

Antitrust Chronicle

FEBRUARY · WINTER 2022 · VOLUME 1(1)



Economics of Potential Competition

TABLE OF CONTENTS

04

Letter from the Editor

34

MAKING THE POTENTIAL COMPETITION DOCTRINE GREAT AGAIN

By Mark Glick & Darren Bush

05

Summaries

41

DISCRIMINATORY ANTITRUST IN THE REALM OF POTENTIAL AND NASCENT COMPETITION

By John M. Yun

07

**What's Next?
Announcements**

49

POTENTIAL COMPETITION AS PROCESS AND STRUCTURE

By Richard N. Langlois

08

ECONOMICS OF POTENTIAL COMPETITION

By Norbert Maier & Kalle Kantanen

53

HEY GOOGLE/SIRI/ALEXA, OF ALL THE PRODUCTS AND SERVICES IN THE METAVERSE WHOSE DO YOU PREFER?

By Chris Pike

15

ECONOMIC ISSUES IN ASSESSING POTENTIAL AND NASCENT COMPETITION

By Andrew Elzinga, Nikhil Gupta, Margaret Kyle & Vivek Mani

21

UNCERTAINTY AND TWO THEORIES OF HARM IN NASCENT COMPETITOR ACQUISITIONS

By Jay Ezielev

28

POTENTIAL COMPETITION MERGERS: LESSONS FROM OUTSIDE THE BOX

By Tim Brennan

Editorial Team

Chairman & Founder

David S. Evans

Senior Managing Director

Elisa Ramundo

Editor in Chief

Samuel Sadden

Senior Editor

Nancy Hoch

Latin America Editor

Jan Roth

Associate Editor

Andrew Leyden

Junior Editor

Jeff Boyd

Editorial Advisory Board

Editorial Board Chairman

Richard Schmalensee - *MIT Sloan School of Management*

Joaquín Almunia - *Sciences Po Paris*

Kent Bernard - *Fordham School of Law*

Rachel Brandenburger - *Oxford University*

Dennis W. Carlton - *Booth School of Business*

Susan Creighton - *Wilson Sonsini*

Adrian Emch - *Hogan Lovells*

Allan Fels AO - *University of Melbourne*

Kyriakos Fountoukakos - *Herbert Smith*

Jay Himes - *Labaton Sucharow*

James Killick - *White & Case*

Stephen Kinsella - *Sidley Austin*

Ioannis Lianos - *University College London*

Diana Moss - *American Antitrust Institute*

Robert O'Donoghue - *Brick Court Chambers*

Maureen Ohlhausen - *Baker Botts*

Aaron Panner - *Kellogg, Hansen, Todd, Figel & Frederick*

Scan to Stay Connected !

Scan or click here to sign up for
CPI's **FREE** daily newsletter.



LETTER FROM THE EDITOR

Dear Readers,

Potential (as opposed to “actual”) competition is defined, essentially, as a competitive constraint on a given firm’s behavior that might “potentially” arise, but has not done so yet. Modern economic thinking places increasing importance on taking potential competition into account in assessing antitrust issues.

How is potential competition defined? For example, it might be most evident where the entrant poses a threat based on a particularly disruptive innovation, an innovative business model, or access to (or ownership of) specific intellectual property or physical infrastructure that others might lack. In addition, the fact that the potential entrant has infiltrated similar markets before might constitute such evidence. The relative specificity of its ability to clear a high entry hurdle might also be demonstrated if it has already entered while others either have failed, or have yet to try.

Potential competition analysis is relevant to almost every field of antitrust law (mergers, monopoly control and restrictive practices), and can be important in many markets. For example, concerns are often raised regarding acquisitions of start-ups by incumbents in the tech sector, on the basis that the acquisition could remove the future constraint that a potential rival producer of a substitute product would have placed on the incumbents. So-called pay-for-delay agreements in pharmaceutical and biotechnology markets have also been subject to scrutiny.

Its analysis requires a detailed consideration of the specifics of the market in question. These factors inevitably involve market definition, a detailed assessment of barriers to entry, and other considerations (the importance of patent protection, the incentives of given merging parties, and other particular characteristics of the market that may be relevant).

The contributions to this CPI Antitrust Chronicle address these questions and further the ongoing debate.

As always, thank you to our great panel of authors.

Sincerely,

CPI Team

SUMMARIES

08



ECONOMICS OF POTENTIAL COMPETITION

By Norbert Maier & Kalle Kantanen

Potential competition is an economic force not yet shaping competition in a given market, but which has the potential to do so in the foreseeable future. It has recently moved up the competition policy enforcement agenda due to the growing interest in innovation-related theories of competitive harm and the rapid development of digital technologies and services. In this article, we briefly review, from an economic perspective, the current theories of harm relating to potential competition, the industries and market situations where such competition is relevant, as well as a few considerations regarding its assessment.

15



ECONOMIC ISSUES IN ASSESSING POTENTIAL AND NASCENT COMPETITION

By Andrew Elzinga, Nikhil Gupta, Margaret Kyle & Vivek Mani

Potential and nascent competition have seen renewed interest from academics, antitrust practitioners, and United States enforcement agencies in recent years. For example, the Federal Trade Commission (“FTC”) focused on issues of potential competition during its Hearings on Competition and Consumer Protection in the 21st Century in 2018, as did the Organisation for Economic Co-operation and Development (“OECD”) during its 2020 Competition Meetings. The Antitrust Division of the U.S. Department of Justice (“DOJ”) and FTC’s recent request for information on merger enforcement included questions related to potential and nascent competition. Importantly, both potential competition and nascent competition describe competition that does not currently exist. The DOJ and the FTC’s concerns about potential or nascent competition arise because firms’ strategies (e.g., pricing or investment decisions) are informed by their expectations about competition in the future. During the last 25 years, the FTC consistently challenged transactions and agreements over concerns related to the elimination of future competition. Given the increased scrutiny on potential or nascent competition in antitrust matters, it is critical to understand the economic rationale that underpins the but-for world when evaluating such competition. In this article, the authors highlight some of these challenges, describe some illustrative examples, and discuss how these challenges may vary across different industries.

21



UNCERTAINTY AND TWO THEORIES OF HARM IN NASCENT COMPETITOR ACQUISITIONS

By Jay Ezrielev

There are two principal theories of harm in nascent competitor acquisition cases: (1) loss of future competition between the acquirer and the target, and (2) loss of innovation. I argue that the loss of future competition theory is most applicable in cases where there is a high probability of significant future competition between the merging parties, that competition is relatively imminent, and market evolution is relatively predictable. Conversely, the innovation effects theory is more suitable for cases where the expected competition between the merging parties is relatively distant in time, market evolution is unpredictable, and innovation is an important part of the competitive process. The economic analysis of innovation effects requires a dynamic competition model. I discuss how economic tools based on dynamic competition models can be effectively applied in analyzing innovation effects of nascent competitor acquisitions.

28



POTENTIAL COMPETITION MERGERS: LESSONS FROM OUTSIDE THE BOX

By Tim Brennan

The puzzle of potential competition mergers is not theoretical but empirical — verifying that the firm not in the market is a likely significant competitor and that very few others are. It may help to look at potential competition in other antitrust contexts. From collusion, “reverse payment” pharmaceutical cases work only because regulation and legislation identify a unique potential generic competitor. From abuse of dominance, the U.S. *Microsoft* case suggests low requirements for establishing that Netscape was a potential competitor to Windows, but in practice the case became equivalent in evidence and outcome to one about excluding actual competitors in browsers. We conclude by looking at the relevance of empirical methods for assessing competitive risk in mergers, shifting the burden of proof, adding objectives beside “consumer welfare,” and, perhaps most important, focusing on how U.S. merger law specifies illegality when competition “may,” not “will,” be substantially reduced.

SUMMARIES

34



MAKING THE POTENTIAL COMPETITION DOCTRINE GREAT AGAIN

By Mark Glick & Darren Bush

Antitrust enforcement efforts against “big-tech” have been hobbled by the destruction of the “potential competition doctrine.” This post describes how the Supreme Court made the doctrine ineffective after creating the doctrine. It then describes how the antitrust enforcement agencies handcuffed themselves further in the development of the doctrine through their merger guidelines. As currently formulated, the potential competition doctrine makes merger enforcement by tech companies impotent. The paper uses Facebook’s Instagram acquisition as an example. It then offers a proposal on how to fix the doctrine to render potential competition a meaningful tool in antitrust enforcement.

41

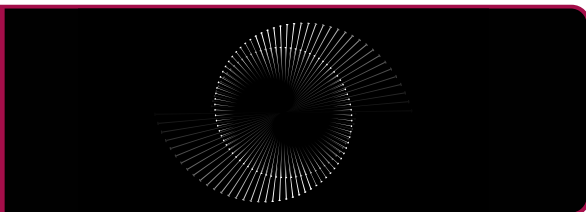


DISCRIMINATORY ANTITRUST IN THE REALM OF POTENTIAL AND NASCENT COMPETITION

By John M. Yun

One of the most important topics in antitrust is how to analyze potential and nascent acquisitions by the largest digital platforms. Notably, there have been calls to implement “discriminatory antitrust” policies where one set of rules applies to big tech while another set of rules applies to everyone else. However, less attention seems to be paid to the actual empirical evidence. To that end, this article reviews a recent FTC report on big tech acquisitions and finds little to raise alarms. Second, the article examines several recent acquisitions by Spotify, an important technology company that sits outside of the “big tech” classification. If Spotify’s recent series of acquisitions can reasonably be considered procompetitive, then why is the same not true (or even possible) for Apple and Amazon within the same product space? Finally, the article summarizes the findings of several recent studies that examined a series of big tech acquisitions. Taken as a whole, these studies indicate insufficient evidence to conclude a systematic concern that large digital technology companies are engaging in anticompetitive acquisitions of potential and nascent competitors.

49



POTENTIAL COMPETITION AS PROCESS AND STRUCTURE

By Richard N. Langlois

Before the development of formal price theory in the early twentieth century, which included the invention of the theory of “perfect” competition, economists held an understanding of competition as active striving, leading to economic growth rather than to “optimality” in any static sense. In the twentieth century, Joseph Schumpeter would be a lonely voice reiterating and amplifying the conception of competition as a dynamic process. If competition is active and dynamic, the important form of competition is potential competition, often from sources we cannot easily foresee. If competition is active and dynamic, the market structure we observe today, or even the market structure we imagine will prevail in the future, is a poor guide to antitrust policy. We should focus instead on impediments, especially legal impediments, to entry, experiment, and contract. In this light, recent proposals to impose on Internet platforms “structural separations” defined in terms of existing technological boundaries are likely to restrict not enhance potential competition – just as such separations did in the twentieth century. Moreover, proposals to restrict platforms from diversifying, including through acquisition, are likely to mute the powerful potential competition that the large platforms represent to each other.

53



HEY GOOGLE/SIRI/ALEXA, OF ALL THE PRODUCTS AND SERVICES IN THE METAVERSE WHOSE DO YOU PREFER?

By Chris Pike

The Metaverse, voice assistants, smart automated vehicles, wearables, there are a number of visions of the future, but more important than which, if any, of these comes to pass, is what these different visions of the future have in common. Which is the understanding that controlling what is, in effect, the next-generation operating system, will deliver an incredibly powerful gatekeeper role that will allow the extraction of huge rents. There is particular scope for harm to potential competition from self-preferencing by these gatekeepers. This short paper sets out the exclusionary concerns and distinguishes those from exploitative concerns that I argue may nevertheless distort and restrict competition by creating a hold-up problem. I explore how these concerns might apply in the Metaverse and other emerging technologies, and argue that applying the type of self-preferencing and interoperability rules that are currently under consideration to these emerging markets will protect potential competition, provide helpful certainty for investors, and help to build an innovative but more decentralized next generation of technologies.

WHAT'S NEXT?

For March 2022, we will feature an Antitrust Chronicle focused on issues related to (1) **China** ; and (2) **Asia Pacific: Opportunities & Challenges**.

ANNOUNCEMENTS

CPI wants to hear from our subscribers. In 2022, we will be reaching out to members of our community for your feedback and ideas. Let us know what you want (or don't want) to see, at: antitrustchronicle@competitionpolicyinternational.com.

CPI ANTITRUST CHRONICLES April 2022

For April 2022, we will feature an Antitrust Chronicle focused on issues related to (1) **Biden's Antitrust**; and (2) **Supply Chains**.

Contributions to the Antitrust Chronicle are about 2,500 – 4,000 words long. They should be lightly cited and not be written as long law-review articles with many in-depth footnotes. As with all CPI publications, articles for the CPI Antitrust Chronicle should be written clearly and with the reader always in mind.

Interested authors should send their contributions to Sam Sadden (ssadden@competitionpolicyinternational.com) with the subject line "Antitrust Chronicle," a short bio and picture(s) of the author(s).

The CPI Editorial Team will evaluate all submissions and will publish the best papers. Authors can submit papers on any topic related to competition and regulation, however, priority will be given to articles addressing the abovementioned topics. Co-authors are always welcome.



ECONOMICS OF POTENTIAL COMPETITION

BY NORBERT MAIER & KALLE KANTANEN¹



¹ The authors are economists at the economic consultancy Copenhagen Economics. They would like to thank Juste Kapustaite, Federico de Michiel and Neil Gallagher for helpful comments and discussions, and Henni Puhakka for excellent research assistance. The views expressed in the text are the private views of the authors.

I. INTRODUCTION

Competition authorities' growing interest in innovation-related theories of harm, together with the rapid development of digital technologies and services, have intensified the attention paid by competition authorities to potential competition. While potential competition complements actual competition in restricting the market power of a dominant incumbent or of two merging companies, its assessment requires a somewhat different legal and economic toolbox than that of actual competition.

In this article, we briefly review what economics has to say about the relevance and assessment of potential competition in various competitive settings. The article is structured as follows: First, we provide a definition of potential competition. Second, we explain the relevant economic theories of harm. Third, we discuss how potential competitors can be identified. Finally, we conclude with some thoughts on how to assess competitive pressure from potential competition.

II. WHAT IS POTENTIAL COMPETITION?

Potential competition is an economic force not yet shaping competition in a given market, but which has the potential to do so in the foreseeable future.² Potential entrants that have (i) an established product and the ability to easily enter the market at a sufficient scale and (ii) that could be kept out of the market via traditional anti-competitive exclusionary pricing strategies (such as predatory pricing or conditional rebates) do not qualify, at least for the purpose of this article, as potential competitors.^{3,4}

This way, the main separation line between potential and actual competition is that potential competition refers to a competitive force not yet realized in the market. This distinction further means that a competitive assessment related to potential competition cannot be based on structural measures, such as concentration indices, or price analysis. The main reason for this is that the product of the potential competitor and the circumstances of its potential entry may not be perfectly defined at the time of the assessment and that it must, by definition, have a zero per cent market share. This implies that one should look at non-price related channels in the competitive assessment.⁵

The key alternative competitive channel is innovation. A firm involved in innovation related to an existing product, but not providing that particular product yet, could, under certain conditions, be viewed as a potential competitor to the suppliers of the existing products.⁶ Furthermore, if many firms are working towards developing a non-existing product for which a demand has been identified, e.g. a drug for a disease, they become each other's potential competitors.

We next turn to the presentation of the main theories of harm linked to potential competition.

III. THEORIES OF HARM

The first step towards the evaluation of potential competition is the identification of theories of harm. Such theories of harm focus either on the elimination of potential competition, which is the case in merger control, or on its substantial weakening through some anti-competitive practices, which is the case in antitrust.⁷

2 This is in line with the definition provided by the OECD's background note on "The concept of potential competition," according to which "Potential competition could be defined as a competitive constraint on a firm's behaviour that might potentially arise but has not yet actually done so." See OECD (2021), *Concept of potential competition*, OECD COMPETITION COMMITTEE DISCUSSION PAPER, <http://oe.cd/tcpc>.

3 For example, AMD harmed by Intel through the use of conditional rebates (see European Commission (2009), *AT.37990 Intel decision*, https://ec.europa.eu/competition/antitrust/cases/dec_docs/37990/37990_3581_18.pdf), or suppliers of wireless technology products and services that were put at disadvantage through Qualcomm's exclusivity rebates (see European Commission (2018), *AT.40220 Qualcomm (exclusivity payments) decision*, https://ec.europa.eu/competition/antitrust/cases/dec_docs/40220/40220_2702_4.pdf) would not qualify as potential competitors for our discussion.

4 We classify such examples as cases where actual rather than potential competition is targeted by the dominant firm.

5 However, one should remain aware that when facing the threat of potential competition, the incumbent may place a competitive bid to signal its intention to deter entry in future and the finding of such behaviour where a market is deemed uncompetitive by usual indicators (i.e. structural analysis) can be indicative of the existence of potential competition. See Salop, Steven C. (2021), *Potential Competition and Antitrust Analysis: Monopoly Profits Exceed Duopoly Profits*, Note for OECD Roundtable on the Concept of Potential Competition, [https://one.oecd.org/document/DAF/COMP/WD\(2021\)37/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2021)37/en/pdf).

6 To what extent that innovation is observed for all the players in the market is a different question.

7 We do not discuss here the competitive constraints imposed by potential competition, e.g. to counterbalance the impact of a merger between two actual competitors.

A. Mergers

Merger-related theories of harm can further be split into i) horizontal, ii) vertical and iii) conglomerate merger theories of harm.

1. Horizontal Merger Theories of Harm

In a horizontal merger setting, a firm may acquire one of its potential competitors. In this case, the potential competitor does not yet exert a competitive pressure in the relevant market, but there is a sufficiently high probability that it would have entered the market and developed into a strong competitive force in a timely manner in a counterfactual with no merger.

This theory of harm has become increasingly common in the pharmaceutical industry where the target company has a pipeline product, i.e. a product in the development phase that could enter the market, subject to an approval from the medical regulatory bodies. For example, such theories of harm were used in the recent *BMS/Celgene and Abbvie/Allergan* mergers. The European Commission found evidence supporting this theory of harm in *Abbvie/Allergan*, requiring the divestiture of Allergan's IL-23 inhibitor brazikumab pipeline product targeting the treatment of some inflammatory bowel diseases, such as ulcerative colitis and Crohn's disease.⁸ In *BMS/Celgene*, the Federal Trade Commission ("FTC") also found evidence supporting this theory of harm and required the divestiture of Celgene's Otezla product for treating moderate-to-severe psoriasis.⁹

The acquiring company may, in such cases, integrate the (potential competitor) target's activity into its own or may stop it altogether. These latter cases have been recently labelled "killer acquisitions" and could be particularly harmful to competition in cases where the acquirer has a dominant market position and the target is the only potential competitor that could credibly challenge the strong market position of the acquiring firm.^{10,11}

Again, the pharmaceutical industry provides good examples of such killer acquisitions where the established supplier of a patented drug acquires the developer of a potentially competing, possibly superior drug.¹² Examples can be found in digital markets too where a firm with a strong position in a market due to strong network effects acquires another firm that could have developed into its powerful competitive challenger. Facebook's acquisitions of WhatsApp and Instagram are, by some observers, viewed as killer acquisitions initiated with the intention of closing down WhatsApp's and Instagram's efforts to develop into social media platforms that could challenge Facebook's own social media service.^{13,14}

2. Vertical Merger Theories of Harm

Theories of harm linked to potential competition can also be formulated in relation to vertical mergers. In particular, a vertical merger may lead to the foreclosure of an important input for potential rivals of the downstream merging party in the competition to supply or develop a downstream product or service. This includes both cases when (i) the downstream party of the merger is already supplying a downstream product and the merger forecloses potential competitors in that market and when (ii) there is no marketed product on the downstream market and the merger forecloses potential competitors of the transaction's downstream party.¹⁵

8 See European Commission (2020), *M. 9461 Abbvie/Allergan*, https://ec.europa.eu/competition/mergers/cases/decisions/m9461_1187_3.pdf.

9 See FTC (2020), *Decision and Order C-4690, in the matter of BMS and Celgene*, https://www.ftc.gov/system/files/documents/cases/191_0061_c4690_bms_celgene_decision_and_order.pdf.

10 See Cunningham, Colleen, Florian Ederer & Song Ma (2021), *Killer Acquisitions*, JOURNAL OF POLITICAL ECONOMY, 129(3), 649–702.

11 Also motivated by examples in digital markets, Caffarra et al. (2020) develop the idea of "reverse" killer acquisition wherein the acquisition of a smaller player in an adjacent market by a large digital platform, potential competition is killed through the large digital platform abandoning its own development of a service to enter the adjacent market from where the target was selected. See Caffarra, Cristina, Gregory S. Crawford & Tommaso Valletti (2020), *How tech rolls": Potential competition and "reverse" killer acquisitions*, CPI ANTITRUST CHRONICLE, 2(2), 13-18.

12 Using data from the pharmaceuticals industry, Cunningham et al. (2021), *supra* note 10, estimate that 6-7 percent of pharmaceutical acquisitions involving overlapping drug projects, i.e. drug projects in the same therapeutic class and using the same mechanism of action, qualify as killer acquisitions, with higher occurrences where acquirer faces limited pre-existing competition due to e.g. distant patent expiration.

13 See for example, Berry, Steven, Martin Gaynor & Fiona Scott Morton (2019), *Do Increasing Markups Matter? Lessons from Empirical Industrial Organization*, JOURNAL OF ECONOMIC PERSPECTIVES, 33(3), 44–68 and the Australian ACCC's *Digital platforms inquiry* (2019), <https://www.accc.gov.au/publications/digital-platforms-inquiry-final-report>.

14 The UK CMA explores the same theory of harm in relation to Facebook's acquisition of Giphy but focusing on the elimination of a potential competitor in the display advertising market. See UK CMA (2021), *Facebook, inc (now Meta Platforms, inc)/Giphy, inc merger inquiry*, <https://www.gov.uk/cma-cases/facebook-inc-giphy-inc-merger-inquiry#final-report>.

15 Vertical theories of harm based on customer foreclosure can be formulated in a mirroring way.

The acquisition of Grail, a company involved in the development of multi-cancer early detection (“MCED”) tests, by Illumina, a supplier of next generation gene sequencing systems (“NGSs”), a transaction currently under investigation by the European Commission and also assessed by the FTC, is a good example of a potential competition related vertical merger theory of harm. According to this theory of harm, Illumina may have the ability and incentive to foreclose an important input, i.e. NGSs, for Grail’s potential rivals in the competition to develop MCED tests.¹⁶

The vertical theory of harm discussed above is one which eliminates potential competition indirectly through input foreclosure. A theory of harm of a direct elimination of a potential competitor would include a vertical merger between an upstream and a downstream firm where one of them could potentially expand into the market where the other merging party had a strong market position. The FTC formulated such a theory of harm in the proposed (and later abandoned) merger between Barnes & Noble, a book retailer, and Ingram, the largest US book wholesaler at the time, where Barnes & Noble had been considering entry into the upstream wholesale market in which Ingram had a strong market position. The FTC considered that the merger would directly eliminate a potential competitor (Barnes & Noble) to Ingram in the wholesale upstream market.¹⁷

3. Conglomerate Merger Theories of Harm

The elimination of potential competition may also appear in a conglomerate merger context where the target’s future potential expansion in the acquirer’s market is considered. For example, Instagram, having operated a free mobile photo sharing app, could have potentially in the future expanded into the market for social media services where Facebook was an important player.^{18,19}

B. Antitrust

Competitive harm linked to potential competition in antitrust arises mostly in relation to horizontal agreements.²⁰ The most prevalent anticompetitive conduct is the delaying of entry (e.g. through slowing down of relevant innovation) or elimination of potential competition through direct payments from a dominant incumbent to the potential entrant. This is a more direct way to keep a potential competitor out of the market than through the foreclosure of customers (or raising the rival’s costs).

A widely cited example of such payments delaying entry is the well-known *pay-for-delay* setup in the pharmaceuticals industry. In such cases, the holder of a pharmaceutical patent first sues a potential competitor for patent infringement, after which the suit is settled such that the potential competitor receives a financial compensation for delaying its entry to the market. One of the major cases is the *FTC v. Actavis* case in the U.S. where Actavis accepted payments from Solvay in return for agreeing to delay the marketing of its approved generic drug that would have challenged Solvay’s patented drug.²¹ Another case is Lundbeck in Europe where the Commission fined Lundbeck for making payments to delay the marketing of cheaper generic drugs that would have challenged its patented antidepressant drug citalopram.²²

A similar case is the complaint referring to Google making annual payments ranging from \$8 to \$12 billion to Apple for keeping Google as its default search engine on Safari, Apple’s browser also deployed on the iPhone.²³ Such payments may have a negative impact on Apple’s incentives to provide or develop alternative search engines and, in turn, divert income from Google.

16 See European Commission (2021), M.10188 *Illumina/Grail*, https://ec.europa.eu/commission/presscorner/detail/en/IP_21_3844 and FTC (2021), *Illumina and Grail*, https://www.ftc.gov/enforcement/cases-proceedings/case-document-search?title=illumina&field_document_description=.

17 See Oldale, Alison, Bilal Sayyed & Andrew Sweeting (2020), *A review of cases involving the loss of potential and nascent competition at the FTC, with particular reference to vertical mergers*, COMPETITION LAW AND POLICY DEBATE, 6(2), p. 60-66. This paper discusses a number of other vertical mergers involving elimination of potential and nascent competition.

18 Some of these digital market acquisitions are also discussed in a conglomerate merger context, see Motta, Massimo & Matin Peitz (2020), *Big Tech Mergers*, Barcelona GSE Working Paper No 1198.

19 Furthermore, the Facebook/Instagram case reminds us that there might be not one single approach to assess a certain transaction. Instead, horizontal and conglomerate considerations may overlap in some cases.

20 As we clarified at the beginning of Section I and in footnote 4, we are not looking, for this article, at exclusionary abuses of dominant position preventing entry of rivals, such as the ones discussed, for example, in Section IV.D. of Salop (2021), *supra* note 5.

21 See *FTC v. Actavis, Inc.*, 570 U.S. 136 (2013), <https://supreme.justia.com/cases/federal/us/570/136/>.

22 See European Commission (2015), AT.39226 – *Lundbeck*, https://ec.europa.eu/competition/antitrust/cases/dec_docs/39226/39226_8310_11.pdf.

23 See *US and Plaintiff States v. Google LLC* (2020), <https://www.justice.gov/atr/case-document/file/1329131/download>.

IV. IDENTIFICATION OF POTENTIAL COMPETITORS

The identification of potential competitors tends not to be a straightforward exercise as no history of actual competition is at hand.²⁴ Furthermore, one should take into account the inherent uncertainty regarding the activity and performance of such firms.²⁵ Different industries pose different challenges in this regard.

Potential competitors are probably easiest to identify in pharmaceutical markets where such competitors are typically companies working towards a drug targeting a certain disease, and potentially offering a special mode of action or delivery. Due to the lengthy regulatory process of testing and approving the developed drug, these drugs in the making, called sometimes “pipeline drugs,” are easily identifiable well before reaching the marketing stage and their suppliers can be identified as potential competitors.²⁶ For instance, the European Commission resorted into analyzing the pipelines of the merging parties and their closest competitors in its clearance of the recent *BMS/Celgene and Abbvie/Allergan* mergers.²⁷

It is slightly more complicated to identify potential competing drugs that come to life not as a result of a genuine innovation process but from the repurposing of an existing drug used to treat a different disease, but that is found to be effective to treat a totally different illness.²⁸

The identification of potential competitors is less straightforward in digital markets where (i) start-ups offering new technologies and services spring up almost on a daily basis, (ii) innovation processes are less regulated and (iii) uncertainty regarding future demand is high. This offers a wider scope for the identification of potential competitors than in traditional non-digital industries. For example, potential competition may come not only in the form of agile tech start-ups but possibly also in the form of large players entering from adjacent markets where they have a large user base, through a process called envelopment.²⁹ This, however, should not mean that every large digital platform with a base in any digital market should be viewed as a real potential competitor because envelopment only works under some circumstances.³⁰ In fact, while envelopment may work in some cases, it is not yet clear whether it should generally be considered as a relevant source of potential competition.³¹

The above discussion of considerations related to potential competition in pharmaceutical and digital markets suggests that potential competition warrants increased attention in industries where innovation plays an important role in the development and evolution of the market.³²

However, innovation-intense industries are not the only ones where potential competition is a relevant issue. By looking at U.S. mergers investigated by the FTC between 1995 and 2020 where the FTC challenged the transaction on the grounds of likely reduction of future competition, Oldale et al. (2020) identified potential competition issues in a few mergers in traditional industries such as energy, book sales and consumer shaving products.³³ Furthermore, the OECD (2021) note on potential competition also draws attention to bidding markets, where some companies who have not previously participated in tenders might be expected to do so in the near future.³⁴

Finally, potential competition could be identified as being at risk, regardless of the industry, in acquisitions where a dominant acquirer is

24 This makes the identification of the counterfactual market evolution particularly hard.

25 In particular, innovation activities by such firms are, by definition, uncertain and the outcomes are unpredictable.

26 The comprehensive and transparent register of clinical trials in the US (www.clinicaltrials.gov) and in Europe (www.clinicaltrialsregister.eu) provide great help in this regard.

27 For *Abbvie/Allergan* see footnote 9. For *BMS/Celgene* see European Commission (2019), *M.9294 BMS/Celgene*, https://ec.europa.eu/competition/mergers/cases/decisions/m9294_657_3.pdf.

28 Such medicines are called repurposed drugs and they may face a faster regulatory approval track. Note that even such drugs would be registered on the relevant clinical trial websites, but perhaps with a shorter duration.

29 Explain. See Eisenmann, Thomas, Geoffrey Parker & Marshall Van Alstyne (2011), *Platform Envelopment*, STRATEGIC MANAGEMENT JOURNAL, 32(12): 1270–85.

30 The economic research on envelopment is far from being complete, but we do not see all the big platforms entering freely any chosen market. For example, Google's entry into the social media market by launching Google+ proved to be unsuccessful.

31 It may, however, be considered in certain cases.

32 This remains true even if we acknowledge the fairly different innovation landscape in the two industries.

33 Still, in their sample of 85 identified cases, 48 cases are from the pharmaceutical industry, 15 from the medical devices, equipment and tests industry and 3 from the technology and software industry. See Table 1 in Oldale et al. (2020), *supra* note 17.

34 See OECD (2021), *supra* note 2.

thought to “overpay” for the target, i.e. pay for it more than what the standard valuation tools would indicate for the value of the target company.³⁵ This is in line with the filtering criteria suggested by Latham *et al.* (2020) that include (i) the purchaser being in a position of significant market power, (ii) the identification of a plausible economic mechanism through which the target could evolve into a threat to the acquirer and (iii) the transaction value containing a significant valuation premium.³⁶ By taking into account that a smaller company is more likely to experience a high growth than a bigger company, Kühn (2021) further complements this last criterion with the observation that a high deal-value-to-target-revenue ratio is more likely to signal the elimination of a potential competitor when the target’s actual revenue is high too, suggesting that the focus of merger control should shift towards the acquisition of larger companies instead of start-ups with small revenues and just a few employees.³⁷

V. ASSESSMENT OF COMPETITIVE PRESSURE

As the weakening and elimination of potential competition is most harmful in cases of an incumbent with a strong market position, one needs to pay special attention to the assessment of barriers to entry and expansion, as well as of the likelihood and timeliness of potential competitors to develop into a relevant competitive force in the market.³⁸ All of these elements need to be assessed in relation to plausible counterfactual scenarios.

The assessment of barriers to entry involves the standard assessment of supply- and demand-side economies of scale, the role of R&D, reputation, and regulation. One needs, however, to also take into account that there might be a variation in the barriers to entry faced by individual potential competitors. This is important especially for mergers, where the acquisition targets one specific potential competitor. If the entry barriers for the target company would be low in a counterfactual with no merger, the elimination of a potential competitor through a merger becomes a real competition concern.

For example, while regulatory requirements would be the same for any player wishing to enter the market, some of them might be at a more advanced stage in complying with the existing regulation. For instance, a pharmaceutical company working on a drug to cure a certain disease may be at a more advanced stage of clinical trials than other pharmaceutical companies working towards the same goal.³⁹

Demand-side economies of scope could also be important in some cases, especially when envelopment may be a possible way to enter the incumbent’s market. In such cases, firms outside the market may face different barriers to entry, linked to demand-side economies of scale, in a counterfactual with no merger or infringement.

As a next step, the likelihood and time frame of the potential competitor to develop into an effective competitive force in a scenario of no merger or no infringement of competition law needs to be assessed. In pharma markets, this could be used by assessing the progress in the regulatory approval process of the identified potential competitor. In other markets, a review of the innovation process and its future prospects may be helpful.

A special characteristic of the theories of harm linked to the weakening or elimination of a potential competitor is that relevant quantitative evidence is scarce. This is less of a problem in the pharma industry where it is possible to accurately document how the drug development process of a potential entrant progresses due to the detailed regulatory approval process. No such standardized source of evidence is available for digital markets or, more broadly, in other less regulated industries.

Under these conditions, the weight assigned to internal documents of the incumbent with a strong market position increases. In merger control, if that is the case, a careful investigation is required for why the acquirer is willing to pay a premium above the market valuation of the target.

35 This is a reason for why some competition enforcers, such as the German Bundeskartellamt, have both revenue and transaction value-based merger notification thresholds to trigger investigation of low revenue high value investigations.

36 See Latham, Oliver, Isabel Tecu & Nikita Bagaria (2020), *Beyond killer acquisitions: Are there more common potential competition issues in tech deals and how can these be assessed?*, CPI ANTITRUST CHRONICLE, 2(2), 26-37

37 See Kühn, Kai-Uwe (2021), *Screening for potential “killer acquisitions” across industries*, University of East Anglia, Centre for Competition Policy, Perspectives on Competition and Regulation Working Paper 21-03.

38 Remember, price and structural analysis cannot be used in such cases.

39 This example also shows differences in the progress with R&D for various companies.

Another focal question is why the competition has not yet entered the market in cases where the product or service has already successfully entered other comparable (geographic) markets.

Finally, one could consider running a customer survey to learn the view of the market about the entry probability of the potential competitor under investigation.



ECONOMIC ISSUES IN ASSESSING POTENTIAL AND NASCENT COMPETITION

BY ANDREW ELZINGA, NIKHIL GUPTA, MARGARET KYLE & VIVEK MANI¹



¹ Andrew Elzinga is a senior manager in Cornerstone Research's Boston office. Nikhil Gupta is a manager in Cornerstone Research's Boston office. Margaret Kyle is the Chair in Intellectual Property and Markets for Technology at MINES ParisTech. Vivek Mani is a principal in Cornerstone Research's Boston office. The authors are grateful to Kostis Hatzitaskos, Jeff Kong, Bob Majure, Zoya Marriott, and Sally Woodhouse for assistance, comments, and suggestions. The views expressed in this article are solely those of the authors, who are responsible for the content, and do not necessarily represent the views of Cornerstone Research or any other entity.

I. INTRODUCTION

Potential and nascent competition have seen renewed interest from academics and antitrust practitioners in recent years.² For example, the Federal Trade Commission (“FTC”) focused on issues of potential competition during its Hearings on Competition and Consumer Protection in the 21st Century in 2018, as did the OECD during its 2020 Competition Meetings.³ The Antitrust Division of the U.S. Department of Justice (“DOJ”) and FTC’s recent request for information on merger enforcement included questions related to potential and nascent competition.⁴

Potential competition refers to a product or firm that could compete with existing products within a specific antitrust market in the future, but has not yet entered the market, and does not currently compete with existing products.⁵ While similar, potential competition is distinct from the related concept of nascent competition, which encompasses scenarios wherein an incumbent firm could be competitively constrained in the future by an existing market participant’s product or innovation.⁶ The difference between potential and nascent competition is that potential competition involves forecasting entry, including non-innovative entry such as entry of generic drugs, whereas nascent competition describes a firm that has already entered the market but is not yet a competitive constraint on existing products.

Importantly, both potential competition and nascent competition describe competition that does not currently exist. As we discuss in this paper, the economic issues that arise with concerns about potential and nascent competition are similar.

The DOJ and the FTC’s concerns about potential or nascent competition arise because firms’ strategies (e.g. pricing or investment decisions) are informed by their expectations about competition in the future.⁷ During the last 25 years, the FTC consistently challenged transactions and agreements over concerns related to the elimination of future competition.⁸ Of 82 such challenges over the last 25 years, pharmaceuticals and medical devices account for over 75 percent of cases.⁹

One catalyst for the ongoing debate was a paper entitled “Killer Acquisitions” by Cunningham et al.¹⁰ Focusing on the life sciences sector, the authors found that 5-7 percent of the acquisitions undertaken in the industry may have resulted in the termination of a target firm’s drug development project because of the acquiring firm’s interest in reducing competition for its own products. This finding sparked considerable interest in the antitrust community.¹¹ This debate has also been central in the tech sector, with commentators describing tech markets as having “kill-zones” where dominant tech incumbent firms are able to suppress competition through acquisitions of nascent competitors.¹²

Concerns about the elimination of potential or nascent competition have also been raised in other sectors, such as financial markets. In these cases, plaintiffs have alleged that financial institutions conspired to limit competition from emerging electronic trading platforms that, in

2 For example, Argentesi et al. (2019) and Lécuyer (2020) discuss merger control issues in the digital sector, where potential competitors are often acquired. See also, OECD, “Concept of Potential Competition,” *OECD Competition Committee Discussion Paper*, 2021; Argentesi, Elena, et al., “Merger Policy in Digital Markets: An *Ex-Post* Assessment,” *CESifo Working Paper*, 2019, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3507256; Lécuyer, Tristan, “Digital Conglomerates and Killer Acquisitions – A Discussion of the Competitive Effects of Start-up Acquisitions by Digital Platforms,” *Concurrences*, Vol. 1, 2020, pp. 42–50.

3 “FTC Hearing #3: Multi-Sided Platforms, Labor Markets, and Potential Competition,” *Federal Trade Commission’s Hearings on Competition and Consumer Protection in the 21st Century*, October 15-17, 2018; “The Concept of Potential Competition,” *Organisation for Economic Co-operation and Development*, June 10, 2021.

4 “Request for Information on Merger Enforcement,” *U.S. Department of Justice and U.S. Federal Trade Commission*, January 18, 2022.

5 Yun, John, “Potential Competition, Nascent Competitors, and Killer Acquisitions,” *The Global Antitrust Institute Report on the Digital Economy*, 2020, pp. 652–678 at p. 655.

6 Hemphill, Scott C & Tim Wu, “Nascent Competitors,” *University of Pennsylvania Law Review*, Vol. 168, No. 1879, 2020, pp. 1879–1910 at pp. 1886–9.

7 Note that in the litigation context, the alleged conduct that suppressed a potential or nascent competitor could have occurred in the past. In such instances the “future” is defined with respect to the timing of the alleged conduct.

8 Oldale, Alison, Bilal Sayyed, and Andrew Sweeting, “A Review of Cases Involving the Loss of Potential and Nascent Competition at the FTC, with Particular Reference to Vertical Mergers,” *Working Paper*.

9 Oldale, Alison, Bilal Sayyed & Andrew Sweeting, “A Review of Cases Involving the Loss of Potential and Nascent Competition at the FTC, with Particular Reference to Vertical Mergers,” *Working Paper*, p. 5.

10 Cunningham, Colleen, Florian Ederer, and Song Ma, “Killer Acquisitions,” *Journal of Political Economy*, Vol. 129, No. 3, 2021, pp. 649–702.

11 MergerFest 2019: Nascent (or Killer?) Acquisitions, *Cornerstone Research*, June 27, 2019; “Merger Control & ‘Killer Acquisitions,’” *EU Pharmaceutical Law Forum*, November 17, 2020

12 “American Tech Giants Are Making Life Tough for Startups,” *The Economist*, June 2, 2018.

the future, would have imposed competitive constraints on over-the-counter (“OTC”) trading regimes operated by defendant financial institutions by increasing pricing transparency and reducing search costs.¹³

Given the increased scrutiny on potential or nascent competition in antitrust matters, it is critical to understand the economic rationale that underpins the but-for world when evaluating such competition. Because it involves evaluating future competition, this evaluation is inherently uncertain and must assess several potential scenarios in the but-for world, including:

- a. What is the likelihood that the potential or nascent competitor survives and prospers, but for the alleged anti-competitive conduct by the incumbent? This is especially pertinent in markets or technologies with high failure rates, and where incumbent firms play a significant role in financing small firms through licensing and acquisitions.

- b. Would the nascent or potential competitor operate in the same relevant antitrust market (product or geographic) as the incumbent in the future? Such an evaluation becomes more complex if the nascent competitor is not in the same antitrust market as the acquirer at the time of the acquisition, or if the relevant antitrust market does not currently exist.

- c. What is the likelihood of entry and the but-for development timeline of the potential competitor and when (if ever) would it impose competitive constraints on incumbents?

In this article, we highlight some of the challenges relevant to the issues described above, describe some illustrative examples, and discuss how these challenges may vary across different industries.

II. WHAT IS THE CORRECT BUT-FOR WORLD?

Any anti-competitive effect of an incumbent’s conduct must be measured relative to an appropriately defined but-for world. However, the but-for world in these matters requires assumptions about how competition would evolve absent the alleged conduct. Notably, the but-for world requires assumptions related to the competitive strategy pursued by the potential or nascent competitor, the future product and geographic market the potential or nascent product competes in, and the potential competitor’s likelihood of entry and/or the potential or nascent competitor’s development timeline; all in the absence of the alleged anticompetitive conduct.

A. Evolution of the Competitive Landscape

The characterization of the but-for world in matters involving potential or nascent competitors is based on competition that may exist in the future. As a result, it is necessary to model the evolution of the potential or nascent competitor’s growth absent the alleged anti-competitive conduct. For example, in a case involving the acquisition of a nascent competitor, one would need to consider the competitive strategy pursued by the nascent competitor in the absence of the acquisition (i.e. the alleged anti-competitive conduct). The nascent competitor could pursue a number of strategies including:

- a. develop and grow independently so that its product imposes competitive constraints on the incumbent,

- b. develop and grow independently but specialize its product so that it does not impose meaningful competitive constraints on the incumbent,

- c. be acquired by a different firm in the same antitrust market as the incumbent,

- d. be acquired by a firm that does not compete in the same antitrust market,

- e. be driven out of the market due to the incumbent firm’s innovation.

¹³ See for example Class Action Complaint, *Litovich v. Bank of America Corp. et al.*, case number 1:20-cv-03154, in the U.S. District Court for the Southern District of New York.

The likelihood that the product of the nascent competitor will evolve to become a competitive constraint on the incumbent firm can depend on whether the nascent competitor is acquired; who acquires the nascent competitor; how the competitive landscape evolves. For example, consider a hypothetical nascent competitor in a market that contains several large incumbents, one of which has a product similar to that of the nascent competitor. If the nascent competitor is acquired by the incumbent with a similar product, that incumbent may shelve the nascent competitor's project or may integrate the acquired technology to the enhance the incumbent's existing product. In contrast, if the nascent competitor is acquired by a rival to this incumbent, it may be more likely that the rival develops the nascent competitor into a competitive constraint to the market.

Consider the *Facebook/Instagram* merger, which some commentators have cited as an example of a nascent acquisition where the regulators did not assess the competitive effects appropriately.¹⁴ In fact, the FTC brought a suit against Facebook challenging its past acquisitions of Instagram (and WhatsApp) alleging that these acquisitions were part of a campaign to snap up potential rivals to head off competitive threats.¹⁵ The Court initially dismissed the suit for lack of evidence, leading the FTC to refile its suit.¹⁶ In January of this year, U.S. District Judge James Boasberg allowed this suit to proceed, noting that the "agency may well face a tall task down the road in proving its allegations."¹⁷ Any assessment of pro-competitive or anti-competitive effects will depend on how one characterizes the but-for development of Instagram absent its acquisition. For example, but-for the transaction, would Instagram have evolved to be moderately successful versus evolving to be the service it is today?¹⁸

B. Market Definition

Characterizing a but-for world that incorporates future competition invariably requires an assessment of the product and geographic market definition to establish whether potential or nascent products will exert competitive pressure on the incumbent in the future. Establishing a future market definition for a potential or nascent product is inherently speculative, as such products may be expected to have differentiated characteristics from the incumbent's product in the future. This may imply that they compete in separate antitrust markets, or that the degree of overlap between the two products is limited. Such considerations have important implications for economic analyses.

As an example, consider recent antitrust actions in financial markets mentioned above. In these matters, it is not clear how comparable the product offered by these nascent exchanges or platforms would be to the OTC product offered by Defendants. For example, Plaintiffs allege that these exchanges would evolve to incorporate anonymous, all-to-all, trading with some form of pricing transparency.¹⁹ Trading in such an environment can be different than bilateral, OTC trading where counterparties are known and can develop relationships with one another, and the terms of trades may only be known by the transacting parties. The relevant economic analysis would need to include an evaluation of the extent to which market participants viewed the exchange product and the OTC product as sufficiently close substitutes to belong in the same relevant antitrust market or to impose meaningful competitive constraints on each other.

C. Likelihood and Timeline of Competitive Effects

An evaluation of whether potential or nascent products could become *future* competitive threats requires understanding how they would develop. In theory, this could involve considerations of how these products could evolve over lengthy time periods. However, actual evaluations of the

14 Yun, John, "Potential Competition, Nascent Competitors, and Killer Acquisitions," *The Global Antitrust Institute Report on the Digital Economy*, 2020, pp. 652–678 at p. 659.

15 Kendall, Brent, John D. McKinnon & Deepa Seetharaman, "FTC Antitrust Probe of Facebook Scrutinizes Its Acquisitions," *The Wall Street Journal*, August 1, 2019.

16 Memorandum Opinion, *Federal Trade Commission v. Facebook, Inc.*, United States District Court for the District of Columbia, Civil Action No. 20-3590 (JEB), June 28, 2021; Allyn, Bobby, "Judge Allows Federal Trade Commission's Latest Suit Against Facebook to Move Forward," *NPR*, January 11, 2022.

17 Memorandum Opinion, *Federal Trade Commission v. Facebook, Inc.*, United States District Court for the District of Columbia, Civil Action No. 20-3590 (JEB), January 11, 2022.

18 Commentators have argued that Instagram has been able to grow rapidly since the acquisition, from 30 million users before the acquisition to 1 billion users after the acquisition. Other commentators have argued that Instagram's success post-acquisition cannot be separated from Facebook's substantial investments into Instagram and Facebook providing tighter integration to Instagram. Yun, John, "Potential Competition, Nascent Competitors, and Killer Acquisitions," *The Global Antitrust Institute Report on the Digital Economy*, 2020, pp. 652–678 at p. 659; Zhuoxin Li, Ashish Agarwal (2016) Platform Integration and Demand Spillovers in Complementary Markets: Evidence from Facebook's Integration of Instagram. *Management Science* 63(10):3438-3458

19 Class Action Complaint, *Litovich v. Bank of America Corp. et al.*, case number 1:20-cv-03154, in the U.S. District Court for the Southern District of New York.

competitive impact of a potential or nascent competitor tend to be more focused on short-run development.²⁰ This narrowed focus may make it easier to draw reasoned inferences about the more immediate future.

Nonetheless, even in the short-run, there can remain uncertainty surrounding the fact and timing of entry of a potential or nascent competitor's products and whether or when they would become a future competitive constraint. Additionally, the point along the development timeline when a product is anticipated to impose a competitive constraint on incumbents may also be uncertain and can vary across industries. For example, in some industries a potential competitor may not impact the dynamics of a particular market until after the product is brought to market (e.g. life sciences). On the other hand, other industries may experience anticipatory competitive responses from incumbent firms even prior to the entry of a product in development (e.g. airlines).²¹

Consider the life sciences industry, where matters involving allegedly delayed generic entry involve modeling the uncertainty in timing of entry. Regardless of the source of the alleged delay, uncertainty exists with respect to when the generic manufacturer would have entered the market absent the conduct. For example, some cases of delayed generic entry require modeling the generic manufacturers' timeline for bioequivalence testing and manufacturing capabilities, among others. The duration of these various manufacturing and development processes has a direct impact on the but-for timing of generic entry.

In addition to uncertainty over the timing of entry, life sciences cases involving allegations of killer acquisitions can also involve uncertainty with respect to the fact of entry. Some of this uncertainty with respect to the fact of entry comes from the highly regulated development requirements in the pharmaceutical industry. New drugs in the U.S. must go through numerous phases of clinical testing to demonstrate that the drug is safe and effective before it can be approved for marketing.²² Only 12 percent of new drug candidates entering clinical trials ever receive marketing approval, and this process typically years in development.²³

Similar issues also arise in other industries. Consider the antitrust actions against financial institutions referenced above. In such cases, a relevant economic question is when (and if) nascent exchanges or platforms would gain sufficient volume that they would discipline prices across a relevant market. Such questions turn not just on whether the platform or exchange product is sufficiently substitutable with the OTC trading product (as discussed above), but also on the timeline at which the platform or exchange would attract new customers and whether there is a threshold volume at which they would exert market-wide price discipline.

Similar issues arise in merger contexts, where regulators have evaluated whether pipeline products can impose a competitive constraint in the future, absent the alleged conduct. For example, in Bayer-Monsanto, the settlement required "the divestiture of certain intellectual property and research capabilities, including 'pipeline' R&D projects."²⁴

III. UNCERTAINTIES RESOLVE DIFFERENTLY ACROSS CASES

The degree of complexity in evaluating potential or nascent competition can vary across industries. For example, many of the challenges discussed above about the unknown evolution of products may not be as relevant to delayed generic entry matters because of the regulatory and institutional framework of the life sciences sector. A main source of uncertainty from a future competition perspective in delayed generic entry cases is the timing of entry. In some sense, these are the least complex cases when it comes to assessing future competition.

Some of the tech matters and the killer acquisitions in life sciences matters discussed above can be more complex. Analyzing competitive effects in these settings requires an evaluation of the counterfactual evolution of a product, market definition, and timing, all of which inform future competition. This is similarly true of the examples of antitrust cases brought against financial institutions discussed above.

20 In fact, both the European Commission and the United Kingdom competition authorities note that a timeline of up to two years is normally considered when analyzing whether entry would be sufficiently swift to deter or eliminate the exercise of market power. "Guidelines on the Assessment of Horizontal Mergers Under the Council Regulation on the Control of Concentrations Between Undertakings," *Official Journal of the European Union*, ¶ 74; "Merger Assessment Guidelines," *Competition Commission and the Office of Fair Trading*, ¶ 5.8.11.

21 How Do Incumbents Respond to the Threat of Entry? Evidence from the Major Airlines," *The Quarterly Journal of Economics*, Vol. 123, No. 4, November 2008, pp. 1611–1633.

22 "Step 3: Clinical Research," *U.S. Food and Drug Administration*, January 4, 2018.

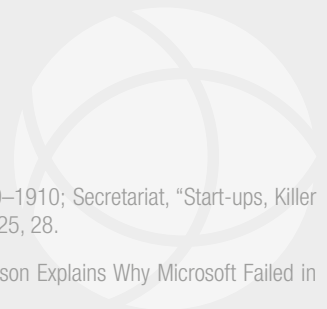
23 DiMasi, Joseph A., Henry G. Grabowski & Ronald W. Hansen, "Innovation in the Pharmaceutical Industry: New Estimates of R&D Costs," *Journal of Health Economics*, Vol. 47, 2016, pp. 20–33 at p. 23.

24 "Justice Department Secures Largest Negotiated Merger Divestiture Ever to Preserve Competition Threatened by Bayer's Acquisition of Monsanto," U.S. Department of Justice, May 29, 2018.

Regardless of the level of complexity, predicting the future is uncertain by its very nature. Several commentators advocate reliance on internal communications from the incumbent firm to inform choices about the firm's decisions about the future.²⁵ While such evidence is valuable, and demands serious consideration, such internal communications should be viewed in conjunction with other evidence in the matter, and not crowd the other evidence out. It is important to bear in mind that internal communications provide merely a firm's best estimates about the future (at times from one individual). Even setting aside the possibility of internal disagreement, firms — like antitrust agencies — do not always correctly predict the evolution of technologies or markets. Incumbents' forecasts about their own success can also turn out to be wrong: there are many examples in the business world of firms' (substantial) investments resulting in less successful products than they hoped. For example, Google's foray into social media with Google+ and Microsoft's efforts in smartphones did not in fact end up being successful.²⁶ As such, their forecasts about other firms, for which they have less information, may also be uncertain and inaccurate.

25 Hemphill, Scott C., & Tim Wu, "Nascent Competitors," *University of Pennsylvania Law Review*, Vol. 168, No. 1879, 2020, pp. 1879–1910; Secretariat, "Start-ups, Killer Acquisitions and Merger Control – Background Note," *Organisation for Economic Co-operation and Development*, May 12, 2020, pp. 24–25, 28.

26 Denning, Steve, "Five Reasons Why Google+ Died," *Forbes*, April 17, 2015; Haselton, Todd, "Departing Windows Chief Terry Myerson Explains Why Microsoft Failed in Smartphones," *CNBC*, March 29, 2018.



UNCERTAINTY AND TWO THEORIES OF HARM IN NASCENT COMPETITOR ACQUISITIONS



BY JAY EZRIELEV¹



¹ Jay Ezrielev is the Managing Principal at Elevecon and former economic advisor to FTC Chairman Joseph Simons. I am grateful to Yair Eilat, Nandu Machiraju, and Bilal Sayyed for their comments.

I. INTRODUCTION

Antitrust policy regarding nascent competitor acquisitions is one of the most contentious issues in antitrust. A nascent competitor is a firm that is not yet a significant competitor in the relevant market but may become one over time.² Lawmakers, antitrust scholars, practitioners, and enforcement agencies around the world are engaged in a heated debate about the correct analytical approach for these transactions. This debate misses a key point about nascent competitor acquisitions. Although authors and commentators often speak about nascent competitor acquisitions as if they are a single generic type of transaction, in reality, there is a wide variety of cases.³ Differences among cases require distinct antitrust prescriptions and analytical approaches.

A key point of differentiation is the likelihood of significant future competition between the merging parties.⁴ Closely related to the likelihood of future competition is the temporal proximity of competition. A case where significant competition between the merging parties is imminent and almost certain to occur is very different from a case where there is a low probability of significant future competition between the merging parties and that competition would not occur until the distant future.⁵

Another source of differentiation is the theory of harm. The U.S. antitrust enforcement agencies have pursued two distinct theories of harm in nascent competitor acquisition cases. The first theory is the loss of future competition. The second theory is the loss of innovation. An acquisition may lead to diminished incentives to pursue innovation if, for example, the target's innovation poses a competitive threat to the acquirer's existing business. The two theories of harm require different analytical frameworks and may lead to different conclusions about effects. Whether one theory is more applicable than the other depends on the nature of the case.

The loss of future competition theory is most applicable in cases where there is a high probability of significant future competition between the merging parties and that competition is relatively imminent. This theory is also more applicable in cases where market evolution is relatively predictable. The innovation effects theory is more suitable for cases where the expected competition between the merging parties is relatively distant in time, market evolution is unpredictable, and innovation is an important part of the competitive process.

Substantiating competitive effects under the loss of future competition theory may be particularly difficult when the expected competition between merging parties is distant in time. These difficulties arise from the inherent uncertainty about future competition. When the level of uncertainty is sufficiently high, analyzing cases under the loss of future competition theory may be impractical.

The innovation effects analysis need not rely on predictions about future competition. Instead, the analysis may focus on how a nascent competitor acquisition affects the abilities and incentives of the merging firms to engage in innovation at the time of the acquisition. Thus, the innovation effects approach may be more practical when there is significant uncertainty about future competition.⁶ The assessment of innovation effects should rely on rigorous economic analysis. Below, I discuss the application of economic tools in analyzing innovation effects.

II. TWO THEORIES OF HARM

The competitive effects under the loss of future competition theory may take several forms. Absent the merger, the nascent target may (by itself or in combination with another firm) develop into a significant competitor to the acquirer. In addition, each of the merging parties may be developing

2 Nascent competitors are a subcategory of potential competitors, which also include firms that are poised to enter the relevant market if market conditions warrant entry. Such potential competitors may have a current constraining effect on pricing. See U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES § 5.1 (2010), <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010> [hereafter Horizontal Merger Guidelines].

3 See, for example, C. Scott Hemphill & Tim Wu *Nascent Competitors*, 168 U. PA. L. REV. 1879 (2020), https://scholarship.law.upenn.edu/penn_law_review/vol168/iss7/1; *Competition in Digital Technology Markets: Examining Acquisitions of Nascent or Potential Competitors by Digital Platforms*: Hearing Before the Comm. on the Judiciary Subcomm. on Antitrust, Competition Policy, & Consumer Rights (Sept. 24, 2019) (Written Testimony of Bruce Hoffman), <https://www.judiciary.senate.gov/imo/media/doc/Hoffman%20Testimony2.pdf>; and Carl Shapiro, *Protecting Competition in the American Economy: Merger Control, Tech Titans, Labor Markets*, 33 J. Econ. Perspct. 69 (2019), <https://www.aeaweb.org/articles/pdf/doi/10.1257/jep.33.3.69>.

4 Most of the discussion in this Article is in the context of horizontal effects of nascent competitor acquisitions. The arguments apply analogously to vertical effects of nascent competitor acquisitions.

5 In this Article I do not distinguish between mergers and acquisitions and use these terms interchangeably.

6 David Pérez de Lamo likewise argues that antitrust enforcers should adopt the "innovation competition approach" in analyzing alleged "killer acquisitions" in the digital sector. (David Pérez de Lamo, *Assessing "Killer Acquisitions": An Assets and Capabilities-Based View of the Start-Up*, CPI ANTITRUST CHRON. (May 2020).)

products or services that would compete against each other in a future relevant market.⁷ The nascent target may also be developing a product that would enable other firms to compete against the acquirer in the future. The acquisition may prevent other firms from gaining access to this product.⁸ Alternatively, the acquisition may foreclose access to the acquirer's product that other firms would need to compete against the nascent target's product in development.⁹

The competitive effects under the loss of future competition theory are substantially similar to the standard effects of eliminating current competition. The two differences are that there is more uncertainty about future competition than about current competition and that the loss of future competition effects are delayed.

Mergers may weaken innovation incentives if successful innovation by one of the merging firms threatens to take business away from the other merging firm. Thus, a nascent competitor acquisition may lead to a loss of innovation if the acquirer reduces or delays the investment in the nascent target's innovation to avoid cannibalizing the acquirer's existing business. The merged firm may also withhold products or services that other firms use for innovation if their innovations threaten the merged firm.¹⁰ However, nascent competitor acquisitions may also spur innovation through synergies that enhance innovation capabilities and other effects.¹¹

"Killer acquisitions" are an example of cases with potentially harmful innovation effects. In these cases, the acquirer terminates the target's innovation because that innovation threatens the acquirer's existing business. A recent study found that many acquisitions in the pharmaceutical industry are killer acquisitions.¹²

III. COMPETITIVE EFFECTS UNCERTAINTY

Uncertainty about future competition has different implications for the two theories of harm.

Under the loss of future competition theory, the competitive effect is a function of the likelihood of significant future competition between the merging firms, the timing of that competition, and the effect of eliminating that competition. The likelihood, timing, and effect depend on numerous other factors, including the scope of the relevant market, market structure, merger efficiencies, supply and demand conditions, margins, diversion ratios, cross-market substitution, the regulatory environment, technology, capacity constraints, supply contracts, licensing agreements, and ownership of assets such as production capacity, trademarks, and patents. What complicates the analysis of competitive effects under the loss of future competition theory is that these factors evolve over time. Moreover, the evolution of these factors depends on whether the merger has occurred and whether the nascent firm has developed into a significant competitor in the market.

The assessment of competitive effects under the loss of future competition theory requires the analyst to predict how markets would evolve over time, with and without the merger. In some industries, such as pharmaceuticals and electric utilities, market evolution may be relatively predictable, at least over the near term. But other industries may be less predictable. In such industries, accurately predicting the market's progression over a multi-year period may be impossible. More generally, given the overall unpredictability of markets, when future competition between the merging parties is relatively distant in time, the loss of future competition theory may be an impractical approach for analyzing nascent competitor acquisitions.¹³

7 This is the mechanism of harm that the FTC alleged in the *Nielsen/Arbitron* matter. See FTC PUTS CONDITIONS ON NIELSEN'S PROPOSED \$1.26 BILLION ACQUISITION OF ARBITRON (Sep. 20, 2013), <https://www.ftc.gov/news-events/press-releases/2013/09/ftc-puts-conditions-nielsens-proposed-126-billion-acquisition>.

8 This is a vertical loss of future competition effect.

9 The FTC's recent challenge of the proposed *Illumina/Graill* transaction alleged this type of vertical loss of future competition effect. See FTC CHALLENGES ILLUMINA'S PROPOSED ACQUISITION OF CANCER DETECTION TEST MAKER GRAIL (March 30, 2021), <https://www.ftc.gov/news-events/press-releases/2021/03/ftc-challenges-illumina-s-proposed-acquisition-cancer-detection> (hereafter "FTC *Illumina/Graill* Press Release").

10 This is a vertical innovation effect. The FTC's recent complaints in the *Nvidia/Arm* and *Illumina/Graill* matters alleged harm under the vertical innovation effect theory. See FTC SUES TO BLOCK \$40 BILLION SEMICONDUCTOR CHIP MERGER (Dec. 2, 2021), <https://www.ftc.gov/news-events/press-releases/2021/12/ftc-sues-block-40-billion-semiconductor-chip-merger> and FTC *Illumina/Graill* Press Release, *supra* note 9. In this Article, I focus on horizontal innovation effects.

11 Carl Shapiro, "Competition and Innovation: Did Arrow Hit the Bull's Eye?" in *The Rate and Direction of Inventive Activity Revisited*, eds. Josh Lerner and Scott Stern (Chicago: University of Chicago Press, 2012), 361-404, and Jay Ezrielev, *An Economic Framework for Assessment of Innovation Effects of Nascent Competitor Acquisitions* (March 22, 2021), <https://ssrn.com/abstract=3810486>.

12 Colleen Cunningham, Florian Ederer, & Song Ma, *Killer Acquisitions*, 129 J. Political Econ. 649 (2021).

13 See discussion in John M. Yun, *Potential Competition, Nascent Competitors, and Killer Acquisitions*. The Global Antitrust Institute Report on the Digital Economy 652 (2020), <https://gaidigitalreport.com/2020/08/25/killer-acquisitions-and-nascent-competition/>.

The assessment of innovation effects need not rely on predictions about future competition. Instead, factfinders may consider how the merger would affect the merging firms' incentives and abilities to engage in innovation, based on currently available information. What ultimately matters for innovation effects is whether the acquirer intends to reduce the investment in innovation because of any loss of dynamic competition. Factfinders may obtain evidence on plans for further investment in innovation through documents and testimony, although this type of evidence has some limitations. It is important to corroborate this evidence with the economic analysis of innovation effects, which I discuss below.

IV. ECONOMIC ANALYSIS: LOSS OF FUTURE COMPETITION EFFECTS

To gauge the competitive effects under the loss of future competition theory, analysts may apply standard static (one period) competition models, such as the differentiated Bertrand and Cournot models.¹⁴ In these models, the relevant competitive interactions occur within a single period. The main challenge for the economic analysis of loss of future competition effects is how to analyze effects when future competition is uncertain.

The uncertainty about future competition may be represented by multiple future states of the world. Assume that there is some future state of the world where the merging parties compete against each other without the merger. In that future state of the world, the competitive effect under the loss of future competition theory is the static (single period) unilateral effect of eliminating competition between the merging parties, potentially leading to higher prices or lower quality.¹⁵ The effect may include upward pricing pressure that arises from the elimination of mutual pricing constraint between the merging parties.¹⁶ However, the merger may also lower prices or increase quality in that future state because of marginal cost efficiencies.

In some other future state of the world, there is no competition between the merging parties with or without the merger. In that future state, there is no competitive harm under the (horizontal) loss of future competition theory. In yet another future state of the world, there is competition between the merging parties without the merger, but there is also entry by other firms. In this future state of the world, entry by other firms mitigates the competitive harm. The competitive effects in future states depend on a myriad of other factors (with and without the merger), including the diversion ratios, market structure, margins, demand conditions, supply functions, and merger efficiencies. The competitive effect in any given future state of the world corresponds to the specific set of factors that describe competition in that state. There are countless future states of the world, each producing a different competitive effect. To assess the overall competitive effect under the loss of future competition theory, the analyst must assign weights to each future state of the world.¹⁷

In some cases, courts and enforcement agencies may use documents and testimony to predict future competition. This may be a feasible strategy when the expected entry or expansion by the nascent competitor is relatively soon and where the focus of the effects analysis is the near term. Factual evidence may provide some indication of the nascent competitor's plans for entering the market. In some industries, it may be possible to predict with reasonable accuracy significant changes in markets over the near term. Consider, for example, an acquisition of a drug in late stages of development. In this case, analysts may be able to predict what competition in the market will look like in the next few years by examining the market participants' drug development plans. Analysts may also apply econometric analysis to estimate the likelihood that a drug will eventually be approved, based on the drug's current stage of development.¹⁸ However, in cases where the expected entry by the nascent competitor is relatively distant in time and in markets that are relatively unpredictable, determining what the future state of competition will look like at the time of entry by the nascent competitor may be exceedingly difficult.

V. ECONOMIC ANALYSIS: INNOVATION EFFECTS

The economic analysis of innovation effects requires a dynamic (multi-period) model of competition because innovation competition spans mul-

¹⁴ In cases where the loss of future competition effects involve vertical foreclosure, analysts may apply vertical competition models to analyze the effects. See, for example, Michael A. Salinger, *Vertical Mergers and Market Foreclosure*, 103 Q. J. Econ. 345 (1988).

¹⁵ These effects correspond to the discussion in the Horizontal Merger Guidelines §§ 6.1-6.3.

¹⁶ Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, 77 ANTITRUST L.J. 49 (2010).

¹⁷ The assignment of the weights may be implicit. For example, if the analyst focuses on a specific future scenario, the analyst is implicitly assigning a weight of zero to all other future scenarios. A number of commentators argue that nascent competitor acquisitions should be assessed based on the expected value of the acquisition's competitive effect. See Hemphill & Wu, *supra* note 3 and A. Douglas Melamed, *Mergers Involving Nascent Competition* (January 14, 2022), <https://ssrn.com/abstract=4009229>. Under this approach, the weights assigned to future states of the world would be the states' probabilities.

¹⁸ In some cases, analysts may be able to predict the likely structure of future competition in a market based on which firms own critical assets such as patents or mining rights.

multiple periods. Firms invest today to create new or improved products and services in the future. Successful innovations benefit consumers but they also take business away from competing firms. Innovation investment may require many years to develop into a viable product or service. For example, it takes 10 years on average to develop a successful new drug.¹⁹

There are many different types of dynamic competition models in industrial organization economics.²⁰ Applying these models to study innovation may be complicated because the answers that the models provide are highly sensitive to the models' specific assumptions. Moreover, calibrating models to analyze innovation effects in specific cases may require information that is generally unavailable. Then there are the administrative challenges of having courts and enforcement agencies actually apply dynamic competition models in antitrust cases.²¹

What matters for antitrust policy is understanding how mergers affect firms' incentives and abilities to pursue innovation. Kenneth Arrow's innovation model provided early insight into how mergers may affect innovation incentives. Under Arrow's model, a monopolist may have diminished incentives to invest in innovation compared to an entrant because the innovation cannibalizes or replaces the monopolist's existing products.²² In this case, the monopolist's acquisition of the entrant may reduce innovation. The Arrow model effect (sometimes also called the replacement effect) is just one of many ways that mergers may affect innovation.²³ The U.S. Horizontal Merger Guidelines discuss several alternative mechanisms through which mergers may either reduce or increase innovation.²⁴

My recent working paper proposes an economic framework for analyzing innovation effects of nascent competitor acquisitions using a dynamic competition model.²⁵ The economic framework identifies nine factors that determine how mergers affect innovation. One of the factors is the replacement effect (or the so-called Arrow model effect), which tends to reduce innovation.²⁶ Another factor is the realization of the merger's synergies, which can enhance innovation capabilities and spur innovation.²⁷ Yet another factor is nascent market competition, which is the effect on innovation of competition from other firms innovating in the same space as the acquisition target. The nascent market competition factor mitigates any loss of innovation from a nascent competitor acquisition.²⁸

Analysts may apply the economic framework by determining which of the nine factors are present in a transaction. The analysts may also gauge the effect of each factor based on the data from the merging parties. The analysis of innovation effects based on the economic framework may corroborate findings from documents and testimony. The combination of factual evidence and economic analysis can improve the overall reliability of innovation effects analysis.

VI. U.S. ENFORCEMENT

Enforcement of nascent competitor acquisition cases typically includes both the loss of future competition and loss of innovation theories of harm. For example, the U.S. Federal Trade Commission's recent complaint in the *Illumina/Pacific Biosciences ("PacBio")* matter alleged that Illumina's proposed acquisition of PacBio would "eliminate significant current and future competition between Illumina and PacBio, substantially harming

19 BIOPHARMACEUTICAL RESEARCH & DEVELOPMENT: THE PROCESS BEHIND NEW MEDICINES (2015), http://phrma-docs.phrma.org/sites/default/files/pdf/rd_brochure_022307.pdf.

20 See, for example, Richard Ericson & Ariel Pakes, *Markov-Perfect Industry Dynamics: A Framework for Empirical Work*, 62 Rev. Econ. Stud. 53 (1995); Gautam Gowrisankaran, *A Dynamic Model of Endogenous Horizontal Mergers*, 30 RAND J. ECON. 56 (1999); Ariel Pakes & Paul G. McGuire, *Stochastic Approximation for Dynamic Analysis: Markov Perfect Equilibrium and the 'Curse' of Dimensionality*, 69 ECONOMETRICA 1261 (2001); Gautam Gowrisankaran & Robert J. Town, *Dynamic Equilibrium in the Hospital Industry*, 6 J. Econ. Manag. Strategy 45 (1997); and Patrick Bajari, C. Lanier Benkard, & Jonathan Levin, *Estimating Dynamic Models of Imperfect Competition*, 75 ECONOMETRICA 1331 (2007).

21 Douglas H. Ginsburg & Joshua D. Wright, *Dynamic Analysis and the Limits of Antitrust Institutions*, 78 ANTITRUST L.J. 1 (2012).

22 Kenneth Arrow, "Economic Welfare and the Allocation of Resources for Invention," in *The Rate and Direction of Inventive Activity: Economic and Social Factors*, eds. Universities-National Bureau Committee for Economic Research, Committee on Economic Growth of the Social Science Research Council (Princeton, NJ: Princeton University Press, 1962), 609–626.

23 Shapiro, *supra* note 11.

24 Horizontal Merger Guidelines §6.4.

25 Ezielev, *supra* note 11.

26 *Id.*

27 *Id.*

28 See *Id.* for a full discussion of the nine factors that determine innovation effects in nascent competitor acquisitions.

consumers.”²⁹ The complaint also alleged that the proposed merger would “harm consumers, in part, by hampering competition, particularly innovation competition.”³⁰

Similarly, the U.S. Department of Justice’s complaint in the recent *Visa/Plaid* matter alleged that “Plaid’s entry into online debit services as a pay-by-bank debit service would erode Visa’s monopoly power by giving merchants and consumers a cheaper, more innovative alternative to Visa’s online debit services,” resulting in “lower prices for online debit transactions and a higher volume of online debit transactions.”³¹ The complaint further alleged that Visa’s proposed acquisition of Plaid would reduce innovation.³² The complaint argued that “[i]f the acquisition were enjoined, Plaid – on its own or in combination with a company other than Visa – would continue to act as a disruptive competitor, developing and launching new, innovative solutions in competition with Visa,” but “[i]n the hands of Visa, this would change dramatically.”³³

U.S. courts view the probability of future competition between merging parties as a critical gating factor in determining whether transactions violate antitrust law. The courts have analyzed nascent competitor acquisitions under the “actual potential entry” or “actual potential competition” theory of harm, which is essentially the loss of future competition theory.³⁴ In applying the actual potential competition theory, U.S. courts have required plaintiffs to demonstrate that the acquisition target would have “probably” entered the relevant market, but for the transaction, in order to establish antitrust liability.³⁵

A number of commentators have argued that the requirement of demonstrating that the nascent competitor would have “probably” entered the relevant market, but for the transaction, results in an overly permissive antitrust policy.³⁶ The commentators argue that low probability of harm is still harm.³⁷ When aggregated over a large number of nascent competitor acquisitions, the low probability of harm can turn into significant overall harm to the economy. As I discuss above, there are major practical challenges in determining antitrust liability based on the loss of future competition theory when future competition between the merging parties is unlikely and distant in time. However, the innovation effects approach may provide a workable solution for deterring some transactions that result in significant but low probability competitive harm.

For example, in killer acquisition cases, the acquirer takes out a competitive threat posed by the target’s innovation by purchasing the target and discontinuing the innovation. Ending the development of the target’s innovation may be harmful even if there is only a low probability that the innovation will be successful. Challenging such killer acquisitions under the innovation effects theory may deter some acquisitions that lead to significant but low probability harm.

VII. CONCLUSION

In this Article, I argue that there are practical reasons for analyzing nascent competitor acquisitions under the innovation effects theory rather than the loss of future competition theory in cases where there is a low probability of significant future competition between the merging parties and that competition would be distant in time.

However, there are other important differences between the two theories of harm. The innovation loss theory represents dynamic competition effects, whereas the loss of future competition theory represents static competition effects. Innovation effects are not limited to nascent competitor acquisitions. These effects may also be present in mergers between current competitors. The two theories of harm offer very different

29 Complaint (Dec. 17, 2021) at 10, *In the Matter of Illumina, Incorporated, a corporation, and Pacific Biosciences of California (PacBio), Incorporated, a corporation*, (Federal Trade Commission) (Dkt. No. 9387), https://www.ftc.gov/system/files/documents/cases/d9387_illumina_pacbio_administrative_part_3_complaint_public.pdf.

30 *Id.* at 11.

31 Complaint (Nov. 5, 2020) at 17, *United States v. Visa Inc. and Plaid Inc.*, (N.D. Cal.) (No. 3:20-cv-07810), <https://www.justice.gov/atr/case-document/file/1334736/download>.

32 *Id.* at 18.

33 *Id.* at 18.

34 *United States v. Marine Bancorp., Inc.*, 418 U.S. 602 (1974); *United States v. Falstaff Brewing Corp.*, 410 U.S. 526 (1973).

35 *Yamaha Motor Co. v. FTC*, 657 F.2d 971, 977 (8th Cir. 1981).

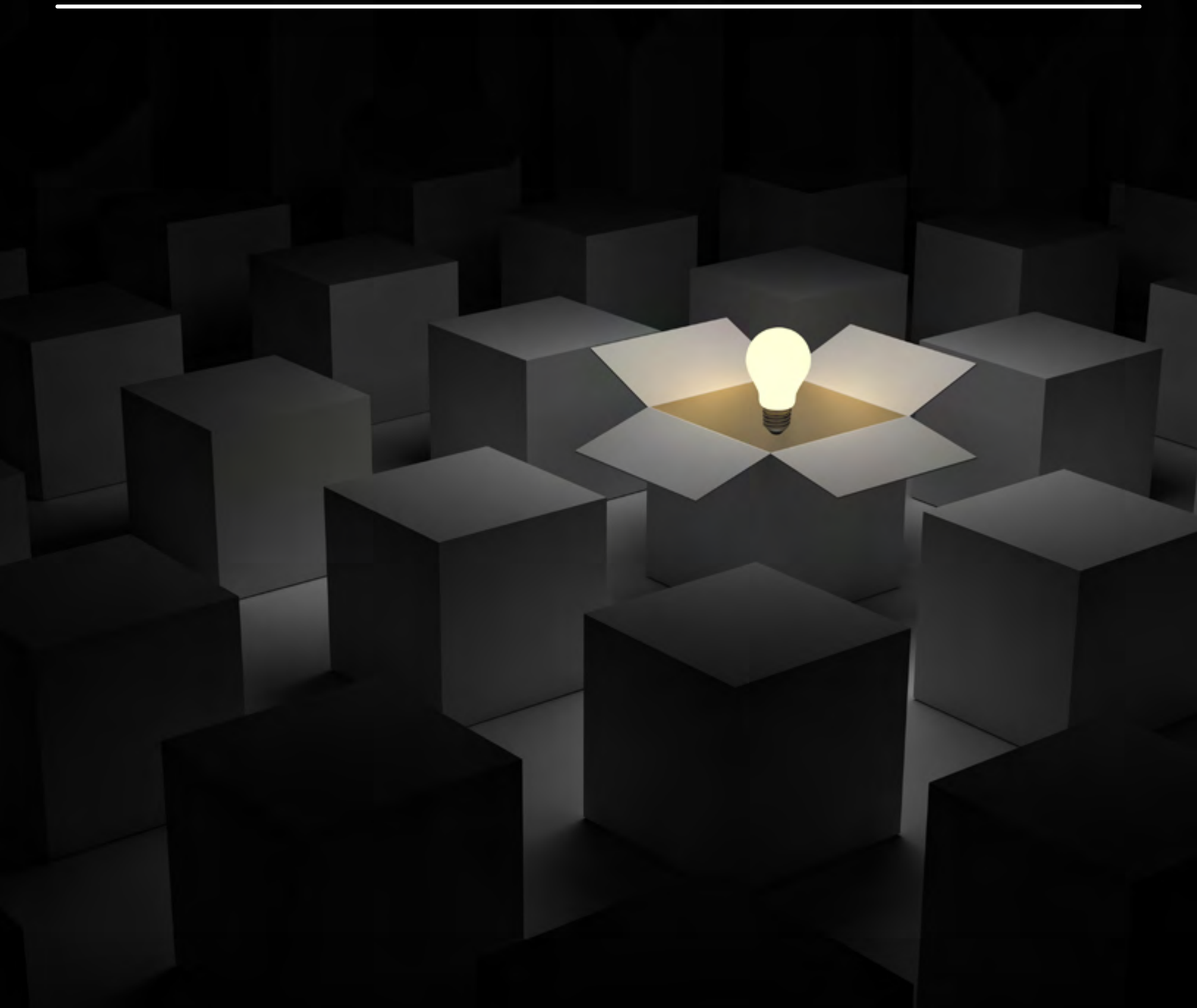
36 See, for example, Hemphill & Wu, *supra* note 3 and DIGITAL COMPETITION EXPERT PANEL, UNLOCKING DIGITAL COMPETITION (2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf.

37 The commentators argue that the assessment of nascent competitor acquisitions should be based on the expected value of the competitive effect of the acquisition. This approach may consider the effects of low-probability outcomes. See Hemphill & Wu, *supra* note 3 and Melamed, *supra* note 17.

perspectives on antitrust priorities. Should antitrust policy strive to avoid future price increases resulting from the elimination of competition between the merging parties in some future states of the world? Alternatively, should antitrust policy strive to avoid innovation losses resulting from the elimination of dynamic competition between the merging parties? Apart from any practical considerations in analyzing nascent competitor acquisitions, it is important that policymakers strive to achieve the right balance between these two perspectives on antitrust. It is also important to continue developing more economic tools for analyzing the innovation effects of transactions.



POTENTIAL COMPETITION MERGERS: LESSONS FROM OUTSIDE THE BOX



BY TIM BRENNAN¹



¹ *U.S. v. El Paso Natural Gas*, 376 U.S. 651 (1964), cited in William Dorian, “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).

I. INTRODUCTION

In principle, potential competition mergers are not puzzling. Understanding how a merger between an ongoing firm and a supplier not yet in the market could reduce competition in the future is neither difficult nor requiring the latest advances in industrial organization theory or even Chicago School economics. Courts have recognized a potential competition doctrine going back to at least 1964.²

The hard part about potential competition cases is not understanding them, but proving them. The two empirical challenges to any competition case might be labeled “not enough” and “too much.” Suppose that one wants to challenge Firm A’s acquisition of Firm B on potential competition grounds, that is, that Firm B is not yet a competitor to Firm A but will present significant competition to Firm A in the future. The “not enough” label applies to the question of whether Firm B will in fact be a significant competitor to Firm A in the future, even though it is not yet in Firm A’s market. The “too much” label applies to the question of whether if Firm B is a potential competitor, how do we not know that Firm’s C, D, E, etc. are not also potential competitors, rendering a merger between A and B inconsequential.

To get a handle on these two challenges, it may be useful to think beyond potential competition mergers as conventionally understood. A first step is to look at lessons from non-merger antitrust cases — collusion and single-firm conduct — where the issues in question primarily involved potential and not actual competitors. From collusion, we can look at arguments against agreements between incumbent pharmaceutical companies and potential suppliers of generic competitors, so-called “reverse payments” cases.³ From single-firm conduct, we can look at the case brought by the U.S. government against Microsoft, where the motivating concern was stifling potential competition to the Windows operating system.⁴

In light of the current prominence of challenges to the consumer welfare and other conventions of merger enforcement, we look at outside the box observations in four merger related areas. The first is the relevance or lack thereof to current methods for evaluating unilateral effects mergers and coordinated effects mergers. A second involves whether plaintiffs should bear the burden of proof of showing harm, or that burden should be reassigned to the merging parties. A third issue is whether rejecting the consumer welfare standards is likely to usefully contribute to the adjudication of potential competition cases. Last is what should need to be proven in a merger case, based on the wording of the Clayton Act.

II. LESSONS FROM COLLUSION CASES: “REVERSE PAYMENTS”

The canonical “reverse payments” pharmaceuticals case goes as follows: Firm I, the incumbent, holds a patent for a drug, D. Firm G develops a generic version of D, before Firm I’s patent on D expires. I sues G for patent infringement. G countersues I, claiming that the patent is invalid. I and G settle these lawsuits, where in exchange for G delaying its entry, I makes a payment to G. The term “reverse payments” comes about because I initially sued G for infringing its patent, but nevertheless I pays G. The competitive problem is that the result of this reverse payment patent litigation settlement is an agreement between I and G not to compete, at least for the duration of I’s original patent.⁵

I do not claim how well this portrayal fits any particular putative reverse payments case. Nor do I attempt to resolve two main critiques of these cases. The first is that courts understandably prefer parties in a lawsuit to settle rather than litigate; contesting a reverse payments case runs counter to that disposition. The second critique is that a patent entails a presumption that the holder has the exclusive right to use its intellectual property over the lifetime of the patent.⁶ My only point here is to note that this is a potential competition case in the guise of a collusion case. The potential entrant is the producer of the generic.

However, the challenge of defining the set of potential entrants with whom the incumbent might collude, and that this may be a problem, is notably easy in these cases. Although the question of competing drugs to address a particular condition remains, we have an apparent incumbent monopoly, defined by patent protection. Second, the set of potential competitors is not open-ended, but defined by legislation and

² *U.S. v. El Paso Natural Gas*, 376 U.S. 651 (1964), cited in William Dorian, “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).

³ *FTC v. Actavis, Inc.*, 570 U.S. 136 (2013).

⁴ *United States v. Microsoft Corporation*, 253 F.3d 34 (D.C. Cir. 2001), settlement approved, *United States v. Microsoft Corp.*, 231 F. Supp. 2d 144 (D.D.C. 2002)

⁵ Aaron Edlin, Scott Hemphill, Herbert Hovenkamp, and Carl Shapiro, “Activating *Actavis*,” 28 Antitrust 16 (Fall 2013).

⁶ See *id.* for responses to these critiques.

regulation.⁷ Generics have to register with the Food and Drug Administration to be able to undertake activities that might otherwise violate the incumbent's patent rights.

Moreover, as the Congressional Research Service has said:

The Hatch-Waxman Act further provided prospective manufacturers of generic pharmaceuticals with a reward for challenging the patent associated with an approved pharmaceutical. The reward consists of a 180-day generic drug exclusivity period awarded to the first generic applicant to file a paragraph IV certification. Congress hoped that this entitlement would encourage generic applicants to challenge a listed patent for an approved drug product.⁸

In other words, no one else can be a potential entrant for six months. Potential competitors in merger cases, on the other hand, will lack this kind of statutory and regulatory identification. The relative ease in identifying potential competitors in reverse payments collusion cases illustrates, by contrast, the absence of a clear means to do so in merger cases.

III. LESSONS FROM MONOPOLIZATION CASES: *U.S. V. MICROSOFT*

The familiar justification for the *Microsoft* case brought in the late 1990s and settled in the early 2000s was that Microsoft undertook tactics to protect its Windows computer operating system monopoly from future competition posed by the ability to use web browsers, then primarily Netscape, to serve as a platform for applications, such as (Microsoft's) Word, Excel, and PowerPoint. The Java programming language would run on the browser and enable applications such as these to run on it. To the user, Netscape and Java together would, in effect, be that future operating system. Users would not have to run Windows and, importantly, personal computer manufacturers would not have to purchase licenses for Windows to install on their machines to enable users to do anything with them.⁹

To many, the *Microsoft* case would seem a model for how to assess potential competition. The trial judge found that Microsoft had monopolized a market for operating systems designed to run on personal computers using the Intel chip,¹⁰ and on with regard to legal liability, the D.C. Court of Appeals largely agreed.¹¹ Although the D.C. Court of Appeals rejected the remedy the trial court had proposed, and the case was ultimately resolved via settlement, the finding that Microsoft had violated the antitrust laws directed at a potential entrant stood and, one might think, serve as a guide for potential competition merger cases.

Some aspects of the *Microsoft* case may be encouraging to those who want to bring such cases. It turns out that the record in this case did very little to support a potential competition case.¹² In particular, it did not establish a relevant market in future operating systems and applications platforms, and then show that this combination was the most likely potential entrant into this market.

This may seem like good news for advocates of potential competition cases. Despite this lack of a record, the Court of Appeals did ratify the trial court's finding that the Microsoft had monopolized a market in Intel-based PC operating systems. One might infer that the evidentiary burden needed to find that had Microsoft instead purchased Netscape, similar evidence would suffice to prove an illegal potential competition merger.

However, the news is not so good when one considers the ultimate resolution of the case. Had the plaintiffs believed that Microsoft was preempting the development of operating systems through practices that directed users to its Internet Explorer browser and away from Netscape, the direct remedy would have been to force Microsoft to divest Internet Explorer, similar to a horizontal divestiture to resolve a merger case. This bullet was not bitten. Instead, and making a long story quite short, the parties eventually settled with Microsoft agreeing to halt practices that prevented personal computer manufacturers from featuring Netscape or other browsers along with or instead of Internet Explorer.

⁷ Congressional Research Service, *The Hatch-Waxman Act: A Primer* (Sept. 28, 2016) 5-7.

⁸ *Id.* At 9.

⁹ I don't want to get beyond my technological expertise, but a Google Chromebook may be somewhat similar to the vision of a computer operating directly via a browser and not with a separate underlying operating system, at least not one visible to the user.

¹⁰ *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30 (D.D.C. 2000).

¹¹ *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001).

¹² The following draws from Timothy Brennan, "Do Easy Cases Make Bad Law? Antitrust Innovation or Missed Opportunities in *U.S. v. Microsoft*," 69 *George Washington L. R.* 1042 (2001).

The eventual outcome of this case was identical, then, to a case that had been not about excluding future competition with the Windows operating system, but about excluding present competition with the Internet Explorer browser. It ended up being a case about harming competition in a present market, not about potential competition. Claims that the case was about potential competition in personal computer operating systems turned out to be eye-catching window (so to speak) dressing that had little to do to explain or justify the eventual outcome of the case. *U.S. v. Microsoft* may be less helpful in designing potential competition merger cases than some might wish.

IV. CHANGES IN MERGER PERSPECTIVES

If the lessons for potential competition mergers from non-merger cases are limited, looking at developments in merger assessment may be instructive.

A. Are Standard Merger Assessment Tools Helpful?

One place to look is the expansion of methods for assessing mergers.¹³ Neither the coordinated effects-based market definition method nor the more modern unilateral effects approaches are useful for potential competition mergers. Regarding coordinated effects, the concern rarely if ever with potential competition mergers is that it will facilitate collusion with a larger but still small set of other firms in a relevant antitrust product and geographic market. Moreover, the crux of a potential competition merger case is that there are not such firms out there; otherwise, the unique threat posed by the acquisition of an entity not yet competing with the acquiring firm is undercut.

This invites turning to methods for assessing unilateral effects mergers, where the effect of the merger is a reduction in competition among the merging sellers. The recent emphasis on this merger concern has led to (and likely been facilitated by) advances in the empirical assessment of the direct effects of on the incentives for those sellers to raise price following the merger. These include using “diversion ratios” — the fraction of sales lost by one merging firm to the other if the former raises its price — to estimate “upward pricing pressure” — the incentive to raise price following the merger. With sufficient data and reasonable assumptions, one can use merger simulation to estimate the effect on price when the merging parties maximize profits together compared to when they did so separately, taking into account pricing responses of other competitors.

However, because the potential competitor by definition is not yet in the market in any significant way — otherwise the word “potential” would not apply — there are no data to support those methods. There have not been any sales to divert, so diversion ratios cannot be used. There has been no ongoing competition from which one can estimate firm-specific demands and costs, from which one can simulate the effects of the potential competition merger.

The inapplicability of either coordinated or unilateral effects methods does not mean there cannot be a potential competition case. However, such a case will not rest on economic techniques. It will depend on documents, particularly analyses within the acquiring firm looking at the potential competitive threat from the acquired firm. (Presumably, an acquiring firm knowing this do what it can to minimize or eliminate the set of such documents.) Testimony from industry experts as to what may happen in the future will also be important. The key lesson, however, is that one cannot expect empirical economic methods to be as informative as they may be in assessing mergers between ongoing enterprises.

B. Shifting the Burden of Proof?

A second possibility to increase the likelihood of the plaintiffs prevailing when bringing a potential competition case is if the burden of proof were shifted from the agencies to the parties in merger cases. Such a shift has been most prominently suggested in a recent report of the majority staff of the House Antitrust Subcommittee.¹⁴ Such a shift is not without precedent. Contested mergers and other proceedings before the Federal Communications Commission are designated for hearings where the merging parties (“applicants” for the transfer of relevant licenses) bear the burden of proof.¹⁵

¹³ The following follows Timothy Brennan, “The Kinetic Rise and Potential Fall of Market Definition,” in Parcu, Pier Luigi, Giorgio Monti, and Marco Botta (eds.), *Economic Analysis in EU Competition Policy: Recent Trends at the National and EU Level* 68 (2021).

¹⁴ U.S. House of Representatives Subcommittee on Antitrust, Commercial and Administrative Law of the Committee of the Judiciary, *Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations* 393 (2020).

¹⁵ 47 U.S.C. 309(e). [“The burden of proceeding with the introduction of evidence and the burden of proof shall be upon the applicant”] I do not know the record, but legend has it that if the Commission is unsatisfied, the parties will generally if not always withdraw the merger, on the presumption that if they failed to persuade the Commission of that the merger is in the public interest, they would fail at a hearing on the merits. It would be interesting, if there is a way to do it, to determine if the different burden facing mergers in the telecommunications sector has led to better or worse outcomes than in the rest of the economy.

Obviously, shifting the burden would make it easier to bring potential competition cases. Whether this is a good idea is another question. With law enforcement in general, the view is that the harm of incorrect guilty verdicts is sufficiently great that the state should bear the burden of proof. Mergers are not matters of criminal law, however, so this general principle need not be valid. The argument for the state bearing the burden in mergers has been that blocking a beneficial merger creates irrevocable harm, while the market will correct for anticompetitive mergers that erroneously make it through the adjudicative process.¹⁶ This presumption regarding relative errors has received extensive recent criticism.¹⁷

If the recent criticism prevails, potential competition cases may become easier to bring. My standpoint remains more conservative. Much of the concern regarding too little enforcement of antitrust, especially with regard to potential competition, has been in big tech.¹⁸ However, a major incentive to innovate in that sector is the prospect that a major current company will pay handsomely to add the new product to its service offerings. It remains uncertain that making potential competition cases easier to bring by shifting the burden of proof will give the public better products at lower prices.

C. Going Beyond Consumer Welfare?

A third theme to consider are proposals to move antitrust beyond what some see as the narrow confines of “consumer welfare.” Whether this would be good for consumers or these other goals is a debate I will not enter into here.¹⁹ The question is whether additional objectives will make potential competition cases easier to bring and win.

We have little if any experience in court with the sort of evidences judges will want to see to factor those additional objectives into the assessment of conventional mergers, so at this point I can only speculate. My present guess is that additional considerations are not likely to help win potential competition cases. It is already difficult to determine that an acquired firm will be a significant competitor to the incumbent acquirer, if it is not yet in the market at the time of the acquisition. It is hard to imagine that a court will find it helpful to determine that the acquisition will have a significant effect on the distribution of political power, economic inequality, the distribution of wealth between capital and labor, sustainability, or other goals some want pursue through antitrust prosecution. But time may tell a different story.

D. “Will” or “May”?

A final aspect that could affect the prospects for potential competition cases comes from a perhaps odd source: textualism, that is, interpreting statutes on the basis of the meaning of the terms in them at the time they were written. The historical aspect of this is not necessary; we can go directly to the phrasing of the Clayton Act, which proscribes acquisitions where: the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.²⁰

The terms of interest are “may” and “substantially.”²¹ In antitrust, especially unilateral effects cases where the concern is suppression of competition between the merging firms — and, as noted above, the likely concern in potential competition cases — in practice the plaintiffs have to show that the merger “will” lead to a substantial lessening of competition. However, that is not what the statute says. One could imagine that a court would require plaintiffs (assuming they retain the burden of proof) to show that *if* there is an effect on competition from the merger, that the effect is substantial. However, they would need to show only that there *may*, not *will*, be that substantial effect.

Having to show only “may” would presumably make potential competition merger cases more attractive to bring. To get a sense of how radical a departure this might be, though, consider what “may” might mean if it false short of “will.” Presumably it should mean more than “could” or “might.” Should it be “more likely than not”? The difficulty in coming up with an adjudicable standard can explain why, a century after passage of the Clayton Act, merger law would have evolved toward a “will” test. But taking textualism seriously suggests that a plaintiff need not have to show that elimination of the potential competitor will cause substantial harm, only that it may cause substantial harm.

16 Frank H. Easterbrook, “Limits of Antitrust,” 63 Texas Law Review 1 (1984).

17 Jonathan Baker, “Taking the Error Out of ‘Error Cost’ Analysis: What’s Wrong with Antitrust’s Right,” 80 Antitrust Law Journal 1 (2015); Herbert Hovenkamp, “Antitrust Error Costs,” U. of Pennsylvania Institute for Law and Economics Research Paper 21-32 (Nov. 29, 2021), available at SSRN: <https://ssrn.com/abstract=3853282>.

18 See *supra*. n 13; Federal Trade Commission, Press Release: FTC Alleges Facebook Resorted to Illegal Buy-or-Bury Scheme to Crush Competition After String of Failed Attempts to Innovate (Aug. 19, 2021), available at <https://www.ftc.gov/news-events/press-releases/2021/08/ftc-alleges-facebook-resorted-illegal-buy-or-bury-scheme-crush>.

19 I’ve argued that this move will likely both hurt consumers and impede the achievement of other social goals apart from economic efficiency. Timothy Brennan, “Should Antitrust Go Beyond ‘Antitrust’?,” 63 Antitrust Bulletin 49 (2018).

20 15 U.S.C. 18.

21 Much of the following discussion is informed by discussions with Joe Farrell, but he is absolved of all errors and this view should not be attributed to him.

V. SUMMARIZING

The rationale for contesting potential competition mergers is clear; the problem is validating that the acquired firm is a significant potential competitor and that others are not. “Reverse payment” collusion cases involve potential competitors, but there the potential competitor is identified by regulators and protected by statute. The *Microsoft* case appears to support a loose requirement for identifying potential competitors. But that case turned out to be equivalent to excluding an actual competitor from the market for browsers rather than excluding a future competitor from the market for operating systems.

Considerations specific to merger analysis do not seem more helpful for potential competition cases. Methods for identifying competitive harm through coordinated or unilateral effects lack the data to apply them. Shifting the burden of proof may be helpful as it would make any merger case to bring, and there is some precedent in FCC assessment of mergers, but whether that is a good idea will require a shift in judgment away from the view that harms from blocking good mergers exceed harms from allowing bad ones. Going beyond “consumer welfare” in antitrust prosecutions seems unlikely to give courts a firmer basis for identifying significant harms attributable to acquisition of a seller not yet in a market. The change most likely to affect potential competition cases would be to take that statutory “may” seriously — still prove that a reduction in competition would be substantial, but not require that the acquisition will bring about that harm. How to define “may” short of “will” remains to be seen.



MAKING THE POTENTIAL COMPETITION DOCTRINE GREAT AGAIN

BY MARK GLICK & DARREN BUSH¹



¹ Professor of Economics, University of Utah and Leonard B. Rosenberg Professor of Law, University of Houston Law Center. Our larger paper, co-authored with Catherine Ruetschlin, discussing potential competition doctrine is available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3746728.

I. INTRODUCTION

Google, Amazon, Apple, Facebook (Meta), and Microsoft (“Big Tech”) dominate the American technology sector.² All of these companies exercise considerable market power through various strategic practices. A growing chorus of commentators have argued that Big Tech’s dominance has been advanced and maintained by hundreds of acquisitions of smaller start-up firms, many below the Hart-Scott-Rodino thresholds.³ Some of these firms, had they remained independent, might have quickly scaled, or entered into alliances, and challenged the Big Tech firms.⁴ To prevent this from occurring, Big Tech stopped these potential competitors in the cradle by establishing “kill zones” where the potential challengers are either targeted for acquisition or destruction. This practice not only solidifies Big Tech’s market power, but it reduces innovation by replacing highly motivated founders of the start-up firms who are residual claimants, with managerial oversight by Big Tech. Why is this process allowed to continue?

We believe that considerable responsibility lies with the gutting of the potential competition doctrine.⁵ The potential competition doctrine was an early antitrust casualty of the Chicago School’s influence on antitrust, part of the larger neoliberal revolution that swept through the United States beginning in the 1970s.⁶ The Chicago School pushed for the elimination of traditional antitrust goals and their replacement by a single “consumer welfare” objective.⁷ It contended that only “economic effects” are relevant and structural presumptions should be abandoned, and it increased the burdens facing plaintiffs in order to preserve assumed (but elusive) “efficiencies.”⁸ Today we face the results of the Chicago School’s successes, one of which is the inability to effectively challenge the dominance of Big Tech.

II. SCOTUS TAKES A WRONG TURN

The potential competition doctrine emerged in the aftermath of the 1950 Amendment to Section 7 of the Clayton Act.⁹ As the Supreme Court described in *Brown Shoe v. United States*, the “dominant theme pervading congressional consideration of the 1950 amendments was a fear of what was considered to be a rising tide of economic concentration in the American economy.”¹⁰ Congress considered concentration not only a problem for consumers, but also for small businesses and American democracy. As its Senator Kefauver stated:

I am not an alarmist, but the history of what has taken place in other nations where mergers and concentrations have placed economic control in the hands of very few people is too clear to pass over easily. A point is eventually reached, and we are rapidly reaching that point in this country, where the public steps in to take over when concentration and monopoly gain too much power. The taking over by the public through its government always follows one or two methods and has one or two political results. It either results in a Fascist state or the nationalization of industries and thereafter a Socialist or Communist state.¹¹

In 1963, in *United States v. Philadelphia National Bank*, SCOTUS explained that the “intense congressional concern” with increasing concentration “warrants dispensing, in certain cases, with elaborate proof of market structure, market behavior, or probable anticompetitive

2 Thomas Philippon, *THE GREAT REVERSAL: HOW AMERICA GAVE UP ON FREE MARKETS* 240 (2019) at 240 (Big Tech firms are top five global firms by market value). However, as Philippon explains: “The notion that the biggest tech firms are somehow the pillars of the U.S. economy is false on its face... If we exclude Amazon, the defining feature of the new stars is how few people they employ and how little they buy from other firms.” *Id.* at 256.

3 Tim Wu & Stuart Thompson, “The Roots of Big Tech Run Disturbingly Deep,” *N.Y. Times* (June 7, 2019).

4 Strong network effects can cause high tech markets to tip, but they also allow a nascent alternative platform to scale quickly.

5 See Generally Darren Bush & Salvatore Massa, *Rethinking the Potential Competition Doctrine*, 2004 *Wis. L. Rev.* 1035.

6 Mark Glick, “Antitrust and Economic History: The Historic Failure of the Chicago School of Antitrust,” 64 *ANTITRUST BULL.* 295 (2019) (describing the rise of the neoliberalism in the United States). David Kotz, *THE RISE AND FALL OF NEOLIBERAL CAPITALISM*, Harvard (2017).

7 Robert Bork, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 80 (2021) (“Looked at from the standpoint of those who must obey the law, the case for exclusive adherence to a Consumer Welfare Standard is clear.”).

8 John Kwoka, *MERGERS, MERGER CONTROL, AND REMEDIES: A RETROSPECTIVE ANALYSIS OF U.S. POLICY* 149 (2015) (“Overall, these data corroborate the findings of the single-merger studies regarding product prices, such a decrease is found with respect to price but also with respect to quality, R&D, and more often than not, efficiency.”). Most of the many studies of merger efficiencies find few or no such benefits. See Robert Lande & Sandeep Vaheesan, *Preventing the Curse of Bigness Through Conglomerate Merger Legislation*, 52 *ARIZ. ST. L. J.* 75, 84-86 (2020).

9 Joseph Brodley, *Potential Competition Mergers: A Structural Synthesis*, 87 *YALE L. J.* 1, 4 (1977).

10 *Brown Shoe Co. v. United States*, 370 U.S. 294, 315 (1962).

11 Quoted in Robert Lande & Sandeep Vaheesan, *Preventing the Curse of Bigness Through Conglomerate Merger Legislation*, 52 *ARIZ. ST. L. J.* 75, 84-86 (2020). Lande & Vaheesan assembly numerous statements with similar import during the 1950 Amendment’s Congressional debate.

effects.”¹² The court explained that when there is a structural increase in concentration due to a merger, the merger “is so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects.”¹³ Thus, the Court created a presumption of an anticompetitive effect from a structural increase in concentration, placing the burden on the merging parties to refute the presumption. The Court’s approach is referred to as a “structural approach.” In contrast, the effects-based approach requires a prediction of the future competitive impact of a merger. When the “effects” at issue are only economic, and more narrowly the effects on consumer welfare, it is easy for burdens to be shifted to plaintiffs. When there is concern for the political and distributional effects of firm dominance it is more difficult to contend that the firm seeking to justify an increase in such dominance should not bear the burden of proof in an antitrust challenge.¹⁴

In 1974, SCOTUS effectively hobbled the potential competition doctrine in *United States v. Marine Bancorporation, Inc.*¹⁵ The opinion was penned by Justice Powell. Powell was a patrician of the neoliberal revolution and was the author of the Powell memo three years earlier before arriving on the bench. The memo was a call to collective action by corporate interests that Powell argued were under assault in the United States.¹⁶ The Marine Bancorporation opinion appeared to advance Powell’s concern about over scrutiny of big corporations. The case concerned the acquisition by Marine Bancorp., a large Seattle-based bank, of the Washington Trust Bank, a smaller bank headquartered in Spokane, Washington. The government challenged the merger on both perceived and actual potential competition grounds, arguing that Marine Bancorp.’s presence on the fringe of the Spokane market disciplined Spokane competitors, and that absent the merger, Marine Bancorp. would likely enter the Spokane market.

The Court found against the government (as did the lower courts). According to SCOTUS, “[t]wo essential preconditions must exist” before an actual potential competition theory “establishes a violation of § 7.” First, that the potential competitor could enter the market at issue absent the merger. Second, that such entry would produce a likelihood of de-concentration or other significant procompetitive effects. It should already be obvious that these factors could not be established to stop a Big Tech company from purchasing a start-up deemed to be a competitive threat. First, how can the plaintiff prove that the start-up would enter? The Powell opinion implied that “unequivocal proof” of actual future de novo entry is required. Even worse, the future fate of a start-up is unpredictable. Yet the plaintiff must prove that the potential entry will deconcentrate the market or accomplish another “significant” but unspecified procompetitive transformation. For good measure, SCOTUS even expressed doubt that an actual potential competition case (the kind that best characterizes the numerous Big Tech mergers) would be viable, even when these exacting standards are met. Thus, controlling Supreme Court precedent erects an unreachable burden for any plaintiff that challenges any of the slew of Big-Tech mergers.

III. THE REAGAN DOJ MAKES THE DOCTRINE WORSE

Ronald Reagan’s Department of Justice addressed the potential competition issue in the 1982 Merger Guidelines,¹⁷ which were revised in 1984. This was the last time potential competition mergers are addressed by the Merger Guidelines.¹⁸ The 1984 Merger Guidelines built upon but also significantly revised the Justice Department’s position developed in the 1968 Merger Guidelines. The 1984 Merger Guidelines treat perceived and actual potential competition together. Under the 1984 Guidelines the factors required for a challenge are: (1) the acquired firm’s market must be concentrated above 1800 HHI. (2) The acquiring firm must have specific entry advantages; otherwise, the elimination of the target still leaves other potential entrants. The number of firms likely to enter should be less than three. If there are more than three likely entrants, then there must be direct evidence of likely entry. (3) The target must have a larger market share of at least 5 percent, and 20 percent or more to make a challenge likely. (4) There are no significant efficiencies of the proposed merger that offset the potential anticompetitive effects.

12 *United States v. Philadelphia Nat’l Bank*, 374 U.S. 321, 363 (1963).

13 *Id.* at 363.

14 This point is made by Jonathan Baker in his book *THE ANTITRUST PARADIGM: RESTORING A COMPETITIVE ECONOMY* 76-77 (2019) (“While the nature and strength of presumptions usually derives from two considerations related to error costs, deterrence policy and inferred effects, it may also depend on overarching policy goals. . . . Mid-twentieth-century courts justified antitrust rules limiting concentration by merger on political grounds. These courts argued that concentrated economic power produced political problems.”).

15 *United States v. Marine Bancorporation, Inc.*, 418 U.S. 602, 604 (1974).

16 The famous 1971 memo titled “Attack on the American Free Enterprise System,” is widely cited as the beginning of the corporate mobilization to transform American law and politics.” Nancy Maclean, *DEMOCRACY IN CHAINS: THE DEEP HISTORY OF THE RADICAL RIGHT’S STEALTH PLAN FOR AMERICA* 125 (2017).

17 Available at <https://www.justice.gov/sites/default/files/atr/legacy/2007/07/11/11248.pdf>.

18 Available at <https://www.justice.gov/sites/default/files/atr/legacy/2007/07/11/11249.pdf>.

The 1984 Merger Guidelines abandoned the Philadelphia Bank's structural approach, as well as the non-consumer welfare antitrust goals. Worse, it requires the plaintiff (itself) to bear the burden on numerous difficult to prove economic effects factors. Under the Merger Guidelines scheme, the merger of a potential entrant could be included in the relevant market if it likely would switch position in supply in response to a small non-transitory increase in price, within a year, without incurring significant sunk costs. But in technology markets start-ups add features and functions to reposition themselves in different markets only with the expenditure of programming time, a sunk cost. Under the Guideline's potential competition scheme, a case against a Big Tech acquisition is unlikely.

Essentially, what technologies will merge and combine and reposition is virtually impossible to predict. Yet, the DOJ/FTC would have to know that there are three or less likely entrants and the target is the most likely, even with information obtained under subpoena or civil investigative demand. In particular, because these are third parties, such proof would not likely be forthcoming. Even if this hurdle is met, the target must have at least a 5% to 20% market share. Most start-ups are purchased before anything like this level of growth is achieved. Such difficult proof is required merely to justify the challenge. Once in the courtroom, the *Marine Bancorporation* factors apply.

IV. A HYPOTHETICAL DOJ INSTAGRAM CHALLENGE

Consider Facebook's acquisition of Instagram that was announced on April 9, 2012. It was Facebook's thirty second acquisition. It occurred on the eve of Facebook's IPO, and Facebook was under serious challenge because of the migration of users from the desktop to mobile platforms. Facebook was not a native iOS (iPhone's operating system) or Android application, and it struggled against mobile-native applications that were attracting growing user numbers. At the same time, photo sharing was forging ahead in popularity and was a key facet of Facebook's user engagement.

At this pivotal juncture, Stanford engineering graduates Kevin Systrom & Mike Krieger launched the native iOS photo sharing application Instagram.¹⁹ Instagram users could post photos across social networks including Facebook and Twitter. Within ten weeks of its premier on the Apple App Store, Instagram had over 1 million users. By the time of the acquisition Instagram had twenty-seven million users and had launched on Android with 1 million users. The Instagram founders envisioned their app as a rival social network based on "people interested in sharing life visually" will text and comments playing a secondary role. Instagram had not yet executed an advertising monetization strategy, but tech observers in 2012 pointed to impending entry into the online advertising market.²⁰

The billion-dollar price tag for Instagram triggered a Hart-Scott-Rodino filing. The FTC investigation was not public, but no challenge was forthcoming. Assume that the FTC was able to measure output among users of social networks and established market concentration above 1800 HHI.²¹ Assume further that it converged on a market definition in online advertising that also resulted in high concentration.²² What else would be required to justify a challenge?

The FTC would have to be convinced that entry into one or both markets is difficult. Through 2011, the markets for social networking and digital advertising had been fluid as firms in these markets competed for dominance. The economies of scale and network effects that typify platform markets represent traditional barriers to entry that would reinforce the incumbency of dominant firms, but Instagram was showing the potential for a nascent competitor to siphon off users and gain market share. In online platform markets new entrants often offer just a subset of the services offered by the dominant provider.²³ Firms like Instagram that gain the popularity and funding to scale become rivals for user attention and potentially rivals for the market over time. Facebook would likely argue that Instagram is just one of many potential entrants into social networking. Moreover, when consumers multi-home by using several apps at once entry by multiple firms becomes even more likely.

For the FTC to demonstrate difficulty of entry into the social networking or digital advertising markets would have been challenging. There is no direct substitute for Facebook in the social networking market, but smaller firms offering complementary or adjacent features can capture user attention that draws engagement and profits away from the network, even if the smaller firm is not yet competing in social network-

19 Gaurav Sangwani, *The Story of How Instagram Started and What Entrepreneurs Can Learn from it*, Financial Express (April 26, 2018).

20 Somini Sengupta, *Why Would the Feds Investigate the Facebook-Instagram Deal?*, New York Times, May 10, 2012.

21 Measuring concentration is not straightforward in a zero-price market. See John Newman, *Antitrust in Zero-Price Markets: Applications*, 94 WASH. L. REV. 49, 64-70 (2016).

22 James Ratliff & Daniel Rubinfeld, *Online Advertising: Defining Relevant Markets*, 6 J. OF COMP. LAW & ECON 653 (2010).

23 Jacques Crémer, Yves-Alexandre de Montjoye, & Heike Schweitzer, *Competition Policy for the Digital Era*, European Commission, 57 (2019), available at <http://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>.

ing.²⁴ Once users adopt a complementary product it is a small step to add social networking features. This ability to capture user attention also makes these smaller, adjacent firms' potential competitors in digital advertising.

If entry is not easy generally, then the FTC would have to show that Instagram had an entry advantage not possessed by three or more firms. This is another Herculean task. Consider the fact that several desktop-based and mobile applications existed at the time. Most of these platforms lacked the social features that distinguished the social networking elements available through Facebook and Instagram. Facebook even purchased several other photo-related services leading up to the Instagram acquisition, including the photo sharing and tagging website Divvy-shot in April 2010, the file sharing, messaging, and commenting service Drop.io in October 2010, and video and image recording and editing app developer Digital Staircase in November 2011.

In May 2012, after announcing the Instagram acquisition but before it was finalized, Facebook purchased Lightbox.com, a mobile social photo sharing application designed for Android in the period before Instagram introduced its Android app. While Lightbox had amassed 1.5 million downloads in its first seven months of operation, Instagram's Android launch in April reached 1 million within a week.²⁵ Facebook purchased and shuttered the Lightbox application, absorbing its employees and pulling the app from the market immediately.²⁶ Facebook launched its own camera app, Facebook Camera, on May 24, 2012, weeks after announcing its intention to acquire Instagram.²⁷

The UK's OFT investigation of the Facebook/Instagram merger lists six competing apps in the photo sharing market, including Camera Awesome, Camera +, Flickr, Hipstamatic, Path, and Pixable.²⁸ Of these services, only Camera+, Hipstamatic, and Camera Awesome included camera applications. Flickr is a photo storage and management tool and Pixable was an aggregator that scraped images from social networks including Facebook, Twitter, and Instagram.²⁹ Path was a social network conceived as a competitor to Facebook that offered a more private experience, limiting social connections to invite more personal interactions.³⁰ Hipstamatic and Camera+ provided photo taking and editing tools but lacked the social features that distinguished Instagram.³¹ In addition, Hipstamatic and Camera Awesome had entered into a partnership with Instagram that streamlined posting photos taken with those apps to Instagram's social network.³² The OFT's list of competitors illustrates the difficulty of demonstrating a specific entry advantage by three or less potential entrants, even if only one type of application is considered.

The final criterion for a potential competition claim is for the government to show that Instagram's entry into the social networking or advertising markets would deconcentrate the market or have a significant procompetitive effect. Under the Merger Guidelines, this effect can be established by showing that Instagram had a market share of five percent or more, and a challenge likely only at the twenty percent market share level. In 2012, the first year Instagram was included in the Pew Social Media Survey, 12 percent of adults – and a significantly higher share of

24 During a 2018 Congressional hearing Facebook CEO Mark Zuckerberg responded to the question "Who's your biggest competitor?" by insisting that the company competes in three main categories, rather than facing a direct competitor in one primary market. Zuckerberg also mentioned that a typical American uses eight different communications software applications, but did not mention that Facebook owns several of them. *Transcript of Mark Zuckerberg's Senate Hearing*. U.S. Senate 115th Congress, 2nd Session Sess. (2018), available at <https://www.washingtonpost.com/news/the-switch/wp/2018/04/10/transcript-of-mark-zuckerbergs-senate-hearing/>.

25 Naina Khedekar, *Interview with Stephen Robert Morse from Lightbox*, Firstpost (Jan. 18, 2012), available at <https://www.firstpost.com/tech/news-analysis/interview-with-stephen-robert-morse-from-lightbox-3593563.html>.

26 Josh Constone, *Facebook Hires Team From Android Photosharing App Dev Lightbox To Quiet Mobile Fears*, TechCrunch (May 15, 2012), available at <https://techcrunch.com/2012/05/15/facebook-lightbox/>.

27 Dirk Stoop, *Introducing Facebook Camera*, Facebook Newsroom (May 24, 2012), available at <https://newsroom.fb.com/news/2012/05/introducing-facebook-camera/>.

28 Office of Fair Trading, *Full Text of the Decision Regarding the Anticipated Acquisition by Facebook Inc of Instagram Inc*, No. ME/5525/12 August 22, 2012, https://webarchive.nationalarchives.gov.uk/20140402232639/http://www.oft.gov.uk/shared_of/mergers_ea02/2012/facebook.pdf.

29 Chris Anderson, *Pixable Closing Up Shop After One Crazy, Awesome Ride*, Medium (November 30, 2015), available at https://medium.com/@chris_anderson/pixable-closing-up-shop-after-one-crazy-awesome-ride-59192743528b.

30 Elise Moreau, *A Look Back on the Social Networking App Called Path*, Lifewire (June 1, 2019), available at <https://www.lifewire.com/what-is-path-3486483>. Jon Russell, *Mobile social network Path, once a challenger to Facebook, is closing down*, TechCrunch (September 17, 2018), available at <https://techcrunch.com/2018/09/17/rip-path/>.

31 According to Hipstamatic cofounder Lucas Buick, "We've never been a social networking company, but we clearly benefit from social networks." Quoted in Austin Carr, *Exclusive: Hipstamatic, Instagram To Unveil Photo-Sharing Partnership*, Fast Company (March 21, 2012), available at <https://www.fastcompany.com/1824797/exclusive-hipstamatic-instagram-unveil-photo-sharing-partnership>.

32 Austin Carr, *Exclusive: Hipstamatic, Instagram To Unveil Photo-Sharing Partnership*, Fast Company (March 21, 2012), available at <https://www.fastcompany.com/1824797/exclusive-hipstamatic-instagram-unveil-photo-sharing-partnership>. Kim-Mai Cutler, *Bootstrapped Is Better? Smugmug's Camera Awesome Crosses 4M Downloads, Adds Instagram Support*, TechCrunch (March 27, 2012) <https://techcrunch.com/2012/03/27/smugmug-camera-awesome/>.

young people – used Instagram despite the fact that it was a mobile-only application.³³ There are no attentional measures such as time on site available for the period before acquisition, but multi-homing and Instagram’s own interoperability would suggest that the company claimed a small share of total social networking users’ attention. The market draw for Instagram was its popularity with important demographic groups at a time when Facebook saw reaching young people and their preferred technologies as key to maintaining dominance in the market.³⁴

At the time of the Facebook acquisition, Instagram had not entered the digital advertising market and had no advertising revenue. It would be impossible to establish a procompetitive effect of Instagram’s entry into the advertising market through the 5 percent threshold because competition from Instagram lay entirely in the future.

A potential competition challenge by the FTC most certainly would have failed under its own Guidelines and unequivocally under Marine Bancorporation. But consider the post-acquisition information that retrospectively demonstrates how the Guidelines analysis would produce a false negative result. Since the acquisition was finalized in 2012, Instagram has generated a significant share of user engagement and revenue for Facebook. With Facebook’s resources and expertise guiding its evolution, Instagram reached 1 billion monthly active users in June 2018 even as Facebook’s own user growth dwindled.³⁵ According to the Pew Research Center, Instagram trails Facebook as the second-most popular social network in the U.S. with 37 percent of adults using the platform in 2019.³⁶ It is the most-used social network for American teens.³⁷

Although Facebook does not disclose Instagram’s financial details, market analysts estimate that 15 percent of Facebook’s revenues come from advertising on Instagram, a number expected to grow over time.³⁸ In 2019, Instagram launched a checkout feature allowing users to make purchases from within the app and delivering a new source of revenue to its parent company.³⁹ It is impossible to know if Instagram would have developed into such a powerful position without Facebook’s guidance, but it is clear that Facebook’s ownership of Instagram allows it to reach a larger user base and achieve greater levels of user engagement and revenue generation than Facebook alone.

V. FIXING THE PROBLEM

For the potential competition doctrine to be meaningful we need to return to structural presumptions and reasonable burdens. Two facts are necessary for a structural presumption of competitive harm. First, the acquiring firm is a leading firm in a concentrated market. Second, the target firm operates in what Professor Joe Brodley refers to as a proximate market. According to Brodley:

33 Lee Rainie, Joanna Brenner, & Kristin Purcell, *Photos and Videos as Social Currency Online*, Pew Research Center, (September 13, 2012) available at <https://www.pewinternet.org/2012/09/13/photos-and-videos-as-social-currency-online/>.

34 As described in Facebook’s 2012 Annual Report:

“Some of our current and potential competitors may have significantly greater resources or better competitive positions in certain product segments, geographic regions or user demographics than we do. These factors may allow our competitors to respond more effectively than us to new or emerging technologies and changes in market conditions. We believe that some of our users, particularly our younger users, are aware of and actively engaging with other products and services similar to, or as a substitute for, Facebook. For example, we believe that some of our users have reduced their engagement with Facebook in favor of increased engagement with other products and services such as Instagram. In the event that our users increasingly engage with other products and services, we may experience a decline in user engagement and our business could be harmed.”

SEC Form 10K for the fiscal year ended December 31, 2012, available at Facebook Investor Relations <https://investor.fb.com/financials/?section=annualreports> and https://s21.q4cdn.com/399680738/files/doc_financials/annual_reports/FB_2012_10K.pdf.

35 Josh Constine, *Instagram hits 1 billion monthly users, up from 800M in September*, TechCrunch, June 20, 2018, <https://techcrunch.com/2018/06/20/instagram-1-billion-users/>.

36 Andrew Perrin & Monica Anderson, *Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018*, Pew Research Center, April 10, 2019, <https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/>.

37 Monica Anderson & JingJing Jiang, *Teens, Social Media & Technology 2018*, the Pew Research Center (March 31, 2018), available at <https://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/>. Sean Wolfe, *Instagram just surpassed Snapchat as the most used app among American teens, according to a new Wall Street survey*, Business Insider (October 22, 2018), available at <https://www.businessinsider.com/instagram-snapchat-popularity-teens-piper-jaffray-2018-10>.

38 Sara Frier & Jeran Wittenstein, *Facebook’s Quarterly Ad Revenue to Get Lift from Instagram*, Bloomberg (July 25, 2018), available at <https://www.bloomberg.com/news/articles/2018-07-25/facebook-s-quarterly-ad-revenue-to-get-lift-from-instagram>. Kurt Wagner & Roni Molla, *Facebook will soon rely on Instagram for the majority of its ad revenue growth*, Vox, (October 9, 2018), available at <https://www.vox.com/2018/10/9/17938356/facebook-instagram-future-revenue-growth-kevin-systrom>. Eric Jhonsa, *Instagram Has Become Facebook’s Main Growth Engine During Its Transition Period*, TheStreet (July 12, 2019), available at <https://realmoney.thestreet.com/investing/technology/instagram-has-become-facebook-s-main-growth-engine-during-its-transition-period-15018209>.

39 Josh Constine, *Instagram Launches Shopping Checkout, Charging Sellers a Fee*, TechCrunch (March 19, 2019), available at <https://techcrunch.com/2019/03/19/instagram-checkout/>.

Market proximity is a concept of presumptive entry advantage. Two markets are proximate to the extent that a knowledgeable firm in one market possesses the necessary production and marketing information and other capabilities to operate in the other. Market proximity provides a suitable surrogate for entry advantage because, other factors being equal, there is less risk and therefore less expense involved in entering a familiar market.⁴⁰

Once these two presumptions are satisfied the burden should shift to the defendant. The Big Tech firm would then have to demonstrate that the target is not a potential entrant. Or if it is an entrant, what other potential entrants have the same entry advantages and would replace the competitive significance of the target. If the target isn't a new entrant, why would competition benefit from the acquisition? Why are consumers not better off with an independent target and the Big Tech firm forced to engage in internal development?

The massive advantages bestowed on big corporations by the influence of the Chicago School has not led to greater competitiveness or greater productivity and growth. It has led to the opposite.⁴¹ The Big Tech firms have been given nearly immunity from scrutiny of their acquisitions of small potential competitors. It is time that the potential competition doctrine be reformed by adopting sensible structural presumptions and burdens of proof on Big Tech to prove that their business strategies benefit consumers.

40 *Id.*

41 Mark Glick, *Antitrust and Economic History: The Historic Failure of the Chicago School of Antitrust*, 64 ANTITRUST BULL. 295, 335 (comparing growth, profits, productivity, wages, unemployment, investment, and income distribution under the New Deal Paradigm (1947-1973) and Neoliberalism (1980-2015) and finding decline in performance under every measure under neoliberalism).



DISCRIMINATORY ANTITRUST IN THE REALM OF POTENTIAL AND NASCENT COMPETITION



BY JOHN M. YUN¹



¹ Associate Professor and Deputy Executive Director, Global Antitrust Institute, Antonin Scalia Law School, George Mason University. Previously served as an Acting Deputy Assistant Director in the Bureau of Economics at the U.S. Federal Trade Commission. No outside funding was received or relied upon for this research. I thank Scalia Law student Thyme Hawkins for excellent research assistance.

I. INTRODUCTION

Currently, one of the most important topics in antitrust is how competition agencies and courts should consider acquisitions by “big tech” companies (that is, Amazon, Apple, Google, Facebook, and Microsoft). There are several competing visions. On one end of the spectrum is the view that these companies have strong incentives to engage in anticompetitive acquisitions of nascent and potential competitors;² consequently, agencies and courts should implement strong presumptions of harm when big tech companies make acquisitions, which can only be overcome if there are extraordinary efficiency gains.³ On the other end of the spectrum is the view that there is little reason to change current merger presumptions or to treat acquisitions by big tech companies differently than “medium tech” or “small tech” companies.⁴

Less attention, however, seems to be paid to the actual empirical evidence on big tech acquisitions. To that end, first, this Article reviews a recent FTC report on acquisitions by the largest technology platforms.⁵ While the report is largely descriptive using aggregated data and, therefore, offers limited insights, there is little in the findings that raise alarms. Rather, most of the acquisitions are valued below \$50 million (and 38.6 percent are valued below \$10 million); include a handful of employees; and involve companies that are five years or older. These characteristics do not neatly fit the profile of nascent, upstart entrants that will likely disrupt the alleged monopoly power exerted by the big tech incumbents. Further, when considered within the broader context of venture capital activity, all other startup activity overshadows acquisitions made by the largest technology companies.⁶

Second, as a point of contrast, the Article examines several recent acquisitions by Spotify, an important technology company that sits outside of the “big tech” classification. Specifically, Spotify has expanded beyond its core music streaming business through a series of startup acquisitions — namely, podcasts and audiobooks. While critics of Spotify could point out that it is also engaging in anticompetitive acquisitions of nascent and potential competitors, the more likely reality is that these acquisitions are accelerating Spotify’s expansion and entry into new markets. Indeed, if Spotify’s recent series of acquisitions can reasonably be considered procompetitive,⁷ then why is the same not true (or even possible) for Apple and Amazon within the same product space? In fact, within music streaming, Spotify is the clear market leader ahead of both Apple and Amazon.⁸ Administering antitrust law based on the mere identity or market capitalization of a company — rather than on market realities — is engaging in what could be called “discriminatory antitrust.” Absent market-based evidence, simply swapping “Spotify” with “Apple” should not mean the law flips a switch and presumes anticompetitive harm.

Finally, the Article summarizes the findings of several recent studies that examined a series of big tech acquisitions.⁹ Taken as a whole, these studies indicate insufficient evidence to conclude a systematic concern that large digital technology companies are engaging in

2 This Article uses the terms “potential competition” and “nascent competition” interchangeably for ease of exposition. However, within antitrust law, there are arguably important differences as potential competition refers to entry that has not yet occurred while nascent competition refers to entry that has occurred but in an adjacent product market. See John M. Yun, *Are We Dropping the Crystal Ball? Understanding Nascent & Potential Competition in Antitrust*, 104 *MARQ. L. REV.* 613, 621 (2021).

3 See, e.g. Platform Competition and Opportunity Act of 2021, H.R. 3826, 117th Cong. (2021), <https://www.congress.gov/bill/117th-congress/house-bill/3826/text> (Senators Klobuchar and Cotton’s bill). See also Press Release, Sen. Tom Cotton, Senate Platform Competition and Opportunity Act, https://www.cotton.senate.gov/imo/media/doc/anti-trust_one_pager.pdf (“Senator Cotton’s legislation establishes a presumption against mergers and acquisitions of potential competitors by the Big Tech companies. A designated firm will have the burden of showing that any purchase of greater than \$50 million does not contribute to or sustain its dominant market share. The bill would prevent big tech from further suppressing competition through killer acquisitions.”).

4 Cf. Invited Statement of Geoffrey A. Manne on House Judiciary Investigation Into Competition in Digital Markets, *Correcting Common Misperceptions About the State of Antitrust Law and Enforcement*, INT’L CTR. FOR LAW & ECON. (Apr. 17, 2020), https://laweconcenter.org/wp-content/uploads/2020/04/Manne_statement_house_antitrust_20200417_FINAL3-POST.pdf at 2 (“[A]ntitrust law and enforcement policy should, above all, continue to adhere to the error-cost framework, which informs antitrust decision-making by considering the relative costs of mistaken intervention compared with mistaken non-intervention. Specific cases should be addressed as they come, with an implicit understanding that, especially in digital markets, precious few generalizable presumptions can be inferred from the previous case.”); see also *id.* at 9-10.

5 FED. TRADE COMM’N, NON-HSR REPORTED ACQUISITIONS BY SELECT TECHNOLOGY PLATFORMS, 2010-2019: AN FTC STUDY (2021), <https://www.ftc.gov/reports/non-hsr-reported-acquisitions-select-technology-platforms-2010-2019-ftc-study/> [hereinafter the “FTC Report”].

6 See *infra* Section II.

7 For instance, the proposed Sens. Klobuchar and Cotton bill would exempt Spotify from the presumption of anticompetitive harm from acquisitions.

8 See *Share of Music Streaming Subscribers Worldwide in the 1st Quarter of 2021, by Company*, STATISTA (Nov. 16, 2021), <https://www.statista.com/statistics/653926/music-streaming-service-subscriber-share/> (indicating Spotify has a worldwide share of 32 percent in music streaming while Apple Music is second at 16 percent, and Amazon is third with 13 percent).

9 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. 26 (May 2020); Axel Gautier & Joe Lamesch, *Mergers in the Digital Economy* (CESifo Working Paper, Paper No. 8056, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3529012; Elena Argentesi et al., *Merger Policy in Digital Markets: An Ex-Post Assessment*, 17 *J. COMP. L. & ECON.* 95 (2020).

anticompetitive acquisitions of potential and nascent competitors. The evidence is simply lacking to reliably identify whether the acquisitions are procompetitive or anticompetitive. Of course, some acquisitions present an increased potential for concern and further inquiry, yet this is precisely what is called for in modern antitrust: base inquiries and challenges on market-specific evidence rather than on broad presumptions based on a firm's identity or market capitalization.

II. INSIGHTS FROM THE FTC REPORT ON BIG TECH ACQUISITIONS

In February 2000, the FTC announced that it would use its Section 6(b) authority to collect acquisition data from Alphabet (Google), Amazon, Apple, Facebook (now Meta), and Microsoft, covering a ten-year period from 2010 to 2019.¹⁰ In September 2021, the FTC released a report summarizing the agency's findings based off the collected data.¹¹

The report used aggregated data and presented the information in summary statistics, so the conclusionary value of the study is modest. Nonetheless, several key statistics emerged. Focusing on transactions valued above \$1 million, there were 616 total transactions across the five companies over the ten years period examined, which is an average of approximately 12 transactions per company per year — or, basically, one a month for each company.¹²

Of these transactions, 78.6 percent were valued below \$50 million, and 38.6 percent were valued below \$10 million.¹³ Further, the majority of the acquisitions valued below \$50 million involved companies with between one to ten employees.¹⁴ Of course, the number of employees is not always a reliable indicator of the “importance” or value of a company.¹⁵ Nonetheless, the likelihood is considerably lower, all else equal, that a relatively low-valued startup with minimal staff represents a substantial competitive threat to an entrenched incumbent. Why is it that firms valued below \$50 million with a few employees are less likely to raise anticompetitive concerns? Fundamentally, the argument hinges on one key point: it is much easier to replicate a company with relatively low revenues and a few employees than one valued, for example, at \$500 million with 100 employees. Indeed, if relatively low revenue and small staff startups routinely and commonly represent competitive threats to incumbents, then this raises questions as to the durability of the alleged monopoly power that incumbents hold and the real extent that there are barriers to entry.

Another interesting finding from the FTC Report is the age of the acquired firms. Of the firms which the FTC had data on (which reduced the sample from 616 to 535), 45.2 percent of the acquired firms were five years or younger, 32 percent were five to ten years old, and 22.8 percent were ten years or older.¹⁶ Thus, most acquisitions involved firms older than five years. This raises the question whether firms older than five (or, certainly, ten) years plausibly represent “nascent” competitors. Undoubtedly, more mature companies can represent a nascent threat if these companies expand from their core business into new areas that then attract the attention of a large incumbent.

Yet, the agencies should be able to clearly identify those instances of expansion and to assess whether the purpose of the acquisition is to stop that emerging business from becoming a significant competitor. In contrast, if the acquisition is over an existing, core business that is over five or ten years old with little to no new market entry/expansion activity, then it certainly reduces the likelihood that the acquired firm represents some unrealized, but potentially threatening, nascent threat. Either the threat is fully mature and, consequently, there should be ample market evidence of the constraining effect of the rival, or the threat is merely theoretical without a firm basis. The point is not to suggest a firm's age can absolutely rule out the plausibility of a nascent threat claim, but the theory of harm must have some basis in market realities. For instance, if a

10 Press Release, Fed. Trade Comm'n, FTC to Examine Past Acquisitions by Large Technology Companies (Feb. 11, 2020), <https://www.ftc.gov/news-events/press-releases/2020/02/ftc-examine-past-acquisitions-large-technology-companies/>.

11 FTC Report, *supra* note 5.

12 *Id.* at 13 fig. 5.

13 *Id.*

14 *Id.* at 23 fig. 17.

15 For instance, at the time of Facebook's acquisition of Instagram in 2012, Instagram had a handful of employees and no revenue. Nonetheless, that acquisition was notable for the \$1 billion transaction price, which strongly indicated Instagram represented something quite different than a company purchased for less than \$50 million. See Kurt Wagner, *Here's Why Facebook's \$1 Billion Instagram Acquisition Was Such a Great Deal*, VOX: RECODE (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: DEALBOOK (Apr. 9, 2012), <https://dealbook.nytimes.com/2012/04/09/facebook-buys-instagram-for-1-billion/>.

16 FTC Report, *supra* note 5, at 25 fig. 21.

firm has been in the market for a decade and has yet to directly compete with an incumbent, then some additional evidence should be required to conclude the acquisition is anticompetitive — let alone, to justify a presumption of anticompetitive harm.

Perhaps the statistic that is the most eye-catching is that the big five tech companies each average one acquisition a month. Without context, however, this number tells us very little. According to one commentary, acquisitions made by big tech represent only a small fraction of overall startup acquisition activity:

If we say that those \$50m-plus deals are the ones where someone might have made money (and even here's [sic] it's only a subset), how does that compare to the rest of the industry? The FTC report says that there were 86 US exits to GAFAM [Google, Apple, Facebook, Amazon, Microsoft] for over \$50m from 2010 to 2019. According to the NVCA [National Venture Capital Association], there were 2,100 US VC [venture capital] exits for over \$50m in that period. Selling to those five companies was 4% of decent-sized exits.

...

The same point applies to the total data set. GAFAM bought 400 US companies from 2010 to 2019 for over \$1m, of which 86 were over \$50m and 314 were between \$1m and \$50m. In the same period, the NVCA reports 3,600 US VC exits where a value was disclosed (and 9,600 total).¹⁷

Of course, these are broad aggregate measures, but the point is that there is a vast amount of entrepreneurial activity and acquisitions happening daily that fall outside the big tech space. Additionally, approximately two-thirds of the venture capital deals during the examined period were in sectors that overlap with big tech markets: information technology (IT), consumer services, business and financial services, and consumer goods.¹⁸

What emerges from the FTC Report is that an overwhelming number of big tech acquisitions are small (that is, the purchase price is less than \$50 million) and involves a handful of employees (that is, between one to ten employees). Further, the acquired companies are often older (that is, over five years old). Of course, without actual details on a particular acquisition, our ability to make policy conclusions is limited. Yet, consider if the opposite were true. Suppose the FTC found that most acquisitions involved firms that were relatively young (less than 5 years old) with a sizeable transaction price (over \$50 million) and a large workforce (certainly above a handful of employees). This counterfactual would likely raise the most concern — again, all else equal. Notably, most of the acquisitions do not fit the above profile.

Overall, while the FTC Report is narrow in its scope and detail, there is little in the report that would support overturning legal precedents; passing legislation to implement discriminatory antitrust; and empowering agencies to become de facto regulatory bodies. In the context of all startup activity, big tech acquisitions represent only a small fraction of all startup activity and acquisitions.

III. EXAMINING SPOTIFY'S RECENT ACQUISITIONS

What about the argument that big tech is “big enough” and that, if they want to grow and expand, they should develop their own products and processes “in house,” that is, they should vertically integrate? This line of argument disregards the economic concept of comparative advantage. Economist Ronald Coase's work on the nature of the firm explained that the “make” versus “buy” decision is based on the cost of using the market; that is transaction costs.¹⁹ If transaction costs are high, then this incentivizes firms to move production further in-house. This principle does not change due to the mere identity of a company. Thus, if we recognize that companies have different comparative advantages, and market conditions can change, then acquisitions can serve an important role in the efficient growth of a company — irrespective of a firm's size or identity.

For instance, take a “medium sized” technology company like Spotify, which is the leading music streaming platform that disrupted Apple's incumbent iTunes and currently maintains its market leadership, despite the presence of Apple, Amazon, and Google.²⁰ On December

¹⁷ Benedict Evans, *When Big Tech Buys Small Tech*, (Nov. 12, 2021), <https://www.ben-evans.com/benedictevans/2021/11/12/when-big-tech-buys-small-tech/>.

¹⁸ The Wall Street Journal, *Tracking Investment by Sector*, <https://graphics.wsj.com/venture-capital-deals/>.

¹⁹ See generally Ronald H. Coase, *The Nature of the Firm*, 4 *ECONOMICA* 386 (1937).

²⁰ Spotify entered the digital music market in 2008 by offering a streaming music service, where customers could listen free of charge with advertisements or pay for a premium service. Spotify's entry disrupted the incumbent, Apple's iTunes, which started in 2001. Eventually, Apple discontinued iTunes and launched Apple Music to compete with Spotify.

16, 2021, Spotify announced the acquisition of podcast technology platform Whooshkaa.²¹ This follows on the heels of an acquisition made a month earlier on November 11, 2021, when Spotify announced the acquisition of a leading audiobook platform Findaway.²² Only two years earlier, Spotify acquired two emerging podcasting platforms Gimlet and Anchor.²³ These acquisitions are part of Spotify's self-stated goal to become "the world's leading audio platform."²⁴ Indeed, Spotify's ambitions have paid off — as it currently commands 381 million users worldwide,²⁵ and \$8.9 billion in annual revenues.²⁶ Spotify is the clear market leader in streaming music services with double the number of paid subscribers as Apple Music²⁷ and has overtaken Apple to become the leading platform for podcasts.²⁸

The acquisition of Findaway appears to be aimed at becoming a leading audiobook destination as well. Notably, Findaway's 150 employees are 11 times more than the number of employees Instagram had at the time of Facebook's acquisition (that is, 13 employees).²⁹ Over the past several years, as stated earlier, Spotify has made a series of significant acquisitions.

- **Podz** (June 17, 2021): Described as a "technology company focused on the podcast discovery experience."³⁰ The purchase price was €45 million (approximately \$51 million).
- **Betty Labs Incorporated** (March 29, 2021): Described as "a technology and content creation company focused on creating groundbreaking live audio experiences."³¹ The purchase price was €57 million (approximately \$65 million).
- **Ringer** (March 6, 2020): Described as "a leading creator of sports, entertainment, and pop culture content" that "allows [Spotify] to expand [its] content offering, audience reach, and podcast monetization."³² The purchase price was €170 million (approximately \$192 million).
- **Megaphone** (December 8, 2020): Described as "a podcast technology company" that "allows [Spotify] to expand and scale its podcast monetization and product offering for advertisers."³³ The purchase price was €195 million (approximately \$221 million).
- **Anchor FM** (February 14, 2019): Described as "a software company that enables users to create and distribute their own podcasts."³⁴ Notably, Spotify explained that that the acquisition allows it "to leverage Anchor's creator-focused platform to accelerate

21 Spotify is Building on Megaphone's Capabilities with the Acquisition of Whooshkaa, SPOTIFY.COM (Dec. 16, 2021), <https://newsroom.spotify.com/2021-12-16/spotify-is-building-on-megaphones-capabilities-with-the-acquisition-of-whooshkaa/>.

22 Spotify to Acquire Leading Audiobook Platform Findaway, SPOTIFY.COM (Nov. 11, 2021), <https://newsroom.spotify.com/2021-11-11/spotify-to-acquire-leading-audiobook-platform-findaway/>.

23 Audio First, SPOTIFY.COM (Feb. 6, 2019), <https://newsroom.spotify.com/2019-02-06/audio-first/>.

24 *Id.* ("These acquisitions will meaningfully accelerate our path to becoming the world's leading audio platform.")

25 About Spotify, SPOTIFY.COM, <https://newsroom.spotify.com/company-info/>.

26 Spotify, Annual Report (Form 20-F) (Dec. 31, 2020), https://s22.q4cdn.com/540910603/files/doc_financials/2020/ar/4e770a8c-ee99-49a8-9f9e-dcc191807b56.pdf at 5 (revenues of \$7.88 million euros).

27 Ryan Henderson, *How Spotify Now Owns the Podcast Supply Chain*, THE MOTLEY FOOL (Jan. 16, 2021), <https://www.fool.com/investing/2021/01/16/the-2-big-reasons-spotify-will-win-podcasting/>.

28 Mikey Campbell, *Spotify Overtakes Apple as Top US Podcast, Says Spotify*, APPLEINSIDER.COM (Oct. 28, 2021), <https://appleinsider.com/articles/21/10/28/spotify-says-it-recently-passed-apple-as-top-us-podcast-platform/>.

29 Riddhi Jain, *Music Streaming Service Spotify Plans on Acquiring Findaway*, ITM (Nov. 12, 2021), <https://itmunch.com/music-streaming-service-spotify-acquires-findaway/> ("Music streaming app Spotify will be bringing in the entire team of Findaway of about 150 employees."); Ben Remaly, *Senate Proposes Limits on GAFA Acquisitions*, GCR.COM (Nov. 8, 2021), <https://globalcompetitionreview.com/gcr-usa/department-of-justice/senate-proposes-limits-gafa-acquisitions/> ("The FTC is currently suing to unwind Facebook's \$1 billion purchase of Instagram and its 13 employees in 2012.")

30 Spotify, Report of Foreign Private Issuer (Form 6-K) (Oct. 2021), https://s22.q4cdn.com/540910603/files/doc_financials/2021/q3/8aac006e-c0b2-4b52-a682-d5ed53274725.pdf at 8.

31 *Id.*

32 Spotify, Annual Report, *supra* note 25, at 44.

33 *Id.*

34 Spotify, Annual Report (Form 20-F) (Dec. 31, 2019), https://s22.q4cdn.com/540910603/files/doc_financials/2019/ar/Spotify-2020-AGM-Annual-Report-on-Form-20-F.pdf at F-22.

the Group's [Spotify's] path to becoming the world's leading audio platform."³⁵ The purchase price was €136 million (approximately \$154 million).

- **Gimlet Media** (February 15, 2019): Described as “an independent producer of podcast content” that “allows the Group to leverage Gimlet’s in-depth knowledge of original content production and podcast monetization.”³⁶ The purchase price was €172 million (approximately \$195 million).
- **Cutler (Parcast)** (April 1, 2019): Described as “a premier storytelling podcast studio” that “allows the Group to bolster its content portfolio and utilize Parcast’s writers, producers, and researchers in the production of high quality content.”³⁷ The purchase price was €49 million (approximately \$55 million).

A reading of the various statements from Spotify executives reveals that they view these acquisitions as a path to “accelerate” their entry into new markets. For instance, according to Spotify, the acquisition of Findaway is to “accelerate Spotify’s presence in the audiobook space and will help us more quickly meet that ambition.”³⁸ Further, “Findaway’s technology infrastructure will enable Spotify to quickly scale its audiobook catalog and innovate on the experience for consumers, simultaneously providing new avenues for publishers and authors to reach audiences around the globe.”³⁹ Similarly, “Combining Spotify and Findaway and their amazing team and their amazing tech, the idea is to realize th[e] future faster than we ever could as separate companies.”⁴⁰

Given the increased calls to make presumptions that market expansions by established companies through acquisitions are inherently anticompetitive and anti-consumer, what is the principled basis to permit market leaders such as Spotify to expand or innovate in podcasts and audiobooks through acquisitions but not Apple or Amazon? In contrast, the modern approach to antitrust, which currently guides agencies and courts, would scrutinize all acquisitions under a rule of reason standard based on market-specific evidence.

In sum, proposed legislation like Senators Klobuchar and Cotton’s bill, “Platform Competition and Opportunity Act,” would treat market leaders like Spotify significantly more favorably than lagging rivals Apple, Amazon, and Google. Why? Simply because Apple, Amazon, and Google fit some arbitrary definition of “big tech.” Over the entire history of the antitrust laws, agencies and courts have never implemented a discriminatory regime where the mere identity of a company triggers a different set of legal rules. Such an approach, in instances such as Spotify, would only serve to further entrench the market leader while hindering the ability of rivals to challenge for market leadership.

IV. THREE RECENT STUDIES EXAMINING BIG TECH ACQUISITIONS

Finally, this Section⁴¹ reviews three recent studies that examine acquisitions made by Google, Amazon, Facebook, Apple, and Microsoft for evidence of anticompetitive harm.⁴² Broadly, all three studies do not reach firm conclusions either in an anticompetitive or procompetitive sense. Indeed, the evidence is either mixed or consistent with both hypotheses. Additionally, none of the studies use a control group such as an examination of acquisitions by technology companies outside of the big five (Google, Amazon, Facebook, Apple, and Microsoft) or track the progress of contemporaneous rivals to the acquired nascent or potential competitor.

Latham et al. examine acquisitions by Google, Amazon, Facebook, and Apple (“GAFA”) between 2009 and 2020, and conclude “only a small proportion of transactions could begin to fit the ‘killer’ narrative.”⁴³ Rather, “the vast majority have been about GAFA acquiring new capa-

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ Press Release, Spotify, Spotify Announces Acquisition of Audiobook Leader Findaway (Nov. 11, 2021), <https://investors.spotify.com/financials/press-release-details/2021/Spotify-Announces-Acquisition-of-Audiobook-Leader-Findaway/default.aspx>.

³⁹ *Id.*

⁴⁰ Sarah Perez, *Spotify Expands Into Audiobooks with Acquisitions of Findaway*, TECH CRUNCH (Nov. 11, 2021), <https://techcrunch.com/2021/11/11/spotify-expands-into-audio-books-with-acquisition-of-findaway/> (quoting Nir Zicherman, Spotify’s head of Audiobooks).

⁴¹ This section is based on Yun, *supra* note 2, at Part IV.

⁴² See Latham et al., *supra* note 9; Gautier & Lamesch, *supra* note 9; Argentesi et al., *supra* note 9.

⁴³ See Latham et al., *supra* note 9, at 27 (defining “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 into a challenger to their core monopoly).

bilities and positioning themselves to enter new markets.”⁴⁴ Specifically, the authors filtered all 409 acquisitions to determine whether they met a “core business” filter.⁴⁵ They find only 33 of the acquisitions (8 percent) fit this filter; further, of these 33 acquisitions, the authors emphasize that they “are not saying that the transactions surviving these filters were killer acquisitions.”⁴⁶

The authors argue, nonetheless, that this could mean that there is a concern about “reverse” killer acquisitions, where the purchaser eliminates its own development and product and uses the acquired product instead. It is not clear, however, that even if a reverse killer acquisition were to occur, that this would be detrimental to innovation. For instance, combining the best of two development processes in order to bring a more innovative product to market faster is a potential cognizable efficiency rather than a theory of harm.⁴⁷ Similarly, in assessing this theory, one cannot simply assume internal development would occur or would occur at the same degree of efficiency as the acquired assets.⁴⁸

Gautier & Lamesch similarly examine acquisitions from big tech platforms and find “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.”⁴⁹ Focusing on killer acquisitions,⁵⁰ of the 175 deals they examined over the period from 2015-2017, 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.”⁵¹ The potential case is Facebook’s 2016 acquisition of the “rapidly popular” photo filter app Masquerade.⁵² Similar to Latham et al., Gautier & Lamesch certainly consider the possibility that some of the acquisitions were intended to increase market power rather than realize efficiency gains. Indeed, either conclusion could be construed as consistent with their evidence. Ultimately, however, they explain “[t]he answer to this question is far from obvious and would need a case by case analysis.”⁵³

Finally, Argentesi et al. examine mergers over the period between 2008 and 2018 involving Google, Facebook, and Amazon.⁵⁴ While their examination is generally more descriptive, they find “there are considerable difficulties in understanding the competitive implications of acquiring a young firm as, at that stage in its life cycle, its evolution is still uncertain, and thus, it is very difficult to determine if the target will grow to become a significant competitive force.”⁵⁵ This finding aptly summarizes the challenge agencies and courts face when assessing mergers involving a theory based on eliminating a nascent competitor. The authors also do a thoughtful review of the UK’s Competition and Markets Authority’s (“CMA”) decisions to clear both the *Facebook-Instagram* and *Google-Waze* acquisitions.⁵⁶ While they make compelling arguments on both sides of the debate, they do not reach a firm conclusion.⁵⁷

44 *Id.* at 34.

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

46 *Id.* (emphasis in original).

47 See U.S. DEP’T OF JUST. & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES (2010) at § 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.”).

48 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, e.g. Amazon Fire Phone, Facebook Home, Facebook Deals, Facebook Email, Facebook Places, Facebook Gifts, Google Glass, Google Nexus Q, Google TV, Microsoft Kinect).

49 See Gautier & Lamesch, *supra* note 9, at 27.

50 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.”).

51 *Id.* at 4.

52 *Id.*

53 *Id.* at 27.

54 See Argentesi et al., *supra* note 9.

55 *Id.* at 103-04.

56 At the time of those acquisitions, the competition authority in the UK was the Office of Fair Trading (OFT).

57 Regarding Facebook-Instagram, the authors conclude: “[T]he effect of the Authorities’ decision to clear the merger on consumer welfare depend on the balance between likely anticompetitive effects and efficiencies, which in turn heavily depend on the selected counterfactual. . . . [P]erhaps . . . Facebook’s role in the development of Instagram with respect to advertising was significant.” *Id.* at 125-26. Regarding *Google-Waze*, the authors conclude: “[T]he merger has enabled Google Maps and Waze to exploit their complementarities and generate efficiencies. These efficiencies are clearly merger-specific and should be taken into account when assessing whether the decision has proved to be beneficial or detrimental to consumers.” *Id.* at 130.

The main takeaway from these studies is that potential and nascent competition cases are challenging — not because we somehow “know” these are anticompetitive mergers but cannot easily prove it — but because these theories of harm are inherently speculative. Further, there are no control group comparisons, such as with non-GAFAM acquisitions including by companies like Spotify, nor is there tracking of competitors to the acquired startups (e.g. the competitors to Instagram and WhatsApp at the time of their acquisitions). Most importantly, the results from these studies do not definitely support a transition to a regulatory approach to antitrust.

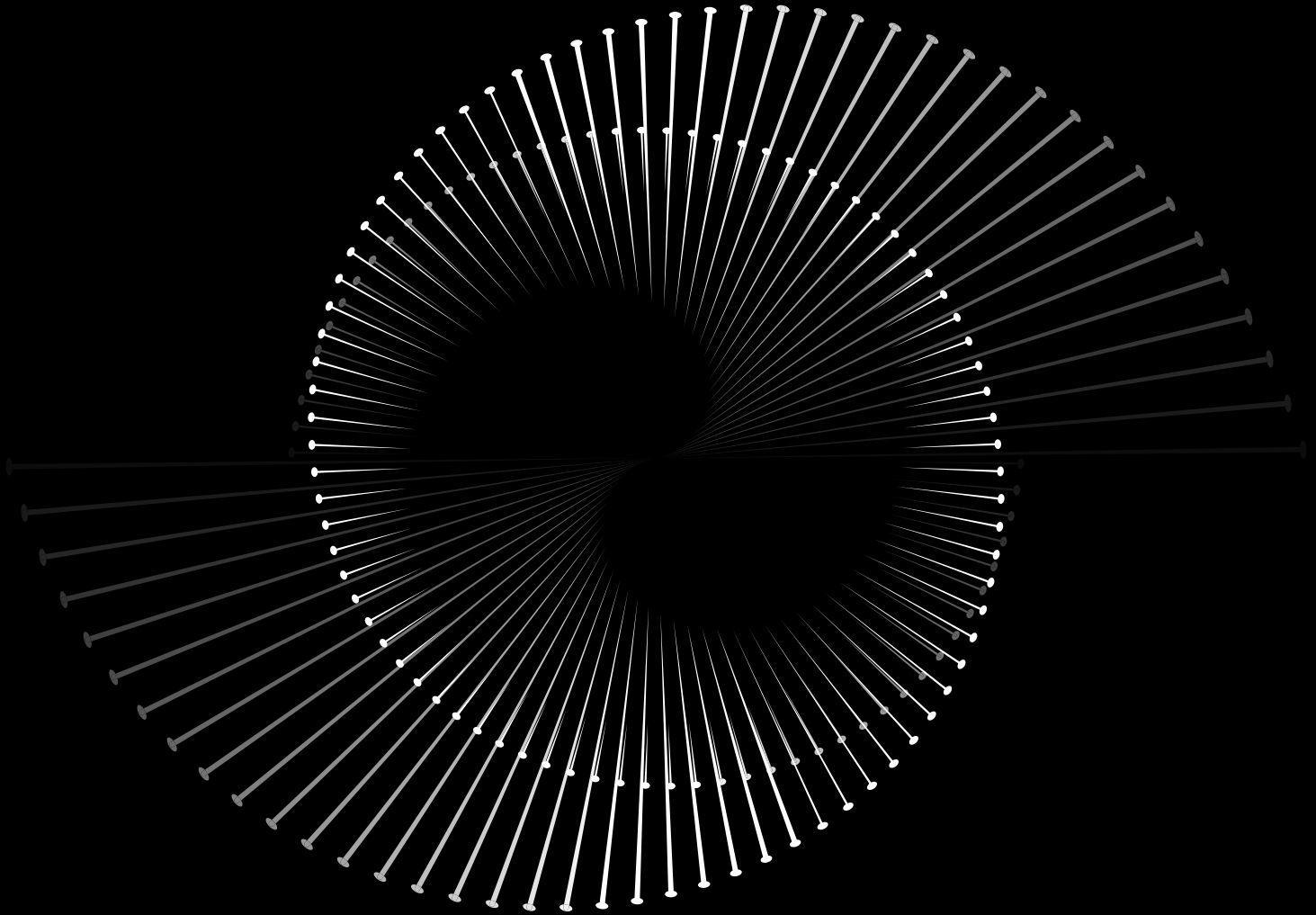
V. CONCLUSION

There is certainly no shortage of calls to fundamentally transform antitrust agencies into regulatory bodies where one set of rules apply to one group and another set to everyone else.⁵⁸ Such a radical restructuring of antitrust demands extraordinary evidence that the current laws are fundamentally broken with rampant consumer harm due to agency inaction or judicial error. The current and available empirical evidence shows little support for such drastic legal and policy changes.

58 In addition to the Klobuchar-Cotton bill, several recent reports have also called for various regulatory antitrust proposals for large digital platforms. See, e.g. STIGLER CTR. FOR THE STUDY OF THE ECON. & THE STATE, STIGLER COMM. ON DIGIT. PLATFORMS: FINAL REP. 16–21 (2019), <https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf>; MAJORITY STAFF REPORT AND RECOMMENDATIONS, SUBCOMMITTEE ON ANTITRUST, COMMERCIAL AND ADMINISTRATIVE LAW OF THE COMMITTEE ON THE JUDICIARY (2020), https://judiciary.house.gov/uploadedfiles/competition_in_digital_markets.pdf.



POTENTIAL COMPETITION AS PROCESS AND STRUCTURE



BY RICHARD N. LANGLOIS¹



¹ Department of Economics, the University of Connecticut.

It has long been conventional for economists to be taught the following story about the nature and history of competition.² Once upon a time, economists like Adam Smith & Alfred Marshall held an oversimplified account in which many anonymous small sellers interacted with each other under conditions of perfect information. It was not until the early twentieth century that thinkers like Edward Chamberlin & Joan Robinson came along to correct this unrealistic view by creating the theory of “imperfect” competition. Like most fables, this one does not survive close scrutiny. In reality, Smith & Marshall offered no such account, but in fact saw competition in a much richer and more nuanced way than would twentieth-century price theory, including its “imperfect competition” variant. Moreover, far from having “corrected” the theory of perfect competition, it was twentieth-century price theory that, drawing on French precursors like Augustin Cournot, would actually *invent* the theory of perfect competition.³

Using the lens of the formal price theory that developed over the course of the twentieth century, modern-day economists look back anachronistically at the origins of the Sherman Act and at the early-century debates that led to the Clayton and FTC Acts. Although the roots of later-century economic analysis were already visible, most contemporaries understood competition quite differently from today’s standard accounts. Thinkers later derided as *laissez-faire* economists, and often even their opponents, did not reason in terms of an efficient equilibrium of prices, quantities, and number of firms; rather, following Adam Smith, they had a dynamic view of competition as active striving.⁴ Alfred Marshall equated competition with “economic freedom and enterprise.”⁵

Active competition could take place along many margins, including both innovation and entry. The result of active competition would be not an efficient allocation of resources at any moment but rather a dynamic process of economic growth. The key to a healthy economy was thus freedom of contract, which meant both freedom from legal restraint, especially restraint on entry, and the freedom to engage in innovative economic arrangements. In the formulation of the day, this could be assured if there was *potential competition* – if the door were left open for others to enter markets and to innovate along technological, organizational, and even contractual dimensions.⁶ Since competition consisted in actions not in the structure of the market, competition policy in this understanding ought to focus on whatever might stop competitive behavior.

As static formal price theory infiltrated antitrust reasoning in the years after World War II, beginning with the so-called Structure-Conduct-Performance paradigm, the importance of potential competition fell into eclipse. Among the few dissenters was Joseph Schumpeter, who upheld the older dynamic view of competition and expressed its importance with distinctive vigor. Competition, he insisted, “acts not only when in being but also when it is merely an ever-present threat. It disciplines before it attacks. The businessman feels himself to be in a competitive situation even if he is alone in his field or if, though not alone, he holds a position such that investigating government experts fail to see any effective competition between him and any other firms in the same or a neighboring field and in consequence conclude that his talk, under examination, about his competitive sorrows is all make-believe.”⁷

Consider the famous turn-of-the century case against Microsoft.⁸ The litigants approached the case with two very different strategies. The government stuck to a focused script. It narrowly defined the relevant market as that for operating systems for Intel-compatible personal computers. Because Microsoft held some 95 percent of that market, it was a monopoly. The government then pressed its case that Microsoft’s contracting practices constituted anticompetitive exclusion that maintained its monopoly and thus violated Section 2 of the Sherman Act.

By contrast, Microsoft waged what could only be called a Schumpeterian defense. The company denied all charges, and it portrayed its position as that of a dynamic competitor in an ever-changing market, perennially besieged by threats ranging from the dimly perceptible to the radically unknown. “In the future,” one Microsoft executive was paraphrased as testifying, “users may simply plug their computers into cable outlets and get whatever programs cable providers offer. Small, handheld computing devices could wipe out the PC, just as the PC wiped out the

2 See for example Huw Dixon, “A Brief History of Imperfect Competition,” *CPI Antitrust Chronicle*, October 2021. <https://www.competitionpolicyinternational.com/a-brief-history-of-imperfect-competition/>.

3 Brian J. Loasby, *Choice, Complexity, and Ignorance*, Cambridge 1976, pp. 173-192; Scott Moss, “The History of the Theory of the Firm from Marshall to Robinson and Chamberlin: The Source of Positivism in Economics,” *Economica* 51(203): 307-318 (1984).

4 Paul J. McNulty, “A Note on the History of Perfect Competition,” *Journal of Political Economy* 75(4): 395-399 (1967); Mary S. Morgan, “Competing Notions of ‘Competition’ in Late Nineteenth-Century American Economics,” *History of Political Economy* 25(4): 563-604 (1993).

5 Alfred Marshall, *Principles of Economics*, Eighth Edition. London 1920, VI.iii.2.

6 Benjamin J. Klebaner, “Potential Competition and the American Antitrust Legislation of 1914,” *The Business History Review* 38(2): 163-185 (1964).

7 Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy*, New York 1950, p. 84.

8 A. Douglas Melamed & Daniel L. Rubinfeld, “U.S. v. Microsoft: Lessons Learned and Issues Raised,” in Eleanor M. Fox & Daniel A. Crane, eds., *Antitrust Stories*, New York 2007, pp. 287-311.

mainframe.”⁹ A graphical exhibit depicted these threats, many of them in the form of question marks, impinging as arrows upon the company. This elicited titters from the courtroom, and the argument was widely mocked in the press. Needless to say, within a few years the twin general-purpose technologies of cloud computing and the smartphone had arisen to make Microsoft’s competitive sorrows of 1999 seem a lot less like alligator tears.¹⁰

Although present-day antitrust policy continues to be informed principally by price theory, and thus to be focused on existing competitors in existing markets, there has arisen a new – or perhaps retro – challenger: the so-called Neo-Brandeisian view. Like the Schumpeterian approach, the Neo-Brandeisian approach rejects price theory as the sole guide – or perhaps as any guide – to assessing competition. Lina Khan, one of the principal exponents of this view, has argued for a return to “process and structure” in understanding markets.¹¹

Yet what she has in mind is quite different from the understanding of process and structure in Adam Smith, Alfred Marshall, or Joseph Schumpeter. Khan calls for a return to “the tradition of structural separations.”¹² Like the Progressives of old, Khan laments the invention of general incorporation statutes, fondly recalling the restrictive state charters that “generally limited the size, scope, and duration of operations and steered business activity toward serving community purposes.” She recalls the country’s history with separation regimes in railroads, bank holding companies, television networks, and telecommunication carriers. And she suggests imposing a similar regime of separation on today’s Internet platforms, restricting them only to those activities that are truly technically integrated – that are “unique infrastructural assets” – and forbidding any that represent mere “commerce.”

A careful assessment of the Neo-Brandeisian position is beyond the scope of the present effort.¹³ But it is clear that a regime of separations is if anything the opposite of a Schumpeterian approach to antitrust. An essential feature of Schumpeterian competition is the tearing down of existing categories of business. The inevitable mutation of technologies and markets would transform “line-of-business restrictions from apparently sensible protections against unfair competition to archaic rules that impede competition and innovation.”¹⁴ As happened in the twentieth century, market segmentation would impede firms from creating and deploying capabilities across segment boundaries. As happened in the twentieth century, market segmentation would ultimately end up protecting incumbents from the genuinely new. Schumpeterian competition is not about maintaining the structure of competition. It is about destroying and replacing it.

Some Neo-Brandeisians announce themselves to be protective of innovation – even, in the case of Tim Wu, of putatively Schumpeterian innovation.¹⁵ But they generally mean this in an exceedingly narrow sense: antitrust should be concerned with preventing existing large firms from unilaterally excluding or buying up (small, new) competitors. In Kahn’s separation scheme, this would mean flatly outlawing self-preferencing: platforms themselves would be barred from competing with any firms that use the platform. The European Commission recently brought charges against Apple after complaints from Spotify that Apple was preferencing its own music-streaming apps over those of Spotify.¹⁶ In a very generous reading, one could see behind this a dynamic theory of leveraging. Maybe modern-day platforms are somehow trying to leverage themselves into large new markets. Perhaps by preferencing its music-streaming apps over those of Spotify, Apple is trying to monopolize the market for music streaming.

The problem with this view is that it misses the nature and sources of genuine competition in the modern Internet economy – and, indeed, in any economy. It misses the importance – and the true sources – of potential competition.

Market segmentation is an attempt to prevent the large platform firms from diversifying. But, especially in an industry underpinned by a general-purpose technology like cloud computing, the ability to diversify is what makes the Internet giants powerful competitors against one

9 William Saletan, “Microsoft Plays Dead,” *Slate*, January 28, 1999.

10 Farhad Manjoo, “Steve Jobs Was Right: Smartphones and Tablets Killed the P.C.,” *The New York Times*, November 13, 2019.

11 Lina M. Khan, “Amazon’s Antitrust Paradox,” *The Yale Law Journal* 126(3): 710-805 (January 2017).

12 Lina M. Khan, “The Separation of Platforms and Commerce,” *Columbia Law Review* 119(4): 973-1098 (2019).

13 But see for example A. Douglas Melamed & Nicolas Petit, “The Misguided Assault on the Consumer Welfare Standard in the Age of Platform Markets,” *Review of Industrial Organization* 54(4): 741-774 (2019).

14 Richard J. Gilbert, “Separation: A Cure for Abuse of Platform Dominance?” *Information Economics and Policy* 54: 100876 (2021).

15 Tim Wu, “Taking Innovation Seriously: Antitrust Enforcement If Innovation Mattered Most,” *Antitrust Law Journal* 78(2): 313-328 (2012).

16 Sam Schechner, “EU Charges Apple with App Store Antitrust Violations in Spotify Case,” *The Wall Street Journal*, April 30, 2021.

another.¹⁷ In the highly unlikely event Apple were to destroy Spotify, it would still have to deal with the likes Amazon and Google, which both have music-streaming services. The Big Tech firms already compete in a wide variety of overlapping niches. Much more significantly, however, these firms have developed underlying technological and market capabilities that, although by no means identical, are fundamentally similar. Computer engineers and data centers are flexible factors of production that can be easily redeployed when a new opportunity emerges. If one firm stumbles in any market niche, the others stand ready to pounce. The most disruptive form of new entry has often come not in the form of a small startup but of a large firm in a related area that can bring to bear the necessary complementary capabilities.¹⁸

Is it not also true that Schumpeterian competition often comes from small firms with new ideas and capabilities? Many fear that today's Big Tech firms are buying up startups that might otherwise have blossomed into potential competitors – so-called killer acquisitions. (An example frequently given is Facebook's acquisition of Instagram and WhatsApp, even if possession of those properties has not stanching the flow of valuable younger users to platforms like Snapchat and TikTok.)¹⁹ Merger policy may be the area where antitrust policy has the greatest hope of militating in favor of dynamic competition. Yet even here caution is in order. Buying a startup with capabilities complementary to its own may allow an acquiring firm to compete more effectively against its other large rivals; and society may profit more from the synergies of acquisition than if the startup had been left to flounder on its own. Until antitrust policy made the purchase of outside technology difficult in the middle of the twentieth century, there had long existed a healthy market for independently developed ideas.²⁰ Technology purchased on the market has featured importantly in the development of major systemic innovations like the iPhone and the Alexa voice-recognition system.²¹ Moreover, empirical evidence suggests that a well-functioning market for mergers and acquisitions creates an incentive for startups to innovate.²²

As either Niels Bohr or Yogi Berra once said, prediction is hard, especially about the future. That means that we can't incorporate potential competition into our analysis merely by trying to guess what kind of competition the future will bring. We will get it wrong. But we can focus on a (Schumpeterian version of) process and structure. That may mean a greater attention to intellectual property rights than to antitrust. It might also mean thinking less about firms and markets and more about economic capabilities and where they come from. And, at the very least, it will mean being careful to avoid creating new institutional barriers to potential competition.

17 Nicolas Petit, *Big Tech and the Digital Economy: The Monigopoly Scenario*. Oxford 2020; Hal Varian, "Seven Deadly Sins of Tech?" *Information Economics and Policy* 54: 100893 (2021).

18 David J. Teece, "Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing, and Public Policy," *Research Policy* 15(6): 285-305 (1986).

19 So say internal Facebook documents. Keach Hagey & Jeff Horwitz, "Facebook Tried to Make Its Platform a Healthier Place. It Got Angrier Instead," *The Wall Street Journal*, September 15, 2021.

20 David A. Hounshell, "The Evolution of Industrial Research in the United States," in Richard S. Rosenbloom & William J. Spencer, eds., *Engines of Innovation: U.S. Industrial Research at the End of an Era*, Boston 1996, p. 26; David C. Mowery, "Plus Ça Change: Industrial R&D in the 'Third Industrial Revolution,'" *Industrial and Corporate Change* 18(1): 1-50 (February 2009).

21 On the many startups Amazon needed to acquire and integrate for the Alexa project, see Brad Stone, *Amazon Unbound: Jeff Bezos and the Invention of a Global Empire*, New York 2021, pp. 21-53.

22 Gordon M. Phillips & Alexei Zhdanov, "R&D and the Incentives from Merger and Acquisition Activity," *The Review of Financial Studies* 26(1): 34-78 (2013).

HEY GOOGLE/SIRI/ALEXA, OF ALL THE PRODUCTS AND SERVICES IN THE METAVERSE WHOSE DO YOU PREFER?

BY CHRIS PIKE¹



¹ The author is Partner and Head of Digital Markets at Fideres, and an associate at the Centre for Competition Policy at the University of East Anglia. Contact address: Chris.Pike@Fideres.com. I would like to thank Professor Tommaso Valletti, Alberto Thomas, and the staff at Fideres for their invaluable comments on the paper and discussion of its themes. Disclosure: Fideres is a firm that provides expert economic advice in relation to investigations into corporate misconduct. Given the nature of the author's role, he may therefore be involved in investigations into any of the firms discussed in this paper. However, the views set out here pre-date and are independent of any such work.

I. TACKLING HARM TO POTENTIAL COMPETITION FROM SELF-PREFERENCING - NEXT GENERATION GATEKEEPERS

A group of teenage boys take a break from their board game (... Dungeons and Dragons? Risk? Monopoly?) to argue about what the future will look like... none has seen *Back to the Future* so hoverboards do not feature...

- *Ready Player One*... Mark is a video-game fan and believes that in the future we will no longer look at the internet, we'll be in it. Inhabitants of this *metaverse* will no longer worry about the amount of time that they and their children spend looking at, and scrolling on their phones, instead they will complain about the manipulative tricks used to lure them into putting on their glasses to enter this second life.
- Meanwhile, Jeff's older sister let him watch Joaquin Phoenix in *Her*, so he's putting his money on us all wanting our own digital butler (that we may or may not fall in love with).
- Tim's a *James Bond* fan and a sucker for a gadget-packed watch, he's betting on wearables.
- Finally, Sunder is a fan of David Hasselhoff and Kitt in *Knight Rider* and sees us driving, or being driven, by our own smart car (a digital chauffeur).

Now, more important than which, if any, of these comes to pass, is what these different visions of the future have in common. Which is the understanding that controlling what is, in effect, the next-generation operating system, will deliver an incredibly powerful gatekeeper role that will allow the extraction of huge rents.

Just as iOS and Android in mobile OS (and their app stores), Windows in desktop OS, and indeed Google in search, and Amazon in digital retail, Mark Zuckerberg seems to see the metaverse as a chance to become a gatekeeper to a marketplace platform (and to combine that with Facebook's unmatched appetite and ability to deliver manipulative addiction-building innovation). He appears to see this as a step up from simply being a gatekeeper to our attention, and hence reliant on the aforementioned manipulative addiction-building innovation which looks increasingly vulnerable to regulation.

He's not the only one either, Tim Sweeney, CEO of Epic Games, believes the metaverse will prevail and that "This Metaverse is going to be far more pervasive and powerful than anything else. If one central company gains control of this, they will become more powerful than any government and be a god on Earth." But whether it is the metaverse, or a digital butler, or the digital chauffeur, or something else entirely, it is the prospect of centralized control that should worry us.²

At the same time these competing visions of the future will no doubt excite those eager to identify competition between big tech firms. These will hold them aloft as some sort of smoking gun to demonstrate the supposedly overzealous nature of competition agencies and the irrational panic of concerned citizens who have witnessed the exploitation unleashed in the name of incentivizing innovation over the last 20 years.

In deriding these legitimate concerns as populist excess, these characters have sought to identify themselves as undervalued and ignored experts, driven by purist scientific economic insight, rather than acknowledge their success with judiciaries around the world. However, despite their focus on innovation, there is a lack of any clear idea on the counterfactual innovation that would have been built upon the same publicly funded research by firms facing more serious competitive constraints within their own dominant markets.³ Moreover, open-ended competition-for-the-market is, by its very nature, a pale flicker of a healthy marketplace.⁴ It is the residual, it is what is left when within-the-market competition is for some reason absent, which is why it is accepted and justified only by the inexistence of that market in a more competitive counterfactual. Its use therefore relies heavily on the much-abused concept of destructive competition, the favored rationale of rent-seeking lobbyists all around the world.

2 Which in large part explains the appeal of decentralized blockchains as an alternative vision for the future of the internet – though sometimes ripe for exploitation themselves (see the class action against Tether, Case No. 19 Civ. 9236, though notably Tether is not decentralised, a fact that in part explains how it was able to abuse its position), and still environmentally toxic, the possibility they offer of removing the gatekeeper altogether rather than simply taming its excesses, or occasionally changing its identity, makes them the truly revolutionary possibility here (see Pike & Carovano, forthcoming in *Algorithmic Antitrust*, 2022, Springer), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3680600.

3 Mazzucato, 2011, *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*.

4 See OECD, "Competition for-the-market" (2019), available at [https://one.oecd.org/document/DAF/COMP/GF\(2019\)7/en/pdf](https://one.oecd.org/document/DAF/COMP/GF(2019)7/en/pdf).

So, the power of the gatekeepers to the metaverse, or over our digital butlers/chauffeurs should be a concern that agencies and policymakers can see coming. Furthermore, there is little reassurance to be had from there being competing visions for this next generation of OSs. Left alone, this amounts to a battle over who gets to exploit us, and more importantly a battle in which the race to build network effects, rather than a better value offer, will determine the winner. Indeed, these effects are likely again to ensure there are only a few winners, even if there are multiple innovations (including those where gatekeeper power is decentralized), and hence a variety of counterfactual innovations. In this context, agencies should be in a position to anticipate and forestall the tipping of these markets through the types of *ex ante* regulatory measures that are proposed in the DMA (and by the UK's DMU). A clear steer that these rules will apply within these emerging markets will therefore be important for protecting potential competition in these markets.

II. DISCRIMINATORY ABUSE: SELF-PREFERENCING BY MONOPSONIST GATEKEEPERS

This short paper focuses on two of the leading inconvenient economic concepts: potential competition and monopsony, and particularly the discriminatory abuse of monopsony market power by a platform via self-preferencing or other manipulation.

Potential competition is defined by the OECD as a competitive constraint on a firm's behavior that might potentially arise but has not yet done so. For example, the potential competitive constraints from firms that do not yet exist; or from firms that do exist, but which have products that do not, or products with still unspecified features that will affect the degree of substitutability with existing products; or with products that exist but which they have not decided how to monetize.

Those that mistake economics for econometrics often seek to exclude analysis of theories of potential competition as somehow un-economic in nature, and hence inadequate or unworthy of treatment under a "more economic" competition law. As noted however, this simply illustrates a convenient misunderstanding of economic insight.

Similarly, monopsony is another area in which competition policy has developed a blind spot on the scope for harm.⁵ A key part of this reawakening has been the renewed focus upon dominant platforms that use their gatekeeper position to self-preference or otherwise discriminate against or between sellers (of products or labor).⁶ This discrimination constitutes a prime example of the way in which a dominant platform can abuse monopsony market power in either an exclusionary, or exploitative fashion.

III. EXCLUSIONARY EFFECTS OF SELF-PREFERENCING AND OTHER DISCRIMINATION

A. Exclusion of Rivals in Ancillary Markets

The first is the foreclosure of rivals in ancillary markets. For example, as the Italian competition agency, the AGCM recently identified, Amazon's discriminating between third-party sellers on the basis of their purchasing of fulfillment services effectively coerces (and hence ties) those sellers into also purchasing Amazon's fulfillment services, rather than a rival's fulfillment services.

This type of conduct can allow a platform to use its dominance to exclude rivals in the ancillary market, and thereby to charge supra-competitive prices to sellers that use its platform. In addition, the conduct can divert sales away from sellers that do not purchase the ancillary services. Furthermore, the conduct can harm consumers. This is firstly because the discrimination can lead them to purchase higher-priced poorer-quality products that have been promoted above better value alternatives. Secondly, to the extent that the purchasers of over-priced ancillary services pass-on this increase this will increase their prices (which benefit from discriminatory prominence) and reduce price competition between sellers on the platform.

But why would a platform tie ancillary services rather than simply charging higher transaction fees? Firstly, the ability to set su-

5 This has begun to be addressed following influential work by authors such as Azar, Ionescu, Steinbaum & Taska (2018) (available at <https://voxeu.org/article/concentration-us-labour-markets>), Posner, Naidu & Weyl (2018) (available at <https://harvardlawreview.org/2018/12/antitrust-remedies-for-labor-market-power/>), Abel, Tenreyro & Thwaites (2019) (available at <https://voxeu.org/article/monopsony-uk>), Pike & Volpin (2019) (available at <https://www.oecd.org/daf/competition/competition-in-labour-markets-2020.pdf>).

6 Some draw a comparison here to supermarkets that self-preference their white-label products. However, leaving aside that supermarkets tend not to preference these products (indeed some allow category captains to organize their layout), this comparison does not hold-up. Firstly, most supermarkets lack a dominant gatekeeper role since they face rival supermarkets. Secondly, white-label products are typically used to countervail the often-dominant position of major brands or to fill an otherwise vacant slot (that of the ultra-low-cost no-frills product variant, or indeed to provide a reliable quality assuring brand where otherwise there would be none). Filling these slots is therefore important for maintaining a supermarket's competitive offer to consumers.

pra-competitive prices on these services can facilitate better price discrimination. For example, it can enable the platform to effectively set different fees for different types of sellers. It may also protect the platform from non-price competition from rivals in the ancillary market. Finally, building market power and economies of scale in the ancillary market can help the platform to then deny sellers on other platforms access to ancillary services with the same economies of scale that it has. This can protect the platform's dominance in its core platform market.

B. Exclusion of Sellers of Products Sold via the Platform

A second concern is over the impact on competition in the markets for products sold on the platform. Where self-preferencing raises the costs of rivals, by discriminating against them and requiring them to spend more on obtaining prominence for their products (customer acquisition), this can reduce the competitive constraint on the platform's own offering.⁷ Similarly where self-preferencing effectively ties products to the platform this can again reduce the competitive constraint on the platform subsidiary's offering.⁸ In both cases the reduction in competitive pressure provides scope for the platform's subsidiary to raise its own price or deteriorate its own quality without losing sales. As in ancillary markets this can in strategically important products, help defend the platform's position.

C. Exclusion of Rival Platforms

Indeed, as noted, exclusion in either ancillary or on-platform product markets can help to exclude rival platforms (e.g. eBay, Fire OS, or Bing). For example, self-preferencing that denies independent firms in on-platform or ancillary markets access to economies of scale or network effects can deny potential rival platforms access to competitive sellers and thereby damage the value of the platform they offer to sellers and consumers. This allow the platform to maintain supra-competitive commissions on platform transactions, some of which will be paid by seller-customers of the platform, and some will be passed on to final consumers.

IV. EXPLOITATIVE EFFECTS OF SELF-PREFERENCING AND OTHER DISCRIMINATION

A. Exploitative Abuse

Distinct from the potential exclusionary effects, self-preferencing also raises concern as a potentially exploitative abuse of dominance. While not an offence in the US, this is a concern in Europe and most other jurisdictions around the world.

These concerns stem from a recognition that whatever its source (merger, exclusionary conduct, or organic growth), persistent market power can be exploited in ways that harm a platform's customers (whether they be consumers buying products/services, or producers/workers buying distribution or intermediation).⁹

For example, a platform might abuse its dominance and the lack of competitive constraints it faces by setting excessive prices (commissions), or instead it might use that freedom from competitive constraints to instead discriminate and earn a supra-competitive market rent in a different way. For example, by earning that same profit in other markets, or by satisfying its non-economic preferences. Indeed, this rent might even be Bork's single monopoly profit, and so of no additional concern, in and of itself. However, it should be recognized that earning that same profit in those other markets by discriminating can create additional harmful competitive distortions.¹⁰

⁷ Bostoen, *Online Platforms and Vertical Integration: The Return of Margin Squeeze?*, *Journal of Antitrust Enforcement* 2018, Vol. 6(3), 355-381, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3075237; OECD (2020), available at [https://one.oecd.org/document/DAF/COMP/WP2\(2020\)1/en/pdf](https://one.oecd.org/document/DAF/COMP/WP2(2020)1/en/pdf).

⁸ Iacobucci & Ducci, *The Google Search Case in Europe: Tying and the Single Monopoly Profit Theorem in Two-Sided Markets*, *European Journal of Law and Economics*, 2018, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3285321.

⁹ Of course, these same consumers stand to benefit from any additional innovation by the dominant firm that is incentivized by the firm being entitled to *persistent* rather than temporary monopoly profits in the future. However, absent a counterfactual on the innovation incentivized by a temporary monopoly profit it is hard to measure that benefit. One approach is to assume that no counterfactual innovation would have occurred, either by the dominant firm or a rival. This will depend on the facts of the case.

¹⁰ See for example Borenstein, Mackie-Mason & Netz (2000) on the distortions caused by taking a monopoly profit by exploiting in an aftermarket, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=978050.

B. It's a Hold-up!

One of the competitive distortions caused by exploitative discrimination (that is, discrimination that does not exclude for the purpose of increasing the platform's own profit, but simply reallocates and diversifies that profit), is that it can nevertheless distort and restrict competition by introducing a hold-up problem that damages potential competition by deterring entry, innovation, and investment.¹¹

For example, when a dominant gatekeeper discriminates and favors its own products (or those of firms that buy its other services), a new entrant into those markets can anticipate that the returns on investing or innovating will prove short-lived. This is because of their vulnerability, not only to entry by more innovative and efficient rivals (to which innovation is always vulnerable), but also to an inferior less efficient rival product (either by the gatekeeper itself, or by a rival that pays a tax to the gatekeeper by purchasing other ancillary services).

To be clear, this is not the distinct risk of a monopoly position being leveraged (which is notionally addressed by exclusionary conduct rules). It is an additional vulnerability to hold-up where the motive is the desire to exploit the same rent across different markets or perhaps in non-financial forms. For example, to exploit in order to satisfy an economically irrational national preference (see *Aéroports de Paris*, in which a formerly nationalized subsidiary was favored due to its historic links to the dominant SOE gatekeeper); or a potentially rational regulatory strategy of concealing/obscuring excess profits by distributing them across the corporation; or a strategy to build lobbying power and political influence by producing sub-standard (e.g. unmoderated) products that are helpful in controlling or favoring useful politicians (instead of simply extracting profits by charging higher prices).

In effect, this type of conduct defies classification as purely exclusionary or exploitative. It is a new and different class of harm that is exploitative (and non-exclusionary) in its motive, but exclusionary in its effect. The different nature of this harm requires adapting our tools to recognize that exclusionary effects might flow from conduct with no exclusionary motive. For one thing, this again calls into question the usefulness of the single monopoly profit theory (since the effect on competition occurs despite their being no additional monopoly profit available). However, it may also cast doubt on things like the recoupment test for predation, since the effectiveness of that test rests on what it tells us about the anticompetitive motive for the conduct, not what it says about the anticompetitive *effect*.

The loss of the potential competition that is generated by held-up entry and by the investment and innovation that is held-up by this exploitative conduct can harm consumers. They can also harm workers and small sellers to the monopsonist (both competitors to the subsidiary who can expect no protection from competition law, and customers of the platform, who should be able to expect protection, even if they are supply-side customers).

We would usually expect the threat of entry, even by a gatekeeper, to intensify existing competition since it introduces an additional credible constraint on incumbents.¹² However, the impact on potential competition is different, because unlike existing rivals who may recognize their costs are sunk, potential rivals can be expected to anticipate such risks and abandon or pre-emptively abort entry and innovation in those markets. This means the harm here will tend to be specific to potential competition, rather than actual competition.

V. HARM TO POTENTIAL COMPETITION IN THE METAVERSE AND BEYOND

A. Masters of the Metaverse

How might these concerns apply within the Metaverse? Worryingly we can see many of the familiar gatekeeper-building playbook moves are currently being deployed. In particular, there is the same push to quickly build scale and network effects, both on the user side and the seller-side of the platform in order to obtain control of the rule-making gatekeeper role.

For example, it appears that Facebook is currently busy selling its Oculus Quest 2 headsets some way below cost, offering discounts of \$500 on the version offered to businesses that comes without the same requirement to hold a Facebook account. Reports suggest this is helping it pick up more than 75 percent of new VR headset sales.¹³ While these discounts obviously benefit early adopters that do not mind handing over

¹¹ For these reasons codes of conduct have been introduced by a number of countries to combat hold-up in the supply chains of dominant grocery retailers.

¹² Though we note for example that Wen & Zhu (2019) find that the mere threat of entry by a dominant platform owner into an application market is sufficient to cause the incumbent application providers to reduce innovation efforts and price competition – specifically by raising prices. See <https://onlinelibrary.wiley.com/doi/10.1002/smj.3031>.

¹³ See Bloomberg, *Meta's Oculus Unit Faces FTC-Led Probe of Competition Practices*, January 2022. available at <https://www.bloomberg.com/news/articles/2022-01-14/meta-s-oculus-unit-faces-ftc-led-probe-of-competition-practices?sref=9hGJlFio>.

their data, the dominant position that they threaten to build, combined with a lack of interoperability, risk distorting competition for later adopters and developers.

On the developer side this presents the opportunity for Facebook to demand exclusivity from developers, and to copy, kill or acquire their more innovative products. For instance, the firm is rapidly acquiring developers, providing it with the subsidiaries to whom it will be able to drive business by discriminating against third parties (while Microsoft's acquisition of Activision seems likely to be intended to do the same for them).¹⁴ Indeed, reports have already emerged of innovative developers seeing their products first copied by Facebook, and then thrown out of its store.

On the consumer-side, Facebook has once again removed privacy choices for users, leaving just the same take-it-or-leave-it offer that has served it so well in exploiting its dominance over social networks.¹⁵ Inevitably it is levying the magical 30 percent commission, the frequency of which now appears to be a convenient focal point for platforms across the sector to coordinate upon.

And when we put on our Oculus headsets to enter the Metaverse, whose products and services will be most prominent? What will the defaults be? Do we need to wait and see whether Facebook favor their own brands, or those that pay them a tax to purchase related services? Is the risk of a dominant gatekeeper emerging not predictable? Should we not take the opportunity to identify the scope for harm, and to clarify for Facebook and others the responsibilities that we expect of anyone that controls the gate to this metaverse? That way they can decide whether to invest in developing a gatekeeper-based system or an interoperable version. And if it turns out that a metaverse can only be realized by a single dominant gatekeeper, then we should ask ourselves whether it is worth having at all.

B. The Anti-Monopolists Strike Back

Fortunately, the FTC under new leadership is looking into the acquisitions, and perhaps unsurprisingly is also reportedly digging into the below cost pricing that will be ringing the same alarm bells that Lina Khan herself rang in the case of Amazon.¹⁶ Investigators will also no doubt be aware of the risk that recoupment is not something that may or may happen further down the line, but instead might be happening right now, in parallel, via exploitation of developers.

In addition, Commissioner Vestager has highlighted these concerns,¹⁷ and the European parliament has identified the importance of including far-reaching and non-discriminatory interoperability requirements in its Digital Markets Act. In particular, it has asked for these to extend to social networks and messaging applications. These requirements offer a powerful tool that removes the scope for hold-up, and hence incentivize the innovation, investment, and entry that risks being forestalled if a dominant platform is once again permitted to take control of gatekeeping.¹⁸ With luck they will be applied to the Metaverse before Facebook's position becomes more difficult to rein-in. Indeed, the more far-sighted legislators might even want to anticipate the need to foster interoperability with the type of decentralized alternatives that are starting to appear in social networks.

C. Digital Butlers & Chauffeurs

Meanwhile concerns over self-preferencing and discrimination in emerging digital assistant technologies are further advanced. In January, the European Commission completed a sector inquiry into digital assistants, which flagged the risks from the emergence of gatekeepers.¹⁹ They are

¹⁴ See CNBC, *Microsoft's metaverse plans are getting clearer with its \$68.7 billion Activision acquisition*, available at <https://www.cnbc.com/2022/01/19/microsoft-activision-what-satya-nadella-has-said-about-the-metaverse.html>.

¹⁵ See the ongoing Bundeskartellamt investigation: details (in English) available at https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2020/10_12_2020_Facebook_Oculus.html?nn=3591568.

¹⁶ See Bloomberg, *Meta's Oculus Unit Faces FTC-Led Probe of Competition Practices*, January 2022, available at <https://www.bloomberg.com/news/articles/2022-01-14/meta-s-oculus-unit-faces-ftc-led-probe-of-competition-practices?sref=9hGJFio>.

¹⁷ See Politico, *Vestager: Metaverse poses new competition challenges*, available at <https://www.politico.eu/article/metaverse-new-competition-challenges-margrethe-vestager/>.

¹⁸ The rules could also create more scope for private as well as public enforcement of both existing antitrust rules and the expanded toolkit that is emerging from the debates over new *ex ante* regulation. For instance, hold-up problems distort potential competition and harm innovation and so are likely to be difficult to address through private enforcement whilst that is constrained to awarding historic rather than the prospective damages that would be incurred in a counterfactual in which the challenged conduct went unchallenged. However, given the uncertainty as to the precise beneficiaries of undistorted competition, one possibility might be to fund and empower an innovation fund for start-ups to act as a super-complainant that can bring cases on behalf of harm to start-ups as a whole. Any court-awarded damages might then be paid into that innovation prize pot that can in turn help to fund action to defend the opportunities and prospects of start-ups across the economy rather than a specific firm.

¹⁹ See EU Commission Report, available at https://ec.europa.eu/commission/presscorner/detail/en/ip_22_402. See also Reuters reporting, available at <https://www.reuters.com/technology/eu-antitrust-regulator-cite-concerns-about-voice-assistants-exclusivity-2021-06-09/>.

now reportedly investigating Google,²⁰ who were also accused of below cost selling and forcing restrictions on interoperability of digital assistants by the CLO of Sonos in his testimony to the U.S. Senate.²¹

At the same time we can see that Amazon and Google are working to place their digital assistants within cars and obtain the data and gatekeeper role that flows from that position. Google for example offers car firms Google Automotive Services (“GAS”) as an all-or-nothing deal in which access to Google Maps requires the manufacturer to use Google’s Play Store and voice assistant. Honda, Volvo, Renault, Nissan, and Mitsubishi have all signed up for the package, and Ford has also done a deal with Google which ensures that even if a rival assistant is installed by the user, only Google will have access to the user data that is generated. In contrast, BMW, GM, Audi, Jeep and Land Rover have all gone with Alexa, with Amazon declaring “voice agents should be interoperable on a single device (or in a vehicle), and voice-enabled products should be designed to support multiple, simultaneous wake words, so customers can easily interact with the voice service of their choice.”²²

As cars become autonomous, the gatekeeping role over the data that flows from these vehicles, and the consumption that occurs within them will become ever-more important. Once again, we can envisage that we will soon find ourselves asking whether aftermarket for pre-installed digital assistants are constrained or not by a somewhat more competitive foremarket for vehicles. As we do so we can but hope that Courts begin to question their apparently unshakeable faith in the strength of constraints imposed by a competitive foremarket.²³ Certainly bringing to bear evidence on the reality of consumer reactions in the foremarket to changes in aftermarket offers will therefore be an indispensable step for plaintiffs seeking to bring complaints.

VI. NEXT STEPS

Having watched the development of the current generation of digital gatekeepers, the question now is whether we have to wait and see which firms succeed in obtaining the same power within the next generation of technologies before applying rules to tame that power. The opportunity is there to pre-empt not only the predictable exclusionary conduct of gatekeepers in these emerging technologies, but the damage that will be done to potential competition when exploitative self-preferencing and discrimination results in a hold-up market failure.²⁴

Such rules might for example require testing for discriminatory algorithms to ensure that seller identity (rather than objective characteristics) do not explain the outcomes. Indeed, such a framework could provide helpful certainty for investors and help to build an innovative but more decentralized next generation of technologies.

The opportunity to forge just such a legislative framework is now upon us. For example, the American Choice and Innovation Online Act that will soon be put to a vote by the U.S. Senate specifies that digital assistants and online platforms would be covered by its provisions.²⁵ The DMA also specifies online intermediation services but is less clear on digital assistants, though the European Parliament and some governments have proposed that they be included. However, the UK has taken the approach of designating whether a firm has strategic market status in relation to specific activities and so its code of conduct and pro-competitive interventions would not apply to activities until they are designated. Designating a metaverse store or even a digital assistant might therefore prove challenging while the market is still emerging. Of course, if Facebook’s professed enthusiasm for an interoperable metaverse,²⁶ and Amazon’s similar interest in interoperable digital assistants, turns out to be genuine, then we may not see the usual legal challenges and lobbying against this legislation and the designation process.²⁷ Here’s hoping.

20 See Reuters reporting, available at <https://www.reuters.com/technology/google-under-new-eu-antitrust-investigation-mlex-reporter-2021-09-09/>.

21 See testimony of Eddie Lazarus (Sonos) before the U.S. Senate Committee on the Judiciary, available at <https://www.judiciary.senate.gov/imo/media/doc/Eddie%20Lazarus%20Written%20Testimony.pdf>.

22 See Politico, *Big Tech’s Next Monopoly Game: Building the Car of the Future*, available at <https://www.politico.com/news/magazine/2021/12/27/self-driving-car-big-tech-monopoly-525867>.

23 See *Apple v. Epic*.

24 This can be expected to include less entry and a change in the nature of investment and innovation (less direct competitor products, less products that are complementary to, or interoperable with an independent rival challenger, and more products that are complementary to the gatekeeper’s product).

25 Section 2(g)(10) of the H.R. 3816, the American Choice and Innovation Online Act.

26 [Building the Metaverse Responsibly](#).

27 However recent lobbying by Google and Apple suggest this may be a forlorn hope: See <https://techcrunch.com/2022/01/20/tech-antitrust-self-preferencing-bill-american-innovation-and-choice-online-act/?guccounter=1> and <https://www.theverge.com/platform/amp/2022/1/18/22890100/antitrust-bill-apple-google-big-tech-senate>.

CPI Subscriptions

CPI reaches more than 35,000 readers in over 150 countries every day. Our online library houses over 23,000 papers, articles and interviews.

Visit competitionpolicyinternational.com today to see our available plans and join CPI's global community of antitrust experts.

