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# The Myth of Data Monopoly: Why Antitrust Concerns About Data Are Overblown

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BY JOE KENNEDY | MARCH 2017

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Recently, a number of legal experts and policy activists have called on antitrust regulators to incorporate the possession of data into their analyses of mergers and possible anticompetitive practices. These observers fear that control of large amounts of data will give companies an unfair advantage over competitors, allowing them to use their market power to harm consumers and competitors.<sup>1</sup> These claims are incorrect. Data-rich companies are not an economic threat, but rather an important source of innovation, which policymakers should encourage, not limit. And because the use of data is non-rivalrous, one company's possession of data does not come at the expense of another's. As such, there is no need to impose additional antitrust scrutiny merely because a company relies on data to conduct business. Moreover, regulators already have sufficient powers to deal with any actual behavioral problems that may arise.

## INTRODUCTION

With the increased power and decreased cost of collecting, transmitting, and storing data, as well as an increase in machine-readable data, more and more companies are using more and more data to help them provide goods and services.

However, a number of commentators have begun to argue that, in the case of companies aggregating large amounts of data, competition policy should be extended to incorporate concerns about the collection and use of data beyond clear examples of anticompetitive behavior.<sup>2</sup> The general argument is that the mere act of collecting large amounts of data,

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such as the vast quantities of personal data collected by social-networking platforms, search engines, and e-commerce sites, gives companies an unfair competitive advantage and that competition policy needs to incorporate this analysis.

For example, in a recent speech on data and competition, the European Commission's (EC) Commissioner for Competition Margrethe Vestager stated:

It's possible that in other cases, data could be an important factor in how a merger affects competition. A company might even buy up a rival just to get hold of its data, even though it hasn't yet managed to turn that data into money. We are therefore exploring whether we need to start looking at mergers with valuable data involved, even though the company that owns it doesn't have a large turnover.<sup>3</sup>

Similarly, a recent EC report worried that:

Where business models of entire ecosystems of SMEs [small and medium enterprises] are dependent on access to a small number of online platforms, or where platforms have access to datasets of unprecedented size, new asymmetries may be created. In such situations, some suppliers to platforms can be disproportionately exposed to potentially unfair trading practices, even in the absence of established dominance of a platform.<sup>4</sup>

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To date, U.S. and European regulators have not adopted this line of reasoning, nor should they. While it is true that data can be used in anticompetitive ways, competition policy is capable of dealing with such abuses. In fact, when analyzing allegations of such behavior, it is often helpful to imagine whether agencies would object if the activity complained about involved some input of critical importance other than data. This helps clarify whether the threat to competition is truly due to control of an important resource or to ungrounded fears about the uniqueness of data.

Advocates for intensifying competition policy cite a variety of flaws and potential abuses in the current system. However, defenders of the current approach seldom argue that there can be no anticompetitive behaviors when it comes to data. Rather, they admit that, in some cases, data use could trigger competitive concerns. What defenders do argue is that, when it comes to competition policy, the focus should be on abusive behavior and not on structural issues, such as how much data a company holds.

The collection of large amounts of data does not by itself represent a threat to competition. Although use of data might in specific circumstances justify regulatory intervention, in most cases the acquisition and use of data does not reduce competition, and the existing legal framework, including traditional interpretations of existing statutes, gives competition and data protection regulators all the flexibility they need to protect markets and consumers. On the contrary, large amounts of data, including personal information, are increasingly a vital input for some of the economy's most important innovations, including

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online platforms, medical diagnoses, digital assistants, language translation, urban planning, and public safety.

This report proceeds by examining the main arguments made by advocates of expanding the scope of competition policy to incorporate possible threats created by the collection of large amounts of data. By and large, these arguments assume that data is somehow *sui generis*, conferring on its possessors an unfair competitive advantage that preempts competitors and forces unwilling consumers to disclose private data with no protections on how it is used. The report then shows why each of these arguments is not convincing and how adopting them would likely lead to lower consumer surplus and less innovation. The report continues by looking at several recent merger cases between data-rich companies to show how the application of traditional competition policy was able to produce the correct result. It concludes with a brief explanation about why smart competition policy is important to innovation and higher productivity.

### **THE ARGUMENTS MADE FOR EXPANDING COMPETITION POLICY**

Some proponents of expanding competition policy argue that data, especially so-called “big data,” is a unique factor of production that requires a unique approach to antitrust analysis.<sup>5</sup> “Big data” refers to data that cannot be processed using traditional database systems, either due to the relative size and heterogeneity of the data set, or the speed at which it is updated.<sup>6</sup> Companies that can master the challenges associated with extracting value from these large datasets can gain a competitive advantage over their peers, as they are able to use these insights to make better decisions.

Concerns about data would seem to apply to any company that collects large amounts of data, which these days includes a growing number of companies. GE and Siemens, for example, are actively working on services that would collect and analyze data from the machinery they sell.<sup>7</sup> IBM is integrating data from electronic health records, medical imaging, claims, and genetics to improve its Watson Health analytics service.<sup>8</sup> Automotive companies, such as Audi, hope to use connected vehicle data to improve their cars.<sup>9</sup> For several years, supermarket chains such as Tesco and Sainsbury’s have used data from loyalty-card schemes to offer personalized discounts; they now hope to use additional data from third parties to better time those promotions and compete with budget brands such as Lidl and Aldi.<sup>10</sup> Whole industries, such as health care, agriculture, and consumer goods, are rapidly moving toward the collection of increasing amounts of data about their customers and products.<sup>11</sup> Yet the proponents of expanding antitrust powers focus primarily on large Internet platforms such as Google, Apple, Facebook, and Amazon. An implicit reason is the belief that, because these companies occupy a central place on the Internet, they are able to collect a greater volume and variety of real-time information than anyone else. As a result, some fear that these platforms, rather than companies such as Audi or Tesco, are likely to reap the market power that data confers.<sup>12</sup>

Proponents of expanding the scope of antitrust review to incorporate how companies collect and use data make a variety of arguments. In a paper that largely rejects these claims

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when applied to concerns about privacy, Federal Trade Commissioner Maureen Ohlhausen and attorney Alexander Okuliar list four arguments proponents make:<sup>13</sup>

1. Privacy is a non-price dimension of competition that can be hurt if some companies have too much market power.
2. Antitrust authorities should not focus solely on the impact on competition in cases where competitive agreements also affect consumer protection but instead should include noncompetition effects in their balancing of costs and benefits.
3. Antitrust authorities should take action when companies achieve monopoly power by misleading consumers about their data-collection policies.
4. Competition law should look at privacy issues even if no competitive implications exist.

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In a comprehensive argument for adjusting competition policy to what they argue are the new realities of data-intensive companies, especially Internet platforms, Maurice Stucke and Allen Grunes list 10 “myths” that they claim support the traditional constraints on competition policy.<sup>14</sup> These are:

1. Privacy laws serve different goals from competition law.
2. The tools that competition officials currently use fully address all major data issues.
3. Market forces currently solve privacy issues.
4. Data-driven online industries are not subject to network effects.
5. Data-driven online markets have low entry barriers.
6. Data has little, if any, competitive significance, since data is ubiquitous, low cost, and widely available.
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.
8. Competition officials should not concern themselves with data-driven industries because competition always comes from surprising sources.
9. Competition officials should not concern themselves with data-driven industries because consumers generally benefit from free goods and services.
10. Consumers who use these free goods and services do not have any reasonable expectation of privacy.

These 10 statements imply three basic claims by the authors. First, the mere possession of large amounts of data gives a company a significant competitive advantage that its rivals will be unable to challenge. Second, competition policy as it is currently practiced is unable to respond to competitive threats stemming from large amounts of data. Third, the acquisition of large amounts of data about users presents a serious threat to privacy that consumer-protection authorities are unable to handle.

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Stucke and Grunes conclude that antitrust review needs to be expanded to address the dangers raised by large amounts of data. Interestingly, the authors do not cite anyone who argues that each of these “myths” is correct. That is because almost all authorities admit that in certain cases some if not most of these are false. What opponents of expanding competition policy do argue is that, by and large, these assertions hold most of the time for most companies and that, where they do not, existing frameworks and approaches are adequate to deal with the specific problems that arise.<sup>15</sup>

This report next examines the extent to which each of these claims are true and the implications for limiting the collection or use of large amounts of data.

### **Merely Possessing a Large Amount of Data Does Not Automatically Convey Lasting Market Dominance**

Stucke and Grunes’ primary worry seems to be that the mere possession of large amounts of data can give a company dominant market power, which rivals can never challenge. This is partially because they think that the difficulty and cost of collecting the relevant data is so high that other companies will be unable to amass it and partially because they believe that the data will allow companies to command higher profit margins, deliver better products, and make wiser decisions. They and others make several claims to support this.

First, they believe that, because data-rich companies often benefit from network and scale effects as they grow, it may be difficult for smaller entrants to compete with a large incumbent even if they have better products.

Second, although Stucke and Grunes note that entry barriers for data-driven industries can be either high or low, they worry that, even in the absence of network and scale effects, amassing large amounts of data raises entry barriers by favoring market concentration and dominance.<sup>16</sup> Although the marginal cost of serving a new customer may be very low, the cost of amassing the data needed to serve the first customer can be prohibitive, especially in the face of determined resistance by an incumbent. For example, a company might deny competitors access to its platform, limit the data available to them, or forbid partners from dealing with them. Proponents of this view then assert that data can therefore become a barrier to entry, making it harder for new competitors to enter the market. This dominant position can then be used to eliminate competition on non-price criteria such as privacy, as argued above.

Third, Stucke and Grunes believe that it is often difficult for rivals to collect the right data because of cost, availability, and other reasons. As a result, they cannot effectively compete with data-rich incumbents.

A fourth argument is that, beyond a certain point, the knowledge conveyed by enough data can give companies an unassailable insight into what is happening in their market. For example, Stucke and Grunes worry that:

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Nowcasting represents a potent data-based weapon, not previously available for monopolies, to monitor new business models in real-time. The data-poly can use its relative advantage in accessing and processing personal data (such as watching for trends in its proprietary data from posts on a social network, search queries, emails, etc.) to quickly identify (and squelch) nascent competitive threats. The dominant firm can acquire entrants before they become significant competitive threats or blunt the entrant's growth (such as manipulating its search engine results to make it harder to find the company).<sup>17</sup>

Finally, they and other proponents of expanding competition tend to overestimate the barriers to competition protecting incumbents and discount the competitive threat posed by new entrants and technologies. They believe that once a data-rich firm acquires a dominant position in the market, it will be extremely difficult for anyone to dislodge it.

#### The Limits of Network and Scale Effects

Virtually no one seriously argues that data-driven companies cannot benefit from network and/or scale effects. But proponents of maintaining the current approach to competition policy point out that these effects also deliver tremendous value to consumers and society, so regulators should be careful in regulating them.<sup>18</sup>

With respect to data-intensive companies, many things argue for bigness, but this bigness benefits society. In many industries, marginal costs increase with higher production. Here, the supply curve slopes up. In contrast, for most information-based industries, production costs fall dramatically to a point where the marginal cost is almost zero. As a result, these companies are able to lower the price they charge users, at least until they attain a certain level of volume. For similar reasons, some people worry that as companies gain more access to information, they will be able to establish a dominant position because they will have achieved significant scale economies.<sup>19</sup>

On the demand side, network effects ensure that the value to each user rises as more users use the same service. The first Harvard students to use Facebook benefitted from it. But this benefit increased dramatically as the first billion users joined. Again, these effects probably trail off after a certain point, but the value of Facebook would be diminished if half of your friends were still on MySpace and not Facebook. Economies of scale and network effects both increase consumer welfare by lowering costs and increasing value. And they do not necessarily ensure lasting market power.

#### The Weakness of Entry Barriers

Supporters of the current approach also argue that over the medium term the barriers to competition created by these effects are not as severe as they appear to be and that it is important to understand the relevant market in which these companies compete: For free services, the relevant market is not the actual service (e.g., the search market, the social network market, etc.) but the advertising market where the companies earn most of their revenues.

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Moreover, the possession of large amounts of data, by itself, does not usually create a large barrier to entry. Even if it did, competition policy should not seek to create a level playing field for all companies at all times, especially when companies benefit from advantages that they created with their own resources and which others are free to emulate.

There are several reasons why the possession of lots of data by itself does not confer an unassailable competitive advantage. First, the use of data is non-rivalrous, meaning that one person's use of it does not diminish its availability to other users. The value to one ad network of knowing a user's age and location is not affected by whether another ad network also has that information. Google's use of open data for navigation services does not prevent Citymapper from building a popular app that uses the same data. Skyscanner's price comparison tool for flights competes with those of flight booking sites such as Expedia, and the pricing data these firms rely on is also available to start-ups such as GTFO Flights. The Weather Channel's commercial service does not stop the Met Office from publishing its own meteorological data freely, including for commercial reuse. New entrants that need data do not find that it has already been used up by incumbents.

A similar concept holds for users. If users had to pay for each site, then the payments to one site would preclude spending the same money on another site. But users can furnish basic information such as their email addresses, ages, and shopping habits to as many sites as they want to without diminishing their income. Users do face a time constraint, in that it is difficult to spend the same hour on both Facebook and YouTube. But even this constraint is minimal because, if a better product or service appears, consumers can shift their use of future hours very readily.

Another countervailing force is that some data loses its worth very quickly. For example, advertisers would love to know what an individual is shopping for right now, but for most products, that information is likely to be worth significantly less a week from now. Recent transport data might help somebody decide where to open a business, but it is of little use to commuters, who want to know what's happening right now—and data from several years ago will be of little value to anyone. An air passenger does not care how many flights were delayed last week, and is much more concerned whether the flight they've bought a ticket for will be late today. Many Londoners will want to know they could be shopping on the most polluted street in the world right now, but tell them what the sulfur dioxide level was in the Great Smog of 1952, and they may give you a strange look.<sup>20</sup>

A company possessing real-time information may make a lot of money off it, which it usually uses to improve existing services and create new ones. But if it wants to create a sustainable competitive advantage, it needs to continually refresh the data and prevent anyone else from collecting it through other means. Fortunately, information is also generally not excludable. Platforms have a difficult time preventing their competitors from gathering data on their own. The more valuable a piece of data is, the more likely it is that more than one company will seek to acquire it.

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Third, there are often many different sources of data that can be used for a given purpose, and new sources of data can prove to be more valuable than what is currently used. For example, companies used to collect data from sensors embedded in the roadway to measure traffic congestion. However, other data sources, such as automated video analysis and mobile-phone locations, have emerged as alternatives. Smart-ticketing systems now allow authorities to monitor congestion in the public-transport system, and even estimate attendance at public events.<sup>21</sup> With the volume of data collected growing substantially every year, and with projections for an increasing number of otherwise conventional, everyday devices that are expected to be connected to the Internet within a few years, the probability that new uses of data will upset existing business models—including those of data-driven firms—seems high.<sup>22</sup>

Finally, even when a company possesses data that cannot be easily acquired anywhere else, the marginal value of additional data may be falling, not rising. For example, in political polling, the additional accuracy provided by larger sample sizes falls off rapidly. In that case, the acquisition of more data would not appreciably increase any market power the company already has.

In a recent article, economists Anja Lambrecht and Catherine E. Tucker examine big data using a resource-based view of the firm, which holds that for a resource such as data to provide a company with a competitive advantage, it must be inimitable, rare, valuable, and non-substitutable.<sup>23</sup> They conclude that:

The unstable history of digital business offers little evidence that the mere possession of big data is a sufficient protection for an incumbent against a superior product offering. To build a sustainable competitive advantage, the focus of a digital strategy should therefore be on how to use digital technologies to provide value to customers in ways that were previously impossible.<sup>24</sup>

Even if the possession of large amounts of data were necessary for an entrant to compete successfully, that would not necessarily constitute an unfair competitive advantage. Many industries have high start-up costs. We do not say that Ford and Daimler have an unfair advantage just because companies must first build an expensive factory before they sell a single car. Nor does amassing a large number of workers represent a barrier to competition, even though these same workers are not available to competitors. Some things are just inherent to the business of offering customers a valuable product. In contrast, collecting data can be relatively cheap, and the data remains available to others.

Although barriers to entry are an element of antitrust analysis, these barriers can be less imposing than they look. Companies have often been able to overcome high upfront costs, provided they have a compelling business plan for eventually earning enough profits to deliver an appropriate risk-adjusted rate of return. An entire ecosystem of angel investors, incubators, and hedge funds exists to invest in promising young companies capable of



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growing rapidly. Although funding is often a challenge, the larger bottleneck remains a lack of innovative and workable ideas.

To some extent, entry barriers are self-correcting. Firms do not pursue market share for nothing. Instead they pursue higher profits, wherever they can find them. But market share that leads to higher profits will also attract additional competitors seeking to break down entry barriers.

More important, many companies face fierce competition and low entry barriers in their most lucrative markets. For example, while some Internet platforms may appear to operate in different markets and therefore possess market power (Facebook does not run Internet searches nor sell phone software and Amazon does not make phone hardware), they compete fiercely for advertising dollars, which represent a large portion of their revenues. In doing so, they face sophisticated and powerful consumers.

Advertising firms and the companies they represent want to make sure that the billions they spend on advertising helps their bottom line. They look across media, including print, mail, television, radio, billboards, the Internet, and even skywriting to find the best value for their dollar. Many possess enough market power to negotiate for low rates and use sophisticated software to measure how effective they are at reaching and converting users. The most relevant market, therefore, for most Internet platforms is not search, social networks, or other applications, but advertising, and in this market, these firms face low entry barriers and strong competition. In the United States, Internet and mobile ad revenues only accounted for 35 percent of all advertising spending in 2015, and Google and Facebook accounted for 63 percent of that share.<sup>25</sup> Despite the rapid growth in Internet advertising, a recent article in *The Economist* reports that the advertising industry is starting to push back against both Internet platforms and advertising brokers. Revelations of overbilling and misreporting the number of viewers have caused some companies to push for more transparency about how many viewers actually see their ads and in what context those views occur.<sup>26</sup>

As a result, platforms are in a continual battle for user attention. Although Google is not a strong competitor to Facebook's personal pages, it does compete aggressively for the limited number of hours that users are able to spend on the Internet. The time you spend grooming your Facebook page is time you cannot spend watching YouTube videos. This means that it is also time that Google can't show you advertising. Whereas a normal monopolist faces incentives to limit supply and raise prices, platforms need to continually attract new users by offering better services for free. Moreover, the relevant market in this case is not the search or social network markets—the prices there are zero. The relevant market is the ad market, and there is plenty of competition.

In certain cases, a monopoly or oligopoly might be the best solution for a market. This is typically the case when marginal costs keep falling and benefits keep rising with volume so that the greatest social value occurs when one company serves the entire market. This might be the case with Facebook's traditional service. The problem is that monopolists

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have an incentive to raise prices and lower quantity. At least one organization has called for applying public utility regulation laws to digital platforms.<sup>27</sup> This would only raise new problems.

Regulators need to ensure the companies they regulate can make a competitive rate of return on their investments, or there will be less investment. More important, regulated markets are not known for rapid innovation and low prices. In the United States this was true of trucking, airlines, and spectrum use prior to deregulation, and is still true of electric transmission now. The problem is compounded when the company also operates in competitive markets, as do many data-intensive firms. In the case of data-reliant companies, the need for regulation is reduced by the fact that markets characterized by rapid innovation tend to be very contestable. Although one or two companies may have a dominant position, that position is not unassailable. As technology shifts and new entrants with a better mousetrap emerge, it is fairly easy for new companies to enter, provided they have a good product. This restricts the market power of incumbents.

#### The Ready Availability of Data

Few people would say that data never has competitive significance. Yet it is true that much data is ubiquitous, low cost, and widely available. Other data, such as satellite or genomic data, might be expensive to acquire but are not exclusive and are still relatively cheap to share.

Lots of data is cheap and easy to collect. Government agencies offer large amounts of it for free.<sup>28</sup> An entire industry of data brokers makes a living collecting as much data as possible and selling it to companies that find it valuable. Although retaining data exclusively may confer a competitive advantage, it also imposes an opportunity cost in the form of lost revenue and fewer opportunities for innovation. This is why many companies are finding the short-term benefits of hoarding data do not outweigh the long-term benefits of sharing it. For example, the Project Data Sphere helps pharmaceutical companies share cancer research data in the hope of accelerating discoveries.<sup>29</sup> It is likely that the amount of this lost revenue increases with the exclusivity and strategic value of the data.

Surprisingly, traditional antitrust analyses can actually deter incumbents from sharing data. Competition policy only comes into play when a company has power within a specific market. If a dominant firm refuses to sell data, it is not a player in the relevant market. By selling data to rivals, the company would expose itself to potential charges of domination even though those rivals now would have more data than they would have had otherwise. This is what has happened to Google in Europe. The European Commission is investigating Google for antitrust concerns regarding the terms and conditions it places on manufacturers of Android-based phones.<sup>30</sup> Thus, by allowing a competitive market for its mobile operating system, Google has exposed itself to more liability, not less. Apple, meanwhile, avoids these concerns simply by manufacturing its own phones.

In some cases, regulators have required companies to make data available to competitors.<sup>31</sup> This typically occurs in the context of a proposed merger that the regulators believe would

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result in the new entity having a dominant position in a particular data market. In order to encourage new entrants or protect the position of existing competitors, competition agencies can require the merged entity to sell data to rivals at a market price. So far regulators have largely resisted calls to use this power to introduce greater competition in the absence of a merger or specific anticompetitive behavior.

Continued restraint is wise because mandatory sharing might actually increase privacy and data security concerns in cases involving personally identifiable information. Because the incumbent would have limited power to attach appropriate security and use requirements on its rivals, firms that lack either the capacity or incentive to impose high data standards might end up possessing the data. Regulators would have to spend significant resources in order to implement and enforce any restrictions from outside. Yet any privacy restrictions on the market for data brokers would make it harder for new companies to gain a foothold in downstream markets.

Continued declines in the cost of computer storage and processing have also lowered the cost of storing and using data.<sup>32</sup> Cloud services reduce barriers to entry by transforming fixed costs into variable costs. This helps entrants scale up. This is important because new companies do not necessarily have to duplicate an incumbent's complete offerings in order to compete effectively. New firms can limit themselves to specific market niches, including those with high profit margins. For example, in addition to facing another large competitor in Lyft as well as the traditional alternatives of taxis, public transportation, and personal cars, Uber faces a number of competing platforms in New York City alone, some of which serve only a small portion of the total market.<sup>33</sup> Snapchat, which is rumored to be contemplating an initial public offering valuing it at over \$25 billion, effectively competes with Google and Facebook, mainly by offering a messaging service.<sup>34</sup>

The main impediment to more competition is often government. By imposing high regulatory and licensing costs, governments can substantially raise the fixed costs of entering a market, especially for smaller firms. Regulatory uncertainty or hostility can also deter competitors. For instance, Uber has few competitors in France, largely because the government has been putting Uber executives in jail.

#### The Limited Power of Data-Rich Firms

The worry that enough data will make a firm all-knowing, able to see market opportunities, and preempt challengers, assumes a lot regarding the quality and quantity of the data as well as management's ability to interpret and act on the information.

For one thing, companies frequently make bad strategic decisions even when they have lots of information and strong incentives. Although companies with significant market share have engaged in a large number of acquisitions, academic evidence shows that the vast majority of mergers have historically failed to earn a competitive rate of return.<sup>35</sup> Data-intensive companies have not been immune to miscalculation. Time Warner's purchase of AOL serves as just one example. More recently, Microsoft ended up writing off \$13 billion

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after mergers with aQuantive and the mobile unit of Nokia both failed.<sup>36</sup> Rather than contributing to market dominance, these mergers weakened the acquiring firm.

For some companies their competitive advantage is the algorithm; for others, including some who are making their algorithms open source, it is the data. For the former case, IBM is training its cognitive computing system, Watson, to help analyze medical information, including the discovery of new drugs for immuno-oncology.<sup>37</sup> To do this, it needs lots of data. But the data would be much less valuable without Watson's sophisticated artificial intelligence capabilities. Sometimes these algorithms are protected as intellectual property, but that does not prohibit competitors from trying to write better ones. And sometimes these algorithms are made public.<sup>38</sup> For example, Google published the source code for its artificial intelligence engine, TensorFlow, to encourage others to find uses for it, and ways of improving it, which Google might not have considered.<sup>39</sup> But even the best algorithms can be defeated by poor business strategy. As an example, one ex-executive attributes the fall of MySpace largely to poor business decisions.<sup>40</sup>

#### The Fragility of Market Power

Many data-driven companies are in highly innovative industries. This continually changes the competitive environment around them. With enough change, their advantages can quickly be overcome by a new competitor with a different technology or business model. Examples of firms that saw their dominance eroded abound. MySpace and Friendster lost to Facebook; AltaVista and Lycos lost to Google; Blackberry and Nokia were displaced by the iPhone, which now competes against Android phones. And, despite all of Google's market power, Google+ remains a weak threat to Facebook. The history of information technology has been one of quasi-competitive markets succeeding each other as the underlying technology changes. The prospect of rapid growth and large profits allows new companies with a good idea to raise capital. This ability serves as a constant threat to incumbents.

Stucke and Grunes dismiss the relevancy of this history by arguing that the defeated firms fell because of mismanagement and technological obsolescence rather than because they lacked an unassailable competitive advantage.<sup>41</sup> But that is beside the point. Or maybe it is the point. While decline might have been avoided by different actions, in each case the company's dominant market position was unable to save it from a failure to remain at the forefront of offering consumers better technology and services. Companies that offer the best products deserve to remain market leaders whether they are incumbents or challengers. The important question is whether the mere possession of large amounts of data can prevent a company from being displaced in the face of a better product. The answer to that question is no. While it does cost something to switch to another service, many users already use more than one competing product, and past experience shows that significant switches do occur when the difference in quality becomes large enough.<sup>42</sup>

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## Existing Competition Policy Is Fully Capable of Handling Data Concerns

Stucke and Grunes make two arguments regarding the weakness of current antitrust policy. First, they agree with defenders of the current approach that competition policy generally has good tools for evaluating the effect of mergers or anticompetitive behavior on prices. But many markets and practices for data do not involve prices, such as Internet platforms that provide free services. They allege that authorities have a much tougher time adequately evaluating the implications of a degradation in non-price competition such as product quality or privacy protection. Current policy focuses on whether a company can implement a small but significant and non-transitory increase in price. And the impact of a price change on consumer welfare is fairly measurable. But regulators may have a tougher time evaluating the probability of a decrease in the quality of a product. The impact of reduced quality on consumers may also be more difficult to estimate.

Second, Stucke and Grunes argue that “free” services are not actually free because consumers must provide their personal data and give up their privacy. And they claim that because of a lack of transparency, consumers do not know how much they actually pay.<sup>43</sup> These sentiments have been echoed by Commissioner Vestager:

Very few people realize that, if you tick the box, your information can be exchanged with others. ... Actually, you are paying a price, an extra price for the product that you are purchasing. You give away something that was valuable. I think that point is underestimated as a factor as to how competition works.<sup>44</sup>

Both concerns are not valid.

### Measuring Threats to Non-Price Competition

In response to Stucke and Grunes’ first argument, while the extent and importance of non-price competition can be difficult to quantify, this difficulty does not affect the proper application of government powers. It does make it harder to evaluate what action should be taken, however. A lack of good data and the existence of close calls complicate many aspects of regulatory law.

Measurement problems aside, Stucke and Grunes argue that because the costs of reduced competition can be high, regulators should be more aggressive in data-driven mergers, even if this increases the risk of mistaken intervention.<sup>45</sup> Others disagree. As Commissioner Ohlhausen points out, the U.S. Supreme Court has used a series of cases to make it clear that the primary criterion for antitrust enforcement is economic efficiency.<sup>46</sup> U.S. regulators cannot use their powers to address speculative threats to competition. They must present the courts with sufficient evidence to conclude that a merger would result in real harm to consumers. The EC faces similar restraints because companies can appeal its decisions in the courts. This rightly constrains the agencies’ ability to adopt a different standard even if they wanted to.

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A secondary goal of competition policy is to give companies an incentive to develop products and services that deliver substantial consumer value by letting them keep the higher profit margins from innovation. Thus, a company is allowed to keep a monopoly if it acquired it by offering a unique product that consumers value. But it is not allowed to prevent other companies from competing with it, nor can it use its monopoly in one market to increase its market power in other markets.<sup>47</sup>

### Dealing With Free Services

Few argue that antitrust policy suddenly becomes irrelevant once a service becomes free. Free services commonly arise in the context of Internet platforms. Some of these companies make money by matching different sides of a given market. For example, eHarmony matches people looking for spouses, and Apple matches phone users with app developers. Often at least one side of the market receives the platform's services "free" in an advertising-supported model. Economists broadly agree that antitrust authorities need to carefully examine the impact on all sides of a market before ruling on the possible competitive implications of platform behavior.<sup>48</sup> Free services also complicate traditional antitrust practice. For instance, market dominance is usually measured by the ability to sustain an increase in prices. This is less relevant when prices are zero. On the other hand, the practice of pricing services below cost has usually been a strong indicator of unfair competition. But this is not necessarily true with platforms.<sup>49</sup>

As discussed above, there is no evidence that data monopolies providing free services have significant market power in the market where they make most of their money—advertising, or that they use any market power they do have to provide worse services.

### Competition Policy Is Not Needed to Protect Privacy

Stucke and Grunes make three main arguments regarding privacy and competition, which they view as one of the most important aspects of non-price competition. First, they argue that privacy and competition goals can be intertwined in cases where companies collect large amounts of personal data.<sup>50</sup> In other words, they argue that the risk to privacy is higher when the possession of large amounts of personal data gives companies more market power. Likewise, they argue that even when market power will not lead to higher prices because services are largely provided for free, consumers can still be hurt because a lack of competition will reduce the pressure on companies to compete for customers by limiting their collection and use of consumer data. Therefore, the provision of free services does not imply that competition is not important, and competition officials need to protect competition on non-price facets of the market.

Similarly, Vestager has stated:

The more data you can collect, the more you know, the better product you can provide, but also the more powerful will you be towards others. ... It isn't solely a competition issue. ... It's very important for us to be able to say what is competition-related and what is an issue of privacy, ownership,

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data [and] how you can be as secure on the net as you can be in the physical world.<sup>51</sup>

Second, Stucke and Grunes argue that natural competition will not provide consumers with the privacy protections they want, partly because companies with large amounts of personal data can exert market power to prevent the entry of competitors who might offer greater privacy protections. Therefore, competition policy should play a more active role to encourage competition on privacy factors.<sup>52</sup> They cite a poll by the Pew Research Center saying that 93 percent of Americans think it is important to control who has information about them, yet most consumers feel that they have lost control and are unaware of who has access to their personal information, what data is used, and how and when it is used. They also claim that new entrants might compete by offering more privacy protection but for network effects and anticompetitive behavior

Finally, Stucke and Grunes argue that, even though consumers voluntarily share enormous amounts of information online, policymakers cannot really know their preferences unless consumers are fully informed about the costs and benefits of their actions and the market offers a “competitive array” of options to match their privacy preferences.<sup>53</sup>

None of these concerns are valid.

#### The Narrow Overlap of Competition and Privacy Policy

It is, of course, true that some companies have tighter privacy policies than others. Stucke and Grunes cite WhatsApp, which was eventually acquired by Facebook. But, as we will see below, consumers generally have a lax attitude toward privacy; they say they want more of it, but they voluntarily share a lot of personal information online and generally do not support websites that cost even a little more, even when they claim to have better privacy policies. So there is no evidence a robust demand for enhanced privacy is going unmet.

More significantly, consumer-protection agencies have sufficient powers to ensure that companies honor any pledges they make about their data policies and comply with existing privacy regulations. They also have broad authority to address problems arising from the actual misuse of data. In the United States, a variety of laws protect privacy in specific market areas. Examples include the Children’s Online Privacy Protection Act, the Health Insurance Portability and Accountability Act, and the Fair Credit Reporting Act. In the European Union, the protection of personal data is enshrined in the EU Charter of Fundamental Rights, and enforced via the ePrivacy directive and the new General Data Protection Regulation (GDPR). These laws apply as much to data-rich tech giants as small start-ups. If policymakers are concerned with privacy, they are certainly capable of enacting stricter privacy laws as the EU has done, although if done improperly these regulations can have significant economic costs.<sup>54</sup>

Moreover, there is little evidence that providing users with more privacy gives a company a competitive advantage; otherwise more companies would be competing on this basis. So there is little reason to think that more competition on privacy would occur even if markets

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were perfectly competitive. From the company’s point of view, privacy restrictions limit possible data uses and therefore reduce revenues and the quality of service. And, despite what privacy advocates might wish, there is little evidence that consumers will pay an appreciable amount for restrictions on how their data can be used.<sup>55</sup>

In a recent article, attorney Darren S. Tucker writes: “In industries where firms differentiate themselves through their approaches to privacy, a merger could reduce the incentive of a merged entity to compete on this basis. A substantial lessening of this competition could be a basis on which to block a proposed transaction.”<sup>56</sup> He predicts, however, that the number of transactions raising serious concerns about an aspect of non-price competition is likely to be very limited. This is partly because, in order to justify antitrust action in the United States, the merger would need to involve rivals that consumers view as the lead competitors on that aspect. In addition, other rivals would have to be unlikely to reposition themselves to compete with the merged firm on those grounds. The merger of two companies that do not compete on that specific aspect would not raise a similar competitive threat.<sup>57</sup>

#### Markets and Privacy

The market for privacy is imperfect. Therefore, we should not expect it to solve all the privacy preferences of all users, since those preferences are so diverse. But this does not mean that decisions on antitrust issues should be driven by privacy concerns or that privacy laws are inadequate. There is no evidence that any lack of competition in providing services that feature greater privacy protections is due to entry barriers rather than a lack of consumer demand. Therefore, regulators should apply traditional competition analysis to the competitive aspects of a problem and use privacy laws to deal with privacy issues.

Privacy law relies heavily on the standard of informed consent to the use of personal data. But privacy advocates increasingly question the degree to which standard terms of use statements truly imply user consent.<sup>58</sup> It is true that few users read these documents and that to use these services one has to agree to the company’s policies. But that does not mean that the documents serve no purpose. First, they provide a record of how the company intends to collect and use data. This can subject companies to public scrutiny and criticisms by those who think they are unfair. Unfortunately, the threat of legal action can motivate the company to draft extremely comprehensive terms that incorporate any possible future uses it might imagine. This makes it difficult for users to understand which uses are actually likely. Nevertheless, the terms of use can create a market for more private services by allowing private groups to study them and inform consumers about their contents and whether any abuses have occurred. In fact, it is the possibility of this competition that privacy advocates worry will be preempted by market power.

Second, these agreements serve as terms of the contract between the company and the users. Regulators have taken action against companies for violating their own terms.<sup>59</sup>

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Third, it is hard to see any other alternative. Contracts of adhesion are widely accepted in many markets because they reduce transaction costs, especially in instances where it would be impractical to negotiate with every user or provide a menu of alternatives.

Perhaps most important, the terms of use do not prevent legislators or privacy regulators from enacting binding laws on how companies protect and use data, irrespective of what the terms of use say. The main reason that this rarely happens is because there have been relatively few instances of companies engaging in clearly inappropriate behavior, and those have been handled by narrow disciplinary actions rather than broad regulation. Since Internet platforms have few valuable assets other than their brand and user base, they have an incentive to build a reputation for trust. This does not always overcome the temptations of profit or secrecy, but that is true for every industry. Past experience shows that users are willing to punish companies that misuse their data.<sup>60</sup>

Another argument regarding the inadequacy of privacy laws to protect consumer welfare is that the collection of large amounts of data allows merchants to practice price discrimination, charging different consumers different prices depending upon the likelihood that they will buy a product.<sup>61</sup> The proposed link between Big Data and price discrimination is set out by Stucke and Grunes:

With companies collecting detailed information on consumers' online and offline activities, often without consumers' knowledge and consent, the risk of abusive practices increases. Consumers can pay higher prices due to the erroneous information collected or inferred about them. Moreover, data-driven behavioral advertising can yield behavioral exploitation, where the more vulnerable are discriminated against. They end up with fewer choices of goods or services, higher prices, and poorer quality, thereby increasing wealth inequality.<sup>62</sup>

Indeed, there is some evidence that companies are getting quite good at doing this.<sup>63</sup> This is often combined with the worry that disadvantaged groups will end up paying higher prices. But there are two reasons why price discrimination might not be a bad thing. First, to the extent that a platform has market power and can only set one price, its incentive is to raise prices on everyone and decrease supply. This allows the company to capture more value from the product and lowers the total benefit to society. If the company can charge different prices to different users, this social loss is reduced. Some consumers might still pay higher prices, but buyers will not purchase a product unless it makes them better off. Second, the ability to charge different prices is not limited to raising prices. Companies also have an incentive to lower prices for consumers who are reluctant to purchase the good.<sup>64</sup> This effect might actually be progressive. The company will charge a higher price to those users whose demand is inelastic. To the extent that lower-income consumers are more price responsive, they will benefit from price discrimination.<sup>65</sup>

But privacy proponents are not satisfied with this. They raise the threat of “behavioral exploitation” to justify restraints on the use of data. Behavioral advertising, in which

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companies combine insights about how people make decisions with large amounts of data in order to approach consumers at the time and in the way that they are most “vulnerable” to making a purchase, is here assumed to take advantage of people not only by getting them to pay higher prices for things that they want, but also by selling them things that they do not want. But proponents do not explain why consumers would regularly do this or why data will worsen the problem.<sup>66</sup>

#### Consumer Preferences Regarding Privacy

When pointing to the competitive threats raised by amassing large amounts of data, advocates of expanding competition review often raise privacy concerns. Faced with the fact that data-rich platforms often offer users their services for free, they fear that the collection of large amounts of data will still shift market power from consumers to companies, forcing the latter to give up valuable data. The analysis is confused, however, by the fact that many of these advocates seem to value data privacy and security much more highly than does the general public. The true source of their frustration is not that the privacy authority lacks the power to impose higher safeguards, but that it won't.

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There are certainly cases when widely shared privacy norms should trump economic considerations. An example might be a public database of photos and addresses of minors published without parents' permission, a case that the U.S. Children's Online Privacy Protection Act probably already covers. But those norms should reflect majority opinion, not the specific preferences of a subgroup. And in many cases, as in blanket opt-in requirements for commercial data use, regulators should weigh the actual benefits from enhanced privacy against the costs in terms of reduced productivity and innovation. This limits privacy authorities because many people, including the younger generations, seem to have a pretty lax attitude about the information they share.<sup>67</sup> As Geoffrey Manne and R. Ben Sperry argue:

The size of a database (i.e., the number of consumers on whom data is collected) doesn't seem like a particularly relevant aspect of product quality in and of itself, and for each consumer the “problem” of a large concentration of information being accumulated in a single company is seemingly insignificant. Meanwhile, to the extent that collection of data from more consumers is a function of increasing network effects, such accumulations of data are almost certainly more likely to correlate with improvements in product quality rather than degradations.<sup>68</sup>

This makes some sense. Do you really care whether your location, favorite websites, and medical prescriptions are stored in a machine somewhere in the cloud? Or do you care about how and by whom that data might be used? And do you mind if the result of using it is cheaper services, more pertinent ads, better medical advice, and more convenient technology? To the extent citizens are worried about the actual use, privacy regulators should be less concerned with how much data a data-rich company possesses. Instead, they should concentrate on how securely the data is held, what uses it is actually put to (as

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opposed to what data *might conceivably* be used for at some time in the future), and whether consumers have given the appropriate level of consent. Existing laws empower them to do all of these things.

This does not mean that consumers would not prefer more privacy. But most goods and services come as a package deal. I really value the comfort and convenience of first-class air travel. I am just not willing to pay for it. So consumers might tell a pollster that they are very concerned with the privacy of their data, but still knowingly frequent sites that offer little privacy protection even if other more private, but less useful, sites exist.<sup>69</sup>

## **COMPETITION ANALYSIS APPLIED TO RECENT MERGER CASES**

Over the past decade, U.S. and European regulators have faced a number of merger cases involving companies in which data collection and use was a large component of the firm's business model. In many of these, commentators urged the agencies to incorporate general data concerns into their review process. For the most part, the agencies have resisted these suggestions and stuck to the traditional principles of merger review: market definition, market share analysis, and the search for whether the new entity would possess market power, largely measured as the ability to maintain a sustainable marginal increase in price.

Regulators have resisted opposing mergers unless they can identify a clear harm to competition in a discrete market. This review shows why sticking with this approach remains wise. The agencies allowed mergers to proceed when they did not affect the amount of competition in existing markets, even if the acquiring company ended up with significantly more data. In contrast, when a merger did threaten competition, the agency was able to protect consumers, often by requiring that data be shared with competitors. Most of the harms articulated by opponents never materialized. In other cases, the agencies were able to reexamine the facts in response to new developments. At least at this time, it does not seem like the agencies got any of the decisions wrong.

### **Automatic Data Processing/AutoInfo Merger**

During 1995 to 1996, ADP's acquisition of AutoInfo raised concerns that the firm would have an "information monopoly" on the systems used by scrapyards to trade salvage.<sup>70</sup> However, the FTC's successful lawsuit against ADP—which resulted in a fine of \$2.97 million—was not based on allegations of uncompetitive behavior. It was based on a violation of the Hart-Scott-Rodino Antitrust Improvements Act of 1976 (HSR), which requires merging companies to submit—under item 4(c) of the HSR form—any documents they produced while assessing the benefits of the transaction. ADP did not file any 4(c) documents, even though the court later discovered that ADP did possess documents that it should have provided—including some that substantiated accusations the firm had behaved anticompetitively.<sup>71</sup>

The rise of e-commerce during the 20 years since that case does nothing to diminish companies' HSR responsibilities, but it has completely changed the competitive landscape. The incentive for ADP to acquire AutoInfo, and any monopolistic threat it posed, is vastly diminished in an era when scrap dealers can use a variety of online platforms to buy and

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sell parts, or even create new ones of their own. No information monopoly exists in the scrap-metal business, and no likelihood exists of one being created: If Alphabet decided to launch Google Scrapheap, this would not prevent rival offerings such as Amazon Junk—or eBay’s standard service. As with the Google/ITA merger, antitrust concerns around data dissolve when the information in question ceases to be excludable, whether that is due to regulation, or the emergence of new technologies.

### **Google/DoubleClick Merger**

Google’s decision to acquire DoubleClick in 2007 gave the FTC its first public opportunity to study the intersection of antitrust policy and privacy.<sup>72</sup> Google already dominated search advertising, and both companies competed for online display advertising, although they concentrated on slightly different parts of the market. Both also held vast amounts of data. Opponents of the merger argued that the combination of this data raised privacy concerns and would give Google’s AdSense service a competitive advantage over advertising rivals.

Both the FTC and the European Commission approved the merger without conditions. Both agencies found that Google and DoubleClick were not competitors in any market for online advertising. Furthermore, because DoubleClick did not have market power, it would be unable to exclude rivals by combining its service with AdSense. DoubleClick’s contracts with its customers prohibited sharing the data in order to target advertisements. Google also committed to not combining the data post-merger. Both agencies found that, even if Google breached this agreement, DoubleClick’s data were not unique, since competitors could find similar data from other sources. Although the FTC recognized that privacy can be a non-price dimension of competition, it also found that antitrust laws do not allow it to block a merger solely to protect privacy.

Recently, several groups filed a complaint with the FTC alleging that Google violated user privacy when it merged data collected by its various services, including DoubleClick.<sup>73</sup> Although Google required users to affirmatively opt in, and the decision was widely reported in the press, the complainants allege that Google did not adequately educate users about the consequences of their decision. The FTC is currently evaluating the complaint.

### **TomTom/Tele Atlas Merger**

TomTom pioneered the market for portable navigation devices, which help drivers and others get detailed street-by-street directions to any destination. In 2007 it sought to acquire Tele Atlas, one of two main suppliers of “navigable digital-map databases,” the raw street data that makes the GPS system valuable. This vertical merger raised the possibility that the new entity would try to foreclose competition in navigation devices by either refusing to sell the database to competitors or selling a smaller subset of the data.

European antitrust regulators refused to stop the merger. The European Commission defined the market narrowly to include navigable digital-map databases but excluded broader map databases. It also rejected TomTom’s argument that Google or Microsoft could quickly enter the market in response to any price increases. The Commission found

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*Regulators have resisted opposing mergers unless they can identify a clear harm to competition in a discrete market. This review shows why sticking with this approach remains wise.*

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that entry would require the compilation of large amounts of data that would be costly and time consuming even for these large platforms.

Although the Commission found that the combined entity could exercise market power, it determined that it would lack an incentive to do so. The loss in downstream revenue from not selling databases to potential rivals would outweigh the increased profits from any gain in market power over navigation devices. As a result, there was no threat to competition. As it turned out, the rise of smartphones undercut the market for GPS devices and drew in companies like Google, substantially reducing the value of the merger.

### **Reed Elsevier/ChoicePoint Merger**

In 2008, the FTC challenged the \$4.1 billion acquisition of ChoicePoint, a data-aggregation company, by Reed Elsevier, a global provider of various professional information services.<sup>74</sup> Although both companies provided many other products and services, both offered a subscription service to law-enforcement agencies to access public and nonpublic information on individuals and businesses. The FTC ruled that the merger would stifle competition between these competing offers to law enforcement by bringing them under a single owner, and so required ChoicePoint to divest one of its key products, CLEAR, to Thompson Reuters, a competing information-service provider.

The FTC correctly intervened in the merger because it would have significantly reduced competition in the market for a specialty service to law enforcement. In virtually all respects, this was a textbook antitrust case. If the companies in question were providing any other product—such as vacuum cleaners, dishwasher detergent, or car tires—the antitrust problem would have been the same: the construction of a monopoly through acquisition.

The FTC did not have antitrust concerns regarding the amount of data the company would have held after the merger. Indeed, law-enforcement agencies and others could still make the investments necessary to collect this information themselves. The FTC's concern was that the merger would remove the downward pressure on prices that resulted from competition between these products. The solution—divesting part of the company to a competitor—helped to maintain that competition, and did not prevent Reed Elsevier from acquiring an extremely large source of data.

### **Dun & Bradstreet/Quality Education Data (QED) Merger**

The FTC objected to the acquisition of QED, a company offering marketing services in the education sector, by MDR, a subsidiary of the business-information provider, Dun & Bradstreet.<sup>75</sup> QED and MDR were the only significant suppliers of marketing data on staff in kindergarten to twelfth grade (K-12) education in the United States, and the merger would have created a monopoly in this market. In the final settlement, MDR agreed to divest some assets to MCH Strategic Data, to preserve competition in the market.

The FTC correctly intervened since the merger threatened to eliminate competition between two leading rivals. As with the Reed Elsevier case, the amount of data held by the

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companies was not a problem. Instead, the issue was that the merger would have created a monopoly in the market for K-12 staff marketing data.

### **Google/ITA Merger**

In 2011, the antitrust division of the U.S. Department of Justice (DOJ) filed a lawsuit to block Google's acquisition of ITA Software, producer of QPX, which provides pricing information for flights to companies such as Expedia, Orbitz, Kayak, and Microsoft's Bing Travel. The DOJ's complaint was that Google's use of ITA's software to provide its own price-comparison service, which would compete with these firms, would give it the means and the incentive to cut off their access to QPX.<sup>76</sup> The DOJ proposed a settlement whereby Google would be allowed to purchase ITA on the condition it license QPX to its competitors for five years. Google accepted.<sup>77</sup> This case shows that nonpersonal data comes up in antitrust cases, too. However, the DOJ's objection was not that the data itself would give Google too much market power, but that access to QPX was excludable. Once the excludability had been neutralized by the settlement, Google's acquisition of ITA ceased to be a concern—unfettered access to the data itself was not found to be harmful to competition.

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*This is an antitrust issue that may eventually be neutralized by technological change.*

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### **Costar/LoopNet Merger**

Costar, the largest provider of commercial real-estate information services in the United States, acquired LoopNet, owner of the most-used commercial real-estate information database in the country.<sup>78</sup> The FTC stepped in and forced CoStar to sell some of LoopNet's stake in Xcelligent, another provider with a business model closely resembling CoStar's, and which received data and financial investment from LoopNet. The FTC did this in order to maintain competition in the market for commercial real-estate database services.

Again, the FTC's intervention makes sense because the merger threatened to reduce competition between rival commercial services. But the outcome did not prevent CoStar from acquiring any of LoopNet's data: The concern was not that CoStar's access to data would allow it to reduce competition, but that its ownership and control of the leading commercial products in this market would, by eliminating competition both between CoStar and LoopNet and between CoStar and Xcelligent.

### **Facebook/WhatsApp Merger**

Facebook of course is best known for the personal webpages it allows its users to produce for free. However, it has tried to add a number of services to this platform, including a texting network. It uses the data generated by this network to offer better services to both users and advertisers. WhatsApp was a rival messaging service that was rapidly gaining new users. Unlike Facebook, WhatsApp did not sell advertising space nor collect large amounts of personal data on its users. Instead, it charged some users a small fee. When Facebook proposed to acquire WhatsApp in 2014, many privacy advocates worried that the merger would eliminate a main challenger to Facebook and reduce options for users who valued privacy.

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The FTC and the European Commission declined to challenge the merger. Although the FTC did not comment on the merger's antitrust implications, the director of its Bureau of Consumer Protection did warn Facebook about using data generated by WhatsApp users. The purpose was to "make clear that, regardless of the acquisition, WhatsApp must continue to honor promises to consumers," including those dealing with privacy.<sup>79</sup> If Facebook wished to make material changes in how it used the data, it would have to obtain the affirmative consent of users. In addition, it could not misrepresent the extent to which it maintained the privacy of the data.

Unlike the FTC, the European Commission did consider the antitrust implications of the merger.<sup>80</sup> First, it found that, given Facebook's post-merger strategy (which was redacted from the decision), it would lack an incentive to introduce targeted advertising on WhatsApp by using data collected from its users. The Commission also looked at whether Facebook would use WhatsApp data to target the same users on other parts of Facebook's platform. It found that whether or not Facebook did this, the increase in data volume would not strengthen its position in advertising, given the large number of other companies that collect data on the Internet. The Commission found that "Any privacy-related concerns flowing from the increased concentration of data within the control of Facebook as a result of the transaction do not fall within the scope of EU Competition law."<sup>81</sup> However, the Commission recently charged Facebook with misleading it during the investigation because in August 2016 the company stated that it would share some of WhatsApp's phone numbers with its parent company.<sup>82</sup>

### **Nielsen Holdings/Arbitron**

The FTC sued Nielsen, an audience-measurement company, because it feared Nielsen's acquisition of Arbitron, a provider of cross-platform ratings services, would allow Nielsen to become a nationwide monopoly provider of cross-platform audience-ratings services—a market that does not exist in the United States, but which Nielsen and Arbitron would have been positioned to develop.<sup>83</sup> The FTC required the divestiture of some of Arbitron's assets to another buyer in order to prevent this from happening.

Nielsen already had a near-monopoly on selling information on TV ratings in the United States, and Arbitron had a strong position in other platforms, including radio. One reason these firms were so competitive was that they had the largest sample audiences of their peers, which remains the dominant means for monitoring ratings with traditional broadcasting. Given these firms' dominant positions nationwide, The FTC was correct to intervene, because no company was yet in a position to challenge these two firms at a national level.

This is an antitrust issue that may eventually be neutralized by technological change. First as broadcast television and radio is supplanted by on-demand content online, the types of audience measurement tools used by these companies will become less important, because providers can directly measure the number of users accessing the content. While it is true that subscriber-funded providers such as Netflix and Amazon Instant Video do not release

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these numbers—and even if they did, content owners might still want independent verification—the audience for these services extends far beyond the geographic reach of Nielsen’s U.S. monopoly.<sup>84</sup> Moreover, the ability to individually monitor subscribers’ viewing habits makes it possible to target particular content at particular users, with the expectation they are more likely to enjoy it and more likely to keep their subscription, meaning low audience figures for a given show need not be a sign of commercial failure.

Second, new technology, including smart TVs and connected audio devices, such as Amazon Echo and Google Home—or even smartphones—could, in theory, measure household viewing and listening habits by identifying audio watermarks in broadcasts, just as Nielsen’s devices do.<sup>85</sup> This creates the potential for other companies to challenge Nielsen in the ratings market, provided they can find the right way to incentivize their customers to consent to this kind of monitoring.

### **Core Logic/DataQuick Merger**

In 2014, the FTC intervened in CoreLogic’s acquisition of DataQuick.<sup>86</sup> Both CoreLogic and DataQuick were providers of property information and analytics to the real estate, mortgage lending, and secondary investor markets in the United States. They were also two of the only three providers of national assessor and recorder bulk data. Although much of the data in question is generated regionally by many different companies, the FTC argued that the merger would have created a monopoly on national data because simply aggregating the available regional data did not provide national coverage. CoreLogic agreed to license some of its national bulk data to Renwood RealtyTrac, a competitor, in order to strengthen that firm and improve competition in this field.

Once again, the competition issue at the heart of this case was not the amount of data the companies held, but the reduced competition in the market to sell this information that would have occurred through the proposed merger.

### **Google/Nest Labs Merger**

In 2014 Google announced that it would pay \$3.2 billion in cash to purchase Nest Labs Inc. Nest Labs is the manufacturer of a home thermostat that links to the Internet. Unlike its predecessors, Nest’s device monitors residents’ behavioral patterns, including temperature preferences and comings and goings to optimize heating and cooling over the day. The company later introduced a smoke and carbon monoxide detector and a security camera that also collect data. At the time of the merger, privacy advocates worried that the merger would give Google intimate insight into the private off-line behavior of Nest customers, giving it an unprecedented ability to target them for advertising.

The FTC disagreed, quickly deciding not to challenge the merger. Nest Labs promised not to share its data with Google without users’ permission. That should not be too surprising. The prime motivation behind the merger was almost certainly not to use Nest’s data to better target consumers on the rest of Google’s platform or even to target Nest users through their devices. Instead, the prime attraction was probably to gain a competitive position in providing the operating system for the smart home, which can potentially



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connect all of a homeowner's appliances and even individual outlets to the Internet. Despite the threat of dominance identified by privacy advocates, the merger may ultimately have disappointed Google.<sup>87</sup>

### WHY IT IS IMPORTANT TO GET DATA POLICY RIGHT

Despite the worries expressed above, the widespread acquisition of large amounts of data is much more often a necessary strategy for companies to maintain competitiveness and introduce innovative products than an attempt to limit competition.

Just like any other important resource, companies may use data in many ways to thwart competition: They can conspire to raise market prices; firms holding major market shares can merge; they can use market power in one sector to unfairly thwart competition in another; a dominant company can try to extend its position by purchasing an upstream or downstream partner. In each of these cases, existing antitrust law allows regulators to take effective action. But merely having more data than one's rivals does not itself threaten competition any more than having more machines does. And the fear that large amounts of data may create other social problems needs to be addressed to other regulators, not the antitrust agencies.

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Regulators should be concerned about stifling the large social value created by the gathering, analysis, and sharing of data. Innovation often depends on it. Moreover, if regulators began preventing companies from acquiring large amounts of data, this would delay or prevent many important technological advancements. For example, Tesla's self-driving technology (which faces increased competition from Google, rival car-makers, and others), IBM Watson's ability to diagnose medical illness, and the Weather Company's weather predictions would all be impossible without massive amounts of data. Data is also how Google often knows what you are searching for before you finish typing it in, how Facebook connects you with lost friends, and how Waze calculates the best route for drivers to take, all conveniences that consumers already take for granted.

It is very easy to reduce total welfare by overestimating the threats of data gathering and dismissing the public benefits of new products that do not yet exist. The fact is that many data-rich companies offer free or low-cost services that are extremely valuable to billions of people, most of whom have a pretty good idea of what data they are providing companies and how it might be used. Existing laws are capable of dealing with clear abuses. Regulators can do a lot of damage by restricting the gathering and use of data in pursuit of preferences that are shared by only a minority of the population.<sup>88</sup>

### CONCLUSION

In the end, the differences of opinion expressed above are usually not about whether control over large amounts of data could in some instances be used to thwart competition. In some situations, it certainly can. The dispute is about the degree to which antitrust regulators should take preemptive action to limit the collection and use of data, not to address identifiable competitive threats, but to preemptively guard against possible harms, including threats to issues that are only loosely related to competition, such as privacy. As

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an example, Stucke and Grunes argue: “Harm from anticompetitive data-driven mergers and abuses by dominant firms can be significant. The harm not only involves higher advertising rates. The abuses of powerful tech firms can cause greater harm in the loss of choice, innovation, privacy, individual autonomy and freedom, and citizens’ trust in a market economy.”<sup>89</sup> But the speculative harms from concentration are unlikely and most likely outweighed by the benefits of scale. Any potential harms are more likely to be related to conduct, rather than structure, and these can occur in industries with higher as well as moderate concentration ratios. And it is not clear why traditional competition policy is inadequate to deal with this.

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## ENDNOTES

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## **ACKNOWLEDGMENTS**

The author wishes to thank the following individuals for providing input to this report: Robert D. Atkinson, Daniel Castro, and Nicholas Wallace. Any errors or omissions are the author's alone.

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