

**Prepared Statement of**

Randal C. Picker  
James Parker Distinguished Service Professor of Law  
The University of Chicago Law School

**Before the**

U.S. House of Representatives  
Committee on the Judiciary  
Subcommittee on Antitrust, Commercial,  
and Administrative Law

**Investigation into the State of Competition in the Digital Market Place**

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I am currently teaching my Spring Platforms and Networks course. The students have been fully engaged with the early material in the course on the history of the U.S. post office, railroads as common carriers, the creation of the U.S. interstate highway system, rural electrification in 1930s, rural broadband today and the 1982 break-up of AT&T. The students were, I am sure, eager to get to smartphones, Amazon and Facebook but there is an important, deeply relevant history that they should encounter before then. In normal times, the intelligence and engagement of my students would be something that I would appreciate but probably, alas, take a little for granted, but these of course are extraordinary times. Countries across the globe face a joint medical and economic crisis that most of us have not seen in our lifetimes.

The fact that my course continues over Zoom successfully with me at home in Chicago and my students scattered across the country is by itself a small point – not to me to be clear or I hope to my students – but the fact that education continues during the crisis is not a small point, but rather is essential. There is no more obvious investment in the future than education. And that so many other activities are still moving forward even as so many are staying at home is a testament to the digital communications and computing infrastructure in place. Not uniformly even in the U.S. – and that was part of our class discussion of rural broadband – but at sufficient scale that the entire economy hasn't shut down even as many have stayed home to slow the spread of the coronavirus. Had this crisis hit five years ago, I don't know that we could have done this and I am quite skeptical that we could have ten years ago.

As you note in your letter to me, your subcommittee has been investigating the state of competition in the digital marketplace. I very much appreciate the invitation to participate in your process and I will focus my response on that digital marketplace. There are certain companies that we associate with that digital marketplace, say Google, Apple, Facebook, Amazon and Microsoft – Intel often gets less attention here – and I find it impossible to discuss Amazon without talking about Walmart and other companies that compete with Amazon’s retail operations. I have in teaching and writing given these companies and these issues a great deal of thought, but I find these issues quite complex. All I can do is offer my best understanding of them right now, but that understanding continues to evolve as I consider new and old situations.

This statement is divided into six sections. Section I summarizes my answer to your questions. Section II sets out a brief history of the firms that you have been looking at in your inquiry. Section III tries to set out what some might see as key problems in the digital marketplace. Section IV looks at each of those situations in depth. Section V looks at the opportunities for and challenges of regulation in these areas and Section VI concludes. This statement is pretty long, but still incomplete in other ways, and there aren’t as many footnotes and citations as there otherwise might be as the Law School is closed given the Covid-19 pandemic and I do not have access to any of the materials in my office.

## **I. Overview**

Your letter focuses on three specific areas of inquiry. This statement runs 35 pages and that sets out my full analysis of your questions, but I also understand that you might like something upfront that is directly responsive to your questions:

- *Adequacy of Existing Laws That Prohibit Monopolization and Monopolistic Conduct*
  - I take the existing laws to refer to current U.S. antitrust law. U.S. antitrust law is primarily a fault-based system administered by the Antitrust Division of the Department of Justice and the Federal Trade Commission with appeals to federal courts.
  - If you believe that we should change how competition currently works in the digital marketplace, I am skeptical that anything like traditional U.S. antitrust law is your tool of choice. Fault is a hard standard and the companies at the heart of your investigation are built on products that succeeded in the marketplace in the face of real competition. How these companies have behaved once they achieved their leading positions is something very much within traditional antitrust analysis, but their success in achieving those positions initially is something that the United States should celebrate and is outside traditional antitrust analysis. This is market success, not fault. And, based on the enforcement record so far, I am doubtful that a more encompassing European Union-style competition law would be effective either.

- Of course, you could change antitrust law to move it away from a fault-based system, but doing that moves in the direction of more direct regulation of the digital marketplace. Instead of organizing these rules around fault as antitrust typically does, an alternative set of new rules would be based on market competition triggers and would impose new competition obligations on leading firms at the point of being triggered. I discuss that in more detail below.
- *Adequacy of Existing Laws on Anti-Competitive Acquisitions*
  - While this overstates a little, the starting point here is that competitors have no real interest in competition. Society benefits from competition while competitors have a frequent desire to limit competition. They might do that through direct agreements limiting competition, but those of course are per se illegal under Section 1 of the Sherman Act and there is a broad consensus that that is the right policy. But competitors can also limit competition through acquisitions, where the purchase operates as a split of the profits associated with monopoly power. These are presumably the type of anti-competitive acquisitions that you have in mind in your letter.
  - Current U.S. antitrust law regarding mergers is organized around the horizontal merger guidelines and the Hart-Scott-Rodino pre-merger notification regime, though there is an ongoing process by the FTC and the Antitrust Division to produce new vertical merger guidelines. A natural alternative to this process is to adopt more bright-line rules that limit acquisitions by particular types of firms (perhaps a system tied to meeting certain conditions (status)), with either a hard limit or a strong presumption that would restrict acquisitions. Yet another alternative would be to allow acquisitions but then review them after the fact with the possibility of subsequent required divestitures. That structure would return to the early days of antitrust where mergers were considered after they were completed. The 1911 breakup of Standard Oil matches that pattern.
  - I find it most useful to discuss these issues in the context of concrete examples – for example, Facebook’s acquisition of Instagram was, I think, quite different from Amazon’s purchase of Whole Foods – and I do that below, but again, to offer an answer upfront, I am skeptical that we should create broad new limits on mergers.
- *Institutional Structure of Antitrust Enforcement*
  - This raises questions that are, in the main, I think, separate from your inquiry into the digital marketplace. I don’t know how many antitrust agencies we should have though I am skeptical that the right number is 52 (or more depending on how you count). The question raises hard problems about the respective role of the federal government and

individual states and also then about having two agencies at the federal level with overlapping jurisdiction. Sorting all of that would go beyond anything that I have thought about carefully in the context of this letter.

- On narrower questions – say should more money be allocated to the Antitrust Division or to the FTC? – I think that you would be better served to rely on individuals who have been inside those agencies and who can better assess than I can exactly how more money would be spent. It is easy to say, for example, that we should have more retrospective studies of mergers, but that is to treat the money as free and agencies always face tradeoffs, as does Congress in assessing how to allocate funds among competing worthy programs.

## II. A Brief History of the GAFAM

The companies that you are focusing on in your inquiry in the digital marketplace have achieved those positions by building products embraced in the marketplace and those products succeeded in the face of robust competition. It would be easy to overlook the path that those companies took to reach this point. To replay that history briefly, start with August 9, 1995, the date that Netscape became a publically-traded company. That date is a useful milestone for a discussion of the digital marketplace, even as that date ignores the origins of the internet in the early 1960s work of ARPA; the 1980s work of the National Science Foundation; and the early 1990s work at CERN in Switzerland and at the National Center for Supercomputing Applications at the University of Illinois at Urbana Champaign. We should not forget that it was the work of the government and these research institutions that put in place the foundations for the commercial internet era.

In July 1995, Amazon launched its website to sell books, Google and Facebook didn't exist yet, and Apple was in deep financial trouble and would report unexpectedly large losses at the beginning of 1996. Microsoft and Intel were very large, successful companies. They had had grown into those positions when IBM launched its personal computer on August 12, 1981 and as the IBM PC became a standard as it was duplicated by countless clone makers. In July 1994, Microsoft had settled its initial antitrust conflict with the Department of Justice over Microsoft's licensing practices for MS-DOS. Microsoft would be required to change how it licensed MS-DOS, but it wasn't clear how much day-to-day-operations would change.<sup>1</sup>

Consider these companies one by one in a little greater detail.

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<sup>1</sup> Lawrence M. Fisher, Apple Raises Loss Estimate, In a Surprise To Wall Street, The New York Times, Jan 11, 1996, pD1. Regarding the 1994 Microsoft settlement, Gates said: "None of the people who run [Microsoft's seven] divisions are going to change what they do or think or forecast. Nothing. Nothing. There's one guy in charge of licenses. He'll read the agreements." Michael Schrage, Windows of Opportunity For Microsoft and Bill Gates, The Washington Post, July 22, 1994, pD3.

## A. Google/Alphabet

Sergey Brin and Larry Page were computer science graduate students at Stanford when they launched Google in 1998. In their 1998 research paper, Brin and Page noted a core problem with using advertising to fund a search engine: “... we expect that advertising funded search engines will be inherently biased towards the advertisers and away from the needs of the consumers.” They noted that search engine bias would be “particularly insidious” given the difficulty for even experts to detect it. Their conclusion was that it was “crucial to have a competitive search engine that is transparent and in the academic realm.”<sup>2</sup>

Indeed, the search industry was looking for a business model that worked as lines between various forms of advertising blurred. In July 2001, the FTC launched an investigation in response to a complaint regarding possible Section 5 deceptive practices by search engines. The inquiry focused on few firm names that we still recognize today, such as Microsoft and AOL Time Warner and other names that we have largely forgotten – AltaVista, Direct Hit Technologies, iWon, Looksmart and Terra Lycos – but Google didn’t even make the list.<sup>3</sup>

But that all changed rapidly. By April 2002, Google had become the number three search site – trailing only MSN and Yahoo – and it had left its pure search competitors such as Overture and AltaVista in the dust. And Yahoo wasn’t really generating its own search results but instead had contracted for search from Google. By October 2003, Google was seen as the clear leader of the search market and indeed was seemingly attracting attention from Microsoft about a possible Microsoft purchase of Google. Google of course stayed independent and went public in August 2004.<sup>4</sup>

While Google’s organic search business has continued to grow, Google has also expanded its business in a series of acquisitions, including buying, among other companies, YouTube.com for \$1.65 billion in October 2006; DoubleClick for \$3.1 billion in April 2007; certain Motorola assets for \$12.5 billion in 2012; Nest for \$3.2 billion in 2014; and most recently Looker for \$2.6 billion in 2019. That is not a comprehensive list as it omits, among others, the pending purchase of Fitbit, the purchase of Android (discussed below) and smaller acquisitions that may have been valuable in building up other products like Google Maps. All of Google’s completed large acquisitions were

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<sup>2</sup> Sergey Brin & Lawrence Page, *The Anatomy of a Large-Scale Hypertextual Web Search Engine*, Apr 1998.

<sup>3</sup> Saul Hansell, *Clicks for Sale: Paid Placement Is Catching On in Web Searches*, *The New York Times*, June 4, 2001, pC1; U.S. Federal Trade Commission, *Letter to Mr. Gary Ruskin, Executive Director, Commercial Alert*, June 27, 2002.

<sup>4</sup> Saul Hansell, *Google’s Toughest Search Is for a Business Model*, *The New York Times*, Apr 8, 2002, pC1; Saul Hansell, *Yahoo’s Profits and Sales Are Better Than Expected*, *The New York Times*, Oct 10, 2002, pC3; John Markoff and Andrew Ross Sorkin, *Microsoft And Google: Partners Or Rivals?*, *The New York Times*, Oct 31, 2003, pC1.

reviewed by antitrust authorities here and often elsewhere and were approved under the applicable standards.<sup>5</sup>

### *B. Apple*

Apple was losing money in 1996 and entered the year as a possible acquisition target. By the end of 1996, Apple purchased NEXT Computer, a company that Steve Jobs had founded after he had left Apple, and that purchase brought Jobs back to Apple. But Apple Computer started on the path to the Apple of today on October 23, 2001 when it launched the iPod. In doing that, Apple was introducing a product different from anything that it had produced before and it was entering a crowded marketplace of MP3 players. There was no obvious reason to think that Apple would succeed in this market, though at least in this market it wasn't facing substantial leading competitors.

That would be exactly the position Apple encountered when it launched the iPhone on January 9, 2007. Research in Motion had moved from its original Blackberry – a handheld email device – into a combined phone/email tool, but Nokia was the clear market leader. Apple would not have been in a position to build the iPhone absent the success of the iPod, but there was no good reason to think that Apple would revolutionize smartphones or that it could succeed in the face of successful well-funded incumbents like Nokia and RIM. And it is worth remembering that the iPhone didn't take off immediately. It was, at least in some ways, a limited device and Apple wouldn't open up the App Store until July 11, 2008.<sup>6</sup>

### *C. Facebook*

“Social Networks” made *The New York Times* end-of-the-year list of the big ideas of 2003. The article described Friendster.com as the best known of the new social networks, even though it had only launched in March 2003. Friendster was competing with Tribe.net (launched in late July 2003), Tickle (a dating service) and LinkedIn. The social networking idea wasn't new – SixDegrees.com had launched in 1997 and failed – but as the underlying internet infrastructure grew in power, meaningful online social networks were possible.<sup>7</sup>

In November 2003, Harvard University undergraduate Mark Zuckerberg was hauled before a Harvard administrative board on charges that he had violated Harvard policies in building his facemash.com website. The website had created a Harvard version of the then-popular Hot or Not website to compare the attractiveness of Harvard undergraduates. Zuckerberg survived the hearing but would take a leave from Harvard to launch in 2004 a new website, thefacebook.com. Reflecting its roots,

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<sup>5</sup> For a good overview of purchases by Google, see Katie Jones, *The Big Five: Largest Acquisitions by Tech Company*, visualcapitalist.com, Oct 11, 2019.

<sup>6</sup> Gartner, March 11 2009; Verge Staff, *iOS: A visual history*, theverge.com, Sept. 16, 2013; Apple Press Release, *iPhone 3G on Sale Tomorrow*, July 10, 2008.

<sup>7</sup> Jon Gertner, *Social Networks*, *The 3<sup>rd</sup> Annual Year in Ideas*, *The New York Times*, Dec 14, 2003, pSM51; Michael Erard, *Decoding the New Cues In Online Society*, *The New York Times*, Nov 27, 2003, pG1.

Facebook grew rapidly on college campuses through 2004 reaching roughly 1 million users by December 2004.<sup>8</sup>

But, as suggested already, Facebook was just one of any number of competing social networks. Friendster was fading as MySpace grew in popularity, a point capped off in July 2005 when News Corp., a traditional media firm, purchased MySpace for \$580 million. MySpace had more than 16 million monthly users and was the sixth most visited internet site, trailing only Yahoo, eBay, MSN, Google and AOL. News Corp. was clearly buying the premier social networking site. MySpace was advertising supported and was seen as an attractive place to reach young consumers. Indeed, Google struck a deal with MySpace to spend \$900 million for advertising over three years.<sup>9</sup>

We know of course how this ended so there is no reason to linger here. Facebook overtook MySpace notwithstanding MySpace's initial strong position in social networking, one that MySpace had achieved by outcompeting other firms like Friendster and Tribe. Do note that Yahoo reportedly tried to buy Facebook in January 2006 for \$750 million and then later in September 2006 for \$900 million. And Facebook hadn't even opened up to the public generally when Yahoo sought to buy it and wouldn't do so until roughly September 2006. Facebook stayed independent and went public in May 2012, but in the middle of that process, on Apr 9, 2012, Facebook announced that it was buying Instagram for \$1 billion. The FTC investigated that deal and voted 5-0 to not to take any action to block the deal. And in February 2014, Facebook bought WhatsApp for \$16 billion. Antitrust regulators in the U.S. and Europe evaluated the deal but eventually took so steps to block the purchase.<sup>10</sup>

#### *D. Amazon*

When Jeff Bezos launched Amazon in July 1995 to sell books online, it faced well-established growing book store competitors. Barnes & Noble had a little over a billion dollars in revenue for its 1992 fiscal year but that had grown to roughly \$2.4 billion for 1996. As its 1996 annual report put it, "[w]e have created a dominant, growing and defensible position in an expanding marketplace, along with a franchise value second to none." Its principle competitor, Borders, was a little smaller reaching almost \$2 billion in revenues in its 1996 fiscal year. Amazon's net sales in 1996 totaled \$15.7 million. And

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<sup>8</sup> Katharine A. Kaplan, *Facemash Creator Survives Ad Board*, *The Harvard Crimson*, Nov 19, 2003; Peter Applebome, *On Campus, Hanging Out By Logging On*, *The New York Times*, Dec 1, 2004, pB1.

<sup>9</sup> Gary Rivlin, *Friendster, Love And Money*, *The New York Times*, Jan 24, 2005, pC1; Richard Siklos, *News Corporation Buys an Internet Company*, *The New York Times*, July 19, 2005, pC6; Saul Hansell, *Yahoo Woos a Social Networking Site*, *The New York Times*, Sept 22, 2006, pC1;

<sup>10</sup> Saul Hansell, *Yahoo Woos a Social Networking Site*, *The New York Times*, Sept 22, 2006, pC1; U.S. Federal Trade Commission, *FTC Closes Its Investigation Into Facebook's Proposed Acquisition of Instagram Photo Sharing Program*, Aug 22, 2012; U.S. Federal Trade Commission, *FTC Notifies Facebook, WhatsApp of Privacy Obligations in Light of Proposed Acquisition*, Apr 10, 2014; European Commission, *Mergers: Commission approves acquisition of WhatsApp By Facebook*, Oct 3, 2014.

for comparison, Walmart's 1996 revenues were \$93.6 billion, though presumably no one thought that Walmart and Amazon were meaningful competitors in 1996.<sup>11</sup>

Amazon's business model harkened back to an earlier era. Sears and Montgomery Ward had grown into some of the U.S.'s largest sellers on the strength of their catalog businesses. Montgomery Ward opened its catalog business in 1872 and Sears followed in 1887. By the early 1920s, Sears was the second largest retailer in the world, just slightly smaller than The Great Atlantic & Pacific grocery store chain, while Montgomery Ward was the fourth largest retailer. The growth of these catalogue merchants had been spurred in part by the 1913 decision of the U.S. Post office to create its new parcel post business to enter into competition with private services in delivering larger packages. Sears was built on the mail-order catalogue business, as Sears did not open its first retail store until 1925. And Sears started selling its own private-label brands in 1927 when it acquired the Craftsman brand, which applied initially to tools but expanded to other products as Sears grew its private-label business. Sears presumably was selling its own in-house products in competition with those from outside producers.<sup>12</sup>

Amazon had built an infrastructure to attract customers to its website, process payments and deliver goods at a distance and adding more products just meant adding items to its warehouses. Amazon added other products to its website (CDs in July 1998, DVDs in November 1998 and Electronics in July 1999), plus in October 1999 it started selling third-party products through its new zShops program. By October 2006, it had taken its core internal skill sets and turned them into wholesale businesses by launching Fulfillment by Amazon and Amazon Elastic Cloud Compute. In each case, Amazon had built a skill set that it used to operate its own first-party inventory business and it was now making those skills available at wholesale to other firms that wanted to buy those services.

#### *E. Microsoft*

Microsoft was a small but growing computer languages company when IBM approached it for a new computer project that IBM was undertaking. IBM wanted to license programming languages from Microsoft but it also asked whether Microsoft would be able to provide an operating system for the computer that would become the IBM PC. Microsoft didn't have an operating system, so it turned down IBM and instead directed IBM to a second company, Digital Research, the maker of the then-leading operating system for personal computers, CP/M. IBM would eventually return to Microsoft to push the company to produce an operating system. Microsoft in turn

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<sup>11</sup> 1996 Barnes & Noble Annual Report, p1; 1997 Borders Group, Inc., Annual Report, p1; Amazon Form S-1, Mar 24, 1997; 1997 Walmart Annual Report.

<sup>12</sup> Marc Levinson, *The Great A&P and the Struggle for Small Business in America* (Hill and Wang 2011); *Fortune*, Oct, 15, 2018; U.S. Postal Service, Office of the Inspector General, *100 Years of Parcel Post*, Report No. RARC-WP-14-004, Dec 20, 2013, p10.



licensed an operating system from a third party and used that to produce the software that became MS-DOS.<sup>13</sup>

On August 12, 1981, IBM launched its new IBM PC and that in turn transformed the personal computer market. IBM announced its new computer with three different operating systems (including one from Digital Research), but Microsoft's MS-DOS eventually carried the day. And as a new clone market emerged – companies effectively copying the IBM PC architecture – the clone makers turned to Microsoft for its operating system and to Intel for the microprocessor that was the calculating heart of the machine. As IBM moved to regain control over the platform it had created through a new operating system, OS/2, and new hardware standards, Microsoft successfully built a new layer, Microsoft Windows, on top of MS-DOS. IBM never regained control over the PC platform that it launched and Microsoft and Intel rose to dominance of it.

Microsoft would eventually face a series of antitrust actions in the U.S. and Europe. In July 1994, the U.S. and Microsoft resolved concerns about Microsoft's licensing practices for MS-DOS with an agreed final judgment. In May 1998, the U.S. brought a new antitrust action against Microsoft related to how Microsoft responded to the entry of Netscape Navigator. Microsoft would eventually lose that case in 2001 before the D.C. Circuit, sitting en banc, where the court found that Microsoft had engaged in illegal monopoly maintenance in violation of Section 2 of the Sherman Act. Microsoft subsequently faced actions in Europe focused on, among other things, allegations that Microsoft had impermissibly tied other products – notable Windows Media Player and Internet Explorer – to Windows. Those cases would result in, in the one case, to a finding of a violation resulting in a large fine and an imposed market remedy and, in the second case, to an agreed settlement with a different market remedy.<sup>14</sup>

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I offer this short history of these companies to situate their success a little. I want to make two other introductory points before turning to consider problems in competition in the digital marketplace. First, even though those companies have operations across the globe, they were all founded in the U.S. and continue to be based here. I do not think that we should take that point as a given or that we as a country would be indifferent to having all of those companies based in say Japan, Europe or China.

There is clearly concern right now about competition between the U.S. and China in the development of 5G wireless, as seen in the recent order issued by the Federal Communications Commission to show cause against China Telecom (Americas) Corporation given possible concerns that the corporation is controlled by the People's

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<sup>13</sup> See Randal C. Picker, *The Arc of Monopoly: A Case Study in Computing*, *The Univ of Chicago Law Review* (2020).

<sup>14</sup> *United States v. Microsoft*, 253 F.3d 34 (D.C. Cir. 2001) (en banc); European Commission, *Commission concludes on Microsoft investigation, imposes conduct remedies and a fine*, Mar 24, 2004; European Commission, *Antitrust: Commission accepts Microsoft commitments to give users browser choice*, Dec 16, 2009.

Republic of China government. In an earlier era, the concern was not China, but Japan. The fear was that the U.S. was trailing Japan in producing new generations of semiconductors. That fear would eventually lead to a new antitrust exemption for joint research projects and to an industry wide consortium, Sematech, to try to restore the U.S. position in semiconductors with backing from the U.S. Department of Defense.<sup>15</sup>

And of course ARPA – the government agency that drove the formation of the early internet – was founded in the response to the launch by the then Soviet Union of its first Sputnik satellite on October 4, 1957. Then Senator John F. Kennedy writing in *The New York Times* on December 8, 1957 said “Sputnik has come; American complacency has gone.” He went on to argue for “reappraisal – for a reassessment of our strength and strategy, a revaluation of our basic policies.” ARPA was part of that reassessment. We want U.S. companies to succeed and the scale of that success will be driven first and foremost by the quality of their products and by key features of the economics of digital marketplaces.<sup>16</sup>

That gets us to the second point, namely that our starting point when looking at these firms should be – and traditionally has been within U.S. antitrust law – that firms that compete and win on the merits and that achieve a leading, even dominant, market position do not violate U.S. antitrust law in doing that. Again, that is to emphasize that U.S. antitrust law is, in the main, organized around a conception of fault. Firms that conspire to fix prices break Section 1 of the Sherman and should be held liable. The Sherman Act is a criminal statute and the Antitrust Division enforces it in just that way. But success in the marketplace doesn’t equate to monopolization under Section 2 of the Sherman Act. Successful firms violate Section 2 of the Sherman Act when they misuse their positions to either maintain monopolies or to distort competition. That is how fault arises under Section 2.<sup>17</sup>

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<sup>15</sup> See U.S. Department of Justice, Executive Branch Agencies Recommend the FCC Revoke and Terminate China Telecom’s Authorizations to Provide International Telecommunications Services in the United States, Apr 9, 2020; U.S. Federal Communications Commission, In the Matter of China Telecom (Americas) Corp., DA 20-448, Apr 24, 2020; National Cooperative Research Act of 1984, Pub. L. 98-462, Oct 11, 1984; Ron Rosenberg, Japan expected to pass US in high technology, *The Boston Globe*, Feb 28, 1980, p23; Andrew Pollack, Japan’s Big Lead in Memory Chips, *The New York Times*, Feb 28, 1982, pF1; David E. Sanger, Compromise Expected On Chip Consortium, *The New York Times*, Mar 3, 1987, pD1; Michael S. Malone, Chip Consortium: Before Congress Antes Up ..., *The Wall Street Journal*, Nov 17, 1987, p38; National Defense Authorization Act for Fiscal Years 1988 and 1989, Pub. L. 100-180, Dec 4, 1987 (Title II, Part F: Semiconductor Cooperative Research Program).

<sup>16</sup> John F. Kennedy, Kennedy Wants U.S. To Sacrifice, *The New York Times*, Dec 8, 1957, p81.

<sup>17</sup> *United States v. Standard Oil Co.*, 173 F. 177, 191 (E.D. Mo. 1909), *aff’d*, 221 U.S. 1 (1911) (“It was enacted, not to stifle, but to foster, competition, and its true construction is that while unlawful means to monopolize and to continue an unlawful monopoly of interstate and international commerce are misdemeanors and enjoined under it, monopolies of part of interstate and international commerce by legitimate competition, however successful, are not denounced by the law, and may not be forbidden by the courts.); *United States v. Aluminum Co. of America*, 148 F.2d 416, 430 (2<sup>nd</sup> Cir. 1945) (“In such cases a strong argument can be made that, although, the result may expose the public to the evils of monopoly, the Act does not mean to condemn the resultant of those very forces which it is its prime object to foster: *finis opus coronat*. The successful competitor, having been urged to compete, must not be

Of course, subject to constitutional constraints, Congress can reset antitrust law to abandon a fault-based system or to create other laws outside of antitrust to reset competition. I take your inquiry to be raising exactly the question of whether that should be done. To assess that, we should turn to considering the current state of competition in the digital marketplace.

### **III. Possible Problems in Digital Marketplace Competition**

We need to identify what we think are the competition problems that we see in the digital marketplace and then identify what we think are possible tools to solve them. I am sure that others will raise different issues, but I will focus this statement on four issues: (1) Google's dominance of search; (2) digital advertising dominance by Google and Facebook; (3) Amazon's dual role as seller and platform; and (4) the smartphone operating system duopoly.

#### *A. Google's dominance of search*

Statcounter.com puts Google's April 2020 search engine market share across all devices (meaning desktop, tablet and mobile) at 88.21%. Bing, Yahoo and DuckDuckGo make up the rest of the market at, respectively, 6.5%, 3.65% and 1.24%. Google's worldwide share is just lower at 86.02%. These statistics reflect a particular way of framing search. They, for example, exclude product searches run directly on Amazon.com, but Google's position in the general search market is remarkable. As discussed below, Google has faced antitrust inquiries in the past in the U.S. and in Europe related to these markets and there are reports on pending investigations by both federal and state antitrust agencies. Should we regard Google's dominant position in search as an antitrust problem? Has Google used that position to thwart new competitors? What should we take away from the prior antitrust investigations of Google's search position? And if antitrust is not the right tool, what other tools are available?

#### *B. Digital advertising dominance*

The search figures above measure how consumers search but of course Google is really a media company and it charges advertisers to reach the consumers produced through its search engine. Google and Facebook are the leading digital advertising firms, though Amazon is growing rapidly. Newspapers are in a state of decline and given the role that newspapers play in a vibrant democracy, there is understandable concern about the state of newspapers, now and going forward. What role has antitrust played to get to this point? Is there a good antitrust tool to address this issue or is a different response outside of antitrust required?

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turned upon when he wins."); *Pacific Bell Telephone Co. v. linkline Communications, Inc.*, 555 U.S. 438, 447-48 (2009) ("Simply possessing monopoly power and charging monopoly prices does not violate §2 ...").

### *C. Amazon's dual role as seller and platform*

Amazon is by far and away the leading ecommerce company though ecommerce of course is only one part of overall retail and Amazon's 2019 net sales of roughly \$280.5 billion are only about 55% of Walmart's 2019 total revenues of \$514.4 billion. Amazon's position has been achieved mainly through internal growth, though it has made a number of substantial purchases, perhaps most prominently buying Whole Foods in 2017 for \$13.7 billion. Those mergers went through the normal DOJ/FTC procedures under the Hart-Scott-Rodino pre-merger notification regime. The central concern with Amazon seems to be that it sells inventory on its own account while simultaneously acting as a platform for third-party sellers. Senator Warren has described the problem here as that Amazon can't be both a player and a referee. Is this actually a problem? If so, have past antitrust failures created this problem? Would it be better if Amazon was forced to divest its retail operations from its platform operations? If so, is there an antitrust basis for doing that or would such a divestiture need to be implemented through new legislation?

### *D. Smartphone operating systems duopoly*

Apple and Google dominate smartphone operating systems and their control over iOS and Android means that they act as gatekeepers for the app stores associated with their platforms. That means that they collect substantial fees – typically a 30% cut – on paid transactions for apps and the like. And there are allegations that Apple and Google give themselves advantaged access to the platform. For example, Spotify has claimed that Apple's own music offering has superior access to iOS compared to Spotify's competing music streaming service. Again are these problems? If so, can they be addressed through antitrust? If not, what would remedies look like outside of antitrust?

## **IV. Analysis of Possible Problems in Digital Marketplaces**

I turn to considering each of the above situations in greater detail.

### *A. Google Dominance of Search*

As I set out in the brief Google history above, everything suggests that Google constructed a superior product and achieved its original position in search through legitimate competition. Assuming that is right, a traditional antitrust case against Google would need to focus on some sort of misuse of that position. The natural place to look is for an illegitimate reaction by Google to some type of threat to Google's search product. Two situations come to mind, so-called vertical search and then the transition from computer desktops to mobile devices. I discuss vertical search in this section and the transition to mobile devices in the section below on smartphone operating systems.

Google faced parallel investigations by the U.S. and Europe on these issues in the early 2010s. The European Commission announced on November 30, 2010 that it was looking at whether Google was preferring its own services and had abused a dominant market position when faced with competition by vertical search services. It was

believed that the U.S. Federal Trade Commission was undertaking a similar investigation over related issues.<sup>18</sup>

## 1. THE THREAT POSED BY VERTICAL SEARCH

The case against Google was based on the new competition posed by vertical search. Google's traditional approach to search relied on indexing websites and assessing which website offered the best response to a user's inquiry. Google took the internet as a given and relied on the information presented by each website. Think of this as first-party information, meaning the information that, say, a restaurant presented about itself on its own website. Of course, first-party information providers rarely say anything negative about themselves.

Contrast that with third-party information of the sort created on websites like Yelp. People who eat at a restaurant post reviews for other people looking for restaurants. This isn't preexisting information but instead is created by users for users and facilitated by the website. Vertical search sites might not compete with Google over the full range of searches but each specialized search might compete in its area. And much local search – a good restaurant, doctor or dentist – might be best sourced from actual consumers of the relevant services.

Google constantly changes how it produces organic search results, but a particularly big change was the move in 2007 to so-called universal search and the Google onebox. Google moved away from just responding with ten blue organic links (and the associated advertising of course) to providing a grouping of possible answers to search queries (such as "what is the best restaurant in Chicago?"). And in doing that, two different issues arose. One was that Google was copying reviews and ratings – scraping as the industry talked about it – from vertical search sites like Yelp directly into the onebox result so that a Google searcher need not visit the vertical search engine to see the results. Yelp of course sells advertising as well, so lost visits meant lost revenues. The second allegation was that Google was preferring its own review sites over outside sites and that it wasn't creating links to review sites based on its normal organic algorithms.

## 2. FRAMING AN ANTITRUST CASE AGAINST GOOGLE

The broad vertical search engine case eventually died, at least so far. On January 3, 2013, the U.S. Federal Trade Commission announced that it was closing its investigation into these issues. The Commission concluded that Google's move to universal search and the onebox was an effort to be more directly responsive to consumers and was not, "on balance, demonstrably anticompetitive." And the investigation in Europe moved away from the broad inquiry into vertical search engines and instead narrowed into a case focused on one particular product, Google Shopping. The European case resulted

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<sup>18</sup> European Commission, Antitrust: Commission probes allegations of antitrust violations by Google, Nov 30, 2010.

in a substantial fine against Google and a back-and-forth over remedies, though Google recently announced that it was dropping its original approach entirely.<sup>19</sup>

The FTC was almost certainly right that the move to universal search was responsive to the needs of consumers, a central concern of U.S. antitrust law. That said, Google could have moved to its onebox result format while still allowing review links to be produced organically. The FTC inadvertently released part of an internal report staff report on the case, and the FTC staff was in favor of pursuing Google, even as the five commissioners voted against doing so.

The case against Google would have framed the situation as, when Google was finally facing an upstart search competitor with a new data model, Google moved to restrict distribution of the competitor's product by rejiggering its product to reduce the chance that consumers would click over to the competitor's website, either through scraping ratings and reviews or by providing only its own reviews. We should not expect new competitors to attack directly in the core market of a dominant firm but instead expect them to enter in a related market at the edge. The hope is that they will gain meaningful traction in the related adjacent market and then will grow over time into a more direct competitor for the original firm.

That was, for example, the structure of the competition between Microsoft and Netscape. Netscape didn't build a competing operating system to try to unseat Windows. It built a browser but Microsoft feared that the browser would grow into a replacement for the operating system – that it would, in Bill Gates's memo on that competition, “commoditize” the operating system – and seeing that competitive threat, Microsoft moved to squelch Netscape. It was that effort that resulted to the D.C. Circuit finding a violation of Section 2 of the Sherman Act in 2001.<sup>20</sup>

The parallel here is that Google, faced with new vertical search competitors, changed how it presented organic search results, which presumably reflected before what Google believed consumers wanted, to limit access to the nascent competition. Again, the issue here isn't universal search or the onebox – as the FTC concluded, that switch could easily have benefited consumers and therefore been procompetitive – but it was exactly how that box was populated with review information that might have been framed as anticompetitive. That would then be framed as a monopoly maintenance claim violating Section 2 of the Sherman Act or a tying claim or, in the FTC's case, as a violation of Section 5 of the Federal Trade Commission Act. Of course, presumably something like this story was presented to and rejected by both the FTC and the European Commission.

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<sup>19</sup> Federal Trade Commission, Statement of the Federal Trade Commission Regarding Google's Search Practices, In the Matter of Google Inc., Jan. 3, 2013; European Commission, Antitrust: Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service, June 27, 2017; Bill Ready, It's now free to sell on Google, google.com, Apr 21, 2020.

<sup>20</sup> Bill Gates, The Internet Tidal Wave, May 26, 1995; United States v. Microsoft, 253 F.3d 34 (D.C. Cir. 2001) (en banc).

### 3. POSSIBLE REMEDIES

What would the remedy have been had a violation been found? Separating out YouTube, for example, wouldn't have changed Google's incentives in providing organic search results. Thinking through possible antitrust remedies starts to push towards considering alternatives to an antitrust approach such as imposing a nondiscrimination obligation on Google or, relatedly, creating some sort of right to be carried in Google search results. Carriage obligations are the essence of common carrier status, but pure common carriage wouldn't do the trick, as the key issue on Google is whether you are on page 1 or page 20 of the search results. The issue is priority more than carriage.

A nondiscrimination obligation might address that and these are common in public utilities, going back at least as far as the 1887 Commerce Act. The regime implemented in electricity is an interesting comparison. The Energy Policy Act of 1992 moved toward separating transmission of electricity – seen as a natural monopoly – from generation of electricity, which was increasingly seen as being subject to competition. FERC Order 888 implemented that regime by requiring transmission companies who were also generating electricity to gain access to the grid through the same interface that outside merchant generators were using. But access and nondiscrimination regimes aren't easy to implement, as the extended litigation over the local telephone competition rules of the 1996 Telecommunications Act and the corresponding litigation over network neutrality should make clear. I discuss those issues in more detail in Section V below.

#### *B. Digital Advertising Dominance*

There is concern in democracies across the globe about the weakened state of newspapers. The Pew Research Center Newspapers Fact Sheet sets out the basic facts for newspapers in the U.S. and those are declining print circulation numbers and a steep drop in advertising dollars from 2006. There is less agreement on exactly what has caused that state affairs, on how much should be attributed to advertising dollars moving to Google and Facebook and how much is the general rise of the internet and sites like Craigslist, which have severely impacted print newspaper's classified advertising revenues.<sup>21</sup>

I am not going to try to resolve that here. Instead, I want to focus on what role antitrust policy has played and whether antitrust is the right tool to address the state of newspapers. I see three different possibilities here: (1) a more aggressive antitrust policy would have blocked mergers by Google and Facebook and doing so would have benefited newspapers (and could now be achieved by breaking up Google and Facebook); (2) newspapers should be given a broad antitrust exemption to allow them to negotiate jointly with Google and Facebook; and (3) Google and Facebook should be forced to pay newspapers, a move that would parallel where France and Australia seem to be heading. I will also note another approach, not based in antitrust, which is to

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<sup>21</sup> Pew Research Center, Newspaper Fact Sheet, journalism.org, July 9, 2019.

create new property rights for newspapers vis-à-vis the internet, though as the French case makes clear, there may be an overlap between new property rights and antitrust. Individual countries in Europe – notably Spain and Germany – have gone down this path and the European Parliament approved a new copyright directive last year with parallel provisions.<sup>22</sup>

## 1. GOOGLE'S ACQUISITIONS

Start with prior mergers by Google. Google's large mergers have gone through the normal antitrust review process in the U.S., Europe and other countries. In some of these cases, such as Google's 2007 merger with DoubleClick, Google was building up its internal advertising and data capabilities. In other cases, such as the 2006 purchase of YouTube.com, Google was adding content on which it could bring to bear its advertising and data technologies, as well as adding to its data trove. And the 2005 purchase of Android, discussed below as part of the larger discussion of smartphone operating systems, was important to Google's ability to expand from the desktop to smartphones.<sup>23</sup>

My assumption is that each of these mergers made Google a stronger competitor for advertising dollars. That is what a successful merger is supposed to do. Media properties have long been financed, in whole or in part, by advertising. That was true at the advent of radio in the 1920s and of free over-the-air television in the 1950s and 1960s. Media firms compete with each other to attract individuals to engage with their properties and they then pitch those individuals – eyeballs as it is often put – to advertisers who actually write the checks. Consumers didn't pay cash to listen to radio or to watch TV and they don't pay cash to use Google (or Facebook of course). There is no requirement that firms like Google and Facebook charge dollars for their services, just like there was no such requirements for radio or TV. Free advertising-supported media is a key part of the history of media in the United States.

Advertisers, like all consumers, vote with their feet and that precisely is the kind of competition that we should expect and that advertisers find valuable. Unfortunately, advertisers aren't necessarily interested in running their ads next to hard news stories about subjects that they think readers will find unpleasant – keyword blacklisting terms like “murder” and “coronavirus” – and that means that the core business model of print news organization faces real disadvantages compared to the text content offered by Google and Facebook.<sup>24</sup>

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<sup>22</sup> Directive (EU) 2019/790 of the European Parliament and of the Council on copyright and related rights in the Digital Single Market, Apr 17, 2019; Autorité de la concurrence, Neighboring rights: The Autorité has granted requests for urgent interim measures presented by press publishers and the new agency AFP (Agence France Presse), [autoritedelaconcurrence.fr](http://autoritedelaconcurrence.fr), Apr 9, 2020;

<sup>23</sup> I should disclose that I served as a consultant to a telecommunications firm that unsuccessfully opposed the DoubleClick merger.

<sup>24</sup> Tiffany Hsu & Marc Tracy, News Outlets Suffer as Advertisers Shun Articles About Coronavirus, *The New York Times*, May 8, 2020, pB3. On content and advertising conflicts, see the



It is far from clear to me what breaking up Google would do. It is certainly possible that, given their market positions, Google and Facebook have pushed up advertising prices, but that of course would make it *easier* for print media to compete with them today. Breaking up Google – saying forcing a divestiture of YouTube – might split the data held by Alphabet, especially going forward, but the revamped Alphabet and the new YouTube would both have large amounts of data. It isn't at all obvious that that would meaningfully improve the posture of newspapers. A breakup could just push down advertising prices without benefiting newspapers.

## 2. FACEBOOK'S ACQUISITIONS

Turn to Facebook. Like Chairman Cicilline, I am more skeptical about the Facebook acquisitions, especially the Instagram purchase, though I obviously have the benefit of hindsight. It seems clear now that the Instagram purchase occurred at a critical time for Facebook. This was at the cusp of the transition from desktop-based social networking to smartphones. The emergence of the iPhone and Android-based handsets (discussed in Section IV.D below) had put in place the infrastructure required to move from social networking based on text to a version organized around photographs. Companies can botch these transitions and once dominant products can lose ground. In an earlier era, Lotus 1-2-3 misplayed the moved from a text-based operating system (MS-DOS) to the graphical user interface (Macintosh and then Windows) and lost its market position to Microsoft Excel.<sup>25</sup>

Instagram had already achieved the hardest part of creating a rich social network, which is millions of users interacting with each other. This creates powerful dynamics – network effects in a phrase – that are very hard to start. And with a large base of users, Instagram could have added other features that would have overlapped much more directly with Facebook. This was the risk that Instagram posed to Facebook. Instagram had not figured out how to monetize that but, at least from the outside, online advertising seems easier to make work if you have lots of users producing rich data. Indeed, in 2008, Facebook hired Sheryl Sandberg from Google to boost its own approach to advertising. WhatsApp had also built up a large base of users and, again, that seems like the difficult undertaking.<sup>26</sup>

Again, with the benefit of hindsight, I could see either of these deals being rejected, though I will note that the antitrust regulators looked at these deals and approved them, and I am instinctively cautious about assuming that I have a better understand of this than teams of professionals who have looked at more inside information than I have. The common thread here is, perhaps, an under-appreciation of exactly what are the core characteristics of the competition here. The FTC statement on the Instagram merger characterized it as a photo app, which was to suggest that it

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classic, pre-internet era book, C. Edwin Baker, *Advertising and a Democratic Press* (Princeton Univ. Press 1993).

<sup>25</sup> Letter of Mar 19, 2019 regarding Facebook by Chairman David N. Cicilline to the FTC Commissioners.

<sup>26</sup> Brad Stone & Miguel Helft, *Facebook Hires Google Executive* as No. 2, Mar 4, 2008.

somehow was in a different market than Facebook. What was probably more important was the fact that both firms competed to attract time and attention from users so as to sustain business models based on engagement feedback loops. Text vs. photos was a small point compared to the more basic point.

### 3. BREAKING UP GOOGLE AND FACEBOOK

But return to the real question: would newspapers be in a better posture if the deals had been blocked or if Google or Facebook were forced to divest one or more of their prior acquisitions? The best case here for newspapers is not that they would be able to be competitive using their own data and targeted advertising – that still seems unlikely – but if instead you created enough firms with large amounts of data, publishers could play them off against each other when they purchased advertising services from a third party. To frame that idea, the 1982 breakup of AT&T mattered some in how it introduced better competition into long-distance telephone service among AT&T, MCI and others, but I think the real payoff came down the road when a new technology – wireless – became important.

In 1995, when the FCC conducted its first major spectrum auction, the breakup of AT&T meant that AT&T was competing with the regional Bell operating companies to buy the newly-available spectrum. That auction would probably have played out differently had we not created eight substantial telecommunications firms from the original AT&T. Having more firms with substantial amounts of data in hand might mean that newspapers would be able to get better deals when they negotiate with firms to supplied targeted advertising for their website.<sup>27</sup>

If you wanted to breakup either Google or Facebook, I am skeptical that you can do that within antitrust proper. I have trouble identifying a nonconsensual breakup of a large firm in the Hart-Scott-Rodino era, meaning a retroactive breakup of a large merger that had gone through the pre-notification process. Recall that the 1982 breakup of AT&T was consensual. The initial remedy in the *Microsoft* case called for the firm to be broken in two, though that remedy was eventually rejected and Microsoft didn't involve mergers. I do not think that breaking up these firms in the fault-based system of antitrust would occur any time soon and speed is one of the issues that we should be paying attention to as we consider possible adjustments to competition in the digital marketplace. Congress presumably could do this through direct legislation – think a modern version of Glass-Steagall, which separated commercial and investment banking – but I have not considered all of the issues associated with that carefully.

### 4. MORE DIRECT INTERVENTIONS

I will close this section briefly with two other issues. The possible benefits of breakups of Google or Facebook and how that would create more competition for the targeted ads outsourced by newspapers is pretty speculative and one could imagine a desire for

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<sup>27</sup> Edmund L. Andrews, *Winners of Wireless Auction to Pay \$7 Billion*, The New York Times, Mar 14, 1995, pD1.

more direct intervention. Consider two related ideas. Last year, Chairman Cicilline introduced H.R. 2054, the Journalism Competition and Preservation Act of 2019. That bill would have effectively created a four-year exemption from possible antitrust liability for certain joint efforts by professional news organizations to withhold content from large online sites like Google and Facebook.

I take it the hope would be that if all U.S. news organizations agreed together to deny their links to Google or Facebook – perhaps by agreeing to a setting in their robots.txt files, though we are now at the edge of my technical knowledge – with the hope that Google and Facebook would then negotiate a deal for the use of links on their websites. I don't know how those negotiations would work out. I get that an individual publisher would likely have weak leverage with Google or Facebook and that allowing the publishers to work together might boost their leverage, but I would just be speculating on how that might play out.

Other jurisdictions have recently taken a different path. France is forcing Google to negotiate with publishers to pay them for the use of their content under so-called neighboring rights obligations, where the French Competition Authority understood Google's response to that new regime to be an abuse of a dominant position. That was obviously a mouthful, but all of that suggests exactly how contextual the French case is. I don't think that the U.S. really has such a regime and its recent creation in Europe was hotly contested. And I don't think that earlier versions of new rights regimes in Spain and Germany were successful. Australia has recently announced a parallel move though the basis for the decision isn't fully public yet, so that makes it hard to evaluate.<sup>28</sup>

I don't think that I know a great deal about what France and Australia have done. From the outside, this looks like a kind of tax regime, where the new media entrants, Google and Facebook, are being taxed for the benefit of the old-line media firms. A full discussion of those issues would be beyond the scope of this statement, but I think that approach is pretty far removed from a traditional antitrust approach where liability is based on fault assessed in a competition framework. To an outsider at least, it appears as if France and Australia believe that Google and Facebook have competed too successfully for advertising dollars. Transferring money from Google and Facebook to newspapers may be a perfectly sensible social policy – I'm not opining on that – but it is clearly a political fight far removed from U.S. antitrust policy.<sup>29</sup>

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<sup>28</sup> Autorité de la concurrence, Neighboring rights: The Autorité has granted requests for urgent interim measures presented by press publishers and the new agency AFP (Agence France Presse), [autoritedelaconcurrence.fr](http://autoritedelaconcurrence.fr), Apr 9, 2020; Livia Albeck-Ripka, Australia Moves to Force Google and Facebook to Compensate Media Outlets, *The New York Times*, Apr 20, 2020.

<sup>29</sup> Ben Smith, Big Tech Has Crushed the News Business. That's About to Change. *The New York Times*, May 10, 2020.

### C. Amazon's Dual Role as Retailer and Platform

Amazon opened for business in July 1995 as just another online retailer. Over time, it added products, but it changed its business model in 1999 when it started selling third-party inventory on its website. Before that, it had been just a first-party inventory seller, meaning like countless other offline and online sellers, it bought inventory at wholesale from suppliers and sold it at retail. Third-party inventory sales have grown substantially overtime from 3% of Amazon's retail sales to 58% in 2018.<sup>30</sup>

#### 1. REFEREE AND PLAYER?

Much of the recent attention to Amazon's sales practices have been directed at this dual role of traditional retailer and third-party sales platform. It is important to be precise about exactly what is has happening here. Retailers have always been the sellers of third-party goods in the basic sense that they do not produce and sell all of their own goods. Doing that is to engage in a private label business. Retailers have been doing that for years – recall that Sears started selling in 1887 and first went into selling its own private-label goods in 1927 – but for most retailers, most of the goods they sell are produced by third parties.

But those retailers buy those goods from third parties and then resell them. When Amazon is acting as a third-party platform, it never owns the goods that it is selling. That can have consequences – who is responsible if there is a problem with the good? – but the competition concern that has been expressed is whether these is a conflict between playing both roles simultaneously. Amazon can't be, as it is put, at the same time, a player and a referee. On July 17, 2019, the European Commission announced an antitrust investigation into this dual role based on concerns about how Amazon was using “competitively sensitive information” in playing those dual roles. That investigation is still pending.<sup>31</sup>

And in the last month, *The Wall Street Journal* reported that Amazon looked at sales data by individual third-party sellers to assess which markets to enter. My understanding is that Amazon has said that that would violate its internal policies, though of course that statement wouldn't tell us whether those policies were actually violated. On May 1, 2020, the House Committee on the Judiciary sent a letter to Jeff Bezos, Amazon's CEO, asking him to appear before the committee to address these issues. The letter set out the Committee's concern with the underlying behavior as well as concerns that Amazon's prior statements to the committee had been, at a minimum, misleading.<sup>32</sup>

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<sup>30</sup> 2018 Amazon Shareholders Letter.

<sup>31</sup> European Commission, Antitrust: Commission opens investigation into possible anti-competitive conduct of Amazon, July 17, 2019.

<sup>32</sup> Dana Mattioli, Amazon Scooped Up Data From Its Own Sellers to Launch Competing Products, *The Wall Street Journal*, Apr 23, 2020; James Leggate, Amazon says it doesn't use sellers' data after Wall Street Journal Story, *foxbusiness.com*, Apr 23, 2020; U.S. House of Representatives, Committee on the Judiciary, Letter to Mr. Jeff Bezos, May 1, 2020. That letter mentioned by name Nate Sutton, Amazon's Associate General Counsel for Competition. Mr. Sutton is a 2000 graduate of The University of

## 2. PLATFORM EFFICIENCIES

We should start with the natural question: why is it useful for Amazon to both be a traditional retailer and then also operate as a platform? Amazon has become a multi-faceted corporation with many features, but to just focus on the goods-selling part of Amazon, we should probably think about it as a product search engine front end matched with a fulfillment back-end. As Amazon sees product searches, it has a number of choices as to how to respond: (1) offer a product owned by Amazon or (2) offer a product owned by a third party. Products owned by Amazon will either be acquired by Amazon from third parties or produced by Amazon for itself. Products owned by third parties will be offered either through pure advertising, where the prospective customer might leave Amazon's site after clicking on an ad or through continued engagement with Amazon's site. On the latter, Amazon may provide payment and identity services—Amazon has my credit card information on file and the firm selling probably does not—and Amazon may provide other services, as it does through its Fulfillment by Amazon service.

That breakdown should give us a sense of some of the regulatory choices that might be possible here. Do a few thought experiments on how you might reconfigure Amazon. Amazon reverts to its original incarnation as an online retailer. It sees searches for products that it isn't selling. It can either add those products, again as a private-label product or by purchasing them at wholesale, or it can sell advertising for those products on its site and then refer those customers outside of Amazon. Barring Amazon from running these ads would presumably raise First Amendment issues. And the key advantage of having Amazon run a platform is that everything suggests that they are a strong competitor in providing back-end transaction and fulfillment services to third parties. We would weaken competition in that market if we excluded Amazon from it. Each time we bar a firm from a market, we run the risk of reducing competition in that market.

Everything suggests that third parties want to take advantage of the front-end and back-end services that Amazon provides. Sellers would almost certainly prefer that potential customers go to their websites directly but it is hard for sellers to get attention from customers. Amazon has succeeded in doing that. When businesses say that they have to be on Amazon, they mean that they want access to the huge volume of product searches that occur there. Customers go to Amazon ready to buy. Amazon is going to charge for bringing those customers to these third parties and that is true whether the sale is through the platform or directly through Amazon when it has purchased the sold product at wholesale. And of course some sellers want Amazon's back-end services.

There certainly are competitors in the back-end services market. I recently searched for face masks on Walmart.com and was presented with the chance to buy

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Chicago Law School. That of course was twenty years ago, so I don't know whether or not he took any of my classes, but it is certainly possible. I have not looked at Amazon's statements to the Judiciary Committee, so I have no view on the possible concern about misrepresentations to the Committee.

from many third parties. And Shopify is perhaps the best-known provider of pure back-end services. My understanding is that Amazon's move into provision of services to third parties indicated that it had built a capability that it could use for its own retail sales as well as those of third parties. We should not waste resources by leaving that capacity on the sideline and we should not reduce competition by barring Amazon from selling its capabilities wholesale.

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My best judgment is that we want a more tailored intervention here. I want to focus on three different issues: (1) Amazon's use of individual third-party seller data to enter product markets; (2) broader concerns about Amazon entry into product markets (sometimes framed as Amazon cloning products); and (3) concerns that Amazon favors its own products in product search results, especially as to how it populates the Buy Box.

### 3. PLATFORM DATA AND ENTRY

The use of individual seller data is a nice, stark case. Amazon purports to say that it doesn't use that data and that it is against its official policy to do so. The data itself, if managed appropriately, would almost certainly qualify for trade secret status and would be protected from misappropriation. But the relationship between Amazon and its third-party sellers is contractual and presumably those contracts establish the respective rights and obligations of the parties regarding this data. I doubt that antitrust law is the best tool to regulate this issue or third-party sellers would have strong antitrust claims under U.S. antitrust law.

But we should see that is at stake here and the recent FTC 6(b) filing by a group of unions offers a couple of relevant examples. U.S. antitrust law doesn't bar firms from entering new markets and selling new products, even firms with the market position held by Amazon. Consumers generally benefit from entry when customers are presented with new versions of existing products or products at lower prices. The 6(b) petition offers two interesting examples of this pattern:

In one example, Amazon introduced a laptop stand that was indistinguishable from the very popular stand that a third-party seller, Rain Design, had been selling on the Marketplace for ten years. The primary distinction between the two products was price: the Amazon Basics-branded stand was \$19, compared to Rain's \$43 stand.

There is so much information in that paragraph. There is no allegation that Amazon was violating any of Rain's intellectual property rights. Indeed, in the original *Bloomberg* piece on this conflict, Rain acknowledged that Amazon was not violating the relevant patent. There is no claim that Amazon was selling below cost. The description is that for ten years, Rain had been able to sell its product at what seems to have been a very high price and consumers have been paying what seems to be above a competitive price that entire time. In some ways, the interesting point that needs to be explained is why other firms didn't enter to compete with the Rain Design product. That suggests

something about the real difficulty of assessing market opportunities and the consequences to consumers from that.<sup>33</sup>

Take the second example from the 6(b) filing. Amazon is said to be producing shoes that “bear a striking resemblance” to Allbirds. Part of what Allbirds pitches is that its shoes are sustainably produced. Allbirds sell for \$95, while the Amazon knockoff, which is not produced sustainably, sells for \$35. Again, there is no allegation of an intellectual property violation and Amazon has entered to offer a different product for a lower price. Individuals who want sustainable higher-priced products get those, while people who want the style at a lower price presumably buy the Amazon knockoffs. Again, Amazon itself says it has a policy against using individual seller data and there is an instinctive appeal to that policy, but as these examples suggest, even that policy is likely to result in meaningful harm to consumers.

Go up one level and focus on aggregated data from third-party sales. As the April 2020 *Wall Street Journal* article suggests, there could be difficult lines to draw between individual data and aggregated data (are data aggregated if two sellers are added together?). Blocking all uses of third-party data, individual or aggregated, through direct regulation almost certainly would be the cleanest way to resolve this issue.

In some sectors, we have direct regulations on how firms can use customer data. Direct regulation of this sort avoids the core antitrust issue of showing some type of antitrust violation and instead would impose a statutory limit on how firms like Amazon, Walmart and others could use data. To take a prominent example from another area, the 1996 Telecommunications Act imposed limits on how telecommunications firms could use so-called customer proprietary network information. See 47 USC 222. This is a type of internal data siloing which limits the ability of firms to moosh together all of the information that they see about customers. That said, data siloing may raise First Amendment issues and so new laws would need to tread carefully in structuring competition while avoiding limits on important constitutional rights.<sup>34</sup>

Assume that regulations are put in place to address the use of platform seller data and turn next to the broader question of Amazon’s entry into product markets. General product searches on Amazon presumably give it a great deal of information on

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<sup>33</sup> Petition for the Investigation of Amazon, Inc., Submitted to the Federal Trade Commission by The International Brotherhood of Teamsters et al, Feb 27, 2020; Spencer Soper, Got a Hot Seller on Amazon? Prepare for E-Tailer to Make One Too, bloomberg.com, Apr 20, 2016.

<sup>34</sup> On data limits, see Randal C. Picker, Competition and Privacy in Web 2.0 and the Cloud, 103 Northwestern Univ. L. Rev. Colloquy 1 (2008). On possible First Amendment concerns, see U.S. West, Inc. v. Federal Communications Commission, 182 F.3d 1224 (10<sup>th</sup> Cir. 1999) (finding that FCC had not narrowly tailored its CPNI regulations as required by the First Amendment). The German competition authority has attempted to implement data siloing regarding how Facebook uses data from Facebook, Instagram and WhatsApp. Its initial decision requiring siloing was overturned on appeal in the German court system, though I think a further appeal is still pending. See Sara Germano, Facebook Wins Appeal Against German Data-Collection Ban, The Wall Street Journal, Aug 26, 2019.

what consumers are interested in, as do clicks on ads on Amazon as do of course sales data on Amazon's sales of its own inventory. Those sources presumably give Amazon a rich stream of data to assess possible markets to enter. Again, the FTC investigation petition is useful:

A former Amazon product manager confirmed the researchers' findings, explaining that "not only can Amazon track what shoppers are buying, it can also tell what merchandise they're searching for but can't find," and then, she said, "Amazon can just make it themselves."

Note the starting point here: Customers search for products but can't find them. Any business having to turn down a customer is in that position, but the fact that, I assume, Amazon is the first destination for many product shoppers means that Amazon is incredibly well situated to see unmet demand and limiting the use of individual seller data won't change that basic point.

#### 4. INTELLECTUAL PROPERTY LAW AND ENTRY

As already suggested, intellectual property law – prominently, patent, copyright, trademark and trade secrets – determines in part the extent to which Amazon, Walmart and other firms are able to enter new markets in competition with their sellers. For example, Williams-Sonoma sued Amazon for copying its products and believed that Amazon had violated Williams-Sonoma trademarks through the copying. IP law draws carefully considered boundaries barring entry in some circumstances and allowing entry in others and I think that we should be careful about undercutting the careful balances drawn in those rules.<sup>35</sup>

#### 5. CONTROL OVER THE BUY BOX AND DISCRIMINATION

As noted above, Amazon effectively runs a product search engine: I search for a product and Amazon returns results. Amazon's algorithms control which results they return, and especially what shows up in the "buy box," Amazon-speak for the box presented where you can click to buy the product. The pending investigation in Europe is looking at that issue. Amazon might prefer its own private label products there or might preference products using its Fulfillment by Amazon service. If Amazon is doing that just to boost its profits – because it makes more money when it sells its own products or products it is fulfilling directly – I do not think that there is a straightforward winnable claim under current U.S. antitrust law. The essential facilities doctrine in antitrust and the corresponding mandatory access regime seen in *Aspen Skiing* and *Trinko* are quite narrow and of uncertain application.<sup>36</sup>

The best claim might be that Amazon is tying its fulfillment product to its product search engine, but none of that would be easy to litigate. The 6(b) filing

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<sup>35</sup> Steve Brachmann, Williams-Sonoma Lawsuit Accuses Amazon of Offering Infringing Products for Sale Online, ipwatchdog.com, Dec 30, 2018.

<sup>36</sup> *Aspen Skiing Co. v. Aspen Highlands Skiing Co.*, 472 U.S. 585 (1985); *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004).



suggests that Amazon is tying product search rankings and placement in the buy box to the use of other Amazon services, especially Fulfillment by Amazon, but I am skeptical that the rankings qualify as a separate product under the *Jefferson Parish* test. Again, a different approach outside of antitrust would be some type of neutrality or nondiscrimination regime regarding how Amazon returns product search results. The United States has a rich experience with nondiscrimination rules going back at least as far as the Interstate Commerce Act of 1887 and nondiscrimination obligations are frequently imposed in public utility industries. Implementing that type of discrimination limit would probably require an associated federal agency to enforce the rules.<sup>37</sup>

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That was a pretty extended discussion, so let me offer a few conclusions regarding Amazon's dual role as an inventory seller and an inventory platform. The customer base, transaction processing and delivery infrastructure that Amazon has built over time makes possible Amazon's first-party inventory business. And the behavior of third-party sellers suggests that Amazon is providing valuable services to those sellers in using its internal skill set in wholesale transactions on the Amazon platform. Requiring Amazon to exit one business or the other would reduce competition and would risk destroying these valuable arrangements.

If the central concern is that Amazon is exploiting individual third-party seller information, there are much more direct interventions possible. In some sectors, we silo data and we could do that here. That said, do note, as the Rain Design example suggests, the real possible costs to consumers from limiting entry by Amazon into new product markets. And if there is a belief that product cloning is too easy, the natural place to fix that problem is in intellectual property law. On the buy box, the central allegation seems to be that Amazon uses the buy box to make money for Amazon. That of course is the business that Amazon is in and U.S. antitrust law doesn't create some sort of general nondiscrimination and access regime for third-party sellers. Congress could of course create a new nondiscrimination regime of the sort that we typically associate with public utilities. The merits of doing that would depend, I would think, on an overall assessment of competition in retail markets, plus a sense of how easy or difficult it is for a government agency to run a nondiscrimination regime. I don't begin to have the data to do a real assessment of retail competition, so I won't try that and I turn to the challenges of government regulation in Section V below.<sup>38</sup>

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<sup>37</sup> *Jefferson Parish Hospital Dist. No. 2 v. Hyde*, 466 U.S. 2 (1984).

<sup>38</sup> My discussion of Amazon has focused on the concerns about its operation of a platform. Your letter also asked about acquisitions by these firms, especially purchases designed to thwart competition. It is hard to imagine that Amazon thought that Whole Foods posed a real competitive threat to Amazon. And Amazon obviously didn't buy Whole Foods to shut it down. Instead, Amazon seemingly wanted to move quickly into physical stores to make it possible to run a more mixed online/physical store company. We could have barred that merger and forced Amazon to build up its physical presence store by store by, say, building a new store right next to each existing Whole Foods. Moving assets into hands that can make them more valuable faster is an important way in which we produce new value in the

#### *D. Smartphone Operating Systems*

The starting point on smartphone operating systems is the remarkable success of Apple and Google even though they entered a market dominated by firms like Nokia and Research in Motion (Blackberry). The iPhone's new touch interface, introduced by Apple in January 2007, transformed the market. That was a point of robust competition among, especially, Apple, Google and Microsoft. Those three firms were playing very different strategies. Apple was offering expensive devices with the operating system and hardware provided by Apple. Microsoft tried to replicate its strategy for PCs by creating a new Windows-based mobile OS that it would sell to handset makers. And Google offered a free operating system to handset makers, Android plus Google's proprietary store, Google Play, though it came bundled with Google search and Google's Chrome browser.

#### 1. CORE MARKET LEVERAGING AND ADJACENT MARKET COMPETITION: THE LESSONS OF MICROSOFT

A frequent concern expressed about dominant technical firms is that they will extend their positions from their core market into adjacent markets and that we should be especially concerned when what starts as an adjacent market could evolve over time into a market that competes with the original core market. That pattern matches reasonably closely the 1998 Microsoft middleware/browser antitrust case. The government proved that Microsoft tried to maintain its operating systems monopoly in how it limited competition by Netscape Navigator. Microsoft feared Navigator as it thought that the browser might evolve into a competitor to the operating system. And, as I suggested above, that pattern might match how Google responded to vertical search, though, again, presumably, both the FTC and the European Commission considered that claim and rejected it.

Take two other examples both involving Microsoft. The European Commission cases against Microsoft were based in part about adjacent market leverage. In 2001, the European Commission issued a statement of objections against Microsoft based, in part, on concerns that Microsoft was tying Windows Media Player to Windows. The fear is that that would give Microsoft a powerful advantage in the competition over media player and more broadly in music and video. By 2004, after a five-year investigation, the Commission concluded that Microsoft had indeed broken EU competition law. The Commission required Microsoft to offer to computer makers versions of Windows with and without the media player, though Microsoft did not have to charge different prices for the two products.<sup>39</sup>

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economy. Unlike the Instagram purchase by Facebook, where, as I noted earlier, I am skeptical that antitrust regulators saw that merger correctly, I think the government acted correctly in greenlighting Amazon's purchase of Whole Foods.

<sup>39</sup> European Commission, Commission initiates additional proceedings against Microsoft, 30 Aug 2001; European Commission, Commission concludes on Microsoft investigation, imposes conduct remedies and a fine, 24 Mar 2004.

Two years later, Microsoft set out an update on the uptake of Windows XP N, the version of Windows without Microsoft's media player. At that point, Microsoft had sold roughly 35.5 million copies of Windows XP with its media player included. And it had sold 1787 copies of Windows XP N, or about 0.005 percent of total Windows sales. I am not aware of information that describes whether Microsoft paid anything to computer manufacturers to distribute its media player, but if the point of the Commission remedy was to change the distribution of media players, it was an abysmal failure. And of course Microsoft didn't come to dominate media players, as we might have expected given the original theory of the Commission's investigation. It doesn't seem to be that easy for even a successful firm to leverage its position in one market into an adjacent related market. The Apple iPod succeeded and the Microsoft Zune didn't.<sup>40</sup>

The second Microsoft example arose again in Europe in 2009. The European Commission issued a statement of objections reflecting its preliminary conclusion that Microsoft was impermissibly tying Internet Explorer to Windows in ways that would "harm[] competition between web browsers, undermine[] product innovation and ultimately consumer choice." The theory of the case was that by distributing Internet Explorer with Windows, Microsoft had a strong advantage in competing in the browser market. Rather than face the potential threat to the delay of the introduction of Windows 7, Microsoft reached a settlement with the European commission in which it agreed to make available a browser ballot or browser choice screen. When Windows 7 computers were turned on in Europe, consumers were offered a choice among 14 different possible browsers rather than simply having Internet Explorer pre-installed.<sup>41</sup>

It was subsequently discovered that Microsoft broke the original browser choice screen when it updated Windows 7. I have not seen anything to suggest that that was intentional, but the European Commission nonetheless issued another large fine. More to the point is that the browser choice screen was broken for 17 months before anyone complained. That gives some sense of how unimportant the remedy was and of course Google Chrome rose over time to market leadership and Internet Explorer faded away. Again, the European Commission's concern that a dominant firm would leverage its position in one market to another simply was not borne out. Product quality seems to matter.<sup>42</sup>

## 2. ENTRY LIMITS

In both of the European Microsoft examples, government regulators were trying to limit how a dominant firm could enter other markets. As I noted above, I do not think that

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<sup>40</sup> Microsoft News Center, Fact Sheet: Windows XP N Sales, Apr 2006.

<sup>41</sup> European Commission, Antitrust: Commission confirms sending a Statement of Objections to Microsoft on the tying of Internet Explorer to Windows, Jan 17, 2009; European Commission, Antitrust: Commission accepts Microsoft commitments to give users browser choice, Dec 16, 2009.

<sup>42</sup> European Commission, Antitrust: Commission opens proceedings against Microsoft to investigate possible non-compliance with browser choice commitments, July 17, 2012; European Commission, Antitrust: Commission fines Microsoft for non-compliance with browser choice commitments, Mar 6, 2013.

U.S. antitrust law blocks firms from entering markets. When Apple, Google and Microsoft took steps to enter the smartphone operating system market, there was no basis in U.S. antitrust law to block that entry. Again, U.S. antitrust law is fault-based and, as just suggested, U.S. law has a less-expansive approach to tying law than Europe.

We have imposed limits on entry as part of antitrust settlements and we sometimes control entry through sectoral regulation. Take telecommunications as a prominent example of this. The 1956 AT&T final judgment – a consensual settlement between the U.S. and AT&T – barred AT&T from entering the computer market. The 1982 breakup of AT&T – another consensual agreement – lifted the computer restriction but imposed other business-line restrictions on AT&T and the new regional Bell operating companies. And the 1996 Telecommunications Act continued to impose a number of quarantines on the RBOCs. These were limits designed to police how regulated natural monopolies competed in adjacent markets. But those agreed settlements and sectoral statutory limits are quite different than saying up front that particular firms were barred from entering new markets. Again, I don't think the current fault-based U.S. antitrust system does that.

We should not think that entry limits are free. The 1956 AT&T final judgment blocked AT&T from moving aggressively into selling computers. AT&T had invented the building block of the modern age when Bell Labs researchers invented the transistor in 1947 ushering in a world of devices based on semiconductors. AT&T should have been a fearsome competitor in mainframe computers, but instead we ended up with a market dominated by IBM. Teasing out causality is always hard. In 1964, IBM introduced a great product, the IBM 360, and maybe that would have carried the day even had AT&T been a computer competitor, but we should not assume that we can hobble strong competitors without a cost. That meant here that the U.S. government would bring an epic Section 2 case against IBM in January 1969.

That case would eventually be dismissed in January 1982. Try a counterfactual exercise: suppose that the case had been settled a few years earlier. IBM had already unbundled software, services and hardware, one of the key goals of the original 1969 complaint. Suppose that, to get rid of the case, IBM had agreed not to enter the newish personal computer market seeing it as place for hobbyists to experiment but nothing more. That is hardly fanciful. Digital Equipment Corp. (DEC) had successfully built a new business around minicomputers and had carved out a space away from IBM, but DEC didn't really think that there was going to be a market in the new microcomputers.

Again, causality and counterfactuals are hard, but everything suggests IBM revolutionized the personal computer market when it introduced the IBM PC on August 12, 1981. IBM clearly had a substantial advantage – “no one ever got fired for buying IBM” was the line – that it was carrying into the new adjacent market. But IBM's entry into the market legitimated the market and made possible the emergence of an incredibly valuable ecosystem of software and IBM PC clones.

### 3. REGULATING SMARTPHONE PLATFORMS

Return to smartphone operating systems. Before 2007, Nokia and RIM/Blackberry were dominant. What would have happened if we had had in place regulations that limited entry by leading firms into adjacent markets? It would have been natural to apply those regulations to Microsoft, Google and even perhaps Apple. Microsoft was clearly trying to extend its dominant position in PC operating systems into a new market and was building off of the software, relationships and expertise that it had there to do that by selling software to handset makers. Apple once again wanted to create a high-end vertically integrated stack of software and hardware. And Google wanted to extend its advertising-supported search model into a support tool for distributing a new smartphone OS. And, of course, Google wanted to speed its entry into that market by buying a company and its Android software. Each of these firms had strong advantages from their strong positions in related adjacent markets.

I think that broad entry limits would have been a mistake here. Consumers were able to make choices about the products they wanted and about the different business models that these three firms, the incumbents and others were offering. We need to recognize the competition we would lose if we blocked strong firms with deep technical capabilities from entering new markets. We don't know what consumers want and we rely on robust competition in markets to sort all of that and that was exactly what happened here.

Now what? We have two strong firms, Apple and Google, running competing smartphone platforms. They each charge a 30% fee for paid-transactions on their platforms and we still have allegations of self-preferencing, as captured by Spotify's pending complaint against Apple before the European Commission. What should we do now, if anything, about this situation?

Ordinary antitrust and competition law are in play here. In May 2019, the U.S. Supreme Court ruled that iPhone owners had standing to bring antitrust claims against Apple relating to the operation of the app store. Apple is likely to face Section 2 monopolization claims and tying claims going forward. Those are the normal tools of antitrust. And on July 18, 2018, the European Commission announced a new €4.34 billion fine over Android and ordered Google to change how it licenses Android software. Those actions are on appeal in the European court system, but Google is in the middle of implementing a remedy very much like the Microsoft browser ballot. This would make it possible for Android owners to easily designate their default search engine. And the Spotify complaint is still open in Europe.<sup>43</sup>

This looks like the most optimistic story so far for the working of traditional antitrust, but I will admit to skepticism here. The European approach to digital competition for the GAFAM has produced, so far, the two Microsoft cases, the Google

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<sup>43</sup> Apple Inc. v. Pepper, 139 S. Ct. 1514 (2019); European Commission, Antitrust: Commission fines Google €4.34 billion for illegal practices regarding Android mobile devices to strengthen dominance of Google's search engine, July 18, 2018.

Shopping result and now the Google Android result. There is this idea that antitrust enforcement has shifted from Washington DC to Brussels and that that reflects a better competition law in Europe and more aggressive competition regulators in Brussels. I am skeptical that an objective observer would describe the European record as one of success. We are still midstream on the Android remedy but I doubt that it will change the market position of Google search, Chrome or the Google Play store and it isn't clear that it will change the net flow of euros across the Android platform.

And on the U.S. side, a fault-based antitrust system is slow and underinclusive in the sense that we will want regulation in some cases where a leading firm has done nothing wrong. It is far from clear that there is a winnable antitrust case against Apple for its operation of the app store, but perhaps that is beside the point if the goal is to do a better job of protecting competition on smartphone platforms. We probably need a much more automatic system that is triggered when a firm achieves dominant status, triggers not based on abuse or misuse of a dominant position but instead based on its leading market position. In many ways, the right question is: once a firm has competed and won: what new obligations should it have? I turn to that regulatory question in the next section.

## V. Opportunities and Challenges of Regulation

For concreteness, continue with smartphone platforms and consider four possible regulatory approaches: (1) treat the platforms like common carriers; (2) implement a nondiscrimination regime; (3) implement price regulation; or (4) bar actions that block platform devices from accessing competing app stores. The first three regulatory approaches are common in public utilities regulation and the fourth is focused more narrowly on using competition as a core regulatory tool. I will discuss those approaches in the context on pre-installation of apps, then turn to Apple/Spotify and then close with a brief analysis of the challenges of regulating data access/portability.

### *A. Regulating Pre-installation of Apps*

Recall that pre-installation of Google Chrome and Google search as the default search engine was at the heart of the European Commission Android case. Consider pre-installation of software on, say, an iOS device or the setting of default services on the device. iOS devices come with a variety of pre-installed Apple apps and Apple charges third parties for pre-installation and being installed as a default setting on iOS devices. Reports suggest that Google was to pay Apple upwards of \$12 billion dollars in 2019 for being set as the default search engine in Safari, Apple's native browser. Given how easy it is to change defaults or download apps, it isn't obvious that preloading should be valuable, but Google's enormous payments to Apple suggest otherwise.<sup>44</sup>

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<sup>44</sup> Lisa Marie Segarra, Google to Pay Apple \$12 Billion to Remain Safari's Default Search Engine in 2019: Report, Fortune Magazine, Sept 29, 2018.

Consider how a common carrier or nondiscrimination regime would apply here. Would Apple have an obligation to carry – here meaning pre-install – any app requesting that? I hope that merely to state the idea is to make clear why that would be an outcome that would be physically impossible and would create a terrible consumer experience. No blocking of apps found to contain malware, no limits on pornography, no limits on apps that help that help people violate the law or evade law enforcement. Part of what consumers want from app stores (or presumably any store, online or offline) is some assurance of quality and filtering for safety and other important social values. And all of the problems that consumers experience in searching through the app stores would come directly to their devices. So don't pre-install apps, but pre-install links, say an incredibly long browser ballot for all apps on your device. Again, self-refuting I hope.

Switch to a more tailored nondiscrimination regime for pre-installation. Apple pre-installs an app, say Apple Music. Would a nondiscrimination regime require Apple to pre-install all competing music apps? Would we instead make the browser choice screen universal for any app category where Apple sought to pre-install all apps? Could Apple auction off the sole right to be pre-installed? And could Apple bid in that auction against outsiders? That might sound strange – Apple bidding to pay itself – but that is exactly how some versions of the Google Shopping remedy have operated. A price regulation regime requiring, as in public utility regulation, say, fair, just and reasonable prices would put the government in the business of regulating these carriage deals between Google and Apple. All of these hypothetical efforts to create pre-installation rights or otherwise regulate pre-installation seems fraught.

### *B. The Apple/Spotify Dispute*

Switch to Apple's dispute with Spotify. Its public statements have focused on two issues. First, Spotify has been able to distribute its free app through Apple's app store without paying Apple anything but if Spotify users upgrade from free to premium inside the app – meaning they are becoming paying customers of Spotify – Apple charges a 30% fee of the price paid to Spotify. Spotify thinks that price is too high. Second, Spotify believes that it has identified circumstances where Spotify has been denied equivalent functional access to iOS, such as the inability to meld together Siri and Spotify or limitations on how Spotify accesses the Apple Watch.<sup>45</sup>

Start with the fee dispute. Apple doesn't charge for ad-supported apps, which means that Spotify has been able to reach millions of iOS users without paying Apple a dime for that access. Apple does charge for apps with fees. I paid \$14.99 for a fancy camera app and got a 30% cut of that. Spotify charges \$9.99 a month for its premium service and if users of the Spotify app sign up for the service within iOS, Apple gets a 30% cut

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<sup>45</sup> Spotify Founder and CEO Daniel Eck, Consumers and Innovators Win on a Level Playing Field, Spotify.com, Mar 13, 2019.

of that in the first year and 15% after that. Apple, I think, gets nothing if a Spotify user signs up separately outside of the app.<sup>46</sup>

I have not considered carefully the best way to organize payments in Apple's iOS ecosystem. There are devices, pre-installation fees and a variety of ways for paying for software. This really does harken back to the complex payment arrangements that led to the U.S. government's 1969 antitrust suit against IBM, though recall the government dismissed that suit after a 13 year slog. That said, IBM did make changes to how it organized payments for hardware, software and services. Given that history and the complexities of operating the iOS platform, I certainly would not be ready to recommend some type of price regulation here. I can see a case for boosting app store competition, though I would want to look more carefully than I have at the competing Android app stores before taking that step.<sup>47</sup>

Switch to Spotify's claim that they have been disadvantaged relative to Apple's access to iOS interfaces, especially as to using Siri and the Apple Watch. These types of fights over product interfaces controlled by a platform and a competitor aren't new. There were similar fights in the 1960s and 1970s between IBM and large tape drive makers who were not competing in the mainframe computer business but who wanted to compete in peripherals. We replayed those in the 1970s when Kodak dominated film and cameras and the upstart Berkey Photo wanted to chip away at the edge of Kodak's dominance. And there were allegations that Microsoft Office enjoyed better access to Windows than competing programs had. These are not new issues and we have mainly wrestled with them in antitrust because no other tools were available.<sup>48</sup>

Those issues might be resolved by a nondiscrimination regime that focused on the APIs and the like in iOS to assure that qualified outsiders could use the same tools that Apple uses to create a rich experience in its products in the adjacent markets. This regime would be triggered in a platform market for any platform that had reached a specified leading position in the market. Again, nondiscrimination regimes have been used in these types of industries since at least the era of the railroad and the Interstate Commerce Act of 1887.

But we should not assume that these are easy regimes to create. The 1996 Telecommunications Act opened up and unbundled local telephone networks and made it possible for outsiders to use parts of the local network to build their own products. This was at its heart an access and nondiscrimination regime. Those rules resulted in a decade-long fight over how that would work, going to the Supreme Court twice and forcing the FCC to issue four sets of lengthy, complex rules before the court system finally found the rules consistent with the 1996 Act. And the ongoing fight over

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<sup>46</sup> Apple Statement, Addressing Spotify's claims, apple.com, Mar 14, 2019.

<sup>47</sup> Joe Hindy, 10 best third party app stores for Android and other options too, androidauthority.com, Apr 28, 2020.

<sup>48</sup> Telex Corp. v. International Business Machine Corp., 510 F.2d 894 (10<sup>th</sup> Cir. 1975); Berkey Photo, Inc. v. Eastman Kodak Co., 603 F.2d 263 (2<sup>nd</sup> Cir. 1979).



net neutrality is precisely over the right scope of a modern common carrier/nondiscrimination regime with the overlay of shifting political winds.<sup>49</sup>

### *C. Data Sharing and Coordinated Data Exit*

I will close this section with a cautionary thought about creating these access points and that will take me to a brief discussion of data/privacy regulation. I suspect that data portability, standing alone, will accomplish relatively little. The default is for the data to stay in place, but even if some individuals move their data elsewhere, that is not a good substitute for moving data at scale. Competitors are the natural actors to move data in a coordinated fashion but regulators have reacted with hostility in the past at these adversarial efforts to move data at scale.

#### 1. EBAY/REVERSEAUCTION.COM

In a much earlier era of the internet, a competitor to eBay sought to move user identities and ratings to its new competing auction site. ReverseAuction.com believed it had a better approach for auctions but eBay had a strong first-mover advantage. Sellers and buyers had built up reputations on the site and that made them trustworthy. ReverseAuction sought to export those ratings to its new site. eBay claimed ownership of those ratings. The FTC intervened to protect the privacy of the eBay users, even though, of course, the information was fully public on eBay. This was more than two decades ago, but it nicely situates the possible conflict over privacy, coordinated data exit and competition.<sup>50</sup>

#### 2. GOOGLE SCRAPING

Consider a more recent example. One of the starting points of the investigation of Google was the claim that Google was scraping ratings and reviews from vertical sites like Yelp. Presumably Yelp's terms of service addressed that, but again, I want to focus instead on coordinated data exit and competition. Here Google is the entrant into the reviews market and Yelp the incumbent. Restaurant review writers might be delighted to have their reviews reach new audiences, but, again, the natural default is to leave the reviews in place at one site. Users benefit from more competition but they want some other person to invest in creating that competition. Google might have a superior approach to searching and organizing reviews and Google has the incentive to create competition in a way that individual consumers do not. Again, antitrust regulators reacted with hostility to a competitor's efforts to effectuate a coordinated data exit.

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<sup>49</sup> AT&T Corp. v. Iowa Utilities Board, 525 U.S. 366 (1999); Verizon Communications Inc. v. Federal Communications Commission, 535 U.S. 467 (2002); Covad Communications Co. v. Federal Communications Commission, 450 F.3d 528 (D.C. Cir. 2006) ("This case involves a series of petitions for review of the FCC's fourth attempt. Because we conclude the Commission's fourth try is a charm, we deny all of the petitions for review."). Net neutrality has been to the D.C. Circuit multiple times, starting in 2010 with Comcast Corp. v. Federal Communications Commission, 600 F.3d 642 (D.C. Cir. 2010) and most recently in 2019 in Mozilla Corp. v. Federal Communications Commission, 940 F.3d 1 (D.C. Cir. 2019).

<sup>50</sup> U.S. Federal Trade Commission, Online Auction Site Settles FTC Privacy Charges, Jan 6, 2000.

### 3. THE FACEBOOK PLATFORM

Take one more example. In May 2007, Facebook announced that it was becoming a platform – calling it, unsurprisingly, Facebook Platform – by moving from being a closed system to one in which the “social graph” would be open to outsiders to build on. Outside firms who been denied access to the inner workings of Facebook would now have new, rich access. I don’t assume that that access was equivalent to the access that Facebook itself had or would continue to have, but this was clearly a step towards competitive parity at the edge of the Facebook network. A step towards a nondiscrimination regime.<sup>51</sup>

That gets us to Cambridge Analytica. I really don’t what that means exactly. At some point, Facebook told me that I was a Cambridge Analytica victim, meaning that one of my Facebook friends had done something with CA’s tools on Facebook and that in turn had exposed some of my personal information – my birth date for example – to CA. I won’t try to address here how we should think about privacy harms. The bigger picture point is to make sure that see upfront the possible conflicts between data sharing, forced or otherwise, privacy and competition.

## VI. Conclusion

In closing, I want to again thank you for asking me to set out my views on digital marketplace competition. This is an important topic worthy of serious government attention and I commend the subcommittee for undertaking its investigation with the care that it has.

The companies that are at the heart of your investigation – Google, Apple, Facebook, Amazon and Microsoft – built their market positions off of incredibly successful products that faced a competitive marketplace. U.S. antitrust law does not condemn firms for doing that and more broadly as a society we should applaud the innovation and hard work that that represents. And the fact that all of those companies were founded in the United States is something that we should take pride in and should not take for granted. I hope all of that is a point of common ground, but I fear that it might not be.

But this achieved market success should not insulate a firm from careful examination so that we ensure robust fair competition for the next set of great markets. We should be especially concerned when leading firms use their market positions to squelch or acquire competitors in adjacent markets. Antitrust law met that challenge in the Microsoft case in the early 2000s. I am skeptical that it has met that challenge recently, though, as I have noted throughout this statement, serious, thoughtful government antitrust officials in the U.S. and Europe clearly have disagreed with that view. How Google responded to vertical search competition was dropped entirely in the U.S. and withered into the Google Shopping case in Europe. And the approval of

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<sup>51</sup> Facebook Unveils Platform for Developers for Social Applications, facebook.com, May 24, 2007.

Facebook's acquisition of Instagram seemed to misunderstand both how positive feedback loop competition worked and how firms build competition out of adjacent markets (and of course Instagram may have been in the same market with Facebook even then). That suggests that current antitrust law in the U.S. and the perhaps broader competition law in Europe are not up to the task of regulating adjacent market competition.

For me, that means that we might want to look outside of traditional antitrust for solutions. And I think that the issues posed with regard to digital advertising and newspapers, in how smartphone operating system ecosystems operate and how Amazon operates its platform are not easily addressed in anything like U.S. antitrust law. For example, I do not think that Google and Facebook are not using their strong positions in digital advertising to block newspapers from emerging as real competitors because they fear that possibility. This is not so much about ensuring competition on the merits – unfortunately, in a basic sense, newspapers have competed and lost – but rather about the social choices that could be made to support the role that newspapers and media play in democracies. That is an incredibly important topic, but not really one for competition policy.

And the issues posed as to Amazon and smartphone platforms are similar but again not standard antitrust issues. Amazon doesn't fear that Rain Design will somehow turn their laptop stand into a serious competitor for Amazon's core business nor does Apple think that Spotify is going to build a competitor to iOS. The question there is how we establish fair competition on the platform. That is, I think, much more of a regulated industries question than an antitrust question.

Notwithstanding the length of this letter, I am sure that I have not addressed many issues that might be of interest to the committee. Indeed, you raised three broad areas of inquiry and I have addressed one of them in depth and then the second in passing as part of my focused look on competition in digital marketplaces. I have not considered with any care smaller acquisitions by these firms, but I hope that other people have addressed that. And, again, on the question of additional resources for the antitrust agencies, I just don't think trying to address that question is really my comparative advantage.

I hope that this statement has been useful. Please let me know if there are additional ways that I can help with your inquiry.