

Written Statement for the Record

by

Maurice E. Stucke* and Ariel Ezrachi†

for a hearing before

**The U.S. House Judiciary Subcommittee on Antitrust, Commercial and
Administrative Law**

titled

**Online Platforms and Market Power, Part III: The Role of Data and Privacy in
Competition**

**Rep. David Cicilline, Chair
Rep. James Sensenbrenner, Ranking Member**

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Thank you for soliciting our views on the implications of the digital platform economy on antitrust and privacy policy.

We live in a transformative era, driven by the digital platform economy, which affects many aspects of our livelihood. The digital platform economy, fueled by the rise of big data and big analytics, has created new value chains and profit centers, with the emergence of new gatekeepers, networks, and multi-sided markets.

But what makes the digital platform economy unique? After all, data, technology, and platforms have long been part of markets. As we illustrate below, the key characteristics of the digital platform economy, which can promote efficiencies and our welfare, can also affect the nature of competition, and give rise to sustained market power and abuse.

As we transition to a data-driven platform economy, we are witnessing the emergence of *data-opolies*—companies that control a key digital platform and significant data inputs. The positioning of these companies as central hubs, like a coral reef, attracts users, sellers, advertisers, software developers, apps, and accessory makers to their ecosystem. Apple and

* Professor of Law, University of Tennessee.

† The Slaughter and May Professor of Competition Law at the University of Oxford, Fellow of Pembroke College, and the Director of the Oxford Centre for Competition Law and Policy.

Google, for example, each control a popular mobile phone operating system (and key apps on that platform); Amazon controls the largest online merchant platform; and Facebook controls the largest social network platform. Through their leading platforms, a significant volume and variety of personal data flows. The velocity in acquiring and exploiting this personal data helps these companies obtain significant market power.

While these online platforms differ from each other in their nature, appeal, and business models, some commonalities exist, including:

- their operation in multi-sided markets,
- the interdependence between the various sides of the market, the role of cross-platform network externalities (we elaborate on this below), and the way price and volume are set,
- their ability to reach a critical mass of users and providers on all sides of the platform that increases user and supplier value and ignites a positive feedback loop,
- the importance of personal data, which the platforms collect directly or through third parties, in providing a significant competitive advantage, and
- the vertical integration that characterizes many modern digital platforms.

To fully understand the durability and source of the data-opolies' power, it is important to acknowledge (i) the centrality of personal data in the digital platform economy, (ii) the multiple network effects in this economy, (iii) how, as a result, the winner can take all or most once the market tips, and (iv) the data-opolies' incentives and ability to use anticompetitive measures to tip the market and maintain and extend their dominance.

After outlining some of the key drivers, which, together, stimulated the change in market dynamics and support the rise of data-opolies, we highlight some of the economic, social, and political risks they pose and the need for a measured response.

We show how these changing market dynamics justify refining and developing policy tools to protect competition, our privacy, and our welfare through a measured and complementary use of competition policy, privacy, and data protection laws.

I. The Centrality of Personal Data in the Digital Economy

The role of personal data in the digital platform economy cannot be overstated, as it drives much of that commerce. Eighty-five percent of Google’s 2018 revenues and 98.5 percent of Facebook’s 2018 revenues came from advertising,¹ which is fueled by the personal data they collect. Data may be structured or unstructured, gathered voluntarily, through observations, or by inferring new information using existing data.²

When considering the role data plays in the digital platform economy, it is helpful to take note of the “four Vs of Big Data” – *Volume* (the quantity of data one can extract), *Variety* (the scope of data one can attain), *Velocity* (the rate the data are generated, accessed, processed, analyzed, and utilized), and *Value* (the overall benefit one can obtain from the data).³ With a sufficient volume and variety of data, and the velocity in processing and learning from the data, companies can improve their algorithms, production, services, business organization, strategies, and competitive advantage. The more personal data a company collects, the greater the variety of the data, and the faster the company can collect, process, and utilize the data, the greater the data’s potential value for the data holder and other service providers in the digital platform economy.

While data is often “non-rivalous” in the sense that it may be duplicated and used by multiple parties, without depleting its value (and as such differs from oil or traditional assets),⁴ its control, especially where the four Vs are present, offers a distinct competitive advantage in the digital economy. Indeed, it is often the large platforms that can derive significant value from the volume and variety of personal data they quickly collect either directly, or through third parties,⁵ and gain a clear data (and competitive) advantage over smaller competitors. Limited access to relevant and timely data may inhibit entry,

¹ Alphabet 2018 10-K at 27, <https://abc.xyz/investor/>; Facebook 2018 Annual Report at 44, <https://investor.fb.com/financials/sec-filings-details/default.aspx?FilingId=13183451>.

² *Competition Law and Data*, 10th May, 2016, available at https://www.bundeskartellamt.de/SharedDocs/Publikation/DE/Berichte/Big%20Data%20Papier.pdf?__blob=publicationFile&v=2.

³ For more details on each V, see MAURICE E. STUCKE & ALLEN P. GRUNES, *BIG DATA AND COMPETITION POLICY* 310 ¶¶ 2.04–2.29 (Oxford University Press, 2016); OECD, *Big Data: Bringing Competition Policy to the Digital Era*, DAF/COMP(2016)14, at 5, <https://www.oecd.org/competition/big-data-bringing-competition-policy-to-the-digital-era.htm>.

⁴ EU Commission Case No COMP/M.6314 – *Telefonica UK/Vodafone UK/Everything Everywhere* (joint venture) - “Customers generally tend to give their personal data to many market players, which gather and market it. Therefore, this type of data is generally understood to be a commodity” (para 543).

⁵ Ariel Ezrachi & Viktoria H.S.E. Robertson, *Competition, Market Power and Third-Party Tracking*, 42 *WORLD COMPETITION* 5–19 (2019).

expansion, and innovation.⁶ As the OECD noted, a positive feedback loop helps the strong become stronger, as the weak get weaker.⁷ Other concerns evolve around data mining, data trade, privacy violations, and manipulation of behavior.⁸

Big data and big analytics can reinforce each other. Data can help train the algorithm. For example, access to a large volume and variety of photographs and related personal data can help train a platform's facial recognition software.⁹ Big analytics, in turn, offer the power to optimize the use of data and subject it to rigorous analysis. Advanced analytics – which rely on algorithms and artificial intelligence – are used to identify patterns in data, sift through vast volume of data points, identify and classify user behavior, and monitor market dynamics. As such, big analytics provide a crucial component in the digital platform economy, and alongside the clear benefits, big analytics can be used in ways that undermine competition and individuals' welfare. We discuss elsewhere how algorithms can facilitate collusion (in ways that enforcers cannot readily detect or prosecute) and behavioral discrimination, which means getting people to buy things they otherwise wouldn't at the highest price they are willing to pay.¹⁰

⁶ The key themes below are discussed in greater detail in ARIEL EZRACHI & MAURICE E. STUCKE, *VIRTUAL COMPETITION - THE PROMISE AND PERILS OF THE ALGORITHM DRIVEN ECONOMY* (Harvard University Press, 2016); Ariel Ezrachi & Maurice E. Stucke, *Digitalisation and Its Impact on Innovation - Report Prepared for the European Commission*, DG Research & Innovation (2018).

⁷ OECD, *Data-Driven Innovation for Growth and Well-Being: Interim Synthesis Report 29* (October 2014), <http://www.oecd.org/sti/inno/data-driven-innovation-interim-synthesis.pdf>; reference within quotation is to CARL SHAPIRO & HAL R. VARIAN, *INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY* (Harvard Business Press, 1999).

⁸ SHOSHANA ZUBOFF, *THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER* (Public Affairs, 2019); ROGER MCNAMEE, *ZUCKED: WAKING UP TO THE FACEBOOK CATASTROPHE* (Penguin Press, 2019).

⁹ April Glaser, *Facebook's Face-ID Database Could Be the Biggest in the World. Yes, It Should Worry Us*, SLATE, July 09, 2019, <https://slate.com/technology/2019/07/facebook-facial-recognition-ice-bad.html>.

¹⁰ VIRTUAL COMPETITION, *supra*, at 89–100 (2016); *Sustainable and Unchallenged Algorithmic Tacit Collusion*, NORTHWESTERN JOURNAL OF TECHNOLOGY & INTELLECTUAL PROPERTY (forthcoming 2020), available at <https://ssrn.com/abstract=3282235> or <http://dx.doi.org/10.2139/ssrn.3282235>; *Antitrust Enforcement and Market Power in the Digital Age: Is Your Digital Assistant Devious?*, in RECONCILING EFFICIENCY AND EQUITY: A GLOBAL CHALLENGE FOR COMPETITION POLICY (Damien Gerard & Ioannis Lianos eds., Cambridge University Press, 2019); *Antitrust, Algorithmic Pricing and Tacit Collusion*, in RESEARCH HANDBOOK ON THE LAW OF ARTIFICIAL INTELLIGENCE (Woodrow Barfield & Ugo Pagallo eds., Edward Elgar Publishing, 2018); *Algorithmic Collusion: Problems and Counter-Measures* (23 June 2017) (Report commissioned by the Organisation for Economic Co-operation and Development for its Competition Committee's Roundtable on Algorithms and Collusion (21-23 June 2017)); *How Digital Assistants Can Harm Our Economy, Privacy, and Democracy*, 32 BERKELEY TECHNOLOGY LAW JOURNAL 1239 (2017); *The Rise of Behavioural Discrimination*, 37 EUROPEAN COMPETITION LAW REVIEW 484 (2016).

II. The Multiple Network Effects in the Digital Platform Economy

Network effects occur when a good or service becomes more valuable as others use it. The digital platform economy has several types of network effects. All can create a feedback loop that attracts users, sellers, service providers and developers, and advertisers to a network. These network effects include:

- *Direct network effects* -- As more people have a telephone, for example, the more people one can call, the more use one gets from one's telephone. An example in today's digital platform economy are social networks, like Facebook.
- *Indirect network effects* concern an increase in benefit for other goods and services as a result of the relationship between users and other providers – such as developers, sellers, or advertisers. A classic example is Microsoft's operating system for personal computers.¹¹ As more people use Microsoft Windows, the operating system becomes more attractive to developers and service providers, who benefit from scale and can more easily cover the high fixed costs.

One can see similar indirect network effects for the operating systems for mobile phones (Google's Android and Apple's iOS), as well as, digital personal assistants (like Google Home and Amazon Alexa). Users are attracted to platforms that offer the popular applications and skills, and can connect with more smart appliances. App developers, publishers, and smart appliance manufacturers prefer platforms with the larger audiences. So, as one or two platforms attract users, they, in turn, will attract more developers, which, in turn, will attract more users to those platforms, thus enhancing the feedback loop. Once many users switch to the leading platforms, it is harder for the smaller platforms to continue to attract users and popular sellers and developers. As several business professors observed, "in a platform market, it is the best platform, and not the best product, that usually wins."¹²

- *Spill-Over Effects* – A traditional spill-over network effects emerges, where more users attract more sellers, advertisers, or suppliers on the other side, which, in turn, can attract more users. When a platform is in position of amassing relevant personal

¹¹ United States v. Microsoft Corp., 84 F. Supp. 2d 9, 20 (D.D.C. 1999).

¹² MICHAEL A. CUSUMANO, ANNABELLE GAWER, & DAVID B. YOFFIE, THE BUSINESS OF PLATFORMS: STRATEGY IN THE AGE OF DIGITAL COMPETITION, INNOVATION, AND POWER 133 (HarperCollins, 2019).

data, then the network effects are amplified by the four Vs, in terms of the platform's ability in attracting additional users, sellers, service providers and developers, and advertisers. The more personal data the platform collects, the better the platform can target users with personalized sponsored search results and ads.¹³ Platforms compete for advertisers based on the return on investment that the platform can deliver.¹⁴ As more users are drawn to the services offered by the platform, the data-opoly amasses a greater variety of data to effectively target consumers with relevant ads, products, and services. The more time users spend on the platform's services (such as search engines, email, maps, videos, etc.), the more opportunities the platform can target users in the moments that matter for a purchasing decision, and the more ad revenues it attracts relative to other online sites.

- *Learning-by-Doing*, powered by big data and big analytics. This network effect concerns the development of advanced and refined analytics through usage. Search engines demonstrate this data-driven network effect clearly.¹⁵ Each person's utility from using the search engine increases when others use it as well.¹⁶ As more people use the search engine, the more opportunities to learn are available to the algorithm, the greater feedback allows refinement as the search engine can learn consumers' preferences, the more relevant the search results will likely be, which, in turn, will likely attract others to use the search engine; and the positive feedback continues. Learning-by-doing network effect is not limited to online searches, but will be present in any environment in which algorithms evolve and adapt based on

¹³ Julia Angwin, Surya Mattu & Terry Parris Jr., *Facebook Doesn't Tell Users Everything It Really Knows About Them*, PROPUBLICA (Dec. 27, 2016, 9:00 AM), <https://www.propublica.org/article/facebook-doesnt-tell-users-everything-it-really-knows-about-them>; Julia Angwin, Madeleine Varner & Ariana Tobin, *Facebook Enabled Advertisers to Reach 'Jew Haters'*, PROPUBLICA (Sept. 14, 2017, 4:00 PM), <https://www.propublica.org/article/facebook-enabled-advertisers-to-reach-jew-haters>; Alex Kantrowitz, *Google Allowed Advertisers to Target People Searching Racist Phrases*, BUZZFEED NEWS (Sept. 15, 2017, 11:15 AM), www.buzzfeed.com/alexkantrowitz/google-allowed-advertisers-to-target-jewish-parasite-black.

¹⁴ See, e.g., AUSTRALIAN COMPETITION & CONSUMER COMMISSION, DIGITAL PLATFORMS INQUIRY FINAL REPORT 3.2 (June 2019); *United States v. Bazaarvoice, Inc.*, No. 13-CV-00133-WHO, 2014 WL 203966, at *21 (N.D. Cal. Jan. 8, 2014) ("A critical asset in building a successful social commerce network is to have the largest audience possible because that is how advertisers and marketers and brands think about the value they get.") (internal quotations omitted).

¹⁵ STUCKE & GRUNES, *BIG DATA AND COMPETITION POLICY*, *supra*, at 172–81; Press Release, European Comm'n, 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), http://europa.eu/rapid/press-release_MEMO-17-1785_en.htm (discussing high barriers to entry in these markets, in part because of network effects: "the data a search engine gathers about consumers can in turn be used to improve results").

¹⁶ STUCKE & GRUNES, *supra*, at 170–81.

experience, such, for example, the development of voice recognition or other instances based on machine learning.¹⁷

- *Scope of Data.* This data-driven network effect concerns the scope of personal data collected, which can be used to personalize tasks and individualize users' needs. The data-opolies already expend significant effort to better track individuals, collect their personal data, and profile them.¹⁸ For example, the more one uses a digital assistant, like Alexa, and the more personal data it collects, the more opportunities Alexa can anticipate one's particular needs.

III. Winner Takes All or Most

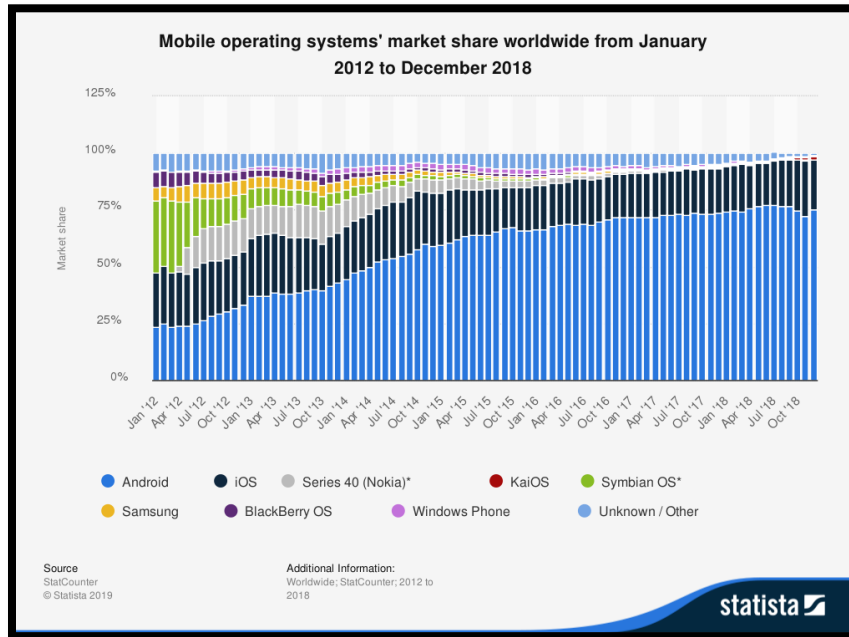
With these network effects, a digital platform market is subject to tipping. Once a significant number of users switch to the leading platforms, app developers will soon follow, increasing the risk that the market will tip to the leading platform's favor. In these instances, competition is said to be *for the market*. For example, the mobile operating system market went from multiple competitors in 2010 (with Google and Apple collectively accounting for 39 percent of unit sales), to a duopoly eight years later.¹⁹ Table 1 reflects this increasing concentration.

¹⁷ See, e.g., *id.*; Christian Chessman, *A "Source" of Error: Computer Code, Criminal Defendants, and the Constitution*, 105 CALIF. L. REV. 179, 181 n.9 (2017) (explaining that machine learning involves combining "rules of analysis" and "repeated exposure to data patterns" in order to iteratively modify software "output or behaviors" over time); M. I. Jordan & T. M. Mitchell, *Machine Learning: Trends, Perspectives, and Prospects*, 349 SCIENCE 255, 255 (2015) ("Machine learning addresses the question of how to build computers that improve automatically through experience.").

¹⁸ EZRACHI & STUCKE, *supra* **Error! Bookmark not defined.**, at chs. 15, 16.

¹⁹ Felix Richter, *Smartphone OS: The Smartphone Duopoly*, Statista, May 20, 2019, <https://www-statista-com.proxy.lib.utk.edu/chart/3268/smartphone-os-market-share/>.

Table 1



Source: StatCounter²⁰

The reality is that it would be very difficult for a new mobile phone operating system to enter the market today and ignite meaningful network effects, even if it offered better features.²¹

When network effects lead to a tipping of a market in favor of the leading platform, competitors may find it impossible to attract advertisers, producers/sellers, app developers, and consumers. Once the market has tipped, users might find it difficult to unilaterally switch as a result of such data-driven network effects. Users become reliant on the dominant platform even though they may prefer a different platform model. In short, users remain with the dominant platform, which may or may not offer the best terms or services.

For example, in early 2018 in the aftermath of the Cambridge Analytica scandal, a #DeleteFacebook campaign made the news. Despite the public outrage, Facebook, in its first quarter of 2018, saw a 13 percent increase in daily and monthly active users and a 49

²⁰ Mobile operating systems' market share worldwide from January 2012 to December 2018 Statista, <https://www-statista-com.proxy.lib.utk.edu/statistics/272698/global-market-share-held-by-mobile-operating-systems-since-2009/> (last visited August 01, 2019).

²¹ Unlocking Digital Competition: Report of the Digital Competition Expert Panel (London: March 2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf, at 29 (“The UK Digital Competition Expert Panel Report” (also known as the “Furman Report”)).

percent increase in revenue, year-over-year. Facebook’s results in its second, third, and fourth quarters of 2018 were even better, with more monthly active users worldwide (and in North America) and higher revenues.²² This is not because Facebook users are agnostic about privacy. Seventy-four percent of surveyed users in 2018 were very or somewhat concerned about Facebook’s invasion of their privacy (a nine percentage point increase from 2011).²³ Even if many Facebook users are displeased with the company’s privacy violations, they cannot readily switch to alternative social networks unless their network of friends also switch to the same alternative network.

IV. Anticompetitive Actions to Attain, Maintain, and Extend Their Dominance

To encourage the tipping of these digital markets, and maintain and extend its dominance, a data-opoly may engage in a variety of anticompetitive strategies, including:

1. Foreclosing its rivals from timely accessing critical data,²⁴
2. Exclusionary practices to prevent rivals from achieving scale,
3. Degrading the functionality of the independent apps and online platforms—like LinkedIn, Twitter, Yelp, or Coupons.com—that operate on their platform (such as mobile operating system) by reducing their inter-operability or performance (such as making them run slower),
4. Leveraging its data-advantage in a regulated market to another market,
5. Increasing customers’ switching costs and thereby reduce multi-homing,
6. Limiting a competing app’s revenue stream by excluding the app from its online payment systems, such as Apple Pay or Google Wallet,
7. Reducing or eliminating the independent app’s ability to distribute its products,
8. Using its “nowcasting radar” to identify and either squelch or acquire nascent competitive threats. Some platforms have a relative advantage in accessing and analyzing data to discern consumer trends well before others. Data-opolies can use their relative advantage to see what products or services are becoming more popular. With their now-casting radar, data-opolies can acquire or squelch these nascent competitive threats. Thus, concerns of kill zones, as *The Economist* notes, abound as the data-opolies use their data-advantage to acquire or squelch nascent

²² Facebook, Earning Slides: Q4 2018 Results, <https://investor.fb.com/financials/?section=secfilings>.

²³ Jeffrey M. Jones, *Facebook Users' Privacy Concerns Up Since 2011*, Gallup, April 11, 2018, <https://news.gallup.com/poll/232319/facebook-users-privacy-concerns-2011.aspx>.

²⁴ One example is when Facebook cut off data to a nascent competitive threat, Twitter’s now defunct video app, Vine. Isobel Asher Hamilton, *Emails show Mark Zuckerberg personally approved Facebook's decision to cut off Vine's access to data*, BUSINESS INSIDER, Dec. 5, 2018, <https://www.businessinsider.com/facebook-documents-mark-zuckerberg-restricted-vine-data-access-2018-12>.

competitive threats, which present unique challenges for enforcers and policy makers.²⁵

For example, once the market has tipped to its favor, the platform may vertically integrate (a legitimate strategic move), and start competing with one side of its platform, namely the app developers and sellers. Amazon, for example, sells its own products under its own brand labels. Google and Apple promote their own mobile phone apps. Rather than compete on the merits, the platform can seek to give its products and services an unfair advantage. When such competition is not on the merits, and involves self-favoring and exclusion, competition downstream is distorted. Indeed, once a powerful platform vertically integrates, then its incentives can change. It can begin preferring its own products and services, and make it harder for consumers to find or use competing products on its platform. Thus, it can be potentially a friend and enemy to the independent apps and sellers.

One example of anticompetitive self-preferencing is the Google Shopping Case, where the European Commission found Google to have abused its market dominance as a search engine by giving an illegal advantage to another Google product, its comparison shopping service.²⁶ Another reported example is Apple favoring its own apps in its app store, over more relevant, or higher rated, competing apps.²⁷ A third example, which the European Commission is currently investigating, is whether Amazon is using data from the merchants it hosts on its platform to secure an advantage in selling its own products against those same retailers.²⁸

²⁵ *Into the danger zone: American tech giants are making life tough for startups*, THE ECONOMIST, June 2, 2018, <https://www.economist.com/business/2018/06/02/american-tech-giants-are-making-life-tough-for-startups>.

²⁶ European Commission - Press release, Antitrust: Commission fines Google €2.42 billion for abusing dominance as search engine by giving illegal advantage to own comparison shopping service, 27 June 2017, https://europa.eu/rapid/press-release_IP-17-1784_en.htm. Google is appealing the EC's decision.

²⁷ Tripp Mickle, *Apple Dominates App Store Search Results, Thwarting Competitors: Searches for 'music,' 'audiobooks' and other categories rank company apps first, a process some developers find unfair; Apple says algorithm doesn't give own products an advantage*, WALL STREET JOURNAL, July 23, 2019, <https://www.wsj.com/articles/apple-dominates-app-store-search-results-thwarting-competitors-11563897221?shareToken=st44e68b42ce5f45f5bd573dae5f8f0f5c>.

²⁸ Sara Salinas, *Amazon hit by EU antitrust probe*, CNBC, Sept. 19, 2018, <https://www.cnbc.com/2018/09/19/eu-probing-amazons-use-of-data-on-third-party-merchants.html>; see also ILSR, *2019 Independent Business Survey* (July 2019), <https://ilsr.org/2019-independent-business-survey/> (highlighting concerns of surveyed independent sellers on Amazon's Marketplace).

V. The Rise of Sustained Market Power

The above dynamics support sustained market power, which is not easily challenged. A look at the global ranking of companies by market value reveals the power of the platform business model. Seven of the eight largest companies in the world (based on market value) in 2019 were digital platforms:

Table 2

The 100 largest companies in the world by market value in 2019 (in billion U.S. dollars)	
	Market value in billion U.S. dollars
<i>Apple</i>	\$961.3
<i>Microsoft</i>	\$946.5
<i>Amazon.com</i>	\$916.1
<i>Alphabet</i>	\$863.2
Berkshire Hathaway	\$516.4
<i>Facebook</i>	\$512
<i>Alibaba</i>	\$480.8
<i>Tencent Holdings</i>	\$472.1

Source: Forbes²⁹

To put this in perspective, if one totaled the market value of the 100 largest companies in the world, these seven firms would account for 24 percent of that total.

Overall, since the mid-2000s, the leading digital platforms – Google, Apple, Facebook, Amazon, and Microsoft – have become key players in the digital economy. Amazon, Apple, Microsoft and Google had the largest absolute increase in market capitalization between 2009 and 2019, with Facebook trailing not far behind.³⁰

²⁹ Forbes, The 100 largest companies in the world by market value in 2019 (in billion U.S. dollars) Statista, <https://www-statista-com.proxy.lib.utk.edu/statistics/263264/top-companies-in-the-world-by-market-value/> (last visited August 01, 2019).

³⁰ PwC, Global Top 100 companies by market capitalization (July 2019), <https://www.pwc.com/gx/en/audit-services/publications/assets/global-top-100-companies-2019.pdf>.

VI. Data-Opolies Can Be Far More Durable Than Past Monopolies

We often hear how dynamic the digital markets are, and how gales of creative destruction can readily displace the leading firms. Thus, Google displaced Yahoo! as the leading search engine, Facebook displaced Myspace, and Amazon displaced many brick-and-mortar retailers.

In order to assess the durability of monopolies in the digital economy, it is helpful to first establish the baseline mortality of companies. As one study found, most companies live very short lives: The average half-life of U.S. publicly traded companies is close to 10.5 years, “meaning that half of all companies that began trading in any given year have disappeared in 10.5 years.”³¹ For companies that were created and died between 1950 and 2009, most died after their initial public offering and fewer than five percent remained alive after thirty years.³²

Similarly, platforms whether in the digital or brick-and-mortar economy are not ensured durable monopoly power. One study calculated 209 failures of platforms over the past twenty years. Most of them (85 percent) were transaction platforms, which also had shorter lives (on average 4.6 years) than the innovation platforms (5 years) or hybrid platforms (7.4 years) in the survey.³³

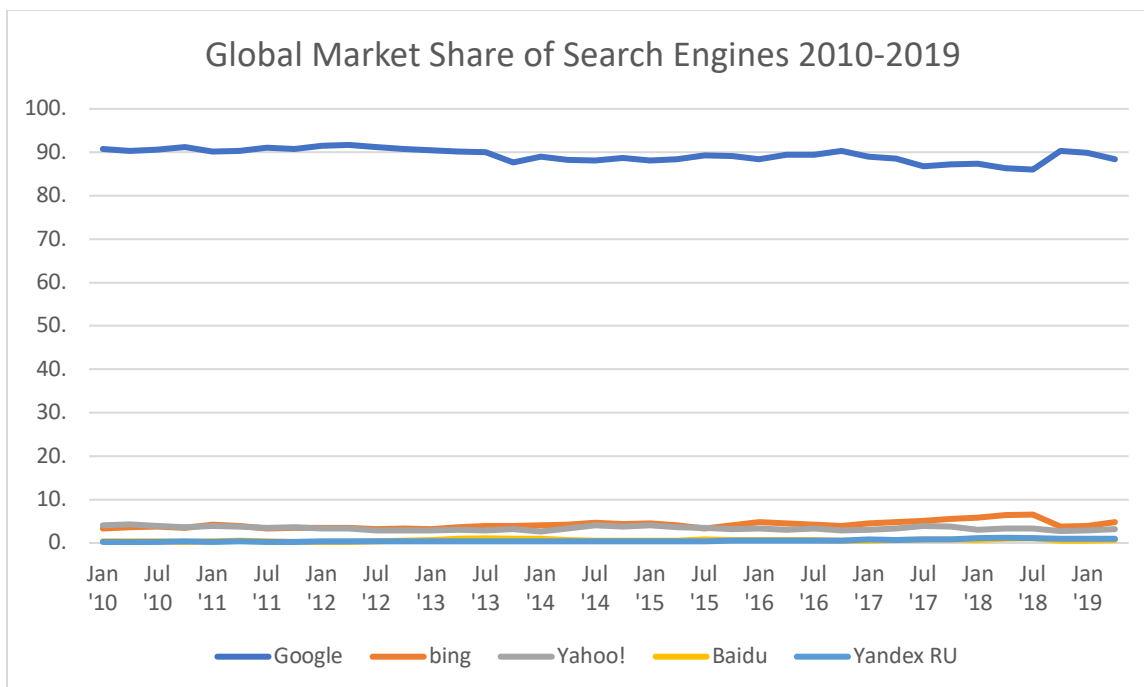
But while the digital platform economy has eroded the power of some of the older platforms and witnesses its share of failures, the new platform economy does not disperse power evenly. Instead, data-opolies have had durable power. For example, Google occupies a position of dominance in the market for search not only in the U.S. and European Union but around the world.

³¹ GEOFFREY WEST, SCALE: THE UNIVERSAL LAWS OF GROWTH, INNOVATION, SUSTAINABILITY, AND THE PACE OF LIFE IN ORGANISMS, CITIES, ECONOMIES, AND COMPANIES 402 (Penguin Press 2018).

³² *Id.* at 397.

³³ CUSUMANO ET AL., BUSINESS OF PLATFORMS, *supra*, at 108.

Table 3



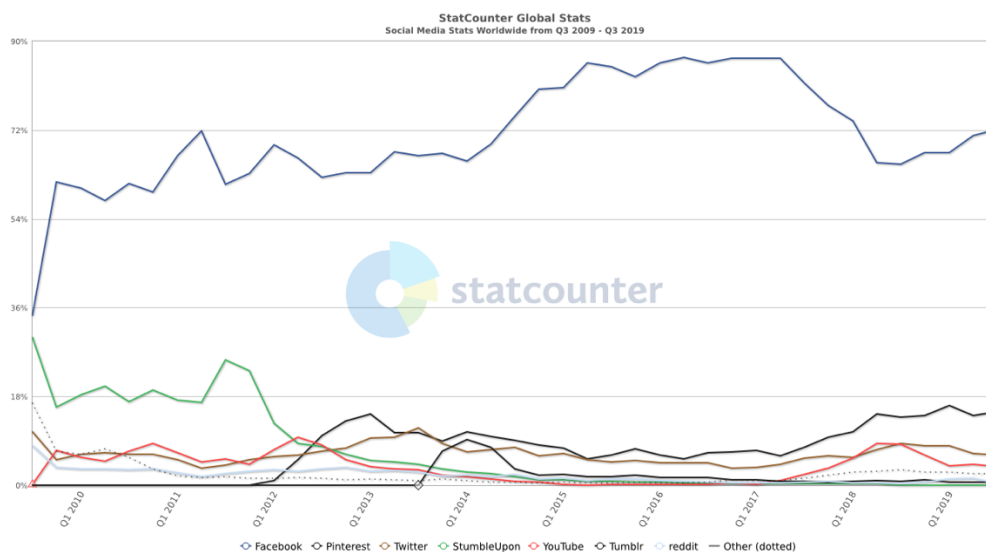
Source: StatCounter³⁴

Similarly, the Bundeskartellamt found Facebook to dominate the market for social networks in Germany.³⁵ But it too, as Table 4 reflects, dominates many other geographic markets around the world.

³⁴ Worldwide desktop market share of leading search engines from January 2010 to April 2019 Statista, <https://www-statista-com.proxy.lib.utk.edu/statistics/216573/worldwide-market-share-of-search-engines/> (last visited September 07, 2019).

³⁵ Bundeskartellamt, “Bundeskartellamt Prohibits Facebook from Combining User Data from Different Sources,” news release, February 7, 2019, https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2019/07_02_2019_Facebook.html; Bundeskartellamt, “Preliminary Assessment in Facebook Proceeding: Facebook’s Collection and Use of Data from Third-Party Sources Is Abusive,” news release, December 19, 2017, https://www.bundeskartellamt.de/SharedDocs/Meldung/EN/Pressemitteilungen/2017/19_12_2017_Facebook.html. Facebook prevailed on appeal, and the German competition agency is now appealing the appellate court’s decision.

Table 4



Source: StatCounter³⁶

As we explore in our forthcoming book, *Competition Overdose* (HarperCollins, March 2020), Google and Facebook also dominate the underlying digital advertising ecosystem.³⁷ By 2018, Google and Facebook extracted 58 percent of the \$111 billion in revenues from the digital ad market – more than all of their online competitors combined.³⁸ The closest competitor is Amazon, which is still expanding its advertising network. According to *Bloomberg*, “In the first half of 2018, Google and Facebook accounted for 75 percent of all digital ad growth; Amazon was responsible for much of the rest.”³⁹

Moreover, it will be far harder for an entrant today to displace Google, Apple, Facebook, and Amazon, as readily as they had displaced their rivals. As the UK 2019 Report of the Digital Competition Expert Panel on *Unlocking Digital Competition* noted,

³⁶ <https://gs.statcounter.com/social-media-stats#quarterly-200903-201903>.

³⁷ See also UK Digital Competition Expert Panel Report, *supra*; ACCC Final Report, *supra*; Autorité de la Concurrence, Opinion no. 18-A-03 of 6 March 2018 on Data Processing in the Online Advertising Sector, http://www.autoritedelaconcurrence.fr/doc/avis18a03_en_.pdf.

³⁸ Autorité Report, 6; Spencer Soper, *Amazon Increases Ad Market Share at Expense of Google, Facebook*, BLOOMBERG NEWS, September 19, 2018, <https://www.bloomberg.com/news/articles/2018-09-19/amazon-increases-ad-market-share-at-expense-of-google-facebook>.

³⁹ Leonid Bershidsky, *The Digital Ad Market Is Overdue for Antitrust Review*, BLOOMBERG NEWS, December 5, 2018, <https://www.bloomberg.com/opinion/articles/2018-12-05/amazon-google-facebook-are-ripe-for-a-european-antitrust-review>; see also ACCC Preliminary Report, 66 (“Google and Facebook receive the majority of digital advertising revenue in Australia; and have captured more than 80 per cent of growth in digital advertising in the past three years.”).

The level of dominance achieved by the early leaders in markets such as social networks and online search is not comparable to the scale and reach that has been achieved by Facebook and Google. For example, the number of monthly unique global visitors to Myspace peaked at around 100 million, and it was valued at \$580 million when it was purchased by News Corporation in 2005. In comparison, Facebook reportedly has over two billion monthly active users, with over 40 million in the UK alone, and was valued at more than \$470 billion in February 2019. It is possible that companies such as Myspace never achieved the critical mass necessary to secure the market.⁴⁰

It added, “Due to their duopoly in the mobile operating system market, Apple and Google each occupy gateway positions between app developers and consumers. In this context, it is clear there is little incentive for app developers to go to the trouble and expense of ensuring their apps work on any smaller rival operating systems, as the potential target market will be so small.”⁴¹ Likewise, in its *Digital Platforms Inquiry - Final Report*, the Australian competition authority concluded that “Google is insulated from dynamic competition to a considerable degree, by barriers to entry and expansion, advantages of scope as well as its acquisition strategies.”⁴² And that “like Google, to a large extent, Facebook is insulated from dynamic competition ...”⁴³

So, while many companies typically die within ten years of their birth, these data-opolies have dominated multiple markets for years and seem poised to continue their domination over the next decade. Indeed, the current market valuations of the key digital platforms suggest that investors do not anticipate disruption that would radically change their dominance. As *The Economist* reported “Alphabet [Google], Facebook and Amazon are not being valued by investors as if they are high risk, but as if their market shares are sustainable and their network effects and accumulation of data will eventually allow them to reap monopoly-style profits.”⁴⁴

⁴⁰ UK Digital Competition Expert Panel Report, *supra*, Point 1.102, page 39.

⁴¹ *Id.*, Point 1.55, page 29.

⁴² ACCC Final Report, Point 2.36, page 76.

⁴³ *Id.*, Point 2.41, page 78.

⁴⁴ *Business in America: Too much of a good thing; Profits are too high. America needs a giant dose of competition*, THE ECONOMIST (March 26, 2016), <http://www.economist.com/node/21695385/print>; see also *The Data Economy*, THE ECONOMIST (May 6-12, 2017).

VII. Additional Risks from the Data-opolies

Ordinarily corporate market power generates profits for companies that are above the competitive rate of return, while imposing higher prices on consumers. As Robert Bork argued, there “is no coherent case for monopolization because a search engine, like Google, is free to consumers and they can switch to an alternative search engine with a click.”⁴⁵

But the risks of powerful platforms (or data-opolies) are not necessarily higher consumer prices (at least directly). Data-opolies can harm consumers, sellers, and the rest of society in other, more significant, ways.

Above, in section IV, we already noted the possibility for *exclusion of rivals* (through foreclosing strategies, self-favoring, functionality degradation, and leveraging of data advantage and market power) that can dampen competition (including privacy competition), user choice, and innovation.

In addition, data-opolies can pose other potential harms, including.⁴⁶

Lower-quality products with less privacy. Companies, antitrust authorities increasingly recognize, can compete on privacy and protecting data. But without effective competition, data-opolies face less pressure. They can depress privacy protection below competitive levels and collect personal data above competitive levels. The collection of too much personal data can be the equivalent of charging an excessive price. Data-opolies can also fail to disclose what data they collect and how they will use the data. The current notice-and-consent regime is meaningless when there are no viable competitive alternatives and the bargaining power is so unequal.

Surveillance and security risks. In a monopolized market, personal data is concentrated in a few firms. Consumers have limited outside options that offer better privacy protection. This raises additional risks, including:

- **Government capture.** The fewer the number of firms controlling the personal data, the greater the potential risk that a government will “capture” the firm. Companies need things from government; governments often want access to data. When there are only a few firms, this can increase the likelihood of companies secretly

⁴⁵ Robert Bork, *Antitrust and Google*, CHI. TRIB. (Apr. 6, 2012).

⁴⁶ For elaboration on each of these risks, see Maurice E. Stucke, *Should We Be Concerned About Data-opolies?*, 2 GEORGETOWN LAW TECHNOLOGY REVIEW 275 (2018).

- cooperating with the government to provide access to data. China, for example, relies on its data-opolies to better monitor its population.
- Covert surveillance. Even if the government cannot capture a data-opoly, its rich data-trove increases a government's incentive to circumvent the data-opoly's privacy protections to tap into the personal data. Even if the government can't strike a deal to access the data directly, it may be able to do so covertly.
 - Implications of a data policy violation/security breach. Data-opolies have greater incentives to prevent a breach than do typical firms. But with more personal data concentrated in fewer companies, hackers, marketers, political consultants, among others, have even greater incentives to find ways to circumvent or breach the dominant firm's security measures. The concentration of data means that if one of them is breached, the harm done could be orders of magnitude greater than with a normal company. While consumers may be outraged, a dominant firm has less reason to worry of consumers' switching to rivals.

Wealth transfer to data-opolies. Even when their products and services are ostensibly “free,” data-opolies can extract significant wealth in several ways that they otherwise couldn't in a competitive market.

- First, data-opolies can extract wealth by getting personal data without having to pay for the data's fair market value. The personal data collected may be worth far more than the cost of providing the “free” service. The fact that the service is “free” does not mean we are fairly compensated for our data. Thus, data-opolies have a strong economic incentive to maintain the status quo, in which users, as the *MIT Technology Review* put it, “have little idea how much personal data they have provided, how it is used, and what it is worth.”⁴⁷ If the public knew, and if they had viable alternatives, they might hold out for compensation.
- Second, something similar can happen but with the content users create. Data-opolies can extract wealth by getting creative content from users for free. In a competitive market, users could conceivably demand compensation not only for their data but also their contributions to Facebook. With no viable alternatives, they cannot.
- Third, data-opolies can extract wealth from sellers upstream. One example is when data-opolies scrape valuable content from photographers, authors, musicians, and

⁴⁷ Tom Simonite, *If Facebook Can Profit from Your Data, Why Can't You?*, MIT TECH. REV. (July 30, 2013), <https://www.technologyreview.com/s/517356/if-facebook-canprofit-from-your-data-why-cant-you/>.

other websites and post it on their own platform. In this case, the wealth of the data-polies comes at the expense of other businesses in their value chain.

- Fourth, data-polies can extract our wealth indirectly, when their higher advertising fees are passed along in the prices for the advertised goods and services.⁴⁸ If the data-polies faced more competitors for their advertising services, ads could cost even less — and therefore so might the products being advertised.
- Finally, data-polies can extract wealth from both sellers upstream and consumers downstream by facilitating or engaging in “behavioral discrimination,” a form of price discrimination based on past behavior — like, say, your internet browsing.

Loss of trust. Market economies rely on trust. For online markets to deliver their benefits, people must trust firms and their use of the personal data. But as technology evolves and more personal data is collected, we are increasingly aware that a few powerful firms are using our personal information for their own benefit, not ours. When data-polies degrade privacy protections below competitive levels, some consumers will choose not “to share their data, to limit their data sharing with companies, or even to lie when providing information,” as the UK’s Competition and Markets Authority put it.⁴⁹ Consumers may forgo the data-polies’ services, which they otherwise would have used if privacy competition were robust. This loss would represent what economists call a deadweight welfare loss. In other words, as distrust increases, society overall becomes worse off.

Social and moral concerns. Historically, antitrust has also been concerned with how monopolies can hinder individual autonomy. Data-polies can also hurt individual autonomy. To start with, they can direct (and limit) opportunities for startups that subsist on their super-platform. This includes third-party sellers that rely on Amazon’s platform to reach consumers, newspapers and journalists that depend on Facebook and Google to reach younger readers, and, as the European Commission’s Google Shopping Case explores, companies that depend on traffic from Google’s search engine.

But the autonomy concerns go beyond the constellation of app developers, sellers, journalists, musicians, writers, photographers, and artists dependent on the data-opoly to reach users. Every individual’s autonomy is at stake. In January 2018, the hedge fund Jana Partners joined the California State Teachers’ Retirement pension fund to demand that

⁴⁸ UK Digital Competition Expert Panel Report, *supra*, at 45 (noting how a report commissioned by DCMS found that as “a consequence of their high market share, ownership of key technologies and strong user data assets, Google and Facebook are, to some extent, able to set their own terms to advertisers and publishers”).

⁴⁹ UK Competition and Markets Authority, *The Commercial Use of Consumer Data: Report on the CMA’s Call For Information* 146 (2015).

Apple do more to address the effects of its devices on children. As *The Economist* noted, “You know you are in trouble if a Wall Street firm is lecturing you about morality.”⁵⁰ The concern is that the data-opolies’ products are purposefully addictive, and thereby eroding individuals’ ability to make free choices.

There is an interesting counterargument that’s worth noting, based on the interplay between monopoly power and competition. On the one hand, in monopolized markets, consumers have fewer competitive options. So, arguably, there is less need to addict them. On the other hand, data-opolies, like Facebook and Google, even without significant rivals, can increase profits by increasing our engagement with their products. So, data-opolies can have an incentive to exploit behavioral biases and imperfect willpower to addict users — whether watching YouTube videos or posting on Instagram.

Political concerns. Economic power often translates into political power. Unlike earlier monopolies, data-opolies, given how they interact with individuals, possess a more powerful tool: namely, the ability to affect the public debate and our perception of right and wrong.

Many people now receive their news from social media platforms. But the news isn’t just passively transmitted. Data-opolies can affect how we feel and think. Facebook, for example, in an “emotional contagion” study, manipulated 689,003 users’ emotions by altering their news feed.⁵¹ Other risks of this sort include:

- **Bias.** In filtering the information we receive based on our preferences, data-opolies can reduce the viewpoints we receive, thereby leading to “echo chambers” and “filter bubbles.”
- **Censorship.** Data-opolies, through their platform, can control or block content that users receive, and enforce governmental or private censorship of political or religious information.
- **Manipulation.** Data-opolies can promote stories that further their particular business or political interests, instead of their relevance or quality.

⁵⁰ Evan Smith, *The Techlash Against Amazon, Facebook, and Google—and What They Can Do*, THE ECONOMIST (Jan. 20, 2018).

⁵¹ Adam D. I. Kramer, Jamie E. Guillory & Jeffrey T. Hancock, *Experimental Evidence of Massive-Scale Emotional Contagion Through Social Networks*, 111 PROC. NAT’L ACAD. SCI. 8788 (2014).

VIII. Change in Enforcement Approach Is Needed

From the above, it becomes evident that the aggregated effect of these powerful platforms challenges several common assumptions, that policy makers are quickly shedding. Just a few years ago, as our earlier writings observed, many antitrust enforcers, among others, espoused the following 10 myths:

- Myth 1: privacy laws serve different goals from competition law.
- Myth 2: the tools that competition officials currently use fully address all the big data issues.
- Myth 3: market forces currently solve privacy issues.
- Myth 4: data-driven online industries are not subject to network effects.
- Myth 5: data-driven online markets invariably have low entry barriers.
- Myth 6: data has little, if any, competitive significance, since data is ubiquitous, low cost, and widely available.
- Myth 7: data has little, if any, competitive significance, as dominant firms cannot exclude smaller companies' access to key data or use data to gain a competitive advantage.
- Myth 8: competition officials should not concern themselves with data-driven industries because competition always comes from surprising sources.
- Myth 9: competition officials should not concern themselves with data-driven industries because consumers generally benefit from free goods and services.
- Myth 10: consumers who use these free goods and services do not have any reasonable expectation of privacy, namely, that markets can easily self-correct, and that that the competitive dynamic and disruptive innovation will necessarily benefit society.

We have seen over the past few years the increasing awareness among policy makers around the globe of the complexity and risks of digital platform markets, and the need to recalibrate current antitrust, privacy, and consumer protection tools and fashion new ones to mitigate these risks.

Among the key reports and studies recently released are the *OECD Roundtable on Big Data*, *OECD Roundtable on Algorithms and Collusion*,⁵² *EU Commission Special Advisors Report on Competition Policy for the Digital Era*,⁵³ *UK Expert Panel Report - Unlocking*

⁵² OECD, Algorithms and Collusion, <https://www.oecd.org/competition/algorithms-and-collusion.htm>.

⁵³ Available at <http://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>.

Digital Competition,⁵⁴ the *ACCC Digital Platforms Inquiry*, Canada's House of Commons Standing Committee on Access to Information, Privacy and Ethics,⁵⁵ *UN World Economic and Social Survey 2018-Frontier Technologies for Sustainable Development*,⁵⁶ and *University of Chicago Committee for the Study of Digital Platforms 2019 Report*.⁵⁷

No doubt, the innovations from digital platforms can offer many benefits and can help countries address other pressing issues. But, the new market dynamics come with risks and distortions that require close scrutiny and measured guardrails. In setting and adjusting their policy measures, countries can ensure a vibrant digital economy in which our welfare is maximized. They can unleash the technological innovations from the digital economy that are so desperately needed to overcome the constraints of poverty, food and water security, climate change, violence and crime, and access to health and education.

As illustrated above, and as is noted in many of the reports mentioned above, in the new market reality, one cannot expect that market forces, if left unchecked, will deliver.

Congress needs to act.

Part of the problem is the ongoing erosion of the scope and relevance of US antitrust law. A series of Supreme Court decisions have emasculated antitrust under a consumer welfare standard that neither concerns citizens nor promotes their welfare. We are at a risk of using a tool ill-equipped and limited in its ability to address the challenges of the digital economy and deliver on its intended promise. On point here are comments made by EU Commissioner Margrethe Vestager who noted at the 2019 OECD/G7 conference: “You can’t have competition policy that is ready for the future, unless it can tackle the threats to competition that come from digitalisation.”⁵⁸

⁵⁴ UK Digital Competition Expert Panel Report, *supra*.

⁵⁵ Canada. 2018. “Democracy under Threat: Risks and Solutions in the Era of Disinformation and Data Monopoly.” House of Commons Standing Committee on Access to Information, Privacy and Ethics. December, <http://www.ourcommons.ca/DocumentViewer/en/42-1/ETHI/report-17/page-141#37>.

⁵⁶ <https://www.un.org/development/desa/dpad/publication/world-economic-and-social-survey-2018-frontier-technologies-for-sustainable-development/>.

⁵⁷ George J. Stigler Center for the Study of the Economy and the State, The University of Chicago Booth School of Business, Committee for the Study of Digital Platforms - Market Structure and Antitrust Subcommittee, Report, 01 July 2019. <https://research.chicagobooth.edu/-/media/research/stigler/pdfs/market-structure-report.pdf?la=en&hash=E08C7C9AA7367F2D612DE24F814074BA43CAED8C>.

⁵⁸ OECD/G7 Conference, 3 June 2019. Speech available online: https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/competition-and-digital-economy_en.

Also contributing to the problem is that antitrust's price-centric tools do not necessarily work well in the digital platform economy, where products and services are often "free" or subsidized by the other side of the platform.

Furthermore, some of the base assumptions as to the way markets operate, the likelihood of them self-correcting, and the power and likelihood of disruption, need careful examination. The ten myths outlined above flourished in an environment of antitrust atrophy in the U.S. Since 1999, the US Department of Justice has brought only *one* major monopolization case under Section 2 of the Sherman Act.⁵⁹ In contrast the DOJ under the Nixon administration brought between 1970 and 1973, 39 civil and 3 criminal cases against monopolies and oligopolies.⁶⁰ The DOJ brought its last predation case in 1999, and in its amicus briefs and advocacy, had sought to weaken, rather than clarify and enforce, a monopolist's duty to deal.

Another factor concerns the effectiveness of enforcement actions. One complaint in both the EU and US is that monopolization cases drag on for years, and once a remedy is imposed, it is often too late and ineffectual. Fines in recent cases have made the headlines due to their magnitude. The FTC's \$5 billion fine against Facebook for privacy violations might seem impressive. But that equals, as the *Wall Street Journal* calculated, "about 16%" of the dominant platform's 2018 operating expenses, "the day-to-day cost of running the business" or to state differently, what the company spends on 59 days of ordinary expenses.⁶¹ Plus, Facebook had a large stockpile of cash -- \$13.9 billion in cash and equivalents, plus \$34.7 billion in marketable securities.

Likewise, Google, in 2018, paid more in fines than it did taxes.⁶² But, as the *Wall Street Journal* calculated, France's \$56.8 million fine in 2019 equaled about 4.5 hours of the dataopoly's operating expenses. The European Commission's \$1.7 billion fine in 2019 for Google's limiting its rival ads amounts to about 5.6 days of its operating expenses. The Commission's \$5 billion fine in 2018 for the multiple Android violations equals 16.5 days. And the \$2.7 billion fine in the shopping case amounts to 11.6 days. Like Facebook,

⁵⁹ U.S. Dep't of Justice, Antitrust Division Workload Statistics, FY 2007-2016, <https://www.justice.gov/atr/file/788426/download>; U.S. Dep't of Justice, Antitrust Division Workload Statistics, FY 2000-2009, <https://www.justice.gov/sites/default/files/atr/legacy/2012/04/04/281484.pdf>.

⁶⁰ U.S. Dep't of Justice, Antitrust Division Workload Statistics, FY 1970-1979, <https://www.justice.gov/atr/antitrust-divisionworkload-statistics-fy-1970-1979>.

⁶¹ Theo Francis, *For Facebook and Alphabet, Big-Ticket Fines Cause Limited Pain*, WALL STREET JOURNAL, July 30, 2019, <https://www.wsj.com/articles/for-facebook-and-alphabet-big-ticket-fines-cause-limited-pain-11564498156>.

⁶² *Google Paid More in EU Fines Than in Taxes in 2018*, STATISTA, Feb. 11, 2019, <https://www.msn.com/en-us/money/news/google-paid-more-in-eu-fines-than-in-taxes-in-2018/ar-BBTs3vE>.

Google, at the end of June 2019, had a large stockpile of cash -- about \$16.6 billion in cash and equivalents, and \$104.5 billion in marketable securities.

Once one considers the likelihood of the agency detecting the violation and the court upholding the finding of infringement, the overall deterrent effect of fines is further limited.⁶³ This is even more so when the company benefits from deep pockets and can regard the fine as another “cost of doing business.” Private litigation and damage claims may help increase deterrence in these cases.⁶⁴ But the belief is that fines do not sufficiently deter antitrust violations. For if they did, the United States would not be sending price-fixers to jail.⁶⁵

In addition to the above, sound competition policy requires a re-evaluation of the ex-ante approach to mergers and acquisitions and the development of advanced theories of harm. In particular, there is increased realization of the competitive risks resulting from data-polies’ acquisitions of nascent competitive threats or non-competitors, which fall outside the current theories of anticompetitive harm. In the new platform economy, such acquisitions may lead to the “strengthening of the platform’s (or ecosystem’s) dominance, because the acquisition can: (i) intensify the loyalty of those users ... (ii) help retain other users for which the new services might be partial substitutes to the ones already available...”⁶⁶

Finally, the risks of data-polies extend beyond state and national borders. US policymakers and enforcers need to coordinate with other jurisdictions. While enforcement against monopolies shriveled in the US, the rest of the world has marched on, with enforcers investigating the abuses of data-polies and digital platforms generally. The European competition authorities have begun to recognize this and have brought actions against four data-polies: Google, Apple, Facebook, and Amazon (or GAFA for short). (*The Economist* created its own acronym, BAADD, “too big, anti-competitive, addictive

⁶³ M. C. Levenstein & V. Y. Suslow, *What Determines Cartel Success?*, 44 JOURNAL OF ECONOMIC LITERATURE 43 (2006); J. E. Harrington Jr, *Optimal Cartel Pricing in the Presence of an Antitrust Authority*, 46 INTERNATIONAL ECONOMIC REVIEW 145-169 (2005).

⁶⁴ *Reiter v. Sonotone Corp.*, 442 U.S. 330, 344 (1979); see also *Mitsubishi Motors Corp. v. Soler Chrysler-Plymouth, Inc.*, 473 U.S. 614, 635 (1985) (“The treble-damages provision wielded by the private litigant is a chief tool in the antitrust enforcement scheme, posing a crucial deterrent to potential violators.”); *Agency Holding Corp. v. Malley-Duff & Assocs., Inc.*, 483 U.S. 143, 151 (1987) (Clayton Act “bring[s] to bear the pressure of ‘private attorneys general’ on a serious national problem for which public prosecutorial resources are deemed inadequate”); Robert H. Lande & Josh Paul Davis, *Benefits from Private Antitrust Enforcement: An Analysis of Forty Cases*, 42 UNIVERSITY OF SAN FRANCISCO LAW REVIEW 879 (2008).

⁶⁵ Maurice E. Stucke, *Morality and Antitrust*, 2006 COLUMBIA BUSINESS LAW REVIEW 443 (2006), <https://ssrn.com/abstract=949199>.

⁶⁶ Page 11, EU Commission Special Advisors Report on Competition Policy for the Digital Era.

and destructive to democracy.”⁶⁷) While some of the challenges presented by the data-polies are novel, and while the law has not caught up to deter some of their excesses, the jurisdictions, in building upon each other’s research and enforcement actions, have made significant headway in reassessing the risks and benefits of the digital platform economy.

An increasing consensus has emerged that there is a need for a joint approach: (i) competition law as a reactive tool, addressing violations and abuse of power, (ii) regulation as an instrument used to ensure the openness and competitiveness of markets, design the boundaries of acceptable behavior, and provide ex-ante certainty as to consumer rights and adequate behavior, and (iii) statutory protections of fundamental rights essential to safeguarding privacy, individual autonomy, and well-being.

What can Congress do?

First, ensure the relevance of the competition provisions and their effectiveness in digital markets. Congress can correct some of the Supreme Court’s errant dicta and holdings, which undermined the effectiveness of antitrust. Thus, Congress should reorient antitrust to ensure its effectiveness and relevance in modern digital markets, with a standard rooted in antitrust’s historical concerns and legal presumptions that are simple enough for lawyers to explain to their clients, for companies to incorporate, and for courts to apply.⁶⁸

Second, promote effective and measured regulatory regimes. Tackling the risks of data-polies requires not only a careful evolution of antitrust enforcement and policy, but also a fortification of some relevant regulatory regimes. A look across the Atlantic reveals an increase emphasis of regulatory tools to address wider aspects of the digital economy. Examples from the EU include regulations on data protection (GDPR),⁶⁹ Platform-to-Business regulation,⁷⁰ and proposed ePrivacy regulation.⁷¹ On point are comments made

⁶⁷ Evan Smith, *The Techlash Against Amazon, Facebook, and Google—and What They Can Do*, ECONOMIST (Jan. 20, 2018), <https://www.economist.com/briefing/2018/01/20/the-techlash-against-amazon-facebookand-google-and-what-they-can-do>.

⁶⁸ For legislative proposals see Marshall Steinbaum & Maurice E. Stucke, *The Effective Competition Standard: A New Standard for Antitrust*, Roosevelt Institute Paper (Sept. 2018), <https://rooseveltinstitute.org/effective-competition-standard/>.

⁶⁹ Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services PE/56/2019/REV/1 OJ L 186, 11.7.2019.

⁷⁰ Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on promoting fairness and transparency for business users of online intermediation services PE/56/2019/REV/1 OJ L 186, 11.7.2019.

⁷¹ Regulation of the European Parliament and of the Council concerning the respect for private life and the protection of personal data in electronic communications and repealing Directive 2002/58/EC.

in the UK Digital Competition Expert Panel Report: “Instead of just relying on traditional competition tools, the UK should take a forward-looking approach that creates and enforces a clear set of rules to limit anti-competitive actions by the most significant digital platforms while also reducing structural barriers that currently hinder effective competition.”⁷² Indeed, “Competition for the market cannot be counted on, by itself, to solve the problems associated with market tipping and winner-takes-most.”⁷³

Third, promote privacy and data protection. The law has not kept up with the data-driven technologies that impact our privacy. This was not the first time. The same year Congress enacted the Sherman Antitrust Act, Samuel Warren and Louis Brandeis called in their seminal law review article for greater privacy protection: “Recent inventions and business methods call attention to the next step which must be taken for the protection of the person, and for securing to the individual what Judge Cooley calls the right ‘to be let alone.’”⁷⁴

Congress must protect the fundamental rights and freedoms, and personal data, of US citizens, and clarify our rights in our data and ability to prevent its appropriation without our meaningful consent. In particular one would hope for greater protection with respect for private life, confidentiality of communications, and the protection of personal data in the digital economy.

Certainly there is not perfect harmony among all the policy makers on the antitrust and privacy implications of the digital platform economy, and divergence certainly exists on how best to deter the risks. But, in the end, the ultimate aim remains the same: an inclusive, sustainable economy that promotes the citizens’ autonomy and well-being.

⁷² UK Digital Competition Expert Panel Report, *supra*, at 2.

⁷³ *Id.* at 4.

⁷⁴ Samuel D. Warren & Louis D. Brandeis, *The Right to Privacy*, 4 HARVARD LAW REVIEW 193, 195 (1890).