Potential Competition and Nascent Competitors

John M. Yun*

Is there a problem with large technology firms, or platforms, purchasing nascent competitors and suppressing competition before they can mature into vibrant competitors? Further, if there is a problem, are the current antitrust laws and the enforcement of those laws sufficient to combat the problem? If not, is there a legislative solution? These are all critical questions given that innovation and incentives to innovate are at the heart of all vibrant modern economies. Without sufficient rates of innovation, the wealth of nations lags, and the welfare of all households is adversely affected.

I. NASCENT VERSUS POTENTIAL COMPETITORS

Before proceeding, I think it is useful to spend a few moments defining and clarifying certain concepts. First, what do we mean by "nascent or potential competitors"? While these two terms are often used synonymously, they have traditionally referred to two different concepts. The term "potential competitor" has a longer history and is typically defined as a firm that is predicted to have a product that will compete *at some point in the future*, but not currently." "Nascent competitor," however, is term that is relatively new in antitrust jurisprudence and was largely developed in the late 1990s with

^{*} Associate Professor of Law and Director of Economic Education, Global Antitrust Institute, Antonin Scalia Law School, George Mason University. Email: jyung@gmu.edu. This article is based on testimony that I gave on September 24, 2019 before the Subcommittee on Antitrust, Competition Policy, and Consumer Rights of the U.S. Senate Committee on the Judiciary for a hearing entitled, Competition in Digital Technology Markets: Examining Acquisitions of Nascent or Potential Competitors by Digital Platforms. Copyright 2019 by John M. Yun. All rights reserved.

The potential competition doctrine first emerged in a dissent in the 1964 Supreme Court case *United States v. El Paso Natural Gas Co.* 376 U.S. 651 (1964) (Harlan, J., dissenting); see 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 (1975). Potential competition 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. Second, the acquiring firm could be a potential market participant while the acquired firm is a current market participant. There is also a distinction between "perceived potential competition" and "actual potential competition." Perceived potential competition refers to a reduction in *current* competition due to the acquisition of a competitor, who is not an active producer, but

the Department of Justice's (DOJ's) *Microsoft* case.² It is a term that typically refers to a *current product or technology*, whether inside or outside some relevant product market, that could, at some point, be considered a significant competitor.³ As Paul Denis states, "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."⁴

Generally speaking, we can consider potential competition as a product that does not yet exist but is predicted to exist or could exist very quickly; thus, it is really a forecast about entry or the threat of entry. Whereas, nascent competition is about a product or technology that exists but has not yet matured into a significant competitor whether within or outside the same relevant market. Like potential competition, nascent competition can be a forecast of entry, repositioning, or expansion, but it also involves a number of other aspects. In particular, it also involves a forecast of future differentiation or development of a product or technology and its level of market success. Finally, a related concept is that of a "killer acquisition." It is the idea that a firm acquires another firm to "eliminate potentially promising, yet likely competing, innovation." It is a term that is effectively capturing the idea of an anticompetitive acquisition of a potential or nascent competitor where the primary intent is to stop a product's development without an offsetting efficiency rationale.

Whenever a firm, big or small, acquires another firm or set of assets, there are literally an infinite number of possible post-merger outcomes, but we can broadly categorize them into three buckets: (i) those that are

the threat of entry disciplines the current market. In contrast, an actual potential competitor is a firm that impacts *future* competition from future entry.

² In *United States v. Microsoft Corp.*, the U.S. Court of Appeals for the District of Columbia Circuit stated: "We may infer causation when exclusionary conduct is aimed at producers of nascent competitive technologies." ²53 F.3d 34, 79 (D.C. Cir. 2001). Further, William Page and Seldon Childers state: "One court has recently emphasized that the plaintiff must prove that 'suppression of nascent threats . . . had an actual adverse effect on competition in the relevant market.' That required the plaintiff to show that 'there was a "reasonable probability" that the [nascent] technology, if available for licensing, would have matured into a competitive force in the [relevant] market' and not merely a 'speculative possibility that [the nascent technology] could have overcome the barriers to its technical feasibility and commercial success." William H. Page & Seldon J. Childers, *Antitrust, Innovation, and Product Design in Platform Markets:* Microsoft *and* Intel, 78 Antitrust L.J. 363, 377 n.73 (2012) (alterations in original) (footnotes omitted) (quoting Princo Corp. v. ITC, 616 F.3d 1318, 1338 (Fed. Cir. 2010)).

³ "Relevant product markets" are defined as the smallest group of products that would allow a hypothetical monopolist to raise price a small, but significant, and nontransitory amount (that is, the SSNIP test or the hypothetical monopolist test). See U.S. Department of Justice & Federal Trade Commission, Horizontal Merger Guidelines § 4 (2010) [hereinafter Horizontal Merger Guidelines], https://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf.

⁴ Paul T. Denis, Presentation at the FTC Hearings on Competition and Consumer Protection in the 21st Century: Nascent and Potential Competition: The Current Analytical Framework (Oct. 15–17, 2018) (presentation at 3), https://www.ftc.gov/system/files/documents/public_events/1413712/cpc-hearings-gmu_1017.pdf.

⁵ Colleen Cunningham, Florian Edere & Song Ma, Killer Acquisitions 1 (Mar. 22, 2019) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3241707.

good for consumers, (2) those that have no real impact on consumers, and (3) those that are bad for consumers. How do we measure "good" or "bad" in the realm of antitrust? We base it on the notion of consumer welfare—or surplus. Consumer welfare describes the benefits of a market existing from the perspective of buyers of the good or service.⁶ As a consequence, we do not base antitrust assessments of "good" or "bad" acquisitions on how well competitors are predicted to perform post-merger. Moreover, we do not base welfare considerations on exactly who is providing the surplus. For instance, whether four equally sized firms or two leading firms with a handful of smaller rivals are providing the surplus, we assess the performance of the market from the perspective of consumers. Otherwise, we would be accepting a rejected and discarded approach by the courts, practitioners, agencies, and academics, which is call the "structure-conduct-performance" (SCP) paradigm.⁷ However, the reality is that we still tend to count the number of firms or look at market shares to make inferences regarding the level of consumer benefits in a market. This tendency can lead to poor predictions.

The consumer welfare standard is not a Harvard, Chicago, or Berkeley school concept but rather a fundamental part of normative economics based on recognizing the importance of efficiency considerations. It is part of the gains from trade from a market which emerge when voluntary, mutually advantageous trade occurs. Consumer welfare, or surplus, is used throughout economic scholarship—not just within the confines of antitrust law and economics. For instance, in a recent paper, Steven Levitt, co-author of the popular *Freakonomics* series of books, along with a number of other researchers, attempted to estimate the social benefit of Uber's entry into various geographic markets in the United States. The measure they used is consumer surplus. Similarly, MIT economist Erik Brynjolfsson and two co-authors state: "Changes in consumer surplus provide a superior, and more

⁶ The textbook treatment of consumer surplus is that it represents the difference between what a consumer is willing to pay and what a consumer actually has to pay—that is, the market price. Yet consumer surplus is not limited to price *per se* and can capture consumers' valuation of quality (via the willingness-to-pay measure).

⁷ The SCP paradigm assumes that there is a reliable relationship between market structure (the number of firms) and competitive intensity. Yet, economic research has rejected this relationship. See, e.g., Harold Demsetz, Industry Structure, Market Rivalry, and Public Policy, 16 J.L. & Econ. 1 (1973); Harold Demsetz, Two Systems of Belief About Monopoly, in Industrial Concentration: The New Learning 164 (Harvey J. Goldschmid, H. Michael Mann & J. Fred Weston eds., Little, Brown & Co. 1974); see also Dennis W. Carlton & Jeffrey M. Perloff, Modern Industrial Organization 268 (Pearson Addison-Wesley 4th ed. 2005) ("[T]he criticisms of [the SCP] approach are many, but perhaps the most significant criticism is that concentration itself is determined by the economic conditions of the industry and hence is not an industry characteristic that can be used to explain pricing or other conduct. . . . The barrage of criticism has caused most research in this area to cease").

⁸ See Peter Cohen, Robert Hahn, Jonathan Hall, Steven Levitt & Robert Metcalfe, *Using Big Data to Estimate Consumer Surplus: The Case of Uber* (Nat'l Bureau of Econ. Research, Working Paper No. 22627, 2016).

direct, measure of changes in well-being, especially for digital goods." In a peer-reviewed paper published in the *Proceedings of the National Academy of Sciences*, using a massive online choice experiment, Brynjolfsson and his co-authors find extremely high levels of consumer surplus from social media (for example, Facebook), online video (for example, YouTube and Netflix), search engines (for example, Google Search), email, and digital maps. ¹⁰ Similarly, Hunt Allcott and other researchers from NYU and Stanford perform the largest-scale experimental evaluation of the welfare effects of Facebook to date and find results that are in line with Brynjolfsson's results. ¹¹

II. Is There a Problem with Large Technology Firms Purchasing Potential and Nascent Competitors and Suppressing Competition Before They Can Mature into Vibrant Competitors?

In order to address this question, we must assess the counterfactual. What if these large technology firms did not acquire smaller firms such as YouTube or Instagram? What would these respective markets look like? Further, would consumers be better off? Given the nature of the exercise, there will always be some degree of uncertainty as we can never *actually* observe the counterfactual (whether it is allowing or blocking a merger). This fundamental reality clearly makes predictive exercises difficult and, perhaps, gives some license to make unfounded claims that are outside the bounds of likely outcomes. More importantly, the relevant question is not whether the FTC or DOJ got a particular merger right or wrong, but whether or not the agencies are systematically biased in approving anticompetitive mergers (that is, a Type I error or a false negative) or blocking procompetitive mergers (that is, a Type I error or a false positive). To my knowledge, there is no study that has shown that the agencies are systematically committing either of these errors.¹²

⁹ Erik Brynjolfsson, Avinash Collis & Felix Eggers, Using Massive Online Choice Experiments to Measure Changes in Well-Being, 116 Proc. Nat'l Acad. Sci. 7250 (2019).

¹¹ Hunt Allcott, Luca Braghieri, Sarah Eichmeyer & Matthew Gentzkow, *The Welfare Effects of Social Media* 5 (Nat'l Bureau of Econ. Research, Working Paper No. 25514, Jan. 2019) ("Aggregated across an estimated 172 million US Facebook users, the mean valuation implies that four weeks of Facebook generates \$31 billion in consumer surplus in the US alone. . . . Facebook generates enormous flows of consumer surplus.").

¹² Some might reference John Kwoka's merger retrospective study, which purportedly showed that agencies approved numerous anticompetitive mergers. *See* John Kwoka, Mergers, Merger Control, and Remedies (MIT Press 2015). The study, however, has a number of shortcomings, which is documented in 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; the majority 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.

To illustrate the difficulty in predicting market outcomes, in 1967, the FTC successfully litigated the divestiture of the Clorox Company, and its liquid bleach assets, from Procter & Gamble (P&G), 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." In the nearly half-century since that decision, P&G has yet to sell liquid bleach in the United States.

More relevant to the digital economy, Facebook's acquisition of Instagram in 2012 is most likely the most cited example to illustrate the claims that (1) strategic acquisitions have entrenched market power and (2) competition authorities are systematically missing anticompetitive acquisitions. A review of the evidence, however, suggests a different story. At the time of the purchase, Instagram had zero revenues and a handful of employees.¹⁴ Since Facebook's acquisition, Instagram has grown from 30 million users to well over one billion.¹⁵ During the same period, Facebook grew from approximately 900 million users to over two billion users. 16 This substantial expansion in users and output is the complete opposite of what we typically consider an anticompetitive outcome. Of course, one could argue that, but for the acquisition, Instagram would have been just as successful, if not more so, and would have remained an independent competitor. While this type of "nirvana" counterfactual is frequently asserted,¹⁷ without more it is an insufficient basis upon which retrospectively to condemn an acquisition let alone justify a systematic overhaul of U.S. antitrust laws. To treat the success and associated exponential output expansion of an acquired product as evidence of an anticompetitive acquisition severely twists the meaning of "anticompetitive." When properly formulated, the central forces driving anticompetitive conduct are reductions in output, quality, and innovation, and transfers away from consumers to producers. Facebook's acquisition of Instagram does not fit this profile.

Importantly, if one believes that the post-merger performance of Facebook and Instagram is an example of an anticompetitive outcome, what

¹³ FTC v. Procter & Gamble Co., 386 U.S. 568, 575 (1967).

¹⁴ See Kurt Wagner, Here's Why Facebook's \$1 Billion Instagram Acquisition Was Such a Great Deal, Vox: Recode (Apr. 9, 2017), https://www.recode.net/2017/4/9/15235940/facebook-instagram-acquisition-anniversary; Evelyn M. Rusli, Facebook Buys Instagram for \$1 Billion, N.Y. Times: DealBook (Apr. 9, 2012), https://dealbook.nytimes.com/2012/04/09/facebook-buys-instagram-for-1-billion.

¹⁵ See Wagner, supra note 14; Ashley Carman, Instagram Now Has 1 Billion Users Worldwide, Verge (June 20, 2018), https://www.theverge.com/2018/6/20/17484420/instagram-users-one-billion-count.

¹⁶ See Number of Monthly Active Facebook Users Worldwide 2018 as of 2nd Quarter 2019 (in Millions), Statista, https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-world-wide/.

¹⁷ See Harold Demsetz, Information and Efficiency: Another Viewpoint, 12 J.L. & Econ. I (1969). Demsetz called the comparison of market-based outcomes to an idealized regulatory outcome the "nirvana" fallacy. Demsetz warned that, "those who adopt the nirvana viewpoint seek to discover discrepancies between the ideal and the real and if discrepancies are found, they deduce that the real is inefficient." Id. at I.

outcome(s) would be considered procompetitive? Suppose that Facebook discontinued Instagram after a year or so. Would we conclude that Instagram was a poor product, and thus the acquisition was benign, or would we conclude that Facebook engaged in a "killer acquisition" in order to snuff out a promising rival? Similarly, suppose that Instagram grew but lagged behind its prior growth projections. Would we conclude that Instagram was only an average product, and thus the acquisition was benign, or would we conclude that Facebook did not invest enough in the product? In other words, what are we "expecting" to happen for us to conclude that an acquisition was either anticompetitive or procompetitive? Without a firm answer, we cannot reasonably conclude that agencies are making systematic errors. The reality is that the answer "depends" on the particular situation. For instance, an acquisition that results in a discontinued product is not per se evidence of either consumer harm or benefit. The answer will depend on the particular circumstances and the potential efficiencies that were gained from the acquisition, including integration of intellectual property, the reduction of transaction costs, economies of scope, and better allocation of skilled labor. However, what seems fairly clear is that an acquisition that results in tremendous growth for both the acquiring and acquired product strongly suggests a procompetitive outcome.

Notably, the success of big tech platforms in various markets is not guaranteed. Take for instance Google+, which was launched on June 28, 2011.¹⁸ At the time, Google stated: "We're transforming Google itself into a social destination at a level and scale that we've never attempted—orders of magnitude more investment, in terms of people, than any previous project."¹⁹ According to MIT economist Catherine Tucker:

Google Plus enjoyed the support of over 1,000 employees (including top engineers), as well as CEO support. In theory, Google Plus should have had network effects and consequent critical mass on its side. This is because it was able to "seed" its initial social network with 90 million users through the integration of other Google services, such as YouTube, in its signup process.²⁰

Instead, Google+ ceased to operate as a consumer product on April 2, 2019.²¹ Google acknowledged that Google+ "has not achieved broad consumer or

¹⁸ See Vic Gundotra, Introducing the Google+ Project: Real-Life Sharing, Rethought for the Web, GOOGLE BLOG (June 28, 2011), https://googleblog.blogspot.com/2011/06/introducing-google-project-real-life.html.
¹⁹ See Steven Levy, Inside Google+—How the Search Giant Plans to Go Social, WIRED, June 28, 2011, https://www.wired.com/2011/06/inside-google-plus-social.

²⁶ Catherine Tucker, What Have We Learned in the Last Decade? Network Effects and Market Power, 32 Antitrust, Spring 2018, at 77, 78.

²¹ See Shutting Down Google- for Consumer (Personal) Accounts on April 2, 2019, GOOGLE+ HELP (Jan. 30, 2019), https://support.google.com/plus/answer/9195133?hl=en&ref_topic=9259565.

developer adoption, and has seen limited user interaction with apps. The consumer version of Google+ currently has low usage and engagement: 90 percent of Google+ user sessions are less than five seconds."²² Put simply, consumers voted with their "feet" (or eyeballs) and directed their attention to other products and platforms. The Google+ example further illustrates the difficulty in making predictions about market success and projecting future competitive effects.

As the great Yogi Berra once allegedly said, "It's tough to make predictions, especially about the future." 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 could significantly increase the probability that a product or technology develops and/or increases the speed at which the product or technology will arrive. Presumptively declaring that all, or most, acquisitions from large technology firms are harmful to consumers, without sufficient evidence and scholarship to support the claim, can result in significantly lower levels of innovation and consumer welfare. This is not to say that all research indicates that the loss of potential competition is not a problem.

A working paper by Colleen Cunningham, Florian Edere, and Song Ma examines the impact of what they label "killer acquisitions" in the pharmaceutical industry.²⁴ While their research is limited to the development of drugs, where product development milestones are readily observable²⁵—unlike in digital markets—it is certainly the type of research that is needed to help inform policy decisions. The study's main result is that "projects acquired by an incumbent with an overlapping drug are 28.6% less likely to be continued in the development process compared to drugs that are not acquired."²⁶ In total, over their sample, they label 6 percent of all pharmaceutical acquisitions as killer acquisitions. Yet even with this result, they conclude that "the

²² See Bob Smith, Project Strobe: Protecting Your Data, Improving Our Third-Party APIs, and Sunsetting Consumer Google+, GOOGLE BLOG (Oct. 8, 2018), https://www.blog.google/technology/safety-security/project-strobe.

²³ According to one source, a variation of this quote has a Danish origin. See It's Difficult to Make Predictions, Especially About the Future, QUOTE INVESTIGATOR, https://quoteinvestigator.com/2013/10/20/no-predict.

²⁴ See Cunningham, Edere & Ma, Killer Acquisitions, supra note 5.

The pharmaceutical industry is an easier 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 reliability 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, this assessment is not as straightforward. For instance, bottled water and tap water are functional substitutes and are composed of the same essential chemical ingredient of H_.O—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.

²⁶ See Cunningham, Edere & Ma, Killer Acquisitions, supra note 5, at 3.

overall effect on social welfare is ambiguous because these acquisitions may also increase ex-ante incentives for the creation of new drug projects."²⁷ 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, a prohibition hindering acquisitions by large pharmaceutical companies, then this will decrease the rate of innovation. Further, the model they develop assumes there are no efficiency rationales for acquiring a firm.²⁸ Consequently, an acquirer would never have a positive incentive to acquire non-overlapping products. Yet, the authors' own data disproves this assumption: four-fifths of the acquisitions in their data set involve non-overlapping products.²⁹ It is worth noting that, in the empirical portion of their paper, the authors attempt explore an alternative rationale for their results based on efficiency considerations, but their notion of efficiency is only a subset of all potential efficiencies that could be generated from an acquisition.

These comments are not intended to diminish the contribution of such research, but it is important to note the strengths and weaknesses of various studies. For instance, this study likely lacks generality to the digital market because drug development is highly regulated, standardized, and documented, and it has set milestones, which is not true of digital markets. Additionally, for drugs, it is relatively straightforward to determine market substitutes based on functionality—which is not a luxury for digital markets where products are generally highly differentiated. I believe that further work should and needs to be done in this area to inform policymakers including Congress as to whether or not the agencies are sufficiently enforcing the current antitrust laws.

Finally, if we believe that there is a systematic problem with large technology firms routinely purchasing future rivals through acquisitions, then it necessarily follows that we also believe there is routine entry in these digital markets and, consequently, market power is not necessarily durable and is subject to disruption. In other words, if Instagram's product in 2012 represented, or would soon represent, a significant constraint on Facebook, then what makes other differentiated social networks such as LinkedIn,

²⁷ *Id.* at 6.

While they have an "efficiency effect," they define the term to mean the difference between the increase in profits the acquiring firm receives after acquiring a product and not having to compete with the product if it does not acquire it. See id. at 14. In other words, it is about increased profits—not "efficiencies" in the sense used in the Horizontal Merge Guidelines or generally in antitrust. Just to illustrate the implications of not having a potential for efficiencies from an acquisition, one proposition in the paper is that an acquiring firm never has a positive incentive to acquire another firm unless there is a "reduce competition" rationale (and thus, there is no positive incentive to acquire complementary assets). See id. at 15 ("If there is no product market overlap, the acquirer is always indifferent between acquiring and not acquiring the entrepreneur.").

²⁹ *Id.* at 21.

Pinterest, Snapchat, Twitter, Tik Tok, and You Tube different from Instagram? They must also be considered actual, potential, or nascent competitors to Facebook. Thus, there is a symmetry to the claim that potential and nascent competition acquisitions are systematically anticompetitive, which is a belief that new entry can constrain, either in the present or in the future, current market power.

III. If There Is a Problem, Are the Current Antitrust Laws and the Enforcement of Those Laws Sufficient to Combat the Problem?

Based on the current evidence and scholarship, I believe the U.S. federal antitrust laws and the enforcement of those laws are sufficient and effective in preventing anticompetitive acquisitions of potential and nascent competitors. In particular, the doctrine of potential competition is well-developed and has a long history in antitrust jurisprudence and agency practice.³⁰ This is codified in the very first sentence of the U.S. DOJ's and FTC's *Horizontal Merger Guidelines*: "The Guidelines outline the principal analytical techniques, practices, and the enforcement policy of the DOJ/FTC with respect to mergers and acquisitions involving actual or *potential competitors*."³¹ This acknowledgement of the importance of future competition is not a surprise given that the current antitrust doctrines of potential competition (*El Paso Natural Gas*) and nascent competition (*Microsoft*) were originally developed by the U.S. antitrust agencies.

Even if the doctrines are well-developed, are the antitrust agencies sufficiently diligent in monitoring and, if needed, in bringing enforcement actions? I believe the evidence is in the affirmative based, in part, on active enforcement in this area. For instance, when Nielsen proposed to purchase Arbitron in 2013,³² the FTC brought a "potential-potential competition" case. This novel theory of harm involved an allegation of future harm based on a product that did not exist; a market that did not exist (that is, "national syndicated cross-platform audience measurement service"³³); and a lack of commitment from either party that it would enter in the near future. Yet, in 2014, the FTC concluded that Nielsen and Arbitron were the two firms most likely to be potential-potential competitors in this future market. Whatever the merits of the case,³⁴ it represents the agencies on the frontier of the

³⁰ See Dorigan, The Potential Competition Doctrine: The Justice Department's Antitrust Weapon Under Section 7 of the Clayton Act, supra note 1.

³¹ Horizontal Merger Guidelines, *supra* note 3, § 1 (emphasis added).

³² See Press Release, Nielsen Holdings N.V. and Arbitron Inc., Nielsen Acquires Arbitron (Sept. 30, 2013), https://www.nielsen.com/us/en/press-releases/2013/nielsen-acquires-arbitron.

³³ See Complaint, Nielsen Holdings N.V., Dkt. No. C-4439, 2014 WL 869523, at *2 (FTC Feb. 24, 2014).
34 See Dissenting Statement of Commissioner Joshua D. Wright, Nielsen Holdings, N.V. and Arbitron Inc., Dkt. No. C-4439, 2013 WL 5348551, at 20 (FTC Sept. 20, 2013), https://www.ftc.gov/sites/default/files/

potential competition doctrine. (It is worth noting that, as of 2019, Nielsen has yet to develop a cross-platform audience measurement service.)³⁵

Similarly, in 2013, the FTC brought a number of potential competition cases: Actavis-Warner Chilcott, Mylan-Agila, and Polypore-Microporous. Both the Actavis and Mylan cases involved the protection of competition in a number of future generic drug markets.³⁶ Polypore was a consummated acquisition that was unwound when the Commission concluded, inter alia, that, "[a]lthough Microporous was not producing automotive separators at the time of the acquisition, it was preparing to compete actively in this market and was already marketing and testing its products with customers."37 In 2014, the FTC brought a case involving pharmaceutical companies Endo Health Sciences and Boca Life Science Holdings, where "the FTC's settlement preserves future competition for three generic drugs where the proposed acquisition would eliminate one likely future entrant from a very limited pool of future entrants."38 In 2015, the FTC challenged Steris Corporation's acquisition of Synergy Health.³⁹ Specifically, the Commission alleged that the acquisition "would violate the antitrust laws by significantly reducing future competition in regional markets for sterilization of products using radiation, particularly gamma or x-ray radiation."40 An Ohio district court, however, ultimately disagreed with the FTC and found that the agency had failed to show that Synergy would have entered "but for" the merger.41 In 2017, the FTC, along with several states, brought a nascent competition case against Mallinckrodt ARD, formerly known as Questcor Pharmaceuticals, alleging:

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

 $documents/public_statements/dissenting-statement-commissioner-joshua-d.wright/{\tt 13092} onielsenar bitron-jdwstmt.pdf.$

³⁵ See Tim Peterson, Comscore and Nielsen Are Racing to Become the One True Cross-Platform Measurement Provider, DIGIDAY, Jan. 2, 2019, https://digiday.com/marketing/comscore-nielsen-racing-become-one-true-cross-platform-measurement-provider.

³⁶ See Cases and Proceedings – Actavis, Inc. and Warner Chilcott, PLC, Fed. Trade Comm'n (Dec. 11, 2013), https://www.ftc.gov/enforcement/cases-proceedings/131-0152/actavis-inc-warner-chilcott-plc-matter; Cases and Proceedings – Mylan Inc., Agila Specialties Global Pte.Limited, Agila Specialties Private Limited, and Strides Arcolab Limited, Fed. Trade Comm'n (Dec. 18, 2013), https://www.ftc.gov/enforcement/cases-proceedings/131-0112/mylan-inc-agila-specialties-global-ptelimited-agila.

³⁷ See Complaint, Polypore Int'l, Inc., Dkt. No. 9327, 2008 WL 4184837 (FTC Sept. 9, 2008), https://www.ftc.gov/sites/default/files/documents/cases/2008/09/091008cmp9327.pdf.

³⁸ See Cases and Proceedings – Endo Health Solutions Inc., Boca Life Science Holdings LLC, and Boca Pharmacal, LLC, Fed. Trade Comm'n (Mar. 21, 2014), https://www.ftc.gov/enforcement/cases-proceedings/131-0225/endo-health-solutions-inc-boca-life-science-holdings-llc-boca.

³⁹ See Cases and Proceedings – Steris/Synergy Health, Fed. Trade Comm'n (Oct. 7, 2015), https://www.ftc.gov/enforcement/cases-proceedings/151-0032/sterissynergy-health-matter.

⁴¹ See FTC v. Steris Corp., 133 F. Supp. 3d 962 (N.D. Ohio 2015).

ACTH drug, preserving Questcor's monopoly and allowing it to maintain extremely high prices for Acthar.⁴²

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."⁴³

These recent enforcement actions clearly suggest that the agencies are not only active in this area but are also willing to push the bounds of the current potential and nascent competition doctrines. Active enforcement is not a big surprise given that these cases really boil down to an assessment of entry and entry conditions. The U.S. agencies are likely the most well-equipped group in the world to assess and forecast entry and its impact on competition. Entry analysis is a part of every agency merger review—whether horizontal or vertical. These are fact-intensive inquires that cannot, and should not, rely on set presumptions regarding the impact of entry on consumer welfare and innovation.

Do the antitrust agencies always make the right decision? Almost certainly not. There will always be some level of error. Again, the question is not whether the agencies have false positives or negatives but rather whether there is evidence of a systematic bias in the agencies' decisions. For instance, a success rate of 90 percent still implies that, for every ten decisions, one will be decided incorrectly. An *ex post* assessment focusing on the one error and ignoring the other nine correct decisions is engaging in hindsight bias. This is not to say that the agencies should not be scrutinized or should not continue to improve in their missions; however, there is currently an insufficient basis to call for a systematic change in agency practices without clear evidence that the agencies are improperly deciding cases.

There are a number of objective reasons to expect antitrust agencies to function relatively well. First, antitrust agencies tend to be small relative to many other regulatory agencies and bureaucracies in general. Second, their staffs tend to be highly trained professionals, consisting primarily of lawyers and Ph.D. economists. Third, they have a well-defined objective (that is, the consumer welfare standard). Fourth, although antitrust is considered a form

⁴² See Cases and Proceedings – Mallinckrodt Ard Inc. (Questcor Pharmaceuticals), Fed. Trade Comm'n (July 14, 2017), https://www.ftc.gov/enforcement/cases-proceedings/1310172/mallinckrodt-ard-inc-questcor-pharmaceuticals.

⁴³ D. Bruce Hoffman, Director, Bureau of Competition, U.S. Federal Trade Commission, Antitrust in the Digital Economy: A Snapshot of FTC Issues, Remarks at GCR Live Antitrust in the Digital Economy 6 (May 22, 2019), https://www.ftc.gov/system/files/documents/public_statements/1522327/hoffman_-_gcr_live_san_francisco_2019_speech_5-22-19.pdf.

of regulation, it is distinct from some forms of regulation in that it does not involve a continuing relationship between the regulated firms and the regulator. A continuing relationship often leads to "regulatory capture," which can lead to rent-seeking and other welfare dissipating activities.⁴⁴

IV. Is There a Legislative Solution to the Problem?

Sweeping policy recommendations, including legislative proposals, that impact key sectors of our economy require appropriate, sound economic evidence and cost-benefit analysis. The evidence must be sufficient to show that the benefits to consumers and competition from the proposed changes are likely to exceed the costs. Without the discipline of weighing those benefits and costs to correct a perceived market or agency failure, these proposals can lead to unintended consequences and even greater inefficiencies and harm to consumers.

One of those unintended consequences could be a negative impact on the rate of innovation—whether in the form of venture capital funding or even entrepreneurial risk-taking in general. The logic is that, if startups and new entrants find it more difficult to "exit," for example, via an acquisition by a large technology firm, then this will negatively impact the *ex ante* incentive to enter in the first place. Further, this means that large technology platforms can only grow and create more innovation through internal vertical integration. This could create a greater secondary incentive to use only proprietary complementary products and tools for their core platform product, which could further chill third-party innovation.

Finally, just as there is a potential for harm from these acquisitions, there is also a potential for significant consumer benefits via efficiency gains. Legislative solutions that would make it difficult or impossible for large technology firms to acquire assets could severely reduce or eliminate this procompetitive possibility. For instance, when a large technology platform with its large user base acquires a product and/or set of assets and improves the quality of its own product, as well as the acquired product, even if it is "merely" a few percentage points of improvement, the aggregate effect will be considerable as it is spread over the entire user base. For example, while Google's acquisition of Waze in 2013 involved overlapping, although differentiated, products, it also involved inputs that are shared and could result in significant shared synergies and cross-product quality improvements.

⁴⁴ See, e.g., George J. Stigler, The Theory of Economic Regulation, 2 Bell J. Econ. & Mgmt. Sci. 3 (1971).

Conclusion

The agencies should and must continue to vigorously enforce the antitrust laws. As a society, we want technology companies, both large and small, to behave properly 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. In other words, we want to make sure that companies are succeeding based on merit rather than anticompetitive conduct. The agencies play a large role in this objective. To that end, I believe an increase in funding to the FTC and DOJ's respective antitrust divisions should be seriously considered. In particular, I believe the agencies would benefit from hiring more economists from all fields and expertise including machine learning, econometrics, labor, and finance. Increasingly, data is becoming a part of every case and the agencies will likely save more by having in-house expertise rather than contracting with outside consultants although economic consultants do excellent work for both the government and the parties. Of course, agency growth should be done in a deliberate and thoughtful manner as expansion beyond a certain point will result in bureaucratic diseconomies of scale. Thus, I would be weary of proposals to add a "technology" group or other non-core antitrust specialists—as this will inevitably lead to significantly larger bureaucracies and associated inefficiencies without, perhaps, large offsetting benefits.

Another potential route is for the FTC to exercise its 6(b) authority, which allows the agency to require an entity to file "annual or special . . . reports or answers in writing to specific questions" regarding the entity's "organization, business, conduct, practices, management, and relation to other corporations, partnerships, and individuals." This would allow the agency to get somewhat "behind the scenes" and determine how the assets of acquired firms are being used and the level of investment, or lack of investment, involved. At the very least, a 6(b) study would give policymakers greater insight and data for which to inform policy decisions and could fuel further research into merger retrospectives.

Finally, I would advocate for greater transparency to the public and policymakers for all major agency decisions—beyond when complaints are issued. Rather, I would like to see detailed statements regarding the particular agency's rationale(s) when cases both close and have a consent agreement. For example, when the FTC closed the Google Search bias investigation

⁴⁵ A Brief Overview of the Federal Trade Commission's Investigative, Law Enforcement, and Rulemaking Authority, Fed. Trade Comm'n (Apr. 2019), https://www.ftc.gov/about-ftc/what-we-do/enforcement-authority.

in 2013, it issued a closing statement that I believe can serve as a model for future investigations. 46

46 See Statement of the Federal Trade Commission Regarding Google's Search Practices, Google Inc., FTC File No. 111-0163, 2013 WL 140443 (FTC Jan. 3, 2013), https://www.ftc.gov/sites/default/files/documents/public_statements/statement-commission-regarding-googles-search-practices/130103brillgooglesearchstmt.pdf.