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# NISKANEN C E N T E R

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Research Brief

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## **DATA PRICE GOUGING: A Stalking Horse for a Neo-Brandeisian Antitrust Doctrine?**

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### **EXECUTIVE SUMMARY**

This brief examines the broad contours of the ongoing debate over antitrust analysis and its application to online service platforms that compete on non-zero prices. In particular, it examines these issues in the context of the recent preliminary findings from Germany's Federal Cartel Office regarding Facebook's purported abuse of market power. Using the facts of that case, this brief hypothesizes what a theory of "excessive pricing" in data might look like as a means of establishing the existence of anticompetitive harms. The ensuing analysis then looks at whether Facebook is indeed in a position to abuse market power, whether the Federal Cartel Office's analysis appropriately identifies the company's competitive market, and if it is in fact possible to reasonably assert a theory of "data price gouging" given the facts as described. The brief argues throughout that the answer to all three questions is a resounding no.

## INTRODUCTION

In recent months, Silicon Valley has taken a beating in political orbits. The industry is increasingly being chastised for sundry sins, both real and perceived. Whether it's automation taking all the jobs, driverless cars run amok, online censorship, or fears of the digital world stripping us of our privacy, there is scarcely a problem that doesn't get dumped at tech's doorstep. As this anti-tech backlash increasingly molds the political mood of modern times, the issue of Big Tech's "bigness" has now inescapably seeped into the public policy zeitgeist in the form of two opposing factions: "Big is Bad" versus "Big is Beautiful."

On the one side is an emerging school of populist antitrust advocates — sometimes called the "Hipster Antitrust" or "neo-Brandeisian" movement — have frequently levied hard-hitting criticisms against the technology industry.<sup>i</sup> They argue there is a pressing need to radically rethink how we define anticompetitive harms in an era of behemoth firms competing at near-zero (or absolute zero) prices. In testimony before the Senate late last year, Barry Lynn summarized the essence of this movement's core reform proposal: "formally abandon the 'Consumer Welfare' philosophy."<sup>ii</sup> As applied to antitrust analysis, this "philosophy" focuses on determining the existence of anticompetitive harms based on whether a firm's behavior makes consumers worse off — through higher prices, fewer choices, or other effects that leave individuals worse off than they would have been in the absence of that behavior. The consumer welfare standard, the neo-Brandeisians would argue, is not nearly expansive enough to deal with the full range of harms attributable to large concentrated firms. As such, the standard should either be sufficiently broadened to account for additional injuries, or else done away with entirely.

Opposite the neo-Brandeisians are those who support upholding the general tenets of a narrowly-constructed consumer welfare standard, arguing that it serves as the most effective tool for

identifying anticompetitive harms. They would argue that even in spite of the unique challenges presented by the digital age,<sup>iii</sup> there is little justification for shifting away from an empirical process geared towards the twin goals of preserving market competition and maximizing the welfare of consumers. Without a narrow standard aimed at protecting the competitive process, antitrust remedies can too easily be hollowed out and abused for political ends — turning it into an empty vessel to be filled with the populist policy-demand du jour, forever aimed towards, but fundamentally incapable of, solving problems unrelated to competition.

These competing perspectives have become an increasingly common feature of tech policy debates in recent months.<sup>iv</sup> Yet for all their proselytizing, the populist antitrust advocates have largely lacked a clear strategy for enacting their revolutionary program, nor offered a clearly-articulated framework for what might replace, and presumably improve upon, the consumer welfare standard.<sup>v</sup> While that framework remains as ever-out-of-reach and elusive as a desert mirage, an actionable strategy for potentially chipping away at the consumer welfare standard may be taking form.

## A THEORY OF "EXCESSIVE PRICING" OF DATA?

In a December 2017 report,<sup>vi</sup> Germany's Federal Cartel Office (FCO) concluded that Facebook had abused its market position by requiring users to consent to the collection and use of their data from third-party sources. The findings were only preliminary, and a final determination is likely still a few months away.

At the time, the FCO's argument could be interpreted as follows:

1. Facebook is dominant in the "social network" market.

2. It abuses this position by coercing consumers to consent to third-party data tracking, which Facebook “merges” such that “individual data gain a significance the user cannot foresee.”
3. This results in users experiencing a “loss of control” over their personal information, constituting “exploitative business terms” and a violation of individuals’ constitutionally-protected “right to informational self-determination.”

It is important to note that the FCO’s conclusions are rooted in a German treatment of privacy jurisprudence, which is notably distinct from the American tradition.<sup>vii</sup> German law affords individuals — and society more broadly — a set of constitutionally-protected rights to control information about themselves, which the FCO concluded had been violated by Facebook’s abuse of its market position. While there are certainly valid technical, economic, and philosophical reasons to question the viability of a “right to information self-determination,” those questions are far beyond the scope of this analysis. Instead, this brief examines the FCO’s findings with an eye towards addressing the agency’s analysis of market power and the economics of competition. It makes no attempt at assessing the legal implications of how anticompetitive harms implicate German data protection laws. That said, although the FCO’s preliminary findings concluded that Facebook abused its market power to violate German users’ constitutional rights, it now appears the agency may be moving to expand that conclusion to include additional injuries.

In a recent New York Times article, Andreas Mundt, the head of the FCO, was quoted as saying, “The Facebook case is really about excessive pricing vis-à-vis the consumer.”<sup>viii</sup> Yet, the original report didn’t appear to make a case for “excessive pricing.” In fact, when discussing its findings of harm to users and competition, the FCO’s report made noted the following:

Facebook offers its service for free. Its users therefore do not suffer a direct financial loss from the fact that Facebook uses exploitative business terms. The damage for the users lies in a loss of control: they are no longer able to control how their personal data are used.<sup>ix</sup>

So while the FCO concluded Facebook abused its market power to deny German users their constitutional right to “informational self-determination,” Mundt’s new claim (that this “case is really about excessive pricing”) suggests the agency may be developing a theory of “data price gouging” in its forthcoming final report. Such a move could offer a strategic opportunity for neo-Brandeisians to construct a roadmap for future interpretations of anticompetitive harms, marshalled under the guise of data price gouging claims.

But how exactly would one make a price gouging case in the context of a non-priced commodity like data? Admittedly, it is a difficult argument to make, especially in the context of the FCO’s limited preliminary findings. The report makes no attempt at quantifying the actual value of a user’s personal information, nor does it describe the specific elements that constitute that bundle of data. Those seem like important and necessary, albeit difficult, first steps in substantiating such a claim. (As an aside, the cost of running a Facebook advertisement is not based on some secret “price” of an individual users’ information profile. Advertising on Facebook involves selecting a dollar amount you want to spend, targeted to a set of variables; the company’s “ad auction” then matches your preferences with users that fall in the specified target group.<sup>x</sup> Unlike a traditional auction, however, the highest bidder with the biggest budget isn’t necessarily the winner. That’s because Facebook has to constantly balance the interests of both advertisers and users, maximizing its appeal to both groups. More on this in the next section.)

Based on the FCO's preliminary findings, the argument for data price gouging might go something like this:

1. Facebook is dominant in the "social network" market.
2. It abuses this position to coerce users into consenting to relinquish more of their data than they would in a competitive market.
3. The ensuing collection of that data, therefore, is the equivalent of "charging" users a price (in the form of a greater quantity of, or more extensive access to, their data) above what they might otherwise pay to access Facebook's services.

It's an interesting argument to consider, but it suffers from a basic and fatal flaw: Both the FCO's preliminary conclusion and the hypothetical line of reasoning above are premised on the assertion that Facebook is indeed the dominant firm in the market in which it competes. It is not. The FCO completely misidentifies the relevant competitive market for the social network firm, leading it to draw the wrong conclusion regarding the company's market power.

## THE MANY SIDES OF THE MARKET

In the FCO's analysis, the market in question is described only as "social networks." In an informal sense, that may appear accurate; after all, most of us tend to think of Facebook as competing with other online service platforms that afford users the ability to connect with one another and share user-generated content. But while that reading of Facebook's market is technically wrong (more on that shortly), the FCO actually goes so far as to decouple Facebook from the broader landscape of what we might casually think of as social network firms. For example, the report notes:

Professional networks such as LinkedIn and Xing, as well as messaging services

such as WhatsApp and Snapchat or other social media such as YouTube or Twitter are not part of the relevant product market. Even though these services are in parts competitive substitutes for Facebook, from the users' perspective they serve a complementary need.<sup>xi</sup>

So in the report's bewildering account of what constitutes a firm competing in the social network market, Twitter and LinkedIn don't qualify. The agency further compounds this confusion by specifically noting that "providers such as Google+" do, in fact, qualify as Facebook's competitors.<sup>xiii</sup> Thus, in assessing the boundaries of the various relevant markets, the FCO draws the lines as follows: Facebook and Google+ are considered social networks, LinkedIn is a "professional network," and Twitter is "social media."<sup>xiii</sup> Facebook, moreover, doesn't compete with LinkedIn or Twitter because, "[o]n account of direct network effects, the substitutability of their products with Facebook is ... limited, despite the fundamental comparability of the products. ... Even though these services are in parts competitive substitutes for Facebook, from the users' perspective they serve a complementary need."<sup>xiv</sup>

Despite the FCO acknowledging the existence of these imperfect substitutes, the agency explicitly disregards the need to incorporate them into its analysis. Instead, it does a complete end run around an empirically sound competition analysis by lumping arbitrarily-defined product offerings into arbitrarily-defined markets. Further, the existence of various online service platforms that are "in parts competitive substitutes" and "serve a complementary need" simply implies product differentiation. It tells us little about the market(s) in which the firms producing those products actually compete. The result is that the agency paints an overly-narrow and overly-simplistic picture of what Facebook's competitive market actually looks like. The reality is much more complicated.

To start sorting through those complexities, it will help to examine another online service provider that competes on zero-price, but which many do not often consider to be directly competing with social networks like Facebook: Google.

Writing in the *Harvard Journal of Law & Public Policy*, Geoff Manne and Josh Wright detail what a theoretical antitrust case against Google might look like, and showcase the difficulties involved in accurately defining its market:

Google sells advertising, first and foremost, and it gives away several other products, including search results. If the relevant advertising market includes all advertising across media, Google has a miniscule market share and essentially no market power. If the relevant advertising market includes only online advertising, Google still has a relatively small share of the market. Only when different types of online advertising (such as search ads versus contextual display ads versus behavioral display ads) are separated into different markets does Google's market share grow substantially in paid search advertising.<sup>xv</sup>

This is an important point in competition analysis: *how* you define the market impacts the level of competition you observe. For example, if we define Google as a “search engine” then even back in 2016, it had a clear dominant market share of the search market — almost 80 percent, to be precise. Bing, its next closest competitor wasn't even close, with a mere 10 percent of the market.<sup>xvi</sup> However, if we define Google as an “online advertising company,” the picture starts looking significantly different.

In 2016, the global online advertising market was about \$180 billion.<sup>xvii</sup> That same year, Google pulled in approximately \$80 billion, which would put its market share at about 16 percent of the total global online advertising market. With a 44 percent share of the market, Google still looks like an imposing competitor, but it suddenly doesn't

seem like the only fish in the pond. Of course, if we were to properly assess Google's competitive market, then it's not strictly true the company only competes with other online advertisers. Indeed, it competes with *all* advertisers, globally. So what does Google's market position look like if we define it as an “advertising company?” In 2016, the total global advertising market was almost \$500 billion.<sup>xviii</sup> Given Google's 2016 revenue, suddenly its market share plummets to 16 percent.

In short, as Manne and Wright point out, “different market definitions translate to very different conceptions” of market power.<sup>xix</sup> Even then, properly identifying the market and calculating its revenue share would still only be a starting point for a more rigorous empirical analysis of the competitive landscape. This is why:

any market definition should be established with econometric data and pertinent theories of supplier and consumer behavior. Absent this, any market power determinations that depend on intuition and market share calculations are suspect and likely to exacerbate already costly Type I error problems.<sup>xx</sup>

While it would be valuable to understand what specific criteria the FCO used to establish its various market boundaries, all we're given are vague claims of market dominance (“Facebook has a quasi-monopoly with more than 90 per cent of user-based market shares”), unsupported assumptions regarding user preferences (Twitter and LinkedIn “are in parts competitive substitutes for Facebook,” but ultimately “serve a complementary need”), and a complete lack of clarity on what “complementary needs” each of the non-social network markets fulfills for users. Nor is there any explanation as to why the agency's admitted recognition of imperfect substitutes failed to enter into the analysis. Given all these seemingly arbitrary deductions, one could be forgiven for concluding that the FCO defined Facebook's competitive market as, well, more or less just “Facebook.”

Nonetheless, it is technically inaccurate to say Facebook competes in the social network market. Rather, Facebook’s market is more correctly defined as the online ad matchmaking, or “targeted eyeballs,”<sup>xxi</sup> market. The company doesn’t compete primarily for user data or personal information, but for user attention, which it acquires and sells to advertisers. In that sense, Facebook is actually competing — intensely<sup>xxii</sup> — against all manner of online platforms and networks, including LinkedIn and Twitter, Google, and even offline firms like radio, TV, and newspapers. Properly described, the online ad matchmaking market is populated by firms that function primarily as intermediaries for transactions: “multi-sided platforms.”<sup>xxiii</sup>

David Evans and Richard Schmalensee define the essential features of a multi-sided platform as (1) providing for a reduction in transaction costs for the parties involved, (2) establishing an “interdependence between the demands” of the various sides, and (3) offering a price structure that “balance[s] membership and usage to maximize platform value.”<sup>xxiv</sup> George Ford, writing at *Bloomberg Law*, notes that such platforms are, in part, uniquely defined by the relationship of prices charged to either side. “[I]f price goes up on one side of the market,” he argues, “then price on the other side correspondingly goes down. Success or failure of a platform may hinge critically on the way prices are balanced across the two sides of the market.” He goes on:

As both sides of the market benefit from the relationship, the platform may choose to allocate the total price for its intermediary service between the two sides of the market. These allocated prices need not be equal for both sides, and the conditions may warrant a positive charge only to one side of the market, or even a negative charge to one side of the market. The possibilities are endless, and so in two-sided markets, simplistic ideas about prices being related to costs are thrown out the window.<sup>xxv</sup>

Facebook, for example, provides a platform for user-generated content. It can offer this service for free only because of a cross-subsidization effect — advertisers get cost-effective access to a wide audience, which in turn helps subsidize users’ access to a zero-cost digital service for sharing content with family and friends. As mentioned previously, the company’s “ad auction” helps to balance the competing demands between users (maximizing the content they want to see) and advertisers (serving ads in a cost-effective manner to a particular pool of likely consumers).

While recognizing Facebook’s nature as a multi-sided platform can aid in drawing more appropriate market boundaries for competition analysis, it also sheds light on the many complexities that examining such a market presents. Failure to properly identify the presence, or misinterpret the activities, of multi-sided platforms competing in multi-sided markets, may lead competition authorities and analysts to inadvertently exaggerate the existence of anticompetitive behavior. As Evans and Schmalensee note:

Multi-sided platforms are more complicated than single-sided firms. Analysis or policy rules that ignore this complexity are prone to commit serious errors. Just because the economic literature on multi-sided platforms does not have simple extensions of existing single-sided tools does not provide a license to apply the wrong tools to multi-sided platform issues.<sup>xxvi</sup>

Unfortunately, the FCO’s conclusion fails to accurately account for Facebook’s complicated market position and competitive arena. As a result, the agency not only misidentifies the company’s true competitive market, but also lays a flawed groundwork for future, unsubstantiated claims of data price gouging. Perhaps more surprising, however, is that despite the FCO’s findings, the agency actually does appear to discern some of these subtle economic realities. For example, in an attempt to make the argument

that Facebook’s supposedly dominant position is further entrenched by “high barriers to entry” for competitors, the report notes:

In the case of advertising-financed services (which can also be referred to as “audience providing platforms”), the advertising side profits from a large private user base (positive indirect network effects). A competitor has to have reached a critical number of private users to successfully enter the market with an ad-financed product [that is free to users]. Without such a critical number the product will not be sufficiently attractive for the advertising side.<sup>xxvii</sup>

By specifically equating “advertising-financed services” (an unequivocal reference to Facebook) with “audience providing platforms,” the report clearly recognizes the multi-sided nature of the market in which Facebook operates. The FCO explicitly recognizes Facebook as an “audience providing platform,” yet fails to incorporate that acknowledgment into its assessment of the relevant market. In other words, the FCO admits that Facebook is a kind of multi-sided platform, but doesn’t take the next step in the competition analysis: examining the economics of both sides of the market. (As an aside, this argument also gets the logic of market entry precisely backwards. A competitor doesn’t enter a market already having an established network of users. It becomes “sufficiently attractive” for advertisers only after offering a service that attracts “a critical number” of users to make it a profitable venture. Competitive advantage is not necessarily synonymous with anti-competitive harm.)

For all these reasons, the fundamental assertion that Facebook possesses, and therefore is in a position to abuse, market power is based on a faulty premise. Thus, Facebook cannot logically be engaged in coercion, data price gouging, or excessive data-pricing — at least according to the facts contained in the FCO’s preliminary report.

## IF DATA IS THE NEW OIL, HOW MANY BARRELS ARE YOU WORTH?

Even if we were to grant that Facebook possessed market power and therefore had the ability to raise and sustain the “price” on data above competitive levels, it still requires some answer to the question: How much is the data worth? There doesn’t appear to be any satisfactory answer to that question, making the FCO’s case of “excessive pricing” nearly impossible to substantiate. (Although outside the scope of this brief, it is worth mentioning that determining a data-price is but one of two interrelated problems. The other is adjudicating what constitutes “your” data; what information you “own” about yourself, as well as how, or whether, that ownership inheres in a legal, economic, and technical framework. Quantifying the value of data is difficult in isolation; when paired with the necessity of resolving age-old questions of epistemic philosophy, the task is near-impossible.<sup>xxviii</sup>)

Even if we could quantify a data-price based on a specific piece of information related to a specific individual at a given time, the number of competing variables that would theoretically impact the value of a larger “bundle” of data would be mind-bogglingly difficult to package into one simple pricing signal. For example, as a general matter the information about me from a decade ago is considerably less valuable than that from a day ago; and that, less valuable than the data from a minute ago; and even that is likely to be significantly less valuable than the ability to potentially predict future information about me. Difficulties aside, if we were committed to the task of pricing data, an ideal starting point might be assessing how much individuals are willing to pay to *not* relinquish “their” data in exchange for a given service.

A recent poll asked that very question: whether consumers would prefer a free, ad-financed Facebook or an ad-free experience for a mere \$1 per month?<sup>xxxix</sup> The response was overwhelmingly in favor of the ad-financed version (79 percent), with only 21 percent indicating a preference for the subscription-based model. Even when given the option to pay a minimal price to avoid data collection, consumers nonetheless opted for the free version by wide margins. More significant is how users responded when confronted with a scenario in which Facebook offered no free option at all. When presented with a situation in which Facebook decides to begin charging users a monthly fee (still \$1) to register for events, join groups, and use one-on-one messaging services, a striking majority of respondents (between 84 and 87 percent) indicated they would simply leave the social network. Even at a bare minimum price, few individuals were unwilling to pay to access Facebook's services.

But if, as the FCO suggests, the company is engaged in an abuse of its market dominance by coercing users to relinquish more data than they otherwise would in a competitive market, then users should theoretically flock to a low-cost monthly subscription model. So why, even given that option, would consumers overwhelmingly continue embracing a free version of Facebook? The following survey participant offers a telling response:

I might be open to learning more first about the paid option ... but it's always been free, if it switches, I would have to think about it ... there are so many social media sites — free sites. But maybe things are changing and Facebook is leading the way? I guess I need more info and time to think about it. What would a majority of people do? Would the paying people be separated out from the non-paying into a different database? Would the price be locked in, or will it continue rising every year?<sup>xxx</sup>

Like many others, this participant explicitly recognizes the existence of available alternatives to Facebook (“there are so many social media sites — free sites”) and displays a sensitivity to future price fluctuations that may be driven by fewer users. Despite being written off by the FCO as irrelevant to the market analysis, imperfect substitutes such as Twitter and LinkedIn may actually play a substantial role in how consumers judge the trade-offs between Facebook's data collection practices and the availability of other zero-priced services. Even at \$1 per month consumers clearly recognize there is no reason they should want to pay because a vast majority of them believe: (1) the social network market is, in fact, competitive and (2) any price they would pay for a social network above zero is excessive. For consumers, the real price gouge may not be excessive data-pricing, but paying for social network sites with anything *but* data.

Yet in spite of consumer preferences and the absence of a clear price on data, shouldn't it nonetheless concern us that online service providers are collecting such large troves of information? After all, with enough data, firms could theoretically crowd out would-be market entrants and anticompetitive harms would inevitably follow. The FCO argues as much when it concludes that social networks are fundamentally “data-driven products” and that “access to the personal data of users is essential for the market position of a company.”<sup>xxxix</sup> Here again, the FCO draws erroneous conclusions based on the assumption that data possesses some inherent value. It does not.

Data, by itself, is not a fundamentally valuable commodity, and access to greater amounts does not necessarily foreclose competitive entry to any given market — online or offline. Indeed, many tech firms that are now household names — Uber, Lyft, Tinder, Kayak, Airbnb, etc. — began with little or no data on their users, competing against established industries with decades of personal-information profiles in their competitive advantage arsenals.<sup>xxxii</sup> Despite what you may have heard, data is not the new oil,<sup>xxxiii</sup> and merely



possessing a large quantity does not confer a competitive advantage or provide you with a valuable raw resource for resale. The value of a social network — or, to be more accurate, an audience-providing platform — is driven by users, first and foremost. All the data in the world will not help a company compete without a business model and an appealing user experience that keeps consumers, or their eyeballs, coming back. That is just as true for social network platforms as it is for any other business.

## CONCLUSION

Although the FCO's final report is not due until early summer 2018, recent comments regarding theories of excessive data-pricing should be a cause for concern. Unmoored from evidentiary analysis and lacking any identifiable harm to consumers or competition, such a theory could potentially become a stalking horse for more expansive applications of antitrust action against online service providers.

The nuanced economic realities of online multi-sided platform markets, clearly-expressed user preferences for zero-priced social network services, limitations on quantifying clear price signals for individual user bundles of data, and a complete absence of any articulable consumer or anticompetitive harms should give us pause before rushing to embrace a new approach to antitrust analysis. Unfortunately, unless we dispense with the notion that data is the new oil, data price gouging may end up being the new rallying cry for trust-busting in the digital age.

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- <sup>i</sup> Robert D. Atkinson and Michael Lind, *The Neo-Brandeisian Attack on Big Business*, National Review, Oct. 2, 2017, <https://www.nationalreview.com/magazine/2017/10/02/large-corporations-good-for-society/>.
- <sup>ii</sup> Barry C. Lynn, *The Consumer Welfare Standard in Antitrust: Outdated or a Harbor in a Sea of Doubt?*, Testimony before the Senate Committee on the Judiciary: Subcommittee on Antitrust, Competition, and Consumer Rights, Dec. 13, 2017, <https://www.judiciary.senate.gov/imo/media/doc/12-13-17%20Lynn%20Testimony.pdf>.
- <sup>iii</sup> Ryan Hagemann, *The Theory of the (Tech) Firm*, Niskanen Center, Nov. 28, 2017, <https://niskanencenter.org/blog/theory-tech-firm/>.
- <sup>iv</sup> See *Should Washington break up Big Tech?*, American Enterprise Institute panel event, Nov. 27, 2017, <http://www.aei.org/events/should-washington-break-up-big-tech/>; *Are Tech Giants Too Big for Democracy?* Open Markets Institute panel event, Nov. 8, 2017, <https://openmarketsinstitute.org/events/are-tech-giants-too-big-for-democracy-with-senator-al-franken/>.
- <sup>v</sup> Herbert Hovenkamp, *Whatever Did Happen to the Antitrust Movement?*, Notre Dame Law Review, forthcoming; University of Pennsylvania, Institute for Law & Economics Research Paper No. 18-7, Feb. 10, 2018, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3097452](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3097452).
- <sup>vi</sup> *Background information on the Facebook proceeding*, Bundeskartellamt, Dec. 19, 2017, [https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Diskussions\\_Hintergrundpapiere/2017/Hintergrundpapier\\_Facebook.pdf?\\_\\_blob=publicationFile&v=6](https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Diskussions_Hintergrundpapiere/2017/Hintergrundpapier_Facebook.pdf?__blob=publicationFile&v=6). (hereafter “Bundeskartellamt.”)
- <sup>vii</sup> Gerrit Nornung and Christoph Schnabel, *Data protection in Germany I: The population census decision and the right to informational self-determination*, Computer Law & Security Report, Vol. 25, Issue 1, 2009, pp. 84-88. (“[T]he German concept of informational self-determination is very disparate from the idea of privacy as a ‘right to be let alone’. Rather, informational self-determination and data protection have two corresponding effects: The individual is shielded from interferences in personal matters, thus creating a sphere in which he or she can feel safe from any interference. At the same time, data protection is also a precondition for citizens’ unbiased participation in the political processes of the democratic constitutional state. The democratic constitutional state relies to a great extent on the participation of all citizens and its legitimacy is based on respecting each person’s individual liberty. As said before, the right to informational self-determination is not only granted for the sake of the individual, but also in the interest of the public, to guarantee a free and democratic communication order. Therefore, it is primarily possible to justify interferences in the right to informational self-determination if a consideration of both principles shows that the public interest outweighs the legitimate interests of the individual. However, the basic idea is always the same: the data subject is to maintain control of his/her own data.”)
- <sup>viii</sup> Natasha Singer and Sapna Maheshwari, *European Regulators Ask if Facebook Is Taking Too Much Data*, New York Times, Apr. 25, 2018, <https://www.nytimes.com/2018/04/24/technology/facebook-data-europe-investigations.html>.
- <sup>ix</sup> Bundeskartellamt, 4.
- <sup>x</sup> Facebook, Advertiser Help Center, About the delivery system: Ad auctions, <https://www.facebook.com/business/help/430291176997542>.
- <sup>xi</sup> Bundeskartellamt, 3.
- <sup>xii</sup> *Id.*
- <sup>xiii</sup> *Id.*
- <sup>xiv</sup> *Id.*
- <sup>xv</sup> Geoffrey A. Manne and Joshua D. Wright, *Google and the Limits of Antitrust: The Case Against the Case Against Google*, Lewis & Clark Law School Legal Studies Research Paper No. 2010-19; George Mason Law & Economics Research Paper No. 10-25; Harvard Journal of Law & Public Policy, Vol. 34, No. 1, Winter 2011; p. 220, available at <http://www.harvard-jlpp.com/wp-content/uploads/2013/10/ManneFinal.pdf>.
- <sup>xvi</sup> StatCounter GlobalStats, *Top 5 Search Engines in the United States*, August 2016, [http://gs.statcounter.com/#desktop-search\\_engine-US-monthly-201608-201608-bar](http://gs.statcounter.com/#desktop-search_engine-US-monthly-201608-201608-bar).

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<sup>xvii</sup> *Global Advertising Forecast*, MAGNA, Dec. 5, 2016, <https://www.magnaglobal.com/wp-content/uploads/2016/12/MAGNA-December-Global-Forecast-Update-Press-Release.pdf>.

<sup>xviii</sup> *Id.*

<sup>xix</sup> Manne and Wright, 220.

<sup>xx</sup> *Id.*, 203.

<sup>xxi</sup> Geoffrey A. Manne and William Rinehart, *The Market Realities that Undermined the FTC's Antitrust Case Against Google*, Harvard Journal of Law & Technology, Occasional Paper Series, July 2013, p. 8, available at <https://jolt.law.harvard.edu/assets/misc/ManneRinehart.pdf>. (“To say that Google dominates ‘search’ or ‘search advertising’ misses the mark precisely because there is nothing especially antitrust-relevant about either search or search advertising. Because of their own unique products, innovations, data sources, business models, entrepreneurship and organizations, many companies that do not fall into either category have challenged and will continue to challenge the dominant company — and the dominant paradigm — in a shifting and evolving range of markets. A more accurate market definition would perhaps include the range of firms that participate in the market for ‘targeted eyeballs’ — that offer any of a range of products attractive to consumers (general search, product search, social networking, emailing, online retailing, etc.), the use of which generate data, context, or secondary actions that enable the firm to target advertising to specific, likely consumers. While undeniably significant in this market, Google is not likely dominant.”)

<sup>xxii</sup> Joe Kennedy, *Should Antitrust Regulators Stop Companies from Collecting So Much Data?*, Harvard Business Review, Apr. 17, 2017, <https://hbr.org/2017/04/should-antitrust-regulators-stop-companies-from-collecting-so-much-data>.

<sup>xxiii</sup> See generally David S. Evans and Richard Schmalensee, *The Antitrust Analysis of Multi-Sided Platform Businesses*, Roger Blair and Daniel Sokol, eds., Oxford Handbook on International Antitrust Economics, Oxford University Press; University of Chicago Institute for Law & Economics Olin Research Paper No. 623, Jan. 30, 2013, available at [https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1482&context=law\\_and\\_economics](https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1482&context=law_and_economics).

<sup>xxiv</sup> *Id.* 6-7.

<sup>xxv</sup> George S. Ford, ‘Hipster’ Antitrust Meets Two-Sided Markets, Bloomberg Law, Apr. 17, 2018, <https://www.bna.com/hipster-antitrust-meets-n57982091307/>.

<sup>xxvi</sup> Evans and Schmalensee, 35.

<sup>xxvii</sup> Bundeskartellamt, 3.

<sup>xxviii</sup> See generally William Rinehart, *The Law & Economics of “Owning Your Data,”* American Action Forum, Apr. 10, 2018, <https://www.americanactionforum.org/insight/law-economics-owning-data/>.

<sup>xxix</sup> Alpha, *To what extent are Facebook users concerned with privacy and ads-free experiences?*, Apr. 22, 2018, <https://platform.alphaHQ.com/rep/ace99d80f33a44fc3483eddc7ff5a58e>.

<sup>xxx</sup> *Id.*

<sup>xxxi</sup> Bundeskartellamt, 1.

<sup>xxxii</sup> Anja Lambrecht and Catherine E. Tucker, *Can Big Data Protect a Firm from Competition?*, Dec. 18, 2015, available at [http://ec.europa.eu/information\\_society/newsroom/image/document/2016-6/computer\\_and\\_communications\\_industry\\_association\\_-\\_can\\_big\\_data\\_protect\\_a\\_firm\\_from\\_competition\\_13846.pdf](http://ec.europa.eu/information_society/newsroom/image/document/2016-6/computer_and_communications_industry_association_-_can_big_data_protect_a_firm_from_competition_13846.pdf).

<sup>xxxiii</sup> See Adam Schlosser, *Here's why data is not the new oil*, Business Insider, Jan. 23, 2018, <http://www.businessinsider.com/data-is-not-the-new-oil-adam-schlosser-of-the-world-economic-forum-2018-1>; Michael Mandel, *The Economic Impact of Data: Why Data Is Not Like Oil*, Progressive Policy Institute, July 12, 2017, [http://www.progressivepolicy.org/wp-content/uploads/2017/07/PowerofData-Report\\_2017.pdf](http://www.progressivepolicy.org/wp-content/uploads/2017/07/PowerofData-Report_2017.pdf); Samuel Hammond, *Should We Have a Special Tax on “Data”?*, Niskanen Center, Apr. 30, 2018, <https://niskanencenter.org/blog/notes/should-we-have-a-special-tax-on-data/>.