

# Online platforms and digital advertising market study

## Observations on the Statement of Scope

Prof. Damien Geradin<sup>(\*)</sup>

### I. Introduction

I appreciate the opportunity to submit observations on the Statement of Scope (“SOS”) of the Market Study on “Online Platforms and Digital Advertising”. This Market Study is welcome given the importance of digital advertising for online content providers (which I will refer to as “publishers”), as well as the complexity and opacity of digital advertising markets. My research reveals that these markets do not function properly. They are ridden with conflicts of interest, leveraging practices, and their lack of competitiveness allows online platforms to generate supra-competitive rents to the detriment of advertisers, publishers and, ultimately, consumers. Investment in ad tech (i.e., the technologies developed and used by intermediaries between advertisers and publishers) has considerably declined.<sup>1</sup>

My observations are based on several recent research papers I have authored or co-authored on digital advertising, with a focus on online display advertising (see Annexes I and II),<sup>2</sup> and on the competitive relationship between online platforms and news publishers.<sup>3</sup> They are also

---

(\*) Professor of Competition Law & Economics at Tilburg University and Visiting Professor at University College London. I have consulted for several publishers, including on issues related to online advertising. These observations have been written at my own initiative.

1 C. Ballentine, “Investment in Ad Tech Grows Increasingly Scarce, With Forrester Predicting a 75% Drop in Venture Capital”, *Adweek*, 7 November 2018, available at <https://www.adweek.com/programmatic/investment-in-ad-tech-grows-increasingly-scarce-with-forrester-predicting-a-75-drop-in-venture-capital/>; C. Ballentine, “Google-Facebook Dominance Hurts Ad Tech Firms, Speeding Consolidation”, *The New York Times*, 12 August 2018, available at <https://www.nytimes.com/2018/08/12/technology/google-facebook-dominance-hurts-ad-tech-firms-speeding-consolidation.html>

2 See D. Geradin & D. Katsifis, “An EU competition law analysis of online display advertising in the programmatic age”, *European Competition Journal* (2019), available at <https://www.tandfonline.com/doi/full/10.1080/17441056.2019.1574440>; See D. Geradin & D. Katsifis, “Google’s (forgotten) monopoly – Ad technology services on the open web”, forthcoming *Concurrences No 3-2019*, currently available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3391913](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3391913)

3 See D. Geradin, “Complements and/or Substitutes? The Competitive Dynamics Between News Publishers and Digital Platforms and What It Means for Competition Policy”, *TILEC Discussion Paper No. 2019-003*, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3338941](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3338941)

informed by earlier papers I wrote on two-sided markets,<sup>4</sup> intermediation platforms,<sup>5</sup> big data,<sup>6</sup> and business models based on the offering of “free” services, which are monetized by selling advertising.<sup>7</sup> The law and economics of online platforms has been one of my main areas of focus in the past decade.

These observations are divided in five sections, which follow the order of the SOS. Section II contains my comments on the SOS’s overview of online platforms and digital advertising in the UK. Section III comments on the three main themes of the Market Study, while Section IV comments on the risk of consumer harm. Section V concludes with some observations on remedies.

## **II. Overview of online platforms and digital advertising in the UK**

The SOS correctly observes that there are three main types of digital advertising in the UK: search advertising; display advertising; and classifieds (paragraph 35) The same paragraph importantly observes that search advertising represents 50% of the UK online advertising market in 2018, compared to 39% for display, 11% for classifieds and less than 1% for other formats.

The SOS also correctly points out that, as regards display advertising, a further distinction has to be made between:

“sales of advertising on the major online platforms (i.e. the way that the platforms monetise their own content), and the wider intermediation of advertising sales on other publishers’ websites through the ‘ad tech stack’.” (paragraph 71)

In other words, display advertising can be differentiated between sales of advertising on the major online platforms (“display advertising on the walled gardens”) and sales on other publishers’ websites (“display advertising on the open web”). While platforms, such as Google, Facebook and Twitter all sell advertising on their own walled gardens, only Google plays a major role on the sales of advertising on the open web through the provision of its ad intermediation services to advertisers and publishers. This above distinction is important because, as will be discussed below, these two forms of display advertising raise different types of concerns and thus may require different types of remedies.

---

4 See, e.g., L. Filistrucchi, D. Geradin et al., “Identifying Two-Sided Markets, 36 (2013) *World Competition*, 33; L. Filistrucchi, D. Geradin et al., “Market Definition in Two-Sided Markets: Theory and Practice”, (2014) (10)2 *Journal of Competition Law & Economics* 293.

5 See, e.g., B. Edelman and D. Geradin, “Efficiencies and Regulatory Shortcuts: How Should we Regulate Companies like Airbnb and Uber”, 19 (2016) *Stanford Technology Law Review* 293

6 See, e.g., D. Geradin and M. Kuschewsky, “Competition Law and Personal Data: Preliminary Thoughts on a Complex Issues”, 2 (2013) *Revue Concurrences*.

7 B. Edelman and D. Geradin, “An Introduction to the Competition Law and Economics of ‘Free’”, *CPI Antitrust Chronicle* (September 2018).

Now, as search advertising is dominated by Google and display advertising on walled gardens is dominated by Facebook (and Google's YouTube to a lower extent), these two companies capture a very large proportion of total digital advertising revenues in the UK.<sup>8</sup> By contrast, tens of thousands of publishers are competing to grab a share of the revenues of display advertising on the open web (i.e., on their web sites and other online properties) and, as will be seen below, a large part of these revenues are absorbed by the various disclosed and undisclosed fees and margins charged by ad tech intermediaries, chief amongst which is Google.

### **III. Themes of the market study**

The SOS explores three major themes: (i) the market power of online platforms in consumer-facing markets; (ii) consumer control over data collection practices; and (iii) competition in the supply of digital advertising in the UK. While these three themes are important, the CMA should give particular attention to the third theme as most of the problems faced by publishers relying on digital advertising revenues come from the lack of competition in the supply of digital advertising.

#### **A. Theme 1: The market power of online platforms in consumer-facing markets**

The sources of market power of online platforms in consumer-facing markets (economies of scale and scope, network effects, the use of data) have already been extensively analysed in several excellent reports, such as the "Competition Policy in the Digital Era" report commissioned by the European Commission<sup>9</sup> or the so-called Furman Report in the UK.<sup>10</sup> Thus, rather than devoting significant resources to these issues, the Market Study can draw from these reports.

The SOS is correct to "*focus particularly on understanding the role of data, and the extent to which the platforms' extensive data on users creates a barrier to competition in digital advertising*" (paragraph 59), as well as to "*examine whether access to this data, in combination with other features identified here, results in market power in the supply of advertising inventory*" (paragraph 61).

---

8 B. Bold, "Google and Facebook to command nearly 65% of UK online ad market by 2021", *Campaign*, 26 March 2019, available at <https://www.campaignlive.co.uk/article/google-facebook-command-nearly-65-uk-online-ad-market-2021/1580126>. See also the recent Report of the Australian Competition & Consumer Commission ("ACCC"), according to which for a typical AU \$ 100 spent by advertisers \$ 47 goes to Google, \$ 24 goes to Facebook and \$ 29 to all other websites and ad tech. See ACCC, Digital Platforms Inquiry, Final Report (June 2019), available at <https://www.accc.gov.au/publications/digital-platforms-inquiry-final-report>, (the "ACCC Report"), p. 122.

9 See Competition Policy for the digital era Final report (2019), available at [ec.europa.eu/competition/publications/reports/kd0419345enn.pdf](http://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf)

10 See Unlocking digital competition Report of the Digital Competition Expert Panel (2019), available at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/785547/unlocking\\_digital\\_competition\\_furman\\_review\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf)

The CMA should examine whether the walled garden’s massive data extraction practices reflect their market power in consumer-facing markets and whether they raise barriers to entry in online advertising. For example, Facebook’s use of social plugins embedded on thousands of publisher websites to track users across the web – in breach of data protection and/or consumer protection laws – not only reflects its market power over users but also has significantly raised barriers to entry and reduced competition in digital advertising.<sup>11</sup> Therefore, other than empowering consumers with greater control over their data, it might be more fruitful for the CMA to impose strict limitations on what Facebook (and other platforms) are allowed to do in terms of data collection and processing across platforms and devices. But for such limitations, it will be extremely hard, if at all possible, for companies that only collect data in the context of a single activity (e.g., news publishers) to compete with multi-market online platforms. When it comes to digital advertising, no company seems close to match the data collection and processing abilities of Google<sup>12</sup> and Facebook.

Moreover, the CMA should also examine whether the walled gardens have made it harder for their competitors to build their own datasets and thus present a credible alternative to advertisers seeking to target users. For example, both Google and Facebook have used their respective market power in the provision of general search services and social network services to promote their own proprietary formats for the display of mobile webpages, i.e. Accelerated Mobile Pages (“AMP”) and Instant Articles respectively. In order to increase the loading speed of mobile webpages, which they unilaterally declared was too slow, Google and Facebook cache webpages on their server.<sup>13</sup> However, that means that instead of sending the reader to the publishers’ website, Google and Facebook maintain users in *their* ecosystem, harvesting their data for advertising purposes. By contrast, although it produces the content that is enjoyed by the reader, the publisher is deprived of important user data, as it cannot use first-party cookies. Instead, it has to rely on the data discretionarily provided by the platform. In practice, this prevents publishers from developing unique datasets, while allowing Google and Facebook to gather the data generated by their readers.

---

11 See Dina Srinivasan, “The Antitrust Case Against Facebook: A Monopolist’s Journey Towards Pervasive Surveillance in Spite of Consumers’ Preference for Privacy”, 16 *Berkeley Bus. L.J.* 39 (2019), p. 64 and 75. See also L. Gormsen & J. Llanos, “Facebook’s Anticompetitive Lean in Strategies”, p. 52-65, available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3400204](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3400204)

12 Since 2016 Google changed its Privacy Policy. As a result, it can combine the vast data collected across its properties (e.g. Google Search, Maps, YouTube, Android) with the massive amounts of behavioral data collected by DoubleClick to create user super-profiles. See J. Angwin, “Google Has Quietly Dropped Ban on Personally Identifiable Web Tracking”, *ProPublica*, 21 October 2016, available at <https://www.propublica.org/article/google-has-quietly-dropped-ban-on-personally-identifiable-web-tracking>

13 See Load AMP pages quickly with Google AMP Cache (“The Google AMP Cache is a cache of validated AMP documents published to the web that is available for anyone to use. Google products, including Google Search, serve valid AMP documents and their resources from the cache to provide a fast user experience across the mobile web.”), available at <https://developers.google.com/amp/cache/>

The question is how Google and Facebook have been able to convince publishers to use their formats, although they do not necessarily serve their interest well.<sup>14</sup> Google has used its dominance in online search to coerce publishers to adopt its AMP format, as AMP-compliant articles are prioritized in its Search Engine Results Page and have exclusive access to the much-coveted News Carousel.<sup>15</sup> Similarly, Instant Articles are prioritized in the user's Newsfeed over news stories that are not Instant Articles.<sup>16</sup> This is an example where these platforms' data advantage is based on coercion.

#### B. Theme 2: Consumer control over data collection practices

The SOS indicates that the Market Study will consider whether consumers are sufficiently aware of how online platforms hold, use or share information about them and how this may affect them, as well as whether they receive sufficient value for their data (paragraphs 63-64).

While online platforms may be able to exploit a lack of consumer choice and understanding to extract data from consumers (paragraph 63), it is questionable whether ensuring that consumers obtain greater information about the data collected by the platforms and the use they make of such data will stimulate competition in consumer-facing markets (and, by extension, on digital advertising markets). While many users are concerned over Facebook's privacy practices, they may pay greater attention to the short-term benefits of using its social network than the long-term consequences on their privacy, which is not surprising given the addictive nature of Facebook.<sup>17</sup> Similarly, there is a "tragedy of the commons" at play here in that, even if they realise that some of Facebook's practices may have deleterious effects on society, users still give priority to the advantages they individually derive from this social network.<sup>18</sup> Regulation of the platforms' data collection practices may thus be more effective than empowering Internet users to have greater control over the use of their data.

#### C. Theme 3: Competition in the supply of digital advertising in the UK

In my view, this is the most important of the three themes the CMA intends to explore. Moreover, within this third theme, the CMA should particularly focus on the "the wider intermediation of advertising sales on other publishers' websites through the 'ad tech stack'" (paragraph 71).

---

14 See e.g., A letter about Google AMP, available at [ampletter.org](http://ampletter.org); see also Scott Gilbertson, "Kill Google AMP before it kills the web", The Register, 19 May 2017, available at [https://www.theregister.co.uk/2017/05/19/open\\_source\\_insider\\_google\\_amp\\_bad\\_bad\\_bad/](https://www.theregister.co.uk/2017/05/19/open_source_insider_google_amp_bad_bad_bad/)

15 M. Scott, "Google's mobile web dominance raises competition eyebrows", *POLITICO*, 1 June 2018, available at <https://www.politico.eu/article/google-amp-accelerated-mobile-pages-competition-antitrust-margrethe-vestager-mobile-android/>

16 See L. Gormsen & J. Llanos, "Facebook's Anticompetitive Lean in Strategies", *supra* note 11, p. 65-66.

17 Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (2019)

18 Garrett Hardin, *The Tragedy of the Commons*, (1968) 102 *Science*, 1243.

The reasons why ad tech markets should receive significant attention in the Market Study are that : (i) with the rise of programmatic advertising, publishers are heavily dependent on ad intermediation services to sell their inventory; (ii) Google holds a dominant position on several of these ad tech markets,<sup>19</sup> and controls each and every element of the ad tech value chain;<sup>20</sup> and (iii) there is some *prima facie* evidence of anticompetitive conduct on the part of Google. As a result, introducing more competition into such markets would have beneficial effects to both advertisers and publishers, as well as end consumers.

The SOS is correct to observe that “*digital advertising intermediation services comprise a highly complicated and rapidly changing set of market arrangements*” (paragraph 72), and that the market suffers from a clear lack of transparency (paragraph 73). The first step of the Market Study should thus be for the CMA to develop a better understanding of the ad tech value chain. In this respect, I believe that the ad tech value chain has been made unnecessarily complex by intermediaries (a strategy I like to refer to as “opacity by design”) in order to better take advantage of advertisers and publishers, which due to an asymmetry of information – and the lack of access to bidding data – have only a limited understanding of how the market functions.

Paragraph 74 of the SOS raises critically important issues.

First, bullet point (a) raises the issue of “*whether the platforms’ provision of digital advertising intermediation services could be used to protect their existing market power or leverage their market power into other parts of the supply chain.*”

One of the issues that the CMA should investigate as part of this Market Study is the extent to which Google has leveraged its control of the ad tech value chain to engage in discriminatory practices to the detriment of other ad tech intermediaries.<sup>21</sup> For instance, as I have shown in one of my papers, there are strong reasons to believe that Google has manipulated the ad selection mechanism of its leading ad server (DFP, now Google Ad Manager) to give systematic preference to its ad exchange (AdX, also now Google Ad Manager).<sup>22</sup> This form of

---

19 See, e.g., the market for ad servers for publishers, the market for display ad intermediation, market for third-party display ad buying solutions, etc. See also the market share estimates of Google’s ad exchange (66%) and DSP (66%) in the ACCC Report at p. 128.

20 Google is present at virtually every step of the value chain between advertisers wishing to buy third-party display inventory and publishers. Google thus offers the leading ad server for publishers (DFP), the leading ad server for advertisers (DCM), two ad networks (AdSense, AdMob), the leading ad exchange/SSP (AdX), the leading third-party display ad buying solutions (AdWords, DBM) as well as its powerful analytics solution (Google Analytics). In other words, Google controls not only the dominant exchange but also the dominant actors that control the flow of supply and demand into the exchange.

21 The ACCC Report observes (at p. 138) that “[t]he scope for anti-competitive self-preferencing is particularly acute in the ad tech supply chain where Google operates businesses at multiple levels.”

22 See D. Geradin and D. Katsifis, “An EU competition law analysis of online display advertising in the programmatic age”, *supra* note 1, 78-79 and 89-92, referred to in the ACCC Report at p. 135.

vertical leveraging / self-preferencing has harmed rival ad exchanges/SSPs by making less likely that they would win impressions, hence depriving them of revenues.<sup>23</sup>

In this respect, it would be useful for the CMA to conduct a retrospective of the *Google/DoubleClick* merger. When Google decided to acquire DoubleClick in 2007, significant concerns were raised by third parties that the acquisition by Google of DoubleClick's leading ad server tools, DoubleClick for Publishers ("DFP") and DoubleClick for Advertisers ("DFA"), presented risks that the merged entity would engage in exclusionary strategies. For example, concerns were raised that the merged entity could bundle DoubleClick's leading ad server tools with Google's intermediation service (AdSense) or tweak the decision logic (referred to as "ad arbitration") contained in DFP to serve ads in favour of AdSense.<sup>24</sup>

In the end, the Commission cleared the merger, rejecting the concerns expressed by third-parties on the ground that the merged entity would not have the ability and the incentive to foreclose rival ad intermediaries.<sup>25</sup> The European Commission's assessment of this merger proved, however, over-optimistic as the foreclosure concerns expressed by third-parties have since materialised. As third-parties feared, Google engaged in some practices designed to expand its grip on the "ad tech" ecosystem at the expense of its rivals. As a result, the market has "tipped" and most of the ad intermediaries which were expected to thrive, and by the same token constrain Google, have either left the market or have been acquired for a fraction of their initial value.<sup>26</sup> Investment in ad tech has nothing but collapsed.<sup>27</sup>

Second, bullet point (b) questions "*how much of the value of advertising is captured by different parts of the supply chain, including the extent to which the share being captured by intermediaries compared with publishers and other content providers might be higher than in a more competitive market.*" This triggers the following observations:

- It may be difficult to find out how much of the value of advertising is captured by different parts of the supply chain as this may depend on the circumstances. With

---

23 As the ACCC Report observes at p. 135, "if a digital platform is able to drive additional volume to its exchange, it may decrease the viability of competing ad exchanges as they would receive less advertising demand."

24 European Commission, Decision of 11 March 2008, COMP/M.4731 *Google/DoubleClick*, par. 289

25 Id at para. 295 et seq. The Commission concluded that, post-merger, Google would not have the *ability to foreclose* as the market investigation had apparently revealed that DoubleClick faced competitive constraints and was thus unable to exercise any significant market power. The Commission also considered that Google would not have the *incentives to foreclose* rival intermediaries. Bundling would likely be unprofitable as it would induce publishers to switch to other ad servers. Similarly, given that "neutrality" was "a key quality of the ad serving tool", it was unlikely that Google would have the incentive to tweak DFP's decision logic in favour of AdSense, as that could induce publishers to switch away from DFP or exclude AdSense from their list of intermediaries.

26 See the data provided in D. Geradin & D. Katsifis, "Google's (forgotten) monopoly – Ad technology services on the open web", *supra* note 1.

27 Id.

programmatic advertising and real-time bidding, each and every available impression is subject to consecutive auctions, which may deliver different outcomes depending on the characteristics of the impression (e.g., how attractive a user profile is for a given set of advertisers). Now, there is anecdotal evidence that the share of the value captured by intermediaries is on average generally high, in some circumstances well over 50%,<sup>28</sup> which seems excessive for mere intermediation. The CMA may wish to conduct some experiments based on data obtained from ad tech intermediaries and Google in particular, to determine the share of the value (i.e., the difference between the price paid by an advertiser for a given impression and the sum paid to the publisher for that impression) they are able to capture.

- An important question is how Google has been able to capture what appears to be an over-sized part of the value. One main reason is that on top of its disclosed commissions, Google can also capture hidden margins by taking advantage of the different prices of the various consecutive auctions it organizes (see the numerical illustrations provided in the paper cited below).<sup>29</sup> Google's refusal to share auction data with publishers make it impossible to calculate the true magnitude of Google's fees.
- Relatedly, another important question that the CMA should investigate is the exact nature of the services provided by Google to publishers. On the one hand, it appears that Google acts like the agent of the publisher, charging a commission on the generated revenue from the sale of inventory.<sup>30</sup> A careful review of Google's Terms for the provision of its ad intermediation services seem to point to the same direction, as according to the Terms Google provides a service and in consideration charges a revenue share percentage fee.<sup>31</sup> On the other hand, Google portrays itself more like an independent distributor/dealer that buys inventory from publishers and then resells it to advertisers, taking advantage of the difference in prices to extract a margin – which comes on top of the commission charged to the publisher.<sup>32</sup> This lack of transparency

---

28 According to a 2014 study of the World Federation of Advertisers cited by the French Competition Authority in its 2018 opinion on online advertising, publishers receive only 40% of ad spend with intermediaries capturing 60% thereof. See Opinion no. 18-A-03 of 6 March 2018 on data processing in the online advertising sector, available at [www.autoritedelaconurrence.fr/doc/avis18a03\\_en.pdf](http://www.autoritedelaconurrence.fr/doc/avis18a03_en.pdf), par. 82. The Guardian revealed in 2016 that “*in worst case scenarios, for every pound an advertiser spends programmatically only 30 pence actually goes to the publisher.*” See D. Pidgeon, “Where did the money go? Guardian buys its own ad inventory”, *Mediatel Newslines*, 4 October 2016, available at <https://mediatel.co.uk/newsline/2016/10/04/where-did-the-money-go-guardian-buys-its-own-ad-inventory/>.

29 See D. Geradin and D. Katsifis “An EU competition law analysis of online display advertising in the programmatic age”, *supra* note 1, 85-89.

30 See [https://www.google.com/intl/en\\_us/DoubleClick/publishers/dfpdx/terms.html](https://www.google.com/intl/en_us/DoubleClick/publishers/dfpdx/terms.html) The level of this commission is not publicly disclosed and is the subject of negotiations between the publisher and Google.

31 *Ibid.*

32 In its 10K Form submitted to the Securities and Exchange Commission in the US, Google reserves to itself the discretion to assess whether it acts on behalf of the publisher (as an agent) or on its own account (as a principal). See Alphabet Inc., Form 10-K filed to SEC, Annual report pursuant to section 13 or 15(d) of the Securities



over Google’s business terms does not let the publisher (or the advertiser) determine and evaluate its fees, essentially affording Google the discretion to adjust its remuneration at will.

Third, bullet point (c) raises the question of “*whether lack of transparency within the advertising supply chain might raise broader concerns, including in relation to ad verification and fraud detection; and the extent to which we might expect any concerns to be addressed by the market.*” A related issue that the CMA should look at concerns the measurement of the performance of the online platforms’ digital advertising campaigns. Walled gardens typically refuse to let third parties audit the performance of their campaigns. That means that the platform might overreport ad metrics and ignore the role of competitors in contributing to a conversion. For instance, Facebook made headlines when it acknowledged that it had overestimated the average time spent watching video ads by up to 80%.<sup>33</sup> Overreporting ad metrics harms not only advertisers but also competing publishers, as it misleads advertisers into thinking that they are better off allocating their budget towards the walled garden rather than on the open web.

Finally, bullet point (d) raises the question of “*how advertising is sold, including the transparency of auction pricing rules, and how the use of auctions affects competition in digital advertising markets.*” This question partly overlaps with the issues raised under bullet points (a) and (b) and thus I refer the CMA to my comments above. Footnote 44 of the SOS observes that “*in the past there have been concerns about how these auctions are run (e.g. concerns over Google’s ‘last look’ advantage, that Google’s ad server gave to Google’s ad exchange, which led to Google changing its auction rules in 2017).*”

Google’s “last look” advantage requires some explanation. Traditionally, publishers ranked within their ad server (typically DFP) the various intermediaries they used (initially ad network but now primarily ad exchanges) in a waterfall-like sequence, where DFP was instructed to call the highest ranked exchange and offer the impression for sale. If the exchange returned a sufficiently high bid, it would secure the impression and no further exchange would be called. If it could not submit a sufficiently high bid, DFP would call the next exchange down the waterfall and so on until the impression was finally sold. Publishers prioritized the various exchanges in the waterfall according to their *estimated* bids, which were calculated based on their past performance, and which could thus differ from their actual real-time bids.<sup>34</sup>

---

Exchange Act of 1934 for the fiscal year ended December 31, 2018, available at [https://abc.xyz/investor/static/pdf/20180204\\_alphabet\\_10K.pdf?cache=11336e3](https://abc.xyz/investor/static/pdf/20180204_alphabet_10K.pdf?cache=11336e3), p. 56.

33 S. Vranica and J. Marshall, “Facebook Overestimated Key Video Metric for Two Years”, *The Wall Street Journal*, 22 September 2016, available at <https://www.wsj.com/articles/facebook-overestimated-key-video-metric-for-two-years-1474586951>.

34 Under the so-called waterfall system publishers were unable to prioritize ad exchanges according to their real-time bids. Prioritizing ad exchanges on the basis of estimated bids was publishers’ best effort to predict the exchange’s future bids. But that was often inefficient, as it could not exclude the possibility that an exchange could have returned a high bid for a particular impression but was precluded from doing so because it was placed low in the waterfall (e.g., due to its *average* poor performance), hence leading to sub-optimal results for publishers.

Google introduced a DFP feature called “Dynamic Allocation,” which allowed AdX to disregard the waterfall. Under Dynamic Allocation, each time an impression was available, DFP would call first AdX and offer the impression for sale. If AdX could solicit a bid just slightly above (e.g., one cent) the *estimated* bid of the highest ranked exchange, it secured the impression and the highest ranked exchange was never called. In other words, AdX was able to compete against other exchanges on the basis of its real-time demand, while the latter were captive of their estimated bids calculated by publishers. In practice, this meant that AdX just had to bid one cent higher than the estimated bid of the highest ranked ad exchange to win the impression, even if the other ad exchange could return a higher bid for the particular impression. This effectively gave Google a “right of first refusal” over available ad impressions.

As publishers and rival ad exchanges became increasingly dissatisfied with Google favoring AdX, they resorted to a disruptive technique called “header bidding.” Through a technically complex process header bidding allowed other ad exchanges to compete simultaneously in an additional auction that takes place before DFP is called by the user’s browser. Ad exchanges could thus finally insert their real-time demand. Even so, competition was not restored, since Google refused to participate in header bidding and AdX maintained an important advantage: it could still secure the impression if it solicited a bid just slightly above the winning bid from the header bidding auction. DFP thus gave AdX the so-called “last look” advantage over every impression, i.e., the possibility to outbid at will its rivals after they had submitted their bids.

Now, the CMA would be wrong to consider that Google created a level playing field by “*changing its auction rules in 2017.*”<sup>35</sup> Repeated calls of industry participants for a fair auction among all ad exchanges and the pressure exerted by header bidding eventually prompted Google to introduce a new feature called “Exchange Bidding.” Exchange Bidding is a unified auction where AdX competes simultaneously with third-party ad exchanges. Even so, commentators are still concerned that Exchange Bidding has paid lip service to calls for fair auctions.<sup>36</sup>

The reason is that the Exchange Bidding auction is organized by Google (as DFP), which at the same time participates in it (as AdX). Google thus collects all the bidding data of its rivals.

---

35 It might be the case that the CMA has been influenced by various articles of the specialized press claiming that Google dropped its “last look” in 2017. See for example S. Sluis, “Google Removes Its ‘Last-Look’ Auction Advantage”, *AdExchanger*, 31 March 2017, available at <https://adexchanger.com/platforms/google-removes-last-look-auction-advantage/>. Yet that could not be further than the truth. If the publisher does not enable Exchange Bidding (and e.g. uses only header bidding) then AdX *still* has “last look”. This inaccuracy has been implicitly acknowledged in a 2019 article of the same industry expert observing that Google’s announced switch to first-price auction will remove its “last look”. See S. Sluis, “Google Switches To First-Price Auction”, *AdExchanger*, 6 March 2019, available at <https://adexchanger.com/online-advertising/google-switches-to-first-price-auction/>

36 See for example J. Hercher, Google’s Answer To Header Bidding Is Now Generally Available, *AdExchanger*, 4 April 2018, available at <https://adexchanger.com/ad-exchange-news/google-exchange-bidding-update-elevates-its-header-bidding-solution-solution>, noting that according to an AppNexus’s director, Exchange Bidding trades on the transparency offered by header-bidding integrations while keeping publishers “*locked in the AdX black box.*”

Google could, of course, argue that DFP and AdX are separated by strict Chinese walls. Nevertheless, that would sound implausible given that in 2018 DFP and AdX were integrated into a unified platform, Google Ad Manager.<sup>37</sup> This suggests that Google may be able to use current and historical data to inform the bidding decisions of AdX, giving it an informational advantage over its rivals.<sup>38</sup> In light of the commercial significance of bidding data, it appears problematic for a dominant undertaking to be both an auctioneer and a bidder with access to its rivals' bidding data.

Exchanging Bidding thus seems to present similar concerns to those posed by digital platforms that exercise a “dual role,” i.e., platforms that operate the marketplace but also compete on it. In its recent probe against Amazon, the European Commission has apparently taken issue with the latter's dual role, i.e. being both the biggest online marketplace and the largest retailer trading on it.<sup>39</sup> The concern seems to be that Amazon might use sensitive data of the third-party resellers that use its platform in order to favor its own retail activities.

#### **IV. Harm to consumers**

The SOS is correct to observe that the various concerns expressed above can create both *direct* and *indirect* harm to consumers (paragraphs 75-76).

Of these different harms, particular attention should be given to the indirect harm consumers suffer “*where competition problems in digital advertising markets result in content providers receiving a lower share of advertising revenues than they would in a well-functioning market.*” This risk of under-compensation of publishers is real. First, search advertising is largely captured by Google. As regards display advertising, more than half of the revenues it generates are captured by the walled gardens and, in particular Facebook (see SOS at paragraph 5). In practice, this means that the largest part of digital advertising revenues is captured by a small number of platforms, while thousands of other companies in the UK (i.e., news publishers and a largest number of other websites offering valuable content) are left with a fraction of these revenues (from which the fees charged by ad intermediaries must be deducted).

This unequal sharing of these revenues can not only harm consumers in terms of depriving them from valuable content, but also have wider impact on society (in the case, for instance, were news publishers, which play a vital role for democracy go out of business).

---

37 J. Bellack, Introducing Google Ad Manager, 27 June 2018, available at <https://www.blog.google/products/admanager/introducing-google-ad-manager>.

38 See also the Plum Consulting Report, p. 59, noting that “[o]n the supply side, in many cases Google technology runs decisioning and auctions, and bids in these auctions, creating potential conflicts of interest.”

39 European Commission, Press release, “Antitrust: Commission opens investigation into possible anti-competitive conduct of Amazon”.

## V. Remedies

The SOS identified five potential remedy areas with the first two of these areas focused on data. I have the following observations:

- Potential Remedy area 1 consists in “*increasing competition through data mobility, open standards and open data.*” While allowing consumers to move their data between applications through “data mobility” and the adoption of “systems with open standards” may be valuable, it is questionable whether this will have a significant impact when it comes to digital advertising. At least with respect to ad tech markets the main problem comes from the fact that Google controls all the key components of the ad tech value chain.
- Potential Remedy area 2 consists in “*giving consumers greater protection in respect of their data.*” It is hard to deny the benefits of giving consumers greater control over their data. However, the CMA should be careful not to adopt remedies that could produce unintended consequences. While one could have thought that the GDPR would have limited the worst excesses of online platforms in terms of data collection, it effectively strengthened the position of the platforms on digital advertising markets to the detriment of other intermediaries, but also advertisers and publishers.<sup>40</sup>
- Potential remedy area 3, which consists in “*limiting platforms’ ability to exercise market power*” has, in my opinion, the greatest potential to increase competition in digital advertising markets to the benefit of the platforms’ rivals, as well as advertisers and publishers. While the development of an *ex ante* regulatory regime is probably the best way to prevent online platforms from exercising market power to the detriment of competition and consumers, the CMA should also consider enforcement action when it has sufficient evidence of a breach of competition rules.

As to the rules and guidance that could comprise such an *ex ante* regime, the several examples mentioned in the SOS are all on point:

- Rules on the terms on which platforms transact with different digital advertisers, including on how platforms set prices, are desirable. As to ad intermediation services, there are reasons to believe that Google sets the price of its services in an opaque (and largely discretionary) manner. Imposing greater clarity on pricing rules may increase competition in such services as advertisers and publishers may be attracted to intermediaries offering lower fees.

---

40 N. Kostov & S. Schechner, “GDPR Has Been a Boon for Google and Facebook”, *The Wall Street Journal*, 17 June 2019, available at <https://www.wsj.com/articles/gdpr-has-been-a-boon-for-google-and-facebook-11560789219?mod=rsswn>; Björn Greif, “Study: Google is the biggest beneficiary of the GDPR”, 10 October 2018, available at <https://cliqz.com/en/magazine/study-google-is-the-biggest-beneficiary-of-the-gdpr>

- Increased reporting and transparency on the different activities undertaken by the platforms across the value chain is also desirable as programmatic advertising has become so complex that even industry experts have difficulties to fully grasp its functioning.<sup>41</sup> The CMA might also wish to consider whether the structure of the market is optimal as the existence of several consecutive auctions, which do not operate in a transparent manner, offer online platforms the opportunity to take advantage of advertisers and publishers by combining high commissions with undisclosed margins.
- Requiring vertically integrated platforms to implement an appropriate form of separation between different activities across the value chain is absolutely necessary. For instance, for the reasons discussed above, Google has used its leading ad server to discriminate in favour of its ad exchange. As behavioural remedies would require significant monitoring and would give opportunities to Google (and other platforms engaging in similar discriminatory practices) to evade their obligations, structural remedies should be given preference by the CMA.

\*\*\*\*

---

41 See for example the “simplified” diagram explaining Google’s ad tech stack created by Ari Paparo, CEO of Beeswax and former Google and DoubleClick advisor <https://twitter.com/aripap/status/1107613284889444352>. The fact that Google often changes the names of its products adds to the complexity of its ad tech stack.