DEPARTMENT OF JUSTICE

"Blind[ing] Me With Science"*: Antitrust, Data, and Digital Markets

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Challenges to Antitrust in a Changing Economy
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I. Introduction

Good morning. Thank you, Einer, for that introduction and thank you to Harvard Law School and the conference organizers for inviting me to be with you today. It is a pleasure to discuss antitrust in the changing economy, especially in the company of so many distinguished guests from the global antitrust community.

I am especially delighted to see old friends, including current and former enforcers, as well as distinguished scholars whose thinking and writing, at times, have helped inform my own views about antitrust policy. I very much look forward to reading and to hearing their remarks today.

As you may know, I have had the privilege of serving as the Assistant Attorney General in charge of the Antitrust Division for just over two years. Each day brings fresh challenges – and no two days are ever alike.

There is one thing, however, that has remained remarkably consistent during my tenure, and that is the public's keen and growing interest in the intersection of the digital economy and antitrust policy. This should come as no surprise. In many ways, the rise of digital markets has defined commerce in this century and, undoubtedly, it will continue to shape our economy going forward. We recognize digital markets for the benefits they offer consumers, as well as the real questions they raise about the formation and exercise of market power.

It is unquestionable that digital technologies have ushered in a wave of creativity, innovation, and opportunity. They can ease the transaction costs of buyers and sellers, and they sometimes cause newer, emerging markets to atomize and take hold.

Yet, it bears repeating that the digital marketplace is *not* immune from anticompetitive transactions or conduct.[1] Antitrust enforcers cannot turn a blind eye to the serious competition

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* THOMAS DOLBY, *She Blinded Me With Science*, *on* THE GOLDEN AGE OF WIRELESS (Capitol Records 1982).

questions that digital markets have raised. That is especially true as we confront mounting evidence about sustained high market shares and potential anticompetitive behavior in digital spaces. In digital markets, as in any other sector, antitrust enforcers must be prepared to uphold the law when companies unlawfully acquire, enhance, or exercise monopoly power.

The potential antitrust issues that can arise in digital markets are numerous. Today, I will focus on how we might think about data, arguably the most transformative input in the digital marketplace.

II. Data in the Digital Economy

By now, many of you have read or heard that data is often analogized to oil for its ability to herald the next Industrial Revolution. It is both a key input and a high-value product of the digital economy. Indeed, some of the most interesting, and in some cases alarming, legal issues in the digital economy lie in the collection, aggregation, and commercial use of consumer data.

The collection, aggregation, and commercial use of data have created dynamic product offerings that deliver benefits to consumers. Need a ride? Your current location data can help get a driver to you within minutes. Looking for a new outfit? A recently pinned image can help suggest new staples for that evolving wardrobe. Looking for a place to dine? You get the picture. Admittedly, these uses can be relatively innocuous or actually beneficial in some contexts, and more alarming in others.

The aggregation of large quantities of data can also create avenues for abuse. That is especially true when the consumer data that is collected, aggregated, and analyzed for commercial use is quite personal and unique in nature. Such data, for example, can provide windows into the

[1] *See* Makan Delrahim, Assistant Attorney General, U.S. Dep't of Justice, Antitrust Div., Remarks for the Antitrust New Frontiers Conference: "…And Justice for All": Antitrust Enforcement and Digital Gatekeepers (June 11, 2019), https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-antitrust-new-frontiers.

most intimate aspects of human choice and behavior, including personal health, emotional well-being, civic engagement, and financial fitness. It is becoming increasingly apparent that this uniquely personal aspect of consumer data is what makes it commercially valuable, especially for companies that are in the business of directly or indirectly selling predictions about human behavior.

Competition law enforcers must carefully understand such business models. Moreover, we cannot afford to be overly formalistic in assessing the potential harms that may be attendant to these kinds of business practices. Today, the extraction of monopoly rents may look quite different than it did in the early 20th century. Therefore, it is not surprising that data and its market value as an asset class would raise competition concerns. After all, antitrust properly understood promotes consumer welfare in all its forms, including consumer choice, quality, and innovation.

A. Defining Data

As we seek a more informed and market-based discussion about the digital economy, we need to be careful with our nomenclature. We often hear about antitrust and privacy concerns in the context of "Big Data." That term unites much under a vague name. Accordingly, its use and meaning fluctuates, often making it too blunt a term to capture fully the nuances of the modern information-based marketplace. That reminds me of an important observation from my friend, European Union Vice President and Commissioner Margrethe Vestager, who noted the importance of keeping the conversation complicated. Oversimplifying the intersection of data, competition, and digital privacy into a term like "Big Data" can cause us to miss key insights.

Data scientists conceive of data along dimensions often referred to as the three "V's": the volume of data; the variety of data; and the velocity of data, which refers to how quickly data is

generated and collected.[2] Sometimes there is also discussion of a fourth V, related to the value of the data. Each of these dimensions may permit a company to glean insights that strengthen a digital product or service. Those insights can be passed onto consumers for procompetitive reasons, or they can be used to harm consumers by diminishing a key element of competition.

Not everyone is concerned about data collection. Some observers suggest it has been happening for decades and therefore antitrust concern about it now is somehow misplaced or overstated. These observers point, for example, to the grocery store that has always collected information about consumer purchasing patterns through loyalty cards, often without consumer complaints – other than getting those very long receipts at checkout.

In my view, however, this analogy is too simplistic to be useful. Antitrust enforcers must examine carefully whether greater competitive harms are threatened given today's market realities. For example, enforcers might consider whether the scale of the data collected has increased by several magnitudes; the type of data collected; and what it means when companies collect usage data, which cannot be easily replicated, in addition to user data. Most notably, enforcers must confront the reality that data insights in the digital economy are combined across the ecosystem of the internet sometimes in ways that transcend product improvement and impact consumer choice altogether.

Today's business methods and practices regarding data appear to be a departure from the kind and scale of old. Thus, it is not particularly compelling to compare today's data-intensive business practices to a brick-and-mortar store's loyalty program.

These changes raise questions about whether there is more potential for abuse of market

[2] *See The Four V's of Big Data*, IBM: BIG DATA & ANALYTICS HUB (2019), https://www.ibmbigdatahub.com/infographic/four-vs-big-data; MAURICE E. STUCKE & ALLEN P. GRUNES, BIG DATA AND COMPETITION POLICY 16 ("Big Data has commonly been characterized by four 'V's: the *volume* of data; the *velocity* at which data is collected, used, and disseminated; the *variety* of information aggregated; and finally the *value* of the data. Each 'V' has increased significantly over the past decade.").

power than in the past. Scholars have argued that the quantity of data collected and the great strides made in data science can now be used to create a real-time "feedback loop" that was previously unattainable. Some of the data that paves the way for that "feedback loop" can allow for product improvements. A feedback loop that protects market power in one or more markets and leverages usage data in particular, however, may make it more difficult for entrants to compete against incumbents. The perceived importance of controlling data has even led some to suggest that "in markets where zero-prices are observed, market power is better measured by shares of control over data than shares of sales or any other traditional measures."[3]

The Antitrust Division is studying the ways market power can manifest in industries where data plays a key role. It bears emphasizing that good competition policy always has required attention to the specific details of a business practice or transaction. Pablo Picasso instructed that one should "have an idea of what [one is] going to do, but it should be a vague idea." Although that philosophy thrives in the Cubist painting movement, it is a poor guide for antitrust enforcers. We know that antitrust concerns are nothing if not fact-laden inquiries.

Amassing a large quantity of data is not necessarily anticompetitive. The more complicated question for enforcers is how data is collected, analyzed, and used, and, most importantly, whether these practices harm competition.

B. Market Power

Data can offer important clues about market structure and competitive dynamics.

Some theorize that data can provide incumbents a way to erect barriers to entry or to enhance market dominance. Under this view, a new entrant often cannot compete successfully with an incumbent because it lacks access to the same volume and type of data. The new entrant

[3] *Big Data: Bringing Competition Policy to the Digital Era*, Background note by the Secretariat, OECD (Nov. 29-30, 2016), https://one.oecd.org/document/DAF/COMP(2016)14/en/pdf.

firm thus may exit the market while the incumbent firm grows lethargically, without the same incentives that it would have in a competitive market to innovate or otherwise improve the quality of its products. In such cases, prospective new entrants and their venture capital backers may be deterred from entering the market altogether.

Others respond by emphasizing that data is ubiquitous, inexpensive, and non-rivalrous, an economic label indicating that data can be collected simultaneously by several firms. In their view, it is easy for new entrants to amass valuable data and compete. In addition, the investment in the collection of large volumes of data is what spurs innovation and many procompetitive product improvements, such as more relevant product recommendations or "free" content, in the first place.

I do not plan to endorse either view today but instead I will make two observations.

First, we should be wary of arguments that oversimplify how bargaining, transaction costs, and competition principles apply with respect to businesses that rely on data collection, aggregation, and analysis. As I described during a recent discussion in Aspen, there may be important qualitative differences between business practices that rely on user data rather than usage data. To ignore as much misses important clues about the ways that the volume, nature, and derivative uses of data animate business decisions across a variety of digital markets.

Second, the acquisition of data as opposed to dollars may create new analytical challenges. As I mentioned in remarks this February, "[i]n the absence of price competition, market definition can be difficult. The traditional analytical test applied by enforcers to define relevant markets … does not translate directly to a zero-price market. We cannot look at the effects of a five percent increase in price because five percent of zero is still zero."[4]

[4] Makan Delrahim, Assistant Attorney General, U.S. Dep't of Justice, Antitrust Div., Keynote Address at the Silicon Flatirons Annual Technology Policy Conference at The University of Colorado Law School: "I'm Free": Platforms and Antitrust Enforcement in the Zero-Price Economy (Feb. 11, 2019), https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-keynote-address-silicon-flatirons.

Yet, antitrust enforcers may need to play an even *greater* role in zero-price markets, "where the absence of price to the end consumers could make private damages recovery difficult, or where effects on business partners, such as advertisers who must rely on an ongoing relationship, may impede the incentives for private antitrust actions."[5] For this reason, the Division is especially vigilant about the potential for anticompetitive effects when a company cuts off a profitable relationship supplying business partners with key data, code, or other technological inputs in ways that are contrary to the company's economic interests.

C. Data has Economic Value

As a foundational matter, we must acknowledge that data has economic value and some observers have said it is analogous to a new currency.[6] It is not valueless simply because the market-bearing price of a resulting product or service is zero. Indeed, the tools of economics have much to say about the efficient allocation of data. For example, firms can induce users to give up data by offering privacy protections and other measures to increase consumer confidence in the bargain. Just as antitrust enforcers care about companies charging higher prices or degrading quality as a sign of allocative inefficiency, it may be important to examine circumstances where companies acquire or extract more data from consumers in exchange for less.

The bargain implicit in some of today's digital transactions reminds me of a cartoon I recently saw in *The New Yorker* magazine. Two friends are seated at a table. One shows the other his phone screen and explains: "It's this new app – you put in your social security number and it

[5] *Id.*

[6] Makan Delrahim, Assistant Attorney General, U.S. Dep't of Justice, Antitrust Div., Remarks as Prepared for Delivery at Booth School of Business at the University of Chicago: "Don't Stop Believin'" Antitrust Enforcement in the Digital Era (April 19, 2018), https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-keynote-address-university-chicagos.

makes you look like a cat."[7]

Although the comic may be glib, it offers a sobering insight a consumer may not have to surrender such valuable data – or so much data – in exchange for the product or service. We don't have a role to say if consumers should or shouldn't knowingly trade their information for a photo of themselves as cats. We can, however, assess market conditions that enable dominant companies to degrade consumer bargaining power over their data.

D. Privacy in Data-Intensive Sectors

The collection of data can also reach beyond its commercial value and raise normative concerns about privacy. These issues often enliven discussions about digital marketplaces and competition therein. Professor Shoshanna Zuboff at Harvard Business School has termed the commercialization of predicting human behavior and the accompanying encroachment on privacy as a form of "surveillance capitalism," or "the unilateral claiming of private human experience as free raw material for translation into behavioral data."[8] She has described "private human experience as the final virgin wood," that is now viewed as part of this "new process for production."

Although privacy fits primarily within the realm of consumer protection law, it would be a grave mistake to believe that privacy concerns can never play a role in antitrust analysis.

Indeed, we take note of evidence that some consumers appear to hold revealed preference for privacy.[9] A Pew Research Center survey indicates that more than 85% of internet users have

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[7] Jason Adam Katzenstein, *Daily Cartoon: Friday July 26th*, THE NEW YORKER (July 26, 2019), https://www.newyorker.com/cartoons/daily-cartoon/friday-july-26th-social-security-app.
[8] John Laidler, *High tech is watching you*, THE HARVARD GAZETTE (March 4, 2019), https://news.harvard.edu/gazette/story/2019/03/harvard-professor-says-surveillance-capitalism-is-undermining-democracy/.
[9] *See* Makan Delrahim, Assistant Attorney General, U.S. Dep't of Justice, Antitrust Div., Keynote Address at the University of Chicago's Antitrust and Competition Conference: Don't Stop Believin': Antitrust Enforcement in the Digital Era (April 19, 2019), https://www.justice.gov/opa/speech/assistant-

taken steps to mask their digital footprints online, by means such as clearing cookies or masking IP addresses.[10] That survey is over five years old. Pew also published an article stating that more than 90% of Americans now believe they have lost control over how personal information is collected and used.[11]

It remains to be seen whether consumer behavior in the digital marketplace maps perfectly onto expressed preferences for privacy. Although some consumers care about privacy, they often still relinquish data for a fairly small incentive. Researchers call this the "privacy paradox." For example, 60% of consumers say they would be uncomfortable sharing their contact list if asked, as many consider contact information the second-most private piece of data, below only social security numbers. Yet researchers found that a sample of around 1500 students at MIT were willing to share the contact information of their closest friends in exchange for only a pizza[12] – though, admittedly, pizza may be a highly prized good in a presumptive market for very bright college students.

The goal of antitrust law is to ensure that firms compete through superior pricing, innovation, or quality. Price is therefore only one dimension of competition, and non-price factors like innovation and quality are especially important in zero-price markets.

Like other features that make a service appealing to a particular consumer, privacy is an important dimension of quality. For example, robust competition can spur companies to offer

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attorney-general-makan-delrahim-delivers-remarks-antitrust-new-frontiers. *See also* Maureen K. Ohlhausen & Alexander P. Okuliar, *Competition, Consumer Protection, and The Right [Approach] to Privacy*, 80 ANTITRUST L.J. 121, 122 (2015) ("[M]any consumers . . . are worried about the privacy losses associated with extensive collection and manipulation of consumer information online.").

[10] *Anonymity, Privacy, and Security Online*, PEW RESEARCH CTR. (Sept. 5, 2013), https://www.pewinternet.org/2013/09/05/anonymity-privacy-and-security-online/.

[11] *Americans' complicated feelings about social media in an era of privacy concerns*, PEW RESEARCH CTR.: FACT TANK (March 27, 2018), https://www.pewresearch.org/fact-tank/2018/03/27/americans-complicated-feelings-about-social-media-in-an-era-of-privacy-concerns/.

[12] Susan Athey et al., *The Digital Privacy Paradox: Small Money, Small Costs, Small Talk* (MIT Sloan Research Paper, Stanford University Graduate School of Business Research Paper, June 2017), https://www.nber.org/papers/w23488.pdf.

more or better privacy protections.[13] Without competition, a dominant firm can more easily reduce quality – such as by decreasing privacy protections – without losing a significant number of users.[14]

As I have said before, these non-price dimensions of competition deserve our attention and renewed focus in the digital marketplace.[15]

III. Antitrust Enforcement and Regulation

I'd like to wrap up my remarks this morning by acknowledging the challenges of antitrust enforcement in digital markets, especially data-driven ones. These issues are not easy, which might be why seemingly every antitrust gathering, symposium, and conference of the last several years has focused on digital markets.

Recent concerns about the power of high-tech firms have led some to wonder whether the antitrust laws are up to the task of detecting and challenging anticompetitive conduct and transactions. Some have suggested changing the antitrust laws, creating new agencies, or even regulating the conduct of certain firms.

While the Division is always willing to engage with Congress on legislative proposals, it bears repeating that our existing framework is flexible enough to detect and to address harms in

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[13] *But see* David S. Evans, *The Online Advertising Industry: Economics, Evolution, and Privacy*, 23 J. ECON. PERSP. 37, 57 (2009) (cautioning that "competition among advertising platforms may not necessarily result in the optimal provision of privacy. Online advertising intermediaries are multisided platforms that compete simultaneously for advertisers and viewers. Whether this competition results in the optimal provision of privacy, and the extent to which it would do so in a highly concentrated market, would need to be investigated carefully.").

[14] Market Structure and Antitrust Subcommittee, *Report by the Committee for the Study of Digital Platforms*, CHICAGO BOOTH: STIGLER CTR. (July 2019), at 34 (citing Agustín Reyna, *The Psychology of Privacy—What Can Behavioural Economics Contribute to Competition in Digital Markets?*, 8 INT. DATA PRIVACY L. 240 (2018)).

[15] Makan Delrahim, Assistant Attorney General, U.S. Dep't of Justice, Antitrust Div., Keynote Address at the Silicon Flatirons Annual Technology Policy Conference at The University of Colorado Law School: "I'm Free": Platforms and Antitrust Enforcement in the Zero-Price Economy (Feb. 11, 2019), https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-keynote-address-silicon-flatirons.

old industries and emerging ones alike. We have a long history of enforcement against titans of industry, including Standard Oil, AT&T, and Microsoft. We also have filed lawsuits to stop anticompetitive transactions in digital markets, such as the one proposed by Bazaarvoice and PowerReviews.

When I think about proposals to amend the antitrust laws I am reminded that such calls are hardly new. Over 80 years ago, law enforcers confronted similar calls to change the law. Back then, as now, the public expressed concerns about economic concentration. Even government leaders sought a new antitrust framework in order to advance certain social or political ends. This was the subject of a piece titled *Should The Antitrust Laws Be Revised?* It was penned in 1937 by Robert Jackson, a former Assistant Attorney General of the Antitrust Division, Attorney General of the United States, and Justice of the Supreme Court. In it, Jackson recounted a few concerns from his day. For example: "[c]oncentration of corporate ownership of wealth, chiefly means of production, has proceeded to a surprising degree."[16] Just in case that doesn't sound familiar, here is Jackson again reciting the popular concerns of his day:

> "[B]ig business has destroyed its own defense, has devoured its own young. The small business man who used to be our most ardent capitalist and the most uncompromising of conservatives has been crushed, or merged, or consolidated, or otherwise retired. This has brought about a subtle change, not only in economic life, but in social and political life as well. There are values in local independence and responsibility which are being sacrificed to balance sheet values."[17]

These worries, eloquently stated in 1937, mirror modern complaints about the economy. Nevertheless, and despite the vociferous calls of his time, Justice Jackson believed that competition, not government regulation, ought to be the rule of trade.[18]

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[16] Robert H. Jackson, *Should The Antitrust Laws Be Revised?*, 71 U.S. L. REV. 575, 579 (1937).
[17] *Id.* at 580.
[18] *See id.* at 576 ("The antitrust laws represent an effort to avoid detailed government regulation of business by keeping competition in control of prices. It was hoped to save government from the conflicts and accumulation of grievances which continuous price control would produce and to let it confine its

Competition in a free market is the cornerstone of the U.S. economy. When it comes to the digital marketplace, a bedrock principle of U.S. antitrust policy remains as applicable as ever: free markets, not governments, should decide winners and losers.

It is thus the Division's priority to promote free markets and the ethos of innovation through timely and effective antitrust enforcement. This goal does not fluctuate with the industry at issue. After all, competitive markets, along with sound antitrust policy buoyed by the rule of law, enabled the United States to become the "cradle of innovation" in the first place.

IV. New Opportunities

As we think about antitrust enforcement in data-intensive sectors, it is impossible to ignore the reality that firms collecting consumer data seek to sell predictions about future consumer behavior by examining past and present consumer decisions. As enforcers, we too, examine past and present decisions by consumers and businesses alike. More importantly, we are engaged in making informed predictions about future competition based on present risks and challenges.

Fortunately, we don't have to go it alone. We are privileged to have longtime experts on the intersection of antitrust law in digital markets in our Technology & Financial Services Section and our San Francisco office, among other Division lawyers across the country. We benefit from the insights of our in-house PhD economists, diligent paralegals, and dedicated support staff. In addition, we anxiously await the arrival of a dozen recently hired, experienced lateral attorneys who will assist our enforcement efforts.

In addition, I am pleased to announce that the Division is establishing a two-year trial attorney program with emphasis on assisting the Division's reviews in this sector. We intend to bring an additional five talented thought-leaders and litigators into the Division. Application

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responsibility to seeing that a true competitive economy functions. […] They assert … a definite economic plan, a sovereignty of public over private interest in business and an affirmative control over our economic life to provide conditions under which competition will function effectively.")

information will be posted on the Antitrust Division's website soon.

V. Conclusion

To conclude, no firm, agency, or person is clairvoyant, but as we better understand the factors that bear on business conduct and transactions in data-intensive sectors, antitrust enforcers can better detect violations that threaten anticompetitive effects. It is incumbent upon antitrust enforcers not to be too myopic or formalistic when it comes to anticompetitive conduct in the digital age. As famed mathematician and theoretical physicist Henri Poincaré said, "It is far better to foresee even without certainty than not to foresee at all."

Thank you.