See Hemphill & Wu, supra note 20, at 1890–91 ("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*, the leading examples 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." (footnote omitted)).

^{106.} United States v. Microsoft, 253 F.3d 34, 79 (D.C. Cir. 2001) ("Given [the] rather edentulous test for causation, the question in this case is not whether Java or Navigator would actually have developed into viable platform substitutes, but (1) whether as a general matter the exclusion of nascent threats is the type of conduct that is reasonably capable of contributing significantly to a defendant's continued monopoly power and (2) whether Java and Navigator reasonably constituted nascent threats at the time Microsoft engaged in the anticompetitive conduct at issue.").

without it, there is at least the acknowledgement that the counterfactual is important.

B. Nature of the Counterfactual Exercise for Potential and Nascent Competitors Under § 7

Given that there are an infinite number of possible market outcomes, both with or without the acquisition of a potential or nascent competitor, how do we compare these two counterfactuals? Of course, while the possibilities are infinite, the probabilities are not. Further, to facilitate the counterfactual exercise, we can group acquisition outcomes into three categories: Failure (F), Middling Outcome (M), and Success (S). For example, if Company A purchases Company B, which is a nascent competitor, and, after the acquisition, Company B is liquidated and its products are discontinued, then we would label that a Failure or even a killer acquisition. In contrast, if Company B continues but does not achieve greater market penetration, then we could label this as a Middling Outcome. Finally, if Company B experiences exponential growth, it can be labeled a Success. These categories are only to illustrate possible outcomes and not to represent clear delineations. Further, these categories are from the perspective of consumers. We are also holding aside the potential efficiencies that accrue to Company A.¹⁰⁷

To engage in the counterfactual exercise required for ex ante § 7 evaluations, we also need to have a sense of outcomes but-for the acquisition. Again, we can use F, M, and S to capture possible outcomes of an independent Company B who is free to compete on its own.

We can use the following table to represent the possible outcomes:

Outcome	With the Acquisition	Without the Acquisition
Failure (F)	F_{I}	F_0
Middling Outcome (M)	M_I	M_0
Success (S)	S_1	S_{θ}

Table 1: Possible Outcomes with and without the Acquisition ¹⁰⁸

^{107.} For instance, even if Company B's product is otherwise a post-merger Failure, the potential efficiencies to Company A's product(s) are a critical component to the ultimate assessment of whether the merger created a net increase in consumer welfare.

^{108.} Again, these outcomes are in reference to the acquired competitor. They do not factor in potential efficiencies to the acquirer.

In terms of the effect of the acquisition, given these categories, there are nine possibilities.

Table 2: Effect of an Acquisition (Holding Aside Efficiencies)

With the Acquisition	Effect of the Acquisition	Welfare Consequence
Failure (F)	F_1 v. F_0	0
Failure (F)	F_I v. M_0	Negative
Failure (F)	F_I v. S_0	Negative
Middling Outcome (M)	M_1 v. F_0	Positive
Middling Outcome (M)	M_I v. M_0	0
Middling Outcome (M)	M_l v. S_0	Negative
Success (S)	S_{I} v. F_{0}	Positive
Success (S)	S_1 v. M_0	Positive
Success (S)	S_1 v. S_0	0

At the top of the table, we can see that, if the acquisition results in a Failure or killer acquisition, then, compared to the but-for world without the acquisition, there are three possibilities: one where the but-for world would have resulted in a Failure, Middling Outcome, or Success. The welfare consequences from these various scenarios are either negative or zero. Put plainly, if the acquisition results in a killer acquisition, then there are no positive welfare scenarios—before the consideration of potential efficiencies to the acquirer. Of course, this is a byproduct of creating three broad categories. It is certainly conceivable that both counterfactuals ultimately result in a Failure—yet the acquisition delayed the failure by 6 months or a year. The point is to generate a general intuition.

Moving to a Middling Outcome from a merger, we can see that anything is possible depending on the counterfactual world without the merger. If the butfor world (without the acquisition) is a Failure, then the Middling Outcome is actually good for welfare. If both worlds would have resulted in a Middling

performance, then the merger really did not change much. ¹⁰⁹ Finally, if the but-for world would have been a Success, then the merger created a net harm.

Finally, for a successful post-merger outcome, there are no negative welfare outcomes. Again, this is a simplification based on the broad categories—as it is conceivable that, but-for the acquisition, the acquired technology or product would have been even more successful. The idea, however, is that a successful post-acquisition outcome generally suggests that the merger either increased welfare or did not change it much.

What is the takeaway from this exercise? First, it is to illustrate the inherent need to compare two counterfactuals rather than one. This implies that the welfare effects of an acquisition cannot be ascertained by just looking at postacquisition failure or success. Nonetheless, within in this broad framework, if a product is killed shortly after it is acquired, then, while it certainly does not definitively prove it is anticompetitive, it raises a great deal of suspicion. For example, let us assume that pre-merger, Company A represents that Company B's product will flourish under the umbrella of Company A. Yet after the acquisition is consummated, Company B's product is quickly terminated. While an ex post evaluation could reveal a perfectly legitimate reason for the termination, including unknown deficiencies in the technology or perhaps unanticipated regulatory hurdles, in this type of scenario, there is a strong argument for requiring the defendant to submit a strong efficiency justification. Alternatively, if Company B enjoys exponential post-merger growth, then there is a compelling argument for requiring the plaintiff to provide substantial evidence of anticompetitive harm.

Given the above, this raises the larger policy question of whether, for ex post evaluations, we should have a rebuttable presumption of illegality if Company A acquires and quickly kills Company B. Certainly, of all the potential scenarios described in Table 2, a killer acquisition is the most likely to be anticompetitive. While seemingly straightforward, there are

^{109.} Again, these categories of F, M, and S are from the consumers' perspective; thus, having both counterfactuals with the same outcome suggests there are no strong procompetitive or anticompetitive arguments to be made. It could be argued that having the same level of market success with and without the acquisition creates a net negative impact on consumer welfare. The idea is that it is better to have an independent Company B—all else equal. Yet if Company B enjoys the same market success with consumers with the acquisition compared to without, then it means it overcame incentives to lower output, raise prices, or reduce innovation either due to the implementation of merger-specific efficiencies, the existence of competitive constraints from other rivals, or both. For multi-sided platforms that involve more than one group of consumers (such as an ad-supported platform with users and advertisers), the idea is that each consumer group would be just as well off in either counterfactual.

considerations that warrant some degree of caution before adopting such a presumption. The failure rate of startups is likely to be high; consequently, a presumption of illegality could create a perverse incentive to maintain a failed product for longer than optimal to avoid ex post liability. Further, this would negatively impact the ex ante incentive to acquire risky, yet potentially promising, startups and technologies in the first place.

In sum, the nature of a § 7 review of nascent or potential competition involves comparing two forecasts of market success. While this is conceptually straightforward, the actual implementation for a specific case is highly fact intensive. Next, this Article considers the state of the evidence regarding whether past acquisitions in the digital sector involved a loss of potential or nascent competitors.

IV. THE STATE OF THE EVIDENCE REGARDING THE ACQUISITION OF POTENTIAL AND NASCENT COMPETITORS

The prior framework for evaluating nascent and potential acquisitions also has implications for merger retrospectives. While merger retrospectives give us the potential to examine the actual effects of an acquisition, there is still a need to develop-at least to some degree-a proxy for the but-for world without the acquisition. While there is unlikely to be a one-size-fits-all approach, there are some natural candidates, including contemporaneous rivals to the acquired nascent or potential competitor. The idea is that these rivals were in a similar (but certainly not in the exact same) position to the acquired potential and nascent firm before the acquisition. Ideally, those contemporaneous rivals were not acquired so we can see how they evolved; although, even if they were acquired, it can provide some value if we believe that, but-for the acquisition, the nascent competitor would have been acquired by another firm. While these proxies are inherently imperfect, it is significantly better, at least conceptually, to compare actual outcomes with the counterfactual outcome.

Further, in assessing retrospectives, a relevant question is not whether the antitrust agencies got a particular merger right or wrong but instead whether the agencies are systematically biased in approving anticompetitive mergers (that is, a Type II error or a false negative) or blocking procompetitive mergers (that

is, a Type I error or a false positive). 110 Overall, there is no study that has shown that the agencies are systematically committing either of these errors. 111

Clearly, the acquisition of a potential or nascent competitor can result in an outcome that is harmful to consumers and innovation, yet it can also result in an outcome that unlocks a great deal of consumer value. Beyond the standard efficiencies, a merger that occurs early in the life of a product could significantly increase the probability that a product or technology develops, increase the speed at which the product or technology will arrive to the market, or both.

The difficulty of assessing the competitive effects of potential or nascent competitors is highlighted by D'Udekem, Mathur, and Van Audenrode in discussing Amazon's acquisition of Kiva Systems in 2012.¹¹² Kiva Systems, which was renamed Amazon Robotics in 2015, produces robots that are deployed in large distribution centers to retrieve and move items in a significantly more efficient manner than other technologies.¹¹³ At the time of the acquisition, Kiva had a number of other customers including Staples, Walgreens, and the Gap, which Amazon stopped supplying when their original contracts ran out.¹¹⁴ Credible alternatives are now widely available—with

^{110.} The relevance and need to assess the error costs in antitrust enforcement was brought to the forefront by Judge Easterbrook. *See* Frank H. Easterbrook, *The Limits of Antitrust*, 63 Tex. L. Rev. 1, 4 (1984) ("Antitrust is costly. The judges act with imperfect information about the effects of the practices at stake. The costs of action and information are the limits of antitrust.").

^{111.} Some might reference John Kwoka's meta-analysis of merger retrospectives to support the conclusion that antitrust agencies are overly tolerant of anticompetitive acquisitions. *See generally* John Kwoka, MERGERS, MERGER CONTROL, AND REMEDIES (2015). The study's shortcomings, as a basis for overhauling current agency practices, have been well documented. *See, e.g.*, Michael Vita & David Osinski, *John Kwoka's* Mergers, Merger Control, and Remedies: *A Critical Review*, 82 ANTITRUST L.J. 361 (2018). These problems include, inter alia, the fact that the study's merger sample consists primarily of transactions before 2000 and none later than 2006; most of the included mergers are a limited representation of the industries evaluated by the antitrust agencies; and the study does not use generally accepted meta-analytic techniques. Even if one were to accept the study's results at face value, it involves an insufficient number of cases and industries to make a claim that the agencies are currently and systematically committing Type I or Type II errors.

^{112.} D'Udekem, Mathur & Van Audenrode, *supra* note 68, at 40–41.

^{113.} See Frank Tobe, The Technology Gap Left by Amazon's Acquisition of Kiva Systems, THE ROBOT REPORT (Apr. 13, 2016), https://www.therobotreport.com/the-technology-gap-left-by-amazons-acquisition-of-kiva-systems [https://perma.cc/JAJ9-BQBY].

^{114.} See id.; Scott Kirsner, Acquisition Puts Amazon Rivals in Awkward Spot, Bos. Globe (Dec. 1, 2013, 12:00 AM), https://www.bostonglobe.com/business/2013/12/01/will-amazon-owned-robot-maker-sell-tailer-rivals/FON7bVNKvfzS2sHnBHzfLM/story.html [https://perma.cc/G3YW-HK9T] ("Major retailers such as Staples, Walgreens, Gap, Office Depot, and Crate & Barrel installed Kiva's

some entering the market, in part, due to the acquisition—but it took a couple of years. 115 D'Udekem, Mathur, and Van Audenrode explain:

There are two possible interpretation of the facts On the one hand, Amazon was able to marry its superior operations with an efficient robotic approach to retrieve goods for delivery. That resulted in an immediately available efficiency On the other hand, one could argue that Kiva's innovative technology could have become available for Amazon and its competitors, thereby introducing efficiencies without providing an advantage to Amazon. 116

While Amazon's purchase of Kiva might not be considered a pure killer acquisition, in that Amazon continued to improve and develop the product, it does involve taking an early technology and withdrawing it from the market, which prevented actual and potential competitors to Amazon from using it. Ultimately, D'Udekem, Mathur, and Van Audenrode conclude that, but for Amazon's acquisition, "there is little doubt that the speed of development [at Amazon] would have been slower. In addition, Amazon's acquisition allowed it to customize the technology and secure greater efficiencies than would have been realized had Kiva continued its development alone." 117

Particularly for large digital platforms, is there strong evidence that they are systematically acquiring nascent competitors in violation of antitrust laws and, therefore, is there a need to change our current presumptions?¹¹⁸ Three recent studies examine a series of prior acquisitions by the largest digital platforms, that is, Google, Amazon, Facebook, and Apple.¹¹⁹ As detailed below, broadly, they all find that few acquisitions strongly fit an anticompetitive narrative. On the other hand, they also conclude it is still an open question whether some of the acquisitions could be construed as anticompetitive. At best, the evidence is mixed, and more work needs to be done—as none of the studies use a control group such as an examination of acquisitions by technology companies outside

technology in their warehouses. And now they all must grapple not only with possible shortages of Kiva bots, but also whether they want to do business with a direct competitor.").

^{115.} See Tobe, supra note 113; D'Udekem, Mathur & Van Audenrode, supra note 68, at 40.

^{116.} D'Udekem, Mathur & Van Audenrode, supra note 68, at 40.

^{117.} Id. at 41.

^{118.} See, e.g., Cal. Dental Ass'n v. Fed. Trade Comm'n, 526 U.S. 756, 781 (1999) ("The object is to see whether the experience of the market has been so clear, or necessarily will be, that a confident conclusion about the principal tendency of a restriction will follow from a quick (or at least quicker) look, in place of a more sedulous one.").

^{119.} See Latham, Tecu & Bagaria, supra note 22, at 27; Gautier & Lamesch, supra note 22, at 1; Argentesi, Buccirossi, Calvano, Duso, Marrazzo & Nava, supra note 22, at 1.

of the big five (Google, Amazon, Facebook, Apple, and Microsoft) or track the progress of contemporaneous rivals to the acquired nascent or potential competitor. 120

Latham, Tecu, and Bagaria examine acquisitions by Google, Amazon, Facebook, and Apple (GAFA) between 2009 and 2020 and conclude that "only a small proportion of transactions could begin to fit the 'killer' narrative." Rather, "the vast majority have been about GAFA acquiring new capabilities and positioning themselves to enter new markets." Specifically, the authors filtered all 409 acquisitions to determine whether they met a "core business" filter. They find only 33 of the acquisitions (8%) fit this filter; further, of these 33 acquisitions, the authors emphasize that they "are not saying that the transactions surviving these filters *were* killer acquisitions." 124

The authors argue, nonetheless, that this could mean that there is a concern about reverse killer acquisitions, where the purchaser eliminates its own development and product and uses the acquired product instead. While it is a reasonable inquiry to make, it does not necessarily follow that a reverse killer acquisition will occur and, even if it does, whether it is detrimental to innovation. For instance, combining the best of two development processes to bring a more innovative product to market faster is a potential cognizable efficiency rather than a theory of harm. Similarly, in assessing this theory, one cannot simply assume internal development would occur or would occur at the same degree of efficiency as the acquired assets.

^{120.} See Latham, Tecu & Bagaria, supra note 22, at 27; Gautier & Lamesch, supra note 22, at 1; Argentesi, Buccirossi, Calvano, Duso, Marrazzo & Nava, supra note 22, at 1.

^{121.} See Latham, Tecu & Bagaria, supra note 22, at 27 (the authors define "killer acquisition" more broadly than instances where the acquired product was discontinued—but rather focus on the narrative that big tech acquisitions are motived by a concern that the target firms could evolve into a challenger to their core monopoly).

^{122.} Id. at 34.

^{123.} *Id.* at 31. This filter looks for either a direct horizontal overlap or whether the acquisition involved a target that was "vertically-related to that core business and could plausibly grow into a competitive threat." *Id.*

^{124.} Id. (emphasis in original).

^{125.} The phrase "reverse killer acquisition" prominently appears in Caffarra, Crawford & Valletti, *supra* note 70. *See also supra* Part II.C.

^{126.} See GUIDELINES, supra note 12, § 10 ("When evaluating the effects of a merger on innovation, the Agencies consider the ability of the merged firm to conduct research or development more effectively. Such efficiencies may spur innovation but not affect short-term pricing.").

^{127.} On this question, a beneficial study would be to examine the failure rate of various products and product developments at large platforms. There is certainly no shortage of large profile product

Gautier and Lamesch similarly examine acquisitions from big tech platforms and conclude "that many GAFAM [Google, Amazon, Facebook, Apple, and Microsoft] acquisitions are driven by the desire to purchase valuable R&D inputs, such as the technology, IP rights and/or people of the target firms."128 Focusing on killer acquisitions, 129 of the 175 deals they examined over the period from 2015 to 2017, they "find no evidence in our sample that killer mergers are widespread, but just one potential case that would have deserved closer investigation by competition watchdogs." ¹³⁰ The potential case is Facebook's 2016 acquisition of the "rapidly popular" photo filter app Masquerade. 131 Holding aside the lack of evidence for widespread killer acquisitions, similar to Latham, Tecu, and Bagaria, Gautier and Lamesch raise the possibility that some of the acquisition were reverse killer acquisitions where the goal was not to realize synergies but to protect its dominance by obtaining a valuable asset on the market and discontinuing its own development and product.¹³² Ultimately, they conclude "[t]he answer to this question is far from obvious and would need a case by case analysis."133

Argentesi, Buccirossi, Calvano, Duso, Marrazzo, and Nava examine mergers over a ten-year period between 2008 and 2018 involving Google, Facebook, and Amazon. While their examination is generally more descriptive, they find "there are considerable difficulties in understanding the competitive implications of acquiring a young firm as, at that stage in their life cycle, their evolution is still uncertain and, thus, it is very difficult to determine if the target will grow to become a significant competitive force." That is the

flops. *See, e.g.*, Eric Griffith, *The Biggest Tech Product Flops of the 2010s*, PCMAG (Dec. 2, 2019), https://www.pcmag.com/news/the-biggest-tech-product-flops-of-the-2010s [https://perma.cc/E5K7-F2P7] (citing Amazon Fire Phone, Facebook Home, Facebook Deals, Facebook Email, Facebook Places, Facebook Gifts, Google Glass, Google Nexus Q, Google TV, and Microsoft Kinect).

^{128.} See Gautier & Lamesch, supra note 22, at 27.

^{129.} The authors, again, use a broader definition for killer acquisition. *See id.* at 2 ("This type of merger is now referred to as a killer merger: the firm acquires a target which develops a technology that can be used to compete with its own products in the future and the acquisition kills the competitive threat.").

^{130.} Id. at 4.

^{131.} *Id.* Notably, Facebook has recently shutdown the app. *See* Taylor Lyles, *Facebook is Shutting Down MSQRD, the AR Selfie App it Acquired in 2016*, THE VERGE (Mar. 13, 2020, 4:28 PM), https://www.theverge.com/2020/3/13/21178982/msqrd-ar-selfie-app-shutting-down-mobile-app-april-facebook [https://perma.cc/VK4V-9YHX].

^{132.} See Gautier & Lamesch, supra note 22, at 3-4.

^{133.} Id. at 27.

^{134.} See Argentesi, Buccirossi, Calvano, Duso, Marrazzo & Nava, supra note 22, at 14.

^{135.} Id. at 19.

essence of the debate. The authors also do a thoughtful review of the United Kingdom's Competition and Markets Authority's (CMA) decisions to clear both the Facebook-Instagram and Google-Waze acquisitions. While they make compelling arguments on both sides of the debate, they do not reach a firm conclusion. ¹³⁷

Finally, Cunningham, Ederer, and Ma examine the impact of killer acquisitions in the pharmaceutical industry. It is important to note that the design of this study is materially different from the previously discussed studies. Cunningham, Ederer, and Ma use control groups and a difference-indifferences empirical approach to establish causality. While their research is limited to the development of pharmaceutical drugs, where product development milestones are readily observable—which is not generally the case in digital markets to certainly the type of research that is needed to help inform broader policy decisions.

The study's main result is that "projects acquired by an incumbent with an overlapping drug are 23.4 percent less likely to have continued development activity compared to drugs acquired by non-overlapping incumbents." In

^{136.} *Id.* at 20–32. At the time of those acquisitions, the competition authority in the United Kingdom was the Office of Fair Trading (OFT).

^{137.} Regarding Facebook-Instagram, the authors conclude: "[W]hether the decision has ultimately harmed consumers also depends on the benefits accrued through the merger, which may have countervailed anti-competitive effects.... These efficiencies seem also to be merger-specific, and it is difficult to assume that they would have arisen in a counterfactual scenario where Instagram was not acquired by Facebook or another social network." *Id.* at 27–28. Regarding Google-Waze, the authors conclude: "While there appear to be some gaps in the analysis undertaken by the Authorities, it is hard to say whether the clearance of the merger has led to a detrimental outcome for consumers." *Id.* at 32.

^{138.} See generally Cunningham, Ederer & Ma, supra note 10.

^{139.} Id. at 35.

^{140.} The pharmaceutical industry is a relatively straightforward industry to study, from the perspective of determining substitutability, because there are set categories of pharmaceutical substitutability, including the therapeutic class and the mechanism of action. Thus, we can more reliably use functional substitutability to proxy for market-based substitutability—that is, how consumers actually behave. For other differentiated products, including almost all the products from large technology platforms and even retail products, this assessment is not as straightforward. For instance, to use a retail example, bottled water and tap water are functional substitutes and are composed of the same essential chemical ingredient of H₂O—yet, in an antitrust application, it would not be a stretch to suggest that antitrust agencies would likely consider bottled water in a separate relevant product market than tap water (even if the tap water is put in a bottle).

^{141.} Cunningham, Ederer & Ma, supra note 10, at 3.

total, they label between 5.3% to 7.4% of all pharmaceutical acquisitions in their sample as killer acquisitions. 142

Yet even with this result, they conclude that "the overall effect on social welfare is ambiguous because these acquisitions may also increase ex-ante incentives for the creation of new drug projects." In other words, new drug development is endogenous to the potential returns from being bought before actual completion of the project. Thus, if the expected payoff from innovation decreases, for example, by a prohibition hindering acquisitions by large pharmaceutical companies, then this will likely decrease the rate of innovation. 145

Ultimately, these studies are leading the way in developing empirical scholarship on acquisitions of nascent and potential competitors. While there is some urgency to enact antitrust reforms and possibly even regulatory solutions, which is addressed in the following Part, those changes must be grounded in solid evidence. Even reports that are otherwise critical of the current level of antitrust enforcement do not recommend changing our legal presumptions regarding large technology companies purchasing nascent and

^{142.} Id. at 6.

^{143.} *Id*.

^{144.} See, e.g., Competition in Digital Technology Markets: Examining Acquisitions of Nascent or Potential Competitors by Digital Platforms: Hearing Before the Subcomm. on Antitrust, Competition Pol'y & Consumer Rts., 116th Cong. 4–5 (Sept. 24, 2019) (Written Testimony of Patricia Nakache, Gen. Partner, Trinity Ventures),

https://www.judiciary.senate.gov/imo/media/doc/Nakache%20Testimony.pdf

[[]https://perma.cc/7K8F-Y3TS] ("[M]any young companies cannot realistically achieve the scale necessary to become standalone public companies, which means that often M&A is the most viable pathway for a startup.").

^{145.} See, e.g., D. Daniel Sokol, Vertical Mergers and Entrepreneurial Exit, 70 FLA. L. REV. 1357, 1362 (2018). In contrast, Lemley & McCreary have recently argued that the current paradigm of venture capital funding and subsequent buyouts is distorting incentives and is actually causing more harm than good. See Mark A. Lemley & Andrew McCreary, Exit Strategy, 101 B.U. L. Rev 1 (2021). This has fueled their proposal to presumptively ban large tech companies from making acquisitions unless they can prove strong efficiencies. Id. Their policy proposal is addressed in infra Part V.D.

potential competitors.¹⁴⁶ Further, officials at the U.S. antitrust agencies also have not seen the evidence to make this change.¹⁴⁷

V. RECENT PROPOSALS TO ADDRESS THE ALLEGED PROBLEMS OF NASCENT, POTENTIAL, AND KILLER ACQUISITIONS

The legal status quo for ex ante assessment of mergers involving nascent competition is uncertain. On one hand, there is a well-developed doctrine on potential competition; however, as this Article has argued, potential competition cases are economically distinct and ill-suited to assess nascent competition issues. Arguably, *FTC v. Steris* is an illustration of a misapplication of the potential competition doctrine for a nascent competition case. The primary guidance on the nature of nascent competition is from *Microsoft*, which is, however, a § 2 case. The question before us is "what should the legal standard for § 7 mergers be when it involves nascent competition?" Given this uncertainty, a number of proposals have recently been offered to fill this void. Below, four proposals are detailed and some commentary as to their relative merits are offered. These proposals have elements that move the debate forward; although, ultimately, there are some concerns with their full adoption that should be considered.

A. Hemphill & Wu's "Reasonably Capable" Standard

Hemphill and Wu propose the use of the "reasonably capable" liability standard used in Sherman Act, § 2 cases, such as *Microsoft*, in lieu of Clayton Act, § 7 standards for ex ante (and ex post) assessments of acquisitions involving nascent competitors by incumbents with monopoly power.¹⁴⁹ The

^{146.} See, e.g., FURMAN REPORT, supra note 9, at 101 ("[T]he majority of acquisitions by large digital companies are likely to be either benign or beneficial for consumers, though a minority may not be. Being acquired is also an important exit strategy for technology start-ups, providing significant incentive for investors to provide funding to risky projects and support market entry.").

^{147.} See, e.g., Hoffman, supra note 94, at 5 ("First, I am not aware of good economic evidence that there is a unique and widespread 'nascent' or 'start-up' acquisition issue in the tech industry. I have seen various commentators claim that the various tech firms make lots of acquisitions. But in itself, that provides little useful information.").

^{148.} See supra Part II.D.

^{149.} Hemphill & Wu, *supra* note 20, at 1881 ("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."). For consummated mergers, the idea was also recently contemplated in a series of speeches by U.S. agency officials. *See* Hoffman, *supra* note 94, at 9 ("[T]here is precedent for using Section 2 of the Sherman Act, and monopolization theories, to challenge acquisitions of

idea is to reduce the information burden on agencies and courts through the use of a more relaxed standard of causality, where the plaintiff need only prove that a nascent acquisition is reasonably capable of maintaining an incumbent's market power.¹⁵⁰

There are aspects of this proposal that are appealing. Importantly, it does not rely on a presumption of harm from incumbents with market power from acquiring nascent competitors. Additionally, the proposal offers an avenue to address some of the inherent information burdens associated with nascent competition. Relatedly, it offers a clearly delineated approach for assessing nascent competition that departs from the precedents established for potential competition cases.

Yet a number of commentators have offered reasons why using § 2 and its liability standards for assessing nascent and potential acquisitions is problematic. Namely, there are questions about whether the burden of production for § 2 cases is actually lower than for § 7 cases. Additionally, the "reasonably capable" standard applies only to exclusionary conduct that has no procompetitive justification. Further, § 2 allows for more powerful efficiency defenses compared to § 7.

This Article offers another argument against the use of § 2's "reasonably capable" standard for assessing ex ante nascent acquisitions: there is a fundamental asymmetry in the number of counterfactuals needed. For § 2,

nascent competitors by firms with existing monopoly power."); Wilder, *supra* note 15, at 4 ("The immediate implication of using Section 2 to evaluate potential competition is that it allows us to step back and put greater emphasis on a pattern of conduct, including past acquisitions.").

- 150. Hemphill & Wu, *supra* note 20, at 1881 ("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.").
- 151. See, e.g., Ginsburg & Wong-Ervin, supra note 52 (focusing on the applicability of § 2 for challenging consummated mergers); Muris & Nuechterlein, supra note 96, at 30 (also focusing on consummated mergers); Jonathan Jacobson & Christopher Mufarrige, Acquisitions of "Nascent" Competitors, ANTITRUST SOURCE, Aug. 2020, at 1, 5 (disputing whether "Section 2 allows for a lower burden of proof than Section 7" for the examination of both consummated and unconsummated mergers involving a nascent competitor).
- 152. See, e.g., Muris & Nuechterlein, supra note 96, at 39 ("Congress enacted the Clayton Act in 1914 and substantially amended it in 1950 because it concluded that the Sherman Act imposed excessive burdens on the government in merger challenges.").
 - 153. Id.
 - 154. See, e.g., Jacobson & Mufarrige, supra note 151, at 5.

which deals primarily with ex post conduct, there is the need to develop, whether implicitly or explicitly, only one counterfactual: the world without the conduct. For ex ante merger evaluations, there is a need to develop two counterfactuals: the world with and without the acquisition. Consequently, importing the "reasonably capable" standard, under the assumption that it is a relaxed causality standard, is inherently incompatible with ex ante § 7 review—as that standard was developed based on cases where the court could actually observe what happened due to the conduct. A court examining a prospective nascent acquisition does not have the luxury.

As noted, Hemphill and Wu also propose to use their legal approach for consummated nascent acquisitions. This scenario is more aligned with § 2 conduct since it involves the need to develop only one counterfactual. Thus, there is no hinderance, at least from the counterfactual perspective, of using § 2 and the "reasonably capable" standard to bring action against a prior acquisition or series of acquisitions. Although, as our prior discussion highlighted, a number of scholars have raised questions about the applicability of § 2's nascent competition doctrine for unwinding even consummated mergers.

B. Furman Report's "Balance of Harms" Standard

The Furman Report recommends that the United Kingdom pass legislation to allow antitrust enforcers to use a "balance of harms" approach in dealing with mergers involving nascent competitors. Under this approach, enforcers would do an explicit calculation to estimate the expected value of the merger's impact. This would involve assigning probabilities to various states of the world and the welfare gains or losses from those various states. For example, if there is a 10% chance that an acquisition would result in \$500 million in anticompetitive harm and a 90% chance that the acquisition will result in efficiencies of \$50 million, then the deal should be blocked because the expected value would be negative (-\$5 million).

^{155.} Cf. Brown Shoe Co. v. United States, 370 U.S. 294, 318 (1962) ("Congress rejected, as inappropriate to the problem it sought to remedy, the application to § 7 cases of the standards for judging the legality of business combinations adopted by the courts in dealing with cases arising under the Sherman Act, and which may have been applied to some early cases arising under original § 7.").

^{156.} FURMAN REPORT, supra note 9, at 99.

^{157.} *Id.* at 99 n.17 ("This means 'expected' in the mathematical sense, so based on the chance of an outcome and its value.").

^{158.} *Id.* at 99 ("A more economic approach to assessing mergers would be to weigh up both the likelihood and the magnitude of the impact of the merger.").

This proposal would move the United Kingdom away from a "more likely than not" standard for merger review to a full-blown weighing of the expected benefits and costs from a merger.¹⁵⁹ The information costs would increase to include the (a) probabilities of all possible scenarios and (b) magnitudes of the harms or benefits from each scenario; consequently, this is akin to an *über* rule of reason approach based on a detailed cost-benefit analysis.¹⁶⁰

First, there is nothing wrong, in theory, with an attempt to precisely calculate the costs and benefits of an acquisition. It can be part of a larger merger review process that puts weight on various pieces of evidence. Additionally, the proposal is an attempt to further move economic analysis to the forefront of merger assessment, and, on that dimension, it is a positive development. The proposal also highlights the concern that deciding potential competition cases under legal standards established for actual competition cases can lead to underenforcement.¹⁶¹

Yet there are real concerns with basing merger policy on low probability scenarios that could result in tremendous harms (or benefits). This approach can put significant weight on catastrophic "worst case" outcomes, which could overwhelm other evidence that suggests a merger will be beneficial to consumers. It would move, by design, what would normally be considered a procompetitive merger into the "anticompetitive bucket." Yet, within this same framework, we would also need to weigh "best case" scenarios; consequently, it could move what would normally be considered an anticompetitive merger into the "procompetitive bucket." Further, agencies and courts would need to weigh the probability that another nascent competitor, that was not acquired, could grow into a formidable rival. All these "possible" scenarios, for both harms and benefits, could effectively negate each other—making all merger decisions an analytical toss-up.

^{159.} Id.

^{160.} *Id.* at 99 n. 18 ("The balance of harms test would have similarities with the government's recognised approach for making regulatory decisions, which draws on the principles of cost-benefit analysis").

^{161.} Whether false positives or false negatives in antitrust are more socially harmful is critical to informing whether legal standards should be adjusted when assessing nascent and potential competition cases. For instance, if we accept Judge Easterbrook's presumption that false positives are more harmful, then, arguably, the standard of proof for plaintiffs should be stronger than the preponderance of the evidence. *See* Murat C. Mungan & Joshua Wright, *Optimal Standards of Proof in Antitrust* 13 (George Mason L. & Econ. Rsch. Paper, Paper No. 19-20, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3428771 [https://perma.cc/9VX8-GGW6]. Alternatively, if false negatives are costlier, then adopting the Furman Report's "balance of harms" approach, to the extent it results in more challenges, could potentially result in a welfare improvement.

This approach also places rule of reason in hyperdrive, requiring precise assessments of probabilities and magnitudes of benefits and harms—not only of the most likely events but, in theory, for all possible events to derive the expected value of the acquisition. It would also be highly sensitive to very small changes in probability estimates. The information costs involved would move antitrust away from the use of evidence-based presumptions, which allow agencies, courts, and juries to more nimbly and reliably avoid error costs. 163

C. Crémer Report's "Significant Impact on Effective Competition (SIEC)" Test

In the Crémer Report, the authors advance a different standard for merger assessment when the following conditions are in place: (i) a "dominant platform," (ii) "strong positive network effects," and (iii) the acquired target has a fast-growing user base with "high future market potential." The presumption underlying these conditions is that this type of market setting is particularly ripe for competition for the entire market rather than incremental market competition. Consequently, the objective is to preserve nascent competitors who have the greatest potential so that one of them could, presumably, take the market from the incumbent. The authors of the report label this as the "significant impact on effective competition (SIEC) test" or a "strengthening of dominance" criterion. The criterion involves looking beyond strict product market overlaps to determine whether the nascent competitor operates in the same "technological" or "user" space, the motive for the acquisition is primarily to protect the dominant platform's core product or ecosystem.

Given that the authors state that this "theory of harm does not create a presumption against the legality of such mergers," and they recognize the importance of assessing the potential efficiencies, this theory has similarities

^{162.} See, e.g., Wilder, supra note 15.

^{163.} See, e.g., Easterbrook, supra note 110, at 10; Joshua D. Wright, Abandoning Antitrust's Chicago Obsession: The Case for Evidence-Based Antitrust, 78 ANTITRUST L.J. 241, 247–48 (2012).

^{164.} CRÉMER REPORT, supra note 9, at 116.

^{165.} *Id.* at 111.

^{166.} Id. at 112, 116.

^{167.} Id. at 117.

^{168.} Id. at 124.

^{169.} Id. at 123.

to the core elements of the *Microsoft* case.¹⁷⁰ Of course, *Microsoft* involved unilateral conduct rather than an acquisition; so, this variant would explicitly fold nascent acquisitions into a *Microsoft*-type theory. A key difference, however, is that this SIEC test would weigh potential efficiencies, which were absent from the *Microsoft* case.¹⁷¹

Ultimately, while this theory of harm is certainly a possibility, there is an issue of what "dominance" means—as it is a term that does not have a specific meaning in U.S. jurisprudence; although, it is increasingly being used to refer to a firm that has monopoly power.¹⁷² In this assessment, courts have properly bifurcated market shares from strict findings of "monopoly" power.¹⁷³ Finally, the theory also requires the identification of nascent competitors who have a great deal of market potential.¹⁷⁴

In sum, there are elements of the SIEC test that could form the basis for a nascent competition standard under § 7, including the assessment of significant market power, the strength of network effects, and the market potential of the nascent competitor. Yet the test is missing an explicit consideration of other nascent technologies or competitors and an assessment of the likelihood of future competition between the parties. While the likelihood assessment need not be as stringent as the potential competition test, it would seem that there should be at least a threshold level that needs to be established. Additionally, the focus on nascent acquisitions involving a fast-growing user base with a high future market potential perhaps shortchanges promising nascent technologies

^{170.} See United States v. Microsoft, 253 F.3d 34, 34 (D.C. Cir. 2001).

^{171.} For instance, if Microsoft acquired Netscape, it would have taken a superior product, that is, Netscape, and integrated it into its operating system—which is very different from conduct intended to limit Netscape's distribution and use. That being said, the Microsoft analogy only takes us so far as the *Microsoft* case also involved a direct horizontal overlap in web browsers, which would have played a large role under a § 7 analysis. It is highly likely that such an acquisition would have been deemed anticompetitive as Microsoft and Netscape were actual competitors in a fairly concentrated web browser market.

^{172.} While monopoly power does not have precise metes and bounds, *see*, *e.g.*, Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 U.S. 451, 481 (1992) ("Monopoly power under § 2 requires, of course, something greater than market power under § 1."), a general rule of thumb is a firm with market shares above 50% in a well-defined relevant product and geographic market, *Monopolization Defined*, FED. TRADE COMM'N, https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/single-firm-conduct/monopolization-defined [https://perma.cc/U23S-QU2L].

^{173.} See W. Parcel Express v. United Parcel Serv., 190 F.3d 974, 975 (9th Cir. 1999) (finding that a firm does not possess sufficient market power unless there are significant barriers to entry); see also Harrison Aire, Inc. v. Aerostar Int'l, Inc., 423 F.3d 374, 381 (3d Cir. 2005).

^{174.} See infra Part V (which discusses a number of considerations that could help in this assessment).

where the future market is more uncertain and, consequently, the user base is not growing particularly fast but there is a high potential payoff from that future competition.

D. Presumption of Illegality for Acquisitions by Dominant Platforms

Due to the perceived problem of large platforms purchasing potential and nascent competitors, some have proposed an outright ban on acquisitions that meet certain criteria.¹⁷⁵ A weaker form of this proposal, yet a close cousin, is a presumption of illegality rebuttable with a narrow category of defenses if it involves an acquirer with monopoly power.¹⁷⁶ While there are variations of this burden-shifting proposal, it effectively comes down to blocking acquisitions, particularly by big tech companies, unless they can prove strong efficiencies.¹⁷⁷

The clear advantage of these proposals is the almost complete economy of information needed to bring a successful nascent acquisition challenge. A parallel legal presumption is a Sherman Act, § 1 price-fixing violation. Yet to reach such a strong and severe presumption, we need a sufficient level of evidence, economic consensus, or both that a particular type of conduct almost always results in negative market outcomes. Given the current state of the evidence, however, developing such a strong presumption does not naturally fit

^{175.} Consolidation Prevention and Competition Promotion Act of 2017, S. 1812, 115th Cong. § 3(3)(B)(ii) (2017) (proposed by Sen. Amy Klobuchar (D-Minn.), Sen. Kirsten Gillibrand (D-N.Y.), Sen. Richard Blumenthal (D-Conn.), and Sen. Ed Markey (D-Mass.)).

^{176.} See, e.g., Phillip E. Areeda & Herbert Hovenkamp, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 701d (5th ed. 2020) ("Accordingly, we would adopt a relatively severe approach to holders of significant monopoly power: the acquisition of any firm that has the economic capabilities for entry and is a more-than-fanciful possible entrant is presumptively anticompetitive, unless the acquired firm is no different in these respects from many other firms." (footnote omitted)).

^{177.} See Lemley & McCreary, supra note 145, at 97 ("We think that the antitrust agencies should presumptively block acquisitions of directly competitive startups by dominant firms.... That presumption should be rebuttable if (1) the startup would not be viable as a freestanding entity and (2) there are no other plausible acquirers...." (footnote omitted)); ACCC REPORT, supra note 9, at 109 ("The ACCC considers it may be worthwhile to consider whether a rebuttable presumption should also apply, in some form.... [A]bsent clear and convincing evidence put by the merger parties, the starting point for the court is that the acquisition will substantially lessen competition."); STIGLER REPORT, supra note 9, at 111 ("These specific merger regulations should require merging firms to demonstrate that the combination will affirmatively promote competition. This shifting of the burden of proof from the government (to prove harm) to the parties (to prove benefit) will assist the [Digital Authority] by placing the job of demonstrating efficiencies on the parties, who have a greater ability to know what they are.").

the nascent and potential competition debate—even for acquirers with significant market power. 178

VI. GUIDANCE IN ASSESSING ACQUISITIONS OF NASCENT COMPETITORS

Nascent competitors certainly could represent a unique threat to the competitive position of the incumbent. Even if an incumbent's acquisition results in a short-run gain from a more expedited access to the market, it can result in a longer run loss of competition. ¹⁷⁹ Is there guidance that would facilitate the examination of nascent competition cases by agencies and courts? Further, what are the characteristics that agencies and courts should look for in the "nature" of the rival?

First and foremost, there should be a legal separation between the potential competition doctrine (and its associated precedents) and nascent competition. The standards developed for potential competition are arguably too demanding for nascent competition cases. As detailed earlier in Part II.D, potential competition cases have a strong geographic market component with very little focus on future product differentiation—particularly with emerging technologies. While predicting geographic market entry is certainly not easy, there are tangible advantages compared to predicting future product market differentiation and emerging technologies. 181

Second, in terms of the characteristics to look for in a particular matter, a key consideration is to distinguish scenarios where the nascent competitor is in a fairly crowded competitive space from those where it has identifiably unique assets (including branding, distribution, and intellectual property) that set it apart. The idea is that the more "different" the product is from other nascent competitors, the more likely the acquisition removes a promising competitor or complementary product that rivals to the acquirer could use to bolster their competitive positions. This is similar to the point that the Crémer Report raised regarding acquisitions involving a high growth product¹⁸² and is a useful metric to focus on; although, it should not be limited to high growth products. Rather,

^{178.} See supra Part IV.

^{179.} See, e.g., Caffarra, Crawford & Valletti, supra note 70.

^{180.} See Jacobson & Mufarrige, supra note 151, at 11 ("[C]ontinued reliance of Marine Bancorporation would come close to a regime of per se legality. It would potentially leave many harmful acquisitions untouched, especially in technology fields.").

^{181.} For instance, it is likely harder to use prior entry experiences involving product market differentiation and evolving technologies to predict the future than for prior entry experiences involving only a geographic dimension or a straight-forward product portfolio expansion.

^{182.} CRÉMER REPORT, supra note 9, at 116.

the focus should be on the degree of differentiation and potentially valuable characteristics, which might or might not be manifested through high growth at the time of the acquisition.

In practice, while it could be a challenge to identify "unique" assets, there are factors that can help in this determination such as the number and strength of other competing products, the strength of the patents and other intellectual property, and the growth rate of the product compared to similarly situated products. For example, if we consider Google's recent acquisition of Looker, a data analytics company, under this lens of unique competition, it appears that various antitrust agencies properly cleared the deal. Notably, while Looker's software is used by competing cloud services, and this certainly raises the possibility of foreclosure as well as concerns about nascent and potential competition, it is also evident that there are numerous close rivals that remain on the market.

Similarly, Susan Athey has mentioned examining whether the assets would be highly valuable to other competitors. ¹⁸⁷ This is akin to stopping the company

183. See Ron Miller, Google Closes \$2.6B Looker Acquisition, TECHCRUNCH (Feb. 13, 2020, 10:35 AM), https://techcrunch.com/2020/02/13/google-closes-2-6b-looker-acquisition [https://perma.cc/6MX4-A9HM].

184. See Deal Between Google and Looker Given the Go-Ahead, COMPETITION & MKTS. AUTH. (Feb. 13, 2020), https://www.gov.uk/government/news/deal-between-google-and-looker-given-the-go-ahead [https://perma.cc/XJQ6-ZVWF] ("Firstly, the CMA [Competition and Markets Authority] considered whether the loss of direct competition between Google and Looker in the supply of BI [business intelligence] tools could lead to increased prices or reductions in quality. The CMA found this was unlikely because Google and Looker are not considered close competitors Secondly, the CMA considered whether Google could leverage its market power in online advertising and web analytics to drive rival BI providers out of the market. . . . [T]here was no strong evidence they would have the incentive to do this."); see also Alistair Barr, Gerrit De Vynck & David McLaughlin, Google's Looker Acquisition Cleared by U.S. Antitrust Officials, BLOOMBERG L. (Nov. 7, 2019, 5:49 PM), https://www.bloomberglaw.com/document/X83RVRIO000000 [https://perma.cc/823Q-AVWJ].

185. See Letter from Diana L. Moss, President, Am. Antitrust Inst., to Hon. Makan Delrahim, Assistant Att'y Gen., U.S. Dep't of Just. (July 8, 2019) (available at https://www.antitrustinstitute.org/wp-content/uploads/2019/07/AAI-Ltr-to-DOJ_Google-Looker 7.8.19.pdf [https://perma.cc/7SVL-UBR3]).

186. *Id.* at 4 ("Looker is ranked by industry sources as the top or key player in the market in which it competes, which is estimated to contain 20 close rivals, including Domo, Tableau, and Jaspersoft."); *see also Top 20 Alternatives & Competitors to Looker*, G2, https://www.g2.com/products/looker/competitors/alternatives [https://perma.cc/79BE-DF6D].

187. Susan Athey, Presentation at the Federal Trade Commission Hearings on Competition and Consumer Protection in the 21st Century: Nascent Competition: Is the Current Analytical Framework Sufficient? 175 (Oct. 17, 2018) (transcript available at

that could double the hard drive capacity with software. These complementary assets that could jump-start a rival—particularly if rivals are bidding for the asset—should be a relevant consideration. Along similar lines, David Pérez de Lamo has proposed what he calls the "innovation competition approach." The central idea is to closely examine whether "the target company is both pursuing a discernible innovation objective (namely creating a potentially competing product from an adjacent market), and that it has the ability to carry it through." The objective is less about determining whether the competing product would eventually reach the market but more on the following:

This focus on innovation overlaps, rather than just projections regarding future market success, offers agencies and courts some tangible basis to assess whether the acquisition is being pursued to lessen competition or to improve quality and innovation.

The above guidance is ultimately about assessing whether there is a toehold of competition. Agencies, by necessity, need to use evidence of actual competition (or very near-term competition) including how that competition

https://www.ftc.gov/system/files/documents/public_events/1413712/ftc_hearings_session_3_transcri pt_day_3_10-17-18fullupdated.pdf [https://perma.cc/6RRH-6CDE]) ("[W]hat happened was Google bought the ITA travel search engine, which ended the Bing relationship, and flipped it to where Google was better in travel than Bing was. And . . . travel search itself, it could have spawned into something completely distinct and not integrated with either platform, but it also was something that . . . could have helped [Bing] grow into a larger general competitor."); see also Kevin A. Bryan & Erik Hovenkamp, Antitrust Limits on Startup Acquisitions, 56 REV. INDUS. ORG. 615, 617 (2020) ("[W]e argue in favor of intervention in situations where a highly-dominant incumbent acquires a startup whose technology could plausibly influence competition if rivals are excluded from using it.").

^{188.} See D'Udekem, Mathur & Van Audenrode, supra note 68.

^{189.} See Pérez de Lamo, supra note 69, at 58.

^{190.} Id.

^{191.} Id. (footnotes omitted).

has evolved and is evolving—even for mergers involving nascent competitors—to reasonably project future competition. Given this, the analysis comes down to the strength and quality of the toehold evidence. The stronger the evidence that there is a current or near-term horizontal overlap, then the greater need for a strong efficiency rationale. Further, an acquisition should receive more scrutiny if the acquired assets and product are fairly unique in a given innovative product space. Of course, that uniqueness, particularly if the nascent technology is highly complementary with the acquiring firm's product and technology, could also result in a great deal of efficiencies.

VII. CONCLUSION

As a society, we want firms, both large and small, to operate and innovate within the bounds of conduct that is based on the merits rather than based on the ability to control the market, keep competitors out, and lower consumer welfare. This is most certainly true in the area of potential and nascent competition—as there are justifiable concerns that companies with significant market power are purchasing rivals before they can mature into vigorous competitors. Yet just as in other areas of antitrust that involve complex considerations of both potential anticompetitive harms and procompetitive benefits, the agencies must investigate these matters based on the particular evidence in front of them. This exercise is facilitated through a clear delineation of the concepts of potential and nascent competition. While assessing nascent and potential competition involves a great deal of uncertainty and projection, there are reasonable tools to assess that competition as long as the right counterfactual exercise is firmly established.

^{192.} See, e.g., Neville Morley, Counterfactualism and Anticipation, in HANDBOOK OF ANTICIPATION 595, 596 (Roberto Poli ed., 2018) ("Many attempts at forecasting or predicting the future rely on knowledge about the past. This knowledge may be in the form of detailed and reliable data from the recent past, interpreted through existing theories and models).