The Problems and Perils of Bootstrapping Privacy and Data into an Antitrust Framework

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I. INTRODUCTION

Increasingly, people use the internet to connect with one another, access information, and purchase products and services. Along with the growth in the online marketplace have come concerns, as well, particularly regarding both the privacy of personal information as well as competition issues surrounding this and other data.

While concerns about privacy and data are not unique to the internet ecosystem, they are in some ways heightened due to the ubiquitous nature of information sharing online. While much of the sharing is voluntary, a group of scholars and activists have argued that several powerful online companies have overstepped their bounds in gathering and using data from internet users. These privacy advocates have pushed the U.S. Federal Trade Commission (“FTC”) and regulators in Europe to incorporate privacy concerns into antitrust analysis.

We have undertaken a classification of the various proposed approaches to incorporating privacy into antitrust law elsewhere. Here, we focus on the two most-developed theories: first, that privacy should be considered in mergers and other antitrust contexts as a non-price factor of competition; and second, that the collection and use of data can be used to facilitate anticompetitive price discrimination. In addition, we analyze the underlying conception of data as a barrier to entry that is a necessary precondition for supporting either proposed theory of harm.

II. PRIVACY AS AN ELEMENT OF NON-PRICE COMPETITION

Under antitrust law, according to some advocates, the best way to understand privacy is as a component of product quality. Thus some privacy advocates have argued that privacy harms can lead to a reduction in the quality of a good or service, which is a standard category of harm that results from market power. Where these sorts of harms exist, it is a normal part of antitrust analysis to assess such harms and seek to minimize them.

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1 Executive Director and Associate Director, respectively, of the International Center for Law and Economics (ICLE). ICLE has historically received support from a broad coalition of groups interested in data, privacy, and competition policy issues, including Google, Amazon, and Facebook.


The Horizontal Merger Guidelines have long recognized that anticompetitive effects may “be manifested in non-price terms and conditions that adversely affect customers.” But this notion, while largely unobjectionable in the abstract, still presents significant problems in actual application.

First, product quality effects can be extremely difficult to distinguish from price effects. Quality-adjusted price is usually the touchstone by which antitrust regulators assess prices for competitive effects analysis. Disentangling (allegedly) anticompetitive quality effects from simultaneous (neutral or pro-competitive) price effects is an imprecise exercise, at best. For this reason, proving a product-quality case alone is very difficult and requires connecting the degradation of a particular element of product quality to a net gain in advantage for the monopolist.

Second, invariably product quality can be measured on more than one dimension. For instance, product quality could include both function and aesthetics: A watch’s quality lies in both its ability to tell time as well as how nice it looks on your wrist. A non-price effects analysis involving product quality across multiple dimensions becomes exceedingly difficult if there is a tradeoff in consumer welfare between the dimensions. Thus, for example, a smaller watch battery may improve its aesthetics, but also reduce its reliability. Any such analysis would necessarily involve a complex and imprecise comparison of the relative magnitudes of harm/benefit to consumers who prefer one type of quality to another.

A. Privacy Advocates Have Failed to Prove a Product Quality Case

The understanding of how quality-adjusted price may be affected by monopolization of data or a merger of entities with large quantities of data requires considerably more analysis than that offered by privacy advocates thus far.

In the merger context (where most of the antitrust-relevant concerns about privacy-as-product-quality have been raised), one claim is that the accumulation of “too much” information about too many consumers is itself (or perhaps will inevitably lead to) a degradation of quality affecting the merging parties’ products.

But that “problem” is almost certainly fully internalized by individual consumers. Consumers, with the assistance of consumer protection agencies like the FTC itself, are generally able to assess the risks of disclosure or other misuse of their information, and to assess the expected costs to themselves if such misuse should occur. Unless the collection of data on other people increases the uncertainty of this risk assessment, or makes harm to the individual consumer more likely (and it is difficult to see why either would likely be the case), it is difficult

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4 See, e.g., 2010 Merger Guidelines, sec. 1 (“Enhanced market power can also be manifested in non-price terms and conditions that adversely affect customers, including reduced product quality, reduced product variety, reduced service, or diminished innovation. Such nonprice effects may coexist with price effects, or can arise in their absence.”); 1997 Merger Guidelines, sec. 0.1 & note 6 (“The unifying theme of the Guidelines is that mergers should not be permitted to create or enhance market power or to facilitate its exercise. Market power to a seller is the ability profitably to maintain prices above competitive levels for a significant period of time... Sellers with market power also may lessen competition on dimensions other than price, such as product quality, service, or innovation.”).
to see why a company’s mere possession of private information about other people is of much concern to any particular consumer.

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.

While an increased amount of aggregated data at the disposal of one entity is not likely a significant harm in and of itself, it is surely the case that specific privacy policies that may affect a company’s treatment of a consumer’s own information may be relevant to his assessment of product quality. Particularly where consumers are paying a zero price (as search engine users and advertising consumers do), non-price competition, including over privacy policies, may be the only source of cognizable effects.

But in that case it must still be shown that a monopolist would have the ability and the incentive (and, in the case of a merger, that these would be merger-specific) to curtail privacy protections as a means of exercising its monopoly power. But this seems unlikely. As FTC Commissioner Joshua Wright noted in a recent speech on the internet of things:

Without any analytical lens through which to interpret [the fact that some companies possess large volumes of data], frankly, so what? . . . [Y]es, that generation of data has implications for both the benefits to consumers from the exchange of data and the risks of specific harms. But the fact that there are millions of data points is not—in and of itself—a privacy risk. What is required to inform policy is not a general suspicion of large data sets and their uses, but rather a more nuanced analysis at least acknowledging the tradeoffs involved for consumers at the margin.5

In the normal case, a monopolistic firm would have an incentive to degrade quality if doing so would lower its costs and the demand elasticity were smaller for downward adjustments in quality than for corresponding increases in price. But in the case of privacy protections—where, for example, one “harm” might be the maintenance of personal information on a firm’s servers for extended periods without deletion—it would seem that a firm might actually incur more cost in degrading (storing information for longer) than in maintaining (deleting cumbersome information from limited storage space) privacy.

At the same time, alleged harms arising from increased sharing of data with third parties (typically advertisers) is necessarily ambiguous, at best. While some consumers may view an increase in data sharing as a degradation of quality, the same or other consumers may also see the better-targeted advertising such sharing facilitates as a quality improvement, and in some cases “degraded” privacy may substitute for a (pro-competitive) price increase that would be far less attractive.

Similarly, claims that concentration will lead to a “less-privacy-protective structure”\(^6\) for online activity are analytically empty. One must make out a case, at minimum, that a move to this sort of structure would reward the monopolist in some way, either by reducing its costs or by increasing revenue from some other source. Absent a coordinated effects argument (which has not to our knowledge ever been raised), increased data concentration alone would seem to be insufficient; unilateral effects must be shown for such a merger to be anticompetitive. There appears to be little incentive for a monopolist to lower quality on its own, unless the barriers to entry are so high that no possible alternatives could exist.

In short, proponents of the theory of product-quality harm arising from monopolization of data need to make out an economically sound case for why the feared privacy degradation would occur at all, or ever be anticompetitive if it did, and this they have not done.

**B. Most Consumers Prefer “Free and Useful” to “More Private”**

As suggested above, on top of the difficulty in parsing out price effects from product quality effects, there seems also to be a tradeoff in consumer perception of product quality from increased data collection between the algorithmic improvements it may facilitate and the (posited) privacy harms it entails. A decrease in privacy protection is not simply a transfer from consumers to producers creating the famous deadweight loss of antitrust textbooks. Rather, the collection and use of larger amounts of information by a company like Google has the ability to improve the quality of Google’s products, whether by improving the relevance of its search results or the successful targeting of its ads. In either case, improving product quality while maintaining a constant zero price—i.e., decreasing quality-adjusted price—is not normally an antitrust injury.

In fact, as we describe in more detail below, several critics assert that the collection and use of more data amounts to a data barrier to entry precisely because it improves the quality of Google’s algorithm in ways that competitors can’t replicate. While there may not be a one-to-one correlation between data collection and product quality, it certainly cannot be said that there is an obvious decrease in quality for consumers when more data is collected, either.

The question of antitrust-relevant product quality really comes down to the relative numbers of, and magnitude of harm to, consumers who prefer more privacy protection versus those who prefer a better search experience and/or a lower monetary price. Most of the available data suggests that the vast majority of consumers value privacy quite a bit less than they do other product attributes, including price.\(^7\) For instance, revealed preferences in search and elsewhere

\(^6\) Swire, supra note 3 (“For these individuals, their consumer preferences are subject to harm if standard online surfing shifts to a less privacy-protective structure due to a merger or dominant firm behavior. In essence, consumers “pay” more for a good if greater privacy intrusions are contrary to their preferences. Under standard economic analysis, and standard antitrust analysis, harm to consumer preferences should be part of the regulatory homework for the competition agencies—such harms should be considered along with other harms and benefits from a proposed merger.”).

suggest that viewing a targeted ad (to access a news article, for example) amounts to a much lower “price” (i.e., psychic burden) on most people than does paying even just a few cents per month for an otherwise identical, ad-free experience. By the same token, consumers almost always choose free (ad-supported) apps over the 99 cent alternative without ads.\(^8\)

To make out an antitrust case based on such privacy “harms,” antitrust regulators would have to compare the magnitude of the harms to what appears to be a small group of privacy-sensitive consumers (who have not otherwise protected themselves by use of marketplace tools like track-blockers or by use of the opt-out options provided by major ad networks and data brokers) to the benefits received by the supermajority of consumers who are less privacy-sensitive. Beside the enormous difficulty of actually performing such an analysis, it seems extraordinarily unlikely that the harms would outweigh the benefits on net.

Unfortunately for proponents of a non-price competition theory of privacy and antitrust, not only is there no obvious reason why monopolists would have an incentive to degrade privacy, there is also no necessary (or even likely) connection between more data collection and use and harm to consumer welfare.

III. PRICE DISCRIMINATION AS A PRIVACY HARM

If non-price effects cannot be relied upon to establish competitive injury (as explained above), then what can be the basis for incorporating privacy concerns into antitrust? One argument is that major data collectors (e.g., Google and Facebook) facilitate price discrimination.\(^9\)

The argument can be summed up as follows: Price discrimination could be a harm to consumers that antitrust law takes into consideration. Because companies like Google and Facebook are able to collect a great deal of data about their users for analysis, businesses could segment groups based on certain characteristics and offer them different deals. The resulting price discrimination could lead to many consumers paying more than they would in the absence of the data collection. Therefore, the data collection by these major online companies facilitates price discrimination that harms consumer welfare.

This argument misses a large part of the story, however. The flip side is that price discrimination could have benefits to those who receive lower prices from the scheme than they would have in the absence of the data collection, a possibility explored by the recent White House Report on Big Data and Differential Pricing.\(^10\)

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\(^10\) EXECUTIVE OFFICE OF THE PRESIDENT OF THE UNITED STATES, *BIG DATA AND DIFFERENTIAL PRICING* 17 (Feb. 2015), available at https://www.whitehouse.gov/sites/default/files/docs/Big_Data_Report_Nonembargo_v2.pdf (“if historically disadvantaged groups are more price-sensitive than the average consumer, profit-maximizing differential pricing should work to their benefit”).
While privacy advocates have focused on the possible negative effects of price discrimination to one subset of consumers, they generally ignore the positive effects of businesses being able to expand output by serving previously underserved consumers. It is inconsistent with basic economic logic to suggest that a business relying on metrics would want to serve only those who can pay more by charging them a lower price, while charging those who cannot afford it a larger one. If anything, price discrimination would likely promote more egalitarian outcomes by allowing companies to offer lower prices to poorer segments of the population—segments that can be identified by data collection and analysis.

If this group favored by “personalized pricing” is as big as—or bigger than—the group that pays higher prices, then it is difficult to state that the practice leads to a reduction in consumer welfare, even if this can be divorced from total welfare. Again, the question becomes one of magnitudes that has yet to be considered in detail by privacy advocates.

Further, this analysis fails to consider the dynamic efficiencies of price discrimination. In a static model of third-degree price discrimination, some buyers receive lower prices (and purchase higher quantities), while other buyers receive higher prices (and purchase lower quantities). Thus, the net impact of price discrimination on output is ambiguous.\(^\text{11}\) But in a dynamic model, price discrimination may often be pro-competitive because the prospect of higher profits provides incentives for entry and allows for additional investments in innovation, increasing product variety, expanding retail outlets, or research and development.\(^\text{12}\) As mentioned above, price discrimination may allow for increased competition to all consumers, including previously unreached and poorer consumers, another pro-competitive outcome.\(^\text{13}\) Contrary to the received wisdom,\(^\text{14}\) economists have noticed that price discrimination is present in even competitive markets.\(^\text{15}\)

Under a proper error cost framework, courts and antitrust regulators should refrain from declaring conduct anticompetitive unless the likelihood of pro-competitive outcomes is demonstrably low.\(^\text{16}\) In this case, it appears very difficult for antitrust regulators to differentiate positive price discrimination from negative price discrimination, and it seems unlikely that the price discrimination “facilitated” by major data collectors is anticompetitive.

For instance, Google analytics is used by many businesses, any number of which compete with one another in the same markets to offer the best deals to consumers through targeted advertising. It seems just as—if not more—likely that Google is increasing consumer welfare by helping businesses find consumers interested in their products and by serving up more relevant

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\(^{12}\) Id. at 350.

\(^{13}\) Id.


\(^{15}\) See, e.g., 70 Antitrust L. J. 593 (2003) (symposium articles discussing competitive price discrimination).

advertisements to those consumers—thus increasing the amount of positive-sum transactions overall.

Finally, price discrimination as a harm in itself is rarely antitrust-relevant. The Robinson-Patman Act, a New Deal-Era amendment to the Clayton Act’s prohibitions on price discrimination, does not extend to price discrimination against end consumers.17 Further, the Robinson-Patman Act has fallen into disrepute because of the outdated economic model it was based upon, leading the Antitrust Modernization Commission to call for its repeal in 2007:

The Robinson-Patman Act does not promote competition…. Instead, the Act protects competitors, often at the expense of competition that otherwise would benefit consumers, thereby producing anticompetitive outcomes. The Act prevents or discourages discounting that could enable retailers to lower prices to consumers. “The chief ‘evil’ condemned by the Act [is] low prices, not discriminatory prices.” The Act thus reflects “faulty economic assumptions” and a significant “misunderstanding of the competitive process.”

Price discrimination, even if facilitated by data, is not an antitrust harm a court or competition agency is likely to accept.

IV. DATA BARRIER TO ENTRY

Either of these theories of harm is predicated on the inability or difficulty of competitors to develop alternative products in the marketplace—the so-called “data barrier to entry.” The argument is that upstarts do not have sufficient data to compete with established players like Google and Facebook, which in turn employ their data to both attract online advertisers as well as foreclose their competitors from this crucial source of revenue. There are at least four reasons to be dubious of such arguments:

1. Data is useful to all industries, not just online companies;
2. It’s not the amount of data, but how you use it;
3. Competition online is one click or swipe away; and
4. Access to data is not exclusive.

A. First, Data Is Useful to All Industries—This Is Not a New Phenomenon Particular To Online Companies

The market for data, even if narrowly described as data for targeted advertising, is much broader than the online world. Offline retailers have long used data about consumers to better serve them. Through devices like coupons and loyalty cards (to say nothing of targeted mailing lists and the age-old practice of data mining check-out receipts), brick-and-mortar retailers can track purchase data and better serve consumers.19 Not only do consumers receive better deals for

17 See Newman, Costs of Lost Privacy, supra, at 875-76 n.107-08.
using them, but retailers also learn what products to stock and advertise, and when and on what products to run sales.

And of course there is a host of other uses for data, as well, including security, fraud prevention, product optimization, risk reduction to the insured, knowing what content is most interesting to readers, etc. The importance of data stretches far beyond the world of online advertising, and far beyond mere retail uses more generally.

**B. Second, It’s Not the Amount of Data That Leads to Success But How You Use It**

Information is important to companies because of the value that can be drawn from it, not for the inherent value of the data itself. Companies don’t collect information about you to stalk you, but to better provide you with goods and services.

Consider companies like Uber, Lyft, and Sidecar that had no customer data when they began to challenge established cab companies that did possess such data. If data were really so significant, they could never have competed successfully. But Uber, Lyft, and Sidecar have been able to effectively compete because they built products that users wanted to use—they came up with an idea for a better mousetrap. The data they have accrued came after they innovated, entered the market, and mounted their successful challenges—not before.

In reality, those who complain about data facilitating unassailable competitive advantages have it backward. Companies need to innovate to attract consumer data, otherwise consumers will switch to competitors (including both new entrants and established incumbents). As a result, the desire to make use of more and better data drives competitive innovation, with manifestly impressive results: the continued explosion of new products, services, and apps is evidence that data is not a bottleneck to competition but a spur to drive it.

**C. Third, Competition Online Is One Click or Thumb Swipe Away; That Is, Barriers to Entry and Switching Costs Are Low**

Somehow, in the face of alleged data barriers to entry, competition online continues to soar, with newcomers constantly emerging and triumphing. This suggests that the barriers to entry are not so high as to prevent robust competition.

Again, despite the supposed data-based monopolies of companies like Facebook and Google, there exist powerful competitors in the marketplaces they compete in. Among many examples:

- If consumers want to make a purchase, they are more likely to do their research on Amazon than Google.21

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• Google flight search has failed to seriously challenge—let alone displace—its competitors, as critics feared. Kayak, Expedia, and the like remain the most prominent travel search sites—despite Google having literally purchased ITA’s trove of flight data and data-processing acumen.22

• Pinterest, one of the most highly valued startups today,23 is now a serious challenger to traditional search engines when people want to discover new products.

• Likewise, Amazon recently launched its own ad network, “Amazon Sponsored Links,” to challenge other advertising players.24

Even assuming for the sake of argument that data creates some barrier to entry, there is little evidence that consumers cannot or will not readily switch to a range of competitors. While there are sometimes network effects online, as with social networking, history still shows that people will switch. MySpace was considered a dominant network until it made a series of bad business decisions and everyone ended up on Facebook instead.25 Similarly, internet users can and do use Bing, DuckDuckGo, Yahoo, and a plethora of more specialized search engines on top of and instead of Google. And Google itself was once an upstart new entrant that replaced once-household names like Yahoo and AltaVista.26

**D. Fourth, Access to Data Is Not Exclusive**

Critics have compared Google to Standard Oil and argued that government authorities need to step in to limit Google’s control over data.27 But to say that data is like oil betrays a serious misunderstanding. If Exxon drills and extracts oil from the ground, that oil is no longer available to BP. Data is not finite in the same way. Google knowing my birthday doesn’t limit the ability of Facebook to know my birthday, as well. While databases and the processes used to create and make use of them may be proprietary, the underlying data is not. And what matters more than the data itself is how well it is analyzed.

This is especially important when discussing data online, where multi-homing is ubiquitous. Multi-homing can be accomplished by tools like the friend-finder feature on WordPress to search out Facebook friends, Google connections, and Twitter followers who also

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22 See Rob Pegoraro, *Remember When Google Was Going to Annex the Travel-Search Industry?*, PROJECT-DISCO (Jun. 4, 2013), [http://www.project-disco.org/competition/060413-remember-when-google-was-going-to-annex-the-travel-search-industry/](http://www.project-disco.org/competition/060413-remember-when-google-was-going-to-annex-the-travel-search-industry/).


use the site for blogging. Most popular platforms make such APIs available to all comers, effectively permitting the transfer of large swaths of data to competitors.

Moreover, the recently announced merger between Verizon and AOL may be a harbinger of yet another source of competition for data for online advertising. As a recent *New York Times* story details:

People in the ad-tech industry said that in buying AOL, Verizon’s immediate goal may be to marry its data about customers to AOL’s capacity to serve ads to increase this sort of relevancy.

“I think AOL was a little on their back foot on mobile,” said Ari Paparo, chief executive of an ad technology company called Beeswax. He added that the most successful companies with mobile ads tended to be those that knew a lot about their customers—that explains why Google and Facebook, which have close to perfect insight into what we do online, are such powerhouses.28

Mobile ISPs like Verizon already have access to considerable data about consumers, likely at least comparable to what Google and Facebook have. What’s more, mobile ISPs have uniquely good access to location data, which is increasingly the coin of the realm in a world where the most important and valuable consumer interactions are shifting to mobile. As suggested above, if there were a “barrier” to Verizon competing with other online platforms, it almost certainly arose from the absence of an effective use of its data, not from any lack of data itself.

**IV. CONCLUSION**

Privacy advocates have thus far failed to make their case. Even in their most plausible forms, the arguments for incorporating privacy and data concerns into antitrust analysis do not survive legal and economic scrutiny. In the absence of strong arguments suggesting likely anticompetitive effects, and in the face of enormous analytical problems (and thus a high risk of error cost), privacy should remain a matter of consumer protection, not of antitrust.

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