INTRODUCTION

Assessing the competitive impact of acquisitions is an integral part of antitrust enforcement. In fact, there is probably no other area of antitrust enforcement that is as well-developed and formalized as the review of mergers and acquisitions. Recently, however, there has been a great deal of attention given to a certain category of acquisitions—namely, the acquisition of potential competitors and nascent competitive threats. Relatedly, there is a concern that, post-acquisition, the acquiring firm will...
terminate the competing, or potentially competing, acquired product, in what is labeled a “killer acquisition.” Notably, the term “killer acquisition” is also used to refer, more generally, to the suppression of potential competition—whether the acquired product is discontinued or not.

These concerns have raised questions about whether anticompetitive acquisitions are occurring in areas outside the view of “standard” merger analysis—that is, in markets where an upstart has developed, or will soon develop, a competitive innovation and product that will challenge the incumbent’s primacy. Yet, there is also a recognition that there is a great deal of uncertainty associated with this theory of harm, which can result in higher overall error costs. Recently, various policy proposals have been offered to specifically address this theory that powerful incumbents are acquiring potential and nascent competitors. These proposals range from developing new evidentiary standards under Section 7 of the Clayton Act to imposing ex ante regulatory prohibitions against certain types of acquisitions.

In this chapter, we address a number of critical questions. 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

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3 See, e.g., ACCC Report, supra note 2, 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’.”).

4 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.”).

5 See infra Section III for a fuller discussion of various proposals. In one prominent proposal, Senator Amy Klobuchar (D-MN) introduced a bill that would ban significant acquisitions by any company with a market capitalization higher than $100 billion unless the acquirer could demonstrate that the transaction would not lessen competition by more than a de minimis amount. See Consolidation Prevention and Competition Promotion Act of 2017, S. 1812, 115th Cong. § 3(3)(B)(ii) (2017).
problem, are the current antitrust laws and the enforcement of those laws sufficient to combat the problem? If not, is there a legislative solution? In addressing these questions, we offer a clear delineation and classification scheme to differentiate potential competition, nascent competitors, and killer acquisitions. Ultimately, while classification schemes are helpful, the assessment of all horizontal acquisitions, whether the rivalry is currently happening or will happen in the future, comes down to the core analytical considerations involving competitive effects, entry, and efficiencies.

I. CLASSIFICATION

Who are “nascent” and “potential competitors”? While these two terms are often, and increasingly, 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 likely to have a product that will compete at some point in the future or could easily enter if current market conditions change (such as a non-cost based increase in price). 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

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7 See, e.g., Gregory J. Werden & Kristen C. Limarzi, Forward-Looking Merger Analysis and the Superfluous Potential Competition Doctrine, 77 ANTITRUST L.J. 109, 111 (2010). Werden & Limarzi find little value in the use of these labels. Id. at 112 (“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.”).
threat of entry disciplines the current market. In contrast, an actual potential competitor is a firm that impacts future competition from future entry.

“Nascent competitor,” however, is a term that is relatively new in antitrust jurisprudence and was largely developed in the late 1990s with the Department of Justice’s (DOJ’s) Microsoft case. It is a term that typically refers to a supplier with an existing product or technology, whether inside or outside some relevant product market, that could, at some point, be considered a significant competitor, or be developed into a significant competitor.

Generally speaking, we can consider potential competition as a product that does not yet compete within a specific relevant market but is predicted to compete or could compete very quickly; thus, the potential competition theory is really a forecast about pending entry or the threat of entry. Whereas, nascent competition describes rivalry or potential rivalry with a product or technology—particularly one associated with a great deal of innovation—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, but it 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.

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8 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 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.” 253 F.3d 34, 79 (D.C. Cir. 2001). For an overview of the court’s treatment of nascent competition in Microsoft, see Douglas H. Ginsburg & Koren W. Wong-Ervin, Challenging Consummated Mergers Under Section 2, CPI NORTH AMERICA COLUMN, May 2020, at 2–4.

9 “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 Horizontal Merger Guidelines § 4.

10 An example would be an out-of-state producer of an established product who is poised to enter the state market but is acquired by an established in-state producer. In other words, potential competition naturally fits scenarios involving geographic market entry.
Finally, a related concept is a “killer acquisition,” which is the idea that a firm acquires another firm to “eliminate potentially promising, yet likely competing, innovation.”11 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.12 The term, however, is also used, more generically, to refer to the suppression of future competition—regardless of whether the product is actually “killed.”13

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 as: (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 measure “good” or “bad” in the realm of antitrust? We base it on the consumer welfare standard.14 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.15

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12 See, e.g., Benoit D’Udekem et al., Remember Stacker? Another Look at “Killer” Acquisitions in the Digital Economy, CPI ANTITRUST CHRON., May 2020, at 38, 39 (offering an example of a killer acquisition: a hard drive manufacturer’s purchase of a software product that doubled the capacity of hard drives with the sole purpose of preventing its availability on the market).

13 See Pérez de Lamo, supra note 4.

14 For a full 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 et al., Requiem for a Paradox: The Dubious Rise and Inevitable Fall of Hipster Antitrust, 51 ARIZ. ST. L.J. 293, 296 (2019).

15 See, e.g., Frank H. Easterbrook, The Limits of Antitrust, 63 TEX. L. REV. 1, 2 (1984) (“Does it matter whether there are two oil companies or twenty? 200 stations or 20,000? Is a Herfindahl-Hirschman Index of concentration in titanium dioxide of 3000 too high? Too low? Just right? If the court tries to move the
II. **Is There a Systematic 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 inherently difficult and, perhaps, gives some license to make unfounded claims that are outside the bounds of likely outcomes. More importantly, the relevant policy question is not whether the antitrust agencies got a particular merger right or wrong, but whether or not 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).

The recognition that there are error costs to antitrust enforcement is a recognition that there are limits to an agency and court’s ability to assess and weigh certain market practices. Even for well-examined business practices, such as resale price maintenance (RPM) and exclusivity, there are still debates among practitioners and economists as to their relative merits. The legality of practices such as RPM and exclusivity ultimately boils down to the particular facts in a given case as both are assessed under a rule of reason economy in the direction of the textbook model of atomistic auctions, it is sure to be wrong a great deal of the time.

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16 Google acquired YouTube in 2006; Facebook acquired Instagram in 2012.

17 The relevance and need to assess the error costs in antitrust enforcement was brought to the forefront with Easterbrook, *supra* note 15, at 4 (“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.”).
analysis, which involves weighing the evidence of anticompetitive harm with that of the procompetitive benefits. This exercise is greatly facilitated by the availability of actual market evidence, both qualitative and quantitative, as to how the specific manifestation of these practices impacted reliable measures of market performance such as price, quantity, quality, and innovation. While identification and establishing causation can require some degree of skill and effort, the answer is out there. This is not the case for nascent and potential competition. What evidence can we observe? The entire basis of the theory of harm involving the loss of a nascent or potential competitor is that traditional metrics and measures of competition are not fully formed and indicative of the level of competition that will emerge at some future date.

This is also what differentiates this theory of harm from “standard” horizontal mergers involving actual competitors; if the merger is anticompetitive, there should be market evidence of the fruits of their prior competition, which will now be lost with the proposed acquisition. Again, this type of evidence will be absent for markets involving nascent and potential competitors—as the harm is an unobservable, conjectured loss of future competition. What hope do agencies and courts have in evaluating this theory of harm? Are there some guidance that could be offered or, even, policy changes that are needed? In light of these questions, there have recently been a number of proposals to address this inherent uncertainty. We discuss these proposals in infra Section III.

To illustrate the difficulty in predicting market outcomes for potential competition, 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.”\textsuperscript{18} In the nearly half-century since that decision, P&G has yet to sell liquid

bleach in the United States.\textsuperscript{19}

More relevant to the digital economy, Facebook’s acquisition of Instagram in 2012 is likely the most cited example to illustrate the claims that strategic acquisitions have entrenched market power and competition authorities are systematically missing anticompetitive acquisitions.\textsuperscript{20} A review of the evidence, however, suggests this is a complex issue.\textsuperscript{21} At the time of the purchase, Instagram had zero revenue and a handful of employees.\textsuperscript{22} Since Facebook’s acquisition, Instagram has grown from 30 million users to well over one billion.\textsuperscript{23} During the same period, Facebook grew from approximately 900 million users to over two billion users.\textsuperscript{24} 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 is a possibility, without more, it is an insufficient basis upon which retrospectively to condemn an acquisition.\textsuperscript{25} Recently, there have been a number of

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\textsuperscript{19} However, it is not necessarily the case that entry has to actually occur to discipline a given market—so the mere fact that P&G has never sold liquid bleach does not prove that the case was improperly decided.

\textsuperscript{20} See, e.g., Nicholas Thompson, Tim Wu Explains Why He Thinks Facebook Should Be Broken Up, WIRE\textsuperscript{D}, July 5, 2019, https://www.wired.com/story/tim-wu-explains-why-facebook-broken-up (quoting Professor Tim Wu: “Instagram was the most dangerous company for Facebook. Facebook had already destroyed a company like it, MySpace, earlier.”).

\textsuperscript{21} See, e.g., Furman Report, supra note 2, at 98 (“The scope for Instagram to grow into a rival to Facebook as a social network was uncertain, and the authority may have struggled to demonstrate that this outcome was more likely than not to occur.”).

\textsuperscript{22} See Kurt Wagner, Here’s Why Facebook’s $1 Billion Instagram Acquisition Was Such a Great Deal, VOX RE\textsuperscript{C}DE (Apr. 9, 2017), https://www.vox.com/2017/4/9/15235940/facebook-instagram-acquisition-anniversary; Evelyn M. Rusli, Facebook Buys Instagram for $1 Billion, N.Y. TIMES DEAL\textsuperscript{B}OOK (Apr. 9, 2012), https://dealbook.nytimes.com/2012/04/09/facebook-buys-instagram-for-1-billion.

\textsuperscript{23} See Wagner, supra note 22; 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.


\textsuperscript{25} Further, there is evidence that Facebook significantly improved the quality and features of Instagram.
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reports regarding internal Facebook documents that reveal that Facebook considered Instagram to be a competitive threat. These type of documents are certainly relevant to an investigation and should be seriously considered, but there are also other types of evidence that agencies weigh—so the identification of these types of documents does not, in and of itself, suggest the FTC improperly failed to bring a case.

Importantly, if one believes that the post-merger performance of Facebook and Instagram is an example of an anticompetitive outcome, what 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 and courts are making systematic errors.

The reality is that the answer depends on the particular situation and a comparison of various counterfactuals. For instance, an acquisition that results in a discontinued product is not per se evidence of either consumer harm or benefit. The answer involves

*See, e.g., Elena Argentesi et al., Merger Policy in Digital Markets: An Ex-Post Assessment 22 (CESinfo Working Paper No. 7985, 2019), https://ssrn.com/abstract=3507256 (“After the acquisition by Facebook, Instagram rapidly evolved into a different product, one that offers fully-fledged social network functionalities, such as direct messaging, photo tagging, and allows advertisers to place their ads on the platform. Facebook contributed to Instagram’s growth by providing improved physical infrastructures as well as its expertise in social networks and advertising markets.”).*


27 See, e.g., Crémer Report, supra note 2, at 117–18 (“There may indeed be cases in the digital realm where a
comparing the counterfactual world without the acquisition with the world with the acquisition. The comparison includes 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. At the time, Google proclaimed: “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.” According to MIT economist, Professor Catherine Tucker, Google+ was primed for success. Instead, Google+ ceased to operate as a consumer product on April 2, 2019. Google acknowledged the stunning failure of Google+. Put

dominant acquirer buys up innovative targets but later shuts down the relevant innovation. This is, however, not the typical scenario. Frequently, the project of the bought up start-up is integrated into the ‘ecosystem’ of the acquirer or into one of their existing products. Such acquisitions are different from killer acquisitions as the integration of innovative complementary services often has a plausible efficiency rationale.”

30 See Catherine Tucker, What Have We Learned in the Last Decade? Network Effects and Market Power, 32 ANTITRUST, Spring 2018, at 77, 78 (“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.”).
32 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 (Google+ “... has not achieved broad consumer or 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.”).
simply, despite the appeal of its online search service, consumers voted with their eyeballs and directed their attention to other products. The Google+ episode further illustrates the difficulty in making predictions about market success and projecting future competitive effects.

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 and/or increases the speed at which the product or technology will arrive to the market. Presumptively declaring that all, or most, acquisitions from large technology firms are harmful to consumers, without sufficient evidence to support the claim, can result in significantly lower levels of innovation and consumer welfare.33 This is not to say that all research indicates that the loss of potential competition is not a problem.

Cunningham et al. examine the impact of killer acquisitions in the pharmaceutical industry.34 While their research is limited to the development of pharmaceutical drugs, where product development milestones are readily observable,35 unlike in digital markets, it is certainly the type of research that is needed to help inform policy decisions.

33 Additionally, there are likely unintended consequences from such policy proposals. See, e.g., J. Daniel Kim, The Paradox of Startup Acquisitions: Eliminating Competition and Creating New Competitors 1, 2, 6 (Mar. 30 2020), https://ssrn.com/abstract=3568153 (“startup acquisitions may unintentionally increase future competition by catalyzing the acquired employees to leave and pursue their own competitor ventures . . . these results provide important managerial implications for established firms seeking to acquire high-tech startups. While startup acquisitions reduce the degree of competition in the short-term, they can generate greater levels of competition in the long-run.”).
34 See Cunningham et al., supra note 11, at 1.
35 The study of substitutability in the pharmaceutical industry is relatively straightforward 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, this assessment is not as straightforward.
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 total, they label between 5.3 percent to 7.4 percent of all pharmaceutical acquisitions in their sample as killer acquisitions.

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.

Given these ex ante uncertainties and the need to make forecasts and predictions about entry, product differentiation, and efficiencies beyond what is typical for merger analysis, we are left with questions regarding whether or not agencies and courts are able

36 See Cunningham et al., supra note 11, at 3.
37 Id. at 6.
38 Id.

See also Competition in Digital Technology Markets: Examining Acquisitions of Nascent or Potential Competitors by Digital Platforms: Hearing Before the Subcomm. on Antitrust, Competition Policy, & Consumer Rights of the S. Comm. on the Judiciary, 116th Cong. 4–5 (Sept. 24, 2019) (Written Testimony of Patricia Nakache, General Partner, Trinity Ventures), https://www.judiciary.senate.gov/imo/media/doc/Nakache%20Testimony.pdf (“... many young companies cannot realistically achieve the scale necessary to becomes standalone public companies, which means that often M&A is the most viable pathway for a startup.”).

40 See, e.g., D. Daniel Sokol, Vertical Mergers and Entrepreneurial Exit, 70 Fla. L. Rev. 1357, 1357 (2018) (arguing that “[v]ertical merger policy that would unduly restrict large tech firms from undertaking acquisitions . . . would hurt incentives for innovation in the economy by chilling business formation in start-ups.”). In contrast, Lemley & McCreary have recently argued that the current paradigm of venture capital funding and subsequent buyouts are distorting incentives and are actually causing more harm than good. This has fueled their proposal to presumptively ban large tech companies from making acquisitions unless they can prove strong efficiencies. See Mark A. Lemley & Andrew McCreary, Exit Strategy (Stanford Law and Economics Olin Working Paper #542, 2019), https://ssrn.com/abstract=3506919. We address this argument and policy proposal in infra Section III.
to assess acquisitions that involve nascent or potential competitors. Importantly, is a different approach needed to assess this particular theory of harm? We turn to that question next.

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

Given the additional uncertainty and challenges required to assess acquisitions involving nascent and potential competitors (including those that could turn out to be a killer acquisition), a number of proposals have recently been made. Below, we detail three proposals and offer some commentary.41

A. Furman Report’s “Balance of Harms” Standard

The Furman Report proposes a “balance of harms” approach in dealing with mergers involving nascent competitors in the United Kingdom.42 The idea is to explicitly calculate the expected value of a merger’s impact, which 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 20 percent chance that an acquisition would result in $250 million in anticompetitive harm and an 80 percent chance that the acquisition will result in net efficiencies of $50 million, then the deal should be blocked because the expected value would be negative (-$10 million).

The proposal is a certainly a serious and thoughtful attempt to move economic

41 Another recent proposal is that the liability standard used in Section 2 cases, such as Microsoft, can be used in lieu of Section 7 standards for acquisitions involving nascent competitors by incumbents with monopoly power. See C. Scott Hemphill & Tim Wu, Nascent Competitors, U. PA. L. REV. (forthcoming 2020) (manuscript at 20–26), https://ssrn.com/abstract=3624058. For arguments against this approach, see Ginsburg & Wong-Ervin, supra note 8. We do not address the specifics of this proposal because it is focused primarily on the legal question of lowering the burden of production on plaintiffs to build a prima facie case. Nonetheless, we do address the larger question of whether there is sufficient evidence to change our presumptions regarding acquisitions involving larger digital platforms.

42 Furman Report, supra note 2, at 99.
analysis and welfare estimates to the forefront of merger assessments. Calculating the expected value is appealing because it incorporates the inherent uncertainty in making predictions about the effects of a merger. If possible, it can be part of a larger merger review process that puts weight on various pieces of evidence.

On the other hand, there are some concerns with shifting merger policy to focus more on low probability outcomes with large harms and benefits. For example, suppose that there is a 5 percent chance that an acquisition will result in net efficiencies equal to $300 million a year while having a 35 percent chance of having net efficiencies equal to $45 million a year. Further, if the remaining 60 percent of outcomes results in a net harm of $50 million a year, the merger would be considered procompetitive since the expected value is $0.75 million. While there are benefits to using an objective basis to make merger decisions, it assumes agencies have good estimates of these various probabilities and welfare outcomes. This is unlikely to be the case for most investigations, and it would make assessments highly sensitive to small changes in probability estimates.43

B. Crémer Report’s “Significant Impact on Effective Competition (SIEC)” Test

The Crémer Report proposes that regulators should be particularly wary of nascent acquisitions involving dominant platforms with strong positive network effects and where the acquired firm has a fast-growing user base with “high future market potential.”44 The report labels this as the “significant impact on effective competition (SIEC)” test.45 The idea is to identify acquisitions where the principal motivation is to protect the dominant platform’s core product or ecosystem. Thus, agencies should focus

44 Crémer Report, supra note 2, at 116.
45 Id. at 117.
more on whether the two firms operate in the same “technological” or “user” space rather than on strict product market overlaps.\footnote{Id. at 117.}

Broadly, the SIEC test shares a great deal in common with current U.S. merger review practices. There is no presumption of illegality.\footnote{Id. at 124.} Potential efficiencies should be considered and given their proper weight.\footnote{Id. at 123.} Additionally, the recommendation to look beyond the core product market overlap is in-line with the nascent competition theory of harm used in Microsoft. Thus, there are attractive elements to the SIEC test. One caveat, however, is that regulators must first firmly establish that the network effects are indeed of the type that limit entry and confer strong barriers to entry—as network effects are not all uniform and may have different characteristics and strengths depending on the particular market.\footnote{See, e.g., Tucker, supra note 30, at 77 (“network effects are not the guarantor of market dominance that antitrust analysts had initially feared”); Daniel F. Spulber, Unlocking Technology: Antitrust and Innovation, 4 J. COMPETITION L. & ECON. 915, 917 (2008) (“Despite being rarely observed, technology lock-in remains influential in competition policy.”). See also John M. Yun, Does Antitrust Have Digital Blind Spots?, S.C. L. REV. (forthcoming 2020), https://ssrn.com/abstract=3593467.}

What prior mergers would have potentially fallen under the SIEC test criteria? At first blush, it would seem Facebook’s acquisition of Instagram would be a candidate. The prevailing view is that Facebook is a monopolist—although, a monopolist over what relevant market? A “social media” market could include services such as YouTube, Twitter, Pinterest, Reddit, and LinkedIn—and, more recently, Snapchat and TikTok.\footnote{In terms of daily active users, TikTok’s 800 million users is approaching half of Facebook’s 1.7 billion users. See Mike Vohaus, ByteDance, Chinese Digital Giant and Owner of TikTok, Reported to Have Revenues of $17 Billion, FORBES (May 27, 2020), https://www.forbes.com/sites/mikevohaus/2020/05/27/bytedance-chinese-digital-giant-and-owner-of-tiktok-reported-to-have-revenues-of-17-billion.} Further, was Instagram a unique nascent competitor that was readily identifiable as a threat to Facebook’s monopoly? Certainly, it is a relevant question and something
agencies should consider; although, in the case of Instagram, it is not entirely clear that it fit this profile.\textsuperscript{51} On the other hand, there is little doubt that Instagram was enjoying tremendous early growth as a photo sharing app.\textsuperscript{52} Yet, purchasing a fast-growing company in an adjacent or distant market also means that the firm is buying what is likely a high quality product and set of assets, and, thus, it raises the potential for strong efficiencies—particularly if the product is highly differentiated from the acquiring firm’s product. Again, there are no easy answers to an ex ante assessment of mergers involving the future growth and differentiation of an emerging product and technology.

C. Presumption of Illegality for Acquisitions by Dominant Platforms

Some politicians have proposed a legislative solution to the perceived problem of large platforms purchasing potential and nascent competitors through an outright ban on acquisitions that meet certain criteria.\textsuperscript{53} A weaker form of this proposal is a strong presumption of illegality that can be rebutted within a narrow category of defenses. While there are variations of this burden-shifting proposal, it effectively comes down to blocking acquisitions by big tech companies unless they can prove strong efficiencies.\textsuperscript{54}

\textsuperscript{51} See, e.g., MG Siegler, Distilled from Burbn, Instagram Makes Quick Beautiful Photos Social, TECHCRUNCH (Sep. 20, 2010), https://techcrunch.com/2010/09/20/instagram (“Beyond Hipstamatic and CameraBag, Instagram faces a ton of competition from photo sharing apps such as Picplz and Treehouse. Systrom thinks a number of them are good, but feels their approach is different enough to separate from the pack.”).

\textsuperscript{52} See, e.g., Kelly Lux, What is Instagram and Why is It So Popular?, SYRACUSE U. SCH. OF INFO. STUD. (Dec. 15, 2011), https://ischool.syr.edu/infospace/2011/12/15/what-is-instagram-and-why-is-it-so-popular (“#1 in the App Store within 24 hours of launch . . . Holds the record as quickest to reach 1 million downloads, occurring on December 21, 2010.”); Martin Bryant, Instagram Appears to Have Passed 25 Million Users, Adding Up to 3000 More Per Hour, TNW (Mar. 2, 2012), https://thenextweb.com/socialmedia/2012/03/02/instagram-appears-to-have-passed-25-million-users-adding-up-to-3000-more-per-hour (“With estimates that the number of photos shared on Instagram are growing at twice the rate of Flickr. . .”).


\textsuperscript{54} See, e.g., Lemley & McCreary, supra note 40, at 85–86 (“We think 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.”); ACCC Report, supra note 2, at 109 (“The ACCC considers it may be worthwhile to consider whether a rebuttable presumption should also apply, in some form . . . absent clear and convincing
However, in order for there to be a presumption of anticompetitive harm from large digital platforms purchasing firms, there needs to be strong evidence that these acquisitions are actually anticompetitive and are systematically being underenforced through the current legal approach. We are unaware of a study that demonstrates this. Three recent studies, however, do attempt to examine prior platform acquisitions, which we detail below. Overall, they do not find systematic evidence that big tech acquisitions fit the killer acquisition narrative. Although, they also conclude that it is still an open question whether some of the acquisitions could be construed as anticompetitive. At best, the evidence is mixed. Even reports that are otherwise critical of the current level of antitrust enforcement do not recommend such a drastic policy change.

In the first study, Latham et al. examine acquisitions by Google, Amazon, Facebook, and Apple (GAFA) between 2009 and 2020. They find that “only a small proportion of transactions could begin to fit the ‘killer’ narrative.” Instead, “the vast evidence put by the merger parties, the starting point for the court is that the acquisition will substantially lessen competition”); Stigler Report, supra note 2, 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 DA [Digital Authority] by placing the job of demonstrating efficiencies on the parties, who have a greater ability to know what they are.”).

See, e.g., Cal. Dental Ass’n v. FTC, 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.”).

The Cunningham et al. study is in regard to killer acquisitions in the pharmaceutical industry, which has limited parallels to digital markets. See discussion supra Section II.

Again, the label “killer acquisition” is not reserved for just those cases where the potentially competitive product was discontinued.

See, e.g., Furman Report, supra note 2, at 101 (“the 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.”).

See Oliver Latham et al., 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. 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 motivated by a concern that the target firms could evolve
majority have been about GAFA acquiring new capabilities and positioning themselves to enter new markets.” 60 In examining the 409 acquisitions in their data set, they find only 33 of them, or 8 percent, fit what they labeled a “core business” filter. This filter looks for either a direct horizontal overlap or a scenario where the acquisition involved a target that was “vertically-related to that core business and could plausibly grow into a competitive threat.” 61 Importantly, of these 33 acquisitions, the authors emphasize that they “are not saying that the transactions surviving these filters were killer acquisitions.” 62

The study does, however, mention a concern about “reverse killer acquisitions,” which involves the incumbent eliminating its internal development of a product and using the acquired product instead. 63 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 in order to bring a more innovative product to market faster could involve discontinuing one of the pre-merger products. 64 Similarly, there are questions whether, even as independent companies, internal development would have continued or would have occurred at the same degree of efficiency. 65

60 Id. at 34.
61 Id. at 31.
62 Id. (emphasis in original).
64 See Horizontal Merger Guidelines § 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.”).
65 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 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 (citing, for example, Amazon Fire Phone, Facebook Home, Facebook Deals, Facebook Email, Facebook Places, Facebook Gifts, Google Glass, Google Nexus Q, Google TV, Microsoft Kinect).
Gautier & Lamesch also 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.” 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.” The case they identify is Facebook’s 2016 acquisition of the photo filter app Masquerade. Additionally, similar to Latham et al., Gautier & Lamesch raise the possibility that some of the acquisitions 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. Ultimately, they conclude “[t]he answer to this question is far from obvious and would need a case by case analysis.”

Finally, Argentesi et al. examine mergers involving Google, Facebook, and Amazon between 2008 and 2018. 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

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67 Id. at 4. 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.”). 

68 Id. Notably, Facebook has recently shut down the app. See Taylor Lyles, Facebook is Shutting Down MSQRD, the AR Selfie App it Acquired in 2016, VERGE (Mar. 13, 2020), https://www.theverge.com/2020/3/13/21178982/msqrd-ar-selfie-app-shutting-down-mobile-app-april-facebook. It is not clear whether the lack of commercial success for Masquerade further supports the possibility that this was a killer acquisition or proves that it was never a real competitive threat in the first place.

69 Id. at 27.

70 See Argentesi et al., supra note 25, at 1.
if the target will grow to become a significant competitive force.”71 With this statement, Argentesi et al. really summarize the difficulties that face competition agencies and authorities. 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.72 While they make compelling arguments on both sides of the debate, they do not reach a firm conclusion.73

Overall, these recent examinations into prior acquisitions of big tech do not reach definitive conclusions. There is a clear recognition that forecasting product and technological developments in dynamic and highly innovative markets is an inherently difficult exercise. One take-away, which is relevant for our policy discussion, is that the evidence is not at the level to suggest that agencies are fundamentally missing anticompetitive potential and nascent acquisitions and, consequently, a change in presumption is required.

IV. ARE THE CURRENT ANTITRUST LAWS AND THE ENFORCEMENT OF THOSE LAWS SUFFICIENT TO COMBAT THE PROBLEM?

Based on the current evidence and scholarship, we 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

71 Id. at 19.
72 At the time of those acquisitions, the competition authority in the UK was the Office of Fair Trading (OFT).
73 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 anticompetitive 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.
The phrase potential competition is used in the very first sentence of the U.S. DOJ and FTC’s Horizontal Merger Guidelines. 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? We believe the evidence is in the affirmative based, in part, on active enforcement in this area. For example, when Nielsen proposed to purchase Arbitron in 2013, 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”); 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, it represents the agencies on the frontier of the potential competition doctrine.

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

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74 See Dorgan, supra note 6, at 418.
75 Horizontal Merger Guidelines § 1 (“These Guidelines outline the principal analytical techniques, practices, and the enforcement policy of the Department of Justice and the Federal Trade Commission . . . with respect to mergers and acquisitions involving actual or potential competitors . . .”).
markets.\textsuperscript{79} \textit{Polypore} was a consummated acquisition that was unwound when the Commission concluded, \textit{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.”\textsuperscript{80} 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.”\textsuperscript{81}

In 2015, the FTC challenged Steris Corporation’s acquisition of Synergy Health.\textsuperscript{82} 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.”\textsuperscript{83} An Ohio district court, however, ultimately disagreed with the FTC and held that the agency had failed to show that Synergy would have entered “but for” the merger.\textsuperscript{84}

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


\textsuperscript{83} Id.

\textsuperscript{84} See FTC v. Steris Corp., 133 F. Supp. 3d 962 (N.D. Ohio 2015).
the Synacthen assets to develop a synthetic ACTH drug, preserving Questcor’s monopoly and allowing it to maintain extremely high prices for Acthar.”

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.”

Even in cases where the agencies do not bring action, theories of harm involving potential and nascent competitors are actively investigated. For example, in 2019, in a 5-0 decision, the FTC closed its investigation into Roche Holding’s proposed acquisition of Spark Therapeutics. Noting that the “FTC strives to closely scrutinize incumbents’ acquisitions of current, potential, and nascent competitors,” the agency engaged in a 10 month investigation where a “key question in the investigation was whether Roche would have the incentive to delay or discontinue Spark’s developmental gene therapy for hemophilia A.” The commission ultimately concluded the acquisition was procompetitive given that “[a]s the other companies endeavor to bring their gene therapies to market, Roche would have the incentive to accelerate, rather than decelerate

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the development of Spark’s gene therapy in order to compete for gene therapy patients.”89

These recent investigations and enforcement actions 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. Seeing active enforcement should not come as a surprise given that these cases turn on an assessment of the likelihood of entry. Entry analysis is a part of every agency merger review—whether horizontal or vertical, and the agencies have developed a great deal of expertise in this area.90 These are fact-intensive inquires that should not rely on set presumptions (unless those presumptions are well-founded with experience and evidence) regarding the impact of entry on consumer welfare and innovation.91

Do the antitrust agencies always make the right decision? Almost certainly not. There will be some level of error. Again, the question is not whether the agencies have false positives or negatives but rather whether, with active enforcement, there is evidence of a systematic bias in the agencies’ decisions. 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.

V. GUIDANCE IN ASSESSING ACQUISITIONS OF NASCENT AND POTENTIAL COMPETITORS

In this section, we consider a number of points that are worth emphasizing when assessing nascent and potential competition. First, it seems critical whether the

89 Id.
91 See Statement of the FTC, supra note 88 (“Merger investigations are highly fact-specific, and the determination of whether a transaction will result in potential competitive harm requiring an enforcement action is driven by evidence.”).
acquisition is primarily vertical or horizontal in nature. While a vertical merger certainly has the potential to be anticompetitive—primarily through foreclosure or raising rivals’ costs—there is also the potential for significant efficiencies. Vertical mergers are fundamentally different from horizontal ones since they involve a merger of complements along a production process. In contrast, nascent and potential competition cases, when properly formulated, involve current or future competitors. Of course, this distinction will not always be crystal clear. For example, is Instagram a substitute or complement to Facebook? The point is that the more that there is a horizontal overlap, e.g., if Microsoft acquired Netscape, the more scrutiny the acquisition should receive.

Second, does the acquired firm have rivals? Is the startup competing in a fairly crowded competitive space or does it have identifiable unique assets (including branding, distribution, and intellectual property) that sets it apart? The idea is that the more “different” the product is from (perhaps distant) rivals, the more likely the acquisition removes from the market an input 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 raises regarding acquisitions involving a high growth product.92 We certainly agree that this is a useful metric to focus on; although, the scope of the inquiry should go beyond just high growth products as the growth rate is just one potential signal of a unique asset. While identifying assets with a great deal of market potential could be a challenge, there are factors that could help in this determination such as the number and strength of other competing products; the uniqueness of the patents and other intellectual property; and the growth rate of the product compared to similarly situated products.

Similarly, David Pérez de Lamo has proposed an approach focused on the

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92 Crémer Report, supra note 2, at 116.
competition over innovation.93 The 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.”94 The objective is less about determining whether the competing product would eventually reach the market but more on identifying

an analysis of (i) essential resources (e.g. intellectual property rights, data sets, large user bases, specialized and expensive hardware, access to financing, engineering skills, and computation power); (ii) capabilities (as a function of the company’s skillset, strategy, governance structure, and past behavior); (iii) patent overlaps; (iv) investment plans of both merging parties setting innovation targets; and (v) internal documents of the acquirer with post-merger divestment plans, should allow the Commission to define the relevant innovation space and perform an innovation competition assessment in digital transactions.95

Identifying 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.

In sum, the above guidance is ultimately about assessing whether there is a reasonable basis to be concerned that the acquisition eliminates a projected increase in competition in the incumbent’s core source of market power. Given this, the analysis comes down to the strength and quality of the evidence. We believe that 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 greater scrutiny if the acquired assets and product are fairly unique in a given innovative product space. In contrast, we find that poor indicators of anticompetitive harm include whether or not there are other bidders and, for vertical mergers, whether the acquiring firm was looking to develop a similar input or product. While these are just initial conjectures, it seems the number of other bidders is a noisy signal of uniqueness and demand for a product.

93 See Pérez de Lamo, supra note 4, at 58.
94 Id.
95 Id. (emphasis in original).
Secondly, the “make versus buy” decision is fundamental to the theory of the firm and there are numerous reasons why buying an input is more efficient than developing it in house including realizing integration benefits significantly earlier than through internal development.

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 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 large technology companies are purchasing rivals before they can mature into vigorous competitors. Yet, just as with 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 rather than on presumptions of anticompetitive harm. We find the agencies’ history of robust enforcement action in this area attests to their willingness and ability to bring these types of cases when needed.