



**Stacking the Tech:  
Has Google harmed competition in online advertising?**

**Subcommittee on Antitrust, Competition Policy, and  
Consumer Rights of the United States Senate Judiciary Committee**

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## I. INTRODUCTION

I am pleased to submit this testimony in connection with the September 15, 2020 hearing before the Senate Judiciary Committee’s Subcommittee on Antitrust, Competition Policy and Consumer Rights and its ongoing evaluation of the antitrust laws and their efficacy in connection with digital platforms. I am an attorney testifying on behalf of Omidyar Network, where I am a Senior Advisor. Omidyar Network is a social change venture that reimagines critical systems and the ideas that govern them to build more inclusive and equitable societies—for the benefit of the many, not just the few—across the globe. We come from business and technology. We know the good both can do. But we also know they must change if our society is to become more inclusive and equitable.<sup>1</sup>

I explain below that, under current law, there is a strong case to be made that Google has illegally monopolized, or illegally maintained a monopoly in, the market for digital advertising on what is termed the “open web,” *i.e.*, advertising that appears on websites as users traverse the internet.

Through a variety of conduct described herein, Google now occupies every layer the “ad tech stack”—a term that describes the various functions that serve to match website publishers with the advertisers who seek to deliver targeted ads to consumers who are viewing those websites. In antitrust parlance, website publishers provide the “supply” of ad space, and advertisers create the “demand” for that space. The market for this sort of advertising is unique and appears on its face dysfunctional from an antitrust standpoint: Google—through its various ad tech tools – represents both the suppliers *and* the purchasers *and* also conducts the real-time auctions that match buyers and sellers and determine the price. Moreover, Google appears to have engaged in a multitude of anti-competitive acts, such as

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<sup>1</sup> Prior to joining Omidyar Network, I served as deputy legal director with the Southern Poverty Law Center for almost seven years with a special focus on overseeing the LGBTQ Rights & Special Litigation practice group, leading the center’s anti-hate litigation. Previously, I was a partner with the law firm of Munger, Tolles & Olson LLP, where I maintained a national trial and appellate practice focused on antitrust, corporate litigation, and LGBTQ pro bono litigation. I also served as special counsel with the Antitrust Division of the U.S. Department of Justice in 2011-12, helping to lead a forty-five-member team of attorneys in the successful antitrust challenge to the proposed merger of AT&T and T-Mobile. I hold an A.B., magna cum laude, in classics from Harvard College, and a J.D., magna cum laude, from the University of Michigan Law School.

making the ad space on YouTube (which it owns) available exclusively through its own ad tech tools, that were designed to cement its lock on this market and exclude competitors. As my co-author and I said in a recent paper about the digital advertising market, “all roads lead through Google.”<sup>2</sup>

Google has asserted that the digital advertising market is vibrant and competitive, and that publishers and advertisers have many options in buying and selling advertising space. Of course, it is not surprising that there are other some other actors in this market, given the significant profits to be made. But a recent report from the United Kingdom’s Competition and Markets Authority (“CMA”) explained, based on an extensive factual investigation, that Google holds a dominant position—as high as 90%—in every layer of the ad tech stack. Moreover, a monopolization case in the U.S. does not require proof that the alleged monopolist hold 100% of a particular market—which would make it literally a monopolist—but rather that it has “monopoly power” and that it has engaged in anticompetitive conduct to obtain or maintain that power rather than competing on the merits. Google’s conduct as described herein surely fits that standard.

Digital advertising is complex and the tools and processes that allow for near-instantaneous placement of ads every time we open a web page can seem opaque. But the consequences of unchecked power in this market are significant. If advertisers are paying higher prices than would obtain in a well-functioning market, economic theory teaches that those higher advertising prices will be passed down to consumers in the form of increased prices for goods and services. If website publishers, such as local news outlets, are being paid less than they should

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<sup>2</sup> See Fiona Scott Morton & David Dinielli, *Roadmap for a Digital Advertising Monopolization Case Against Google* (May 2020), <https://omidyar.com/wp-content/uploads/2020/05/Roadmap-for-a-Case-Against-Google.pdf>. This paper and its analysis were based on publicly available information. Professor Scott Morton and I also published a related paper explaining how Google has monopolized the market for search. See Fiona Scott Morton & David Dinielli, *Roadmap for a Monopolization Case Against Google Regarding the Search Market* (May 2020), <https://omidyar.com/wp-content/uploads/2020/09/Roadmap-for-a-Monopolization-Case-Against-Google-Regarding-the-Search-Market.pdf>. The two papers together show how Google monopolized general search and then used that dominance as a springboard to build and maintain dominance in the digital display advertising market as well. A complete and effective enforcement action against Google, therefore, necessarily would address Google’s interrelated conduct in search and in digital advertising.

for their supply of advertising space, they will invest less in content creation and news gathering. Google is the winner and the rest of us are the losers. This committee therefore is right in investigating if current antitrust law is up to the task of ensuring competition in digital advertising and exploring possible legislative fixes if it is not.

## II. THE ANTITRUST CASE AGAINST GOOGLE

The elements of a claim for monopolization under Section 2 of the Sherman Act are straightforward. The Department of Justice has summarized them as follows:

At its core, section 2 makes it illegal to acquire or maintain monopoly power through improper means. The long-standing requirement for monopolization is both "(1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident."<sup>3</sup>

Although the Antitrust Division of the Department of Justice is reported to be preparing a case against Google, and multiple State Attorneys General also have been reported to be investigating Google's practices, none of the facts from those investigations has been made public. Nonetheless, the UK CMA's recent report discloses facts about this market that make it possible to sketch what a case in the United States might look like.

### *A. Digital Display Advertising Is a Product Market*

A monopolization case requires defining a "market," and there is a strong basis to conclude that digital display advertising constitutes a market for purposes of U.S. antitrust law. Digital advertising comes in a variety of forms. One form is "search" advertising, *i.e.*, the advertising that appears at the top of the results page when a

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<sup>3</sup> See <https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-1#:~:text=This%20element%20includes%20both%20conduct,with%20monopoly%20power%20is%20anticompetitive.>

user enters a query into the Google search engine or some other search engine. Another is “display” advertising, which is the advertising that appears on web pages as users traverse the web. For example, if I open a page from the Washington Post about the investigation of officers involved in the killing of George Floyd,<sup>4</sup> I see an ad for Liberty Insurance on the right-hand side of the screen. That is a “display ad.”

The ad that I see may not be the same ad that you see. That is because the actors in the ad tech stack may know a lot about me, including my location, my recent searches, my age, whether I own my home, whether I’m gay or straight, etc., and target their ads to me based on what is known about me. When I open a page on washingtonpost.com, a signal is sent that triggers a process whereby washingtonpost.com announces that there is space available on the page that I am looking at, and advertisers then bid (through automated processes) to serve an ad in that particular space for me to see.

The CMA concluded that display advertising and search advertising are not substitutes—and therefore they constitute separate antitrust markets—because they serve different purposes. Advertisers view search ads as responsive to particular consumer inquiries—for example, a search for “local plumbers”—whereas they use display advertising to raise general brand awareness to people whose demographic or other characteristics make them appear to be potential customers.

It is true that advertisers also purchase ads on particular platforms, such as Facebook or Amazon. Google has suggested that the existence of those other platforms means that Google cannot hold market power in advertising. But the

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<sup>4</sup> See Holly Bailey, *Former officers charged in George Floyd killing turn blame on one another* (Sept. 10, 2020), [https://www.washingtonpost.com/national/floyd-minneapolis-police-blame/2020/09/10/b6367c1c-f37c-11ea-b796-2dd09962649c\\_story.html?hpid=hp\\_hp-banner-main\\_floydblame-610pm%3Ahomepage%2Fstory-ans](https://www.washingtonpost.com/national/floyd-minneapolis-police-blame/2020/09/10/b6367c1c-f37c-11ea-b796-2dd09962649c_story.html?hpid=hp_hp-banner-main_floydblame-610pm%3Ahomepage%2Fstory-ans). If I close the page and then reload it, I see a different ad. A different bidder won the space for that ad space the second time I opened the page, presumably because Liberty Mutual placed a lower value on my seeing the same ad a second time than did a different business that wanted me to see an ad for the first time.

CMA flatly rejected those assertions. If you want to advertise on the open web—rather than on Facebook or Amazon—you have to engage with the ad tech stack that Google dominates. For this reason, digital display advertising on the open web is a “market” for U.S. antitrust purposes, even though advertisers may engage in other forms of digital advertising as well, just as advertisers might purchase space on billboards and also in magazines.<sup>5</sup>

### *B. Google Has Monopoly Power in the Display Advertising Market*

Monopoly power generally is understood as the ability to raise prices above the competitive level. Indeed, the Supreme Court has defined monopoly power as “the ability to raise prices above those that would be charged in a competitive market.”<sup>6</sup> Courts examine a number of factors in determining if a firm has monopoly power, including market shares and “barriers to entry,” meaning elements of the market that make it difficult for new entrants to compete and succeed. The CMA report revealed facts that indicate that Google holds extremely high shares in the market for digital display advertising, and that there are significant barriers to entry. These facts make it highly likely that a U.S. court would conclude that Google has monopoly power.

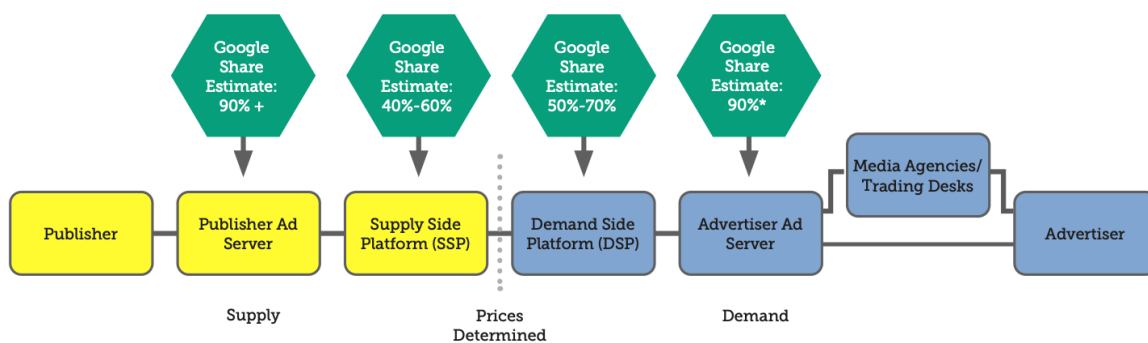
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<sup>5</sup> The large digital platforms often suggest that they face stiff significant competition because there are multiple large digital platforms (Facebook, Google, Amazon, and Apple, for example). But that assertion is as overly simplistic as saying that Chick-fil-A faces significant competition from Best Buy because both of them operate brick-and-mortar outlets that sell physical items for cash. In this instance, the CMA specifically rejected—based on data and extensive interviews of market participants—the assertion that other forms of digital advertising can substitute for advertising on the open web.

<sup>6</sup> See <https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-2#di>. The CMA report concludes that there is direct evidence of Google’s ability to charge supra-competitive prices. Google sets a “reserve price” in its auctions, meaning a minimum bid needed to win a particular ad placement. If none of the bids exceeds this reserve price, the winning bidder must pay the “reserve price”—a price that, by definition, is higher than the price that would have been paid in an auction in which Google set the floor price. The CMA reports that the majority of winning bids actually pay the reserve price, that is, a supra-competitive price.

## 1. High Market Shares

Google, through its various ad tech tools, performs virtually every function that matches advertisers to publishers. The CMA concluded that Google holds significant market share—up to 90%—at every level of the ad tech stack. The following figure reflects the CMA findings.



Based on CMA Figure 5.10.

\* Advertiser Ad Server share estimate based on FlashTalking.com.<sup>46</sup>

Significantly, Google holds a roughly 90% share of the Publisher Ad Server business. Publisher Ad Servers help publishers, such as small-town papers, manage their inventory. Google also holds a roughly 90% share of the Advertiser Ad Server business; this function helps advertisers manage campaigns. The result of these high market shares means that nine out of ten times a website makes space available for ad placement, it does so using Google tools, and nine out of ten times an advertiser places an ad on a website, that advertiser also uses Google tools.

This power is compounded by the fact that Google also has high shares in other functions in the ad tech stack, as indicated in the figure above, including the function of conducting the real-time auctions that determine which ads are served to which consumers and at what price. Google's shares in the digital display advertising market plainly support a finding that Google holds monopoly power.

## 2. Significant Barriers to Entry

It is not easy to gain a foothold in the ad tech world, and the CMA identified a number of factors that make it particularly difficult for existing or new entrants to challenge Google’s dominance.

Foremost among these barriers is the need for detailed personal data about the consumer who is viewing a particular web page. Advertisers will pay more for ads they know will be presented to likely customers than they would for ads that might be shown to people who are unlikely to purchase the advertised product or service. A lawn mower manufacturer, for example, would want to show ads to people living in single-family homes, but not to apartment dwellers, and would bid more to place an ad in front of a known homeowner than someone living in a fourth-floor walk-up.

Google has an enormous advantage in this regard because of its multitude of consumer facing products—Google Maps, Gmail, Google Search, to name a few—as well as the Google Android operating system, which collects location and other information. Location information is the “golden ticket” in digital advertising. A donut shop might want to advertise exclusively to people who are within a mile of the store during the hours of 7:00 am and 10:00 am. Google can determine who fits the bill; a new entrant without access to the vast sources of data that Google has likely could not. It would be virtually impossible for new entrant to replicate this depth or breadth of personal data.

Another barrier results from the tendency of publishers and of advertisers to “single-home,” meaning that they typically use just a single tool to manage their advertising supply or purchases. According to the CMA, this is especially the case with small publishers and advertisers. The CMA reports, for example, that it can be costly and time-consuming for a publisher to switch to a new Publisher Ad Server (a function in which Google holds a 90% share) and the publisher can lose ad revenues in the process. This feature of the market helps cement Google’s monopoly power, because any new entrant would need not just to offer a better product or lower price, but to offer the service at a price that would justify incurring those high switching costs from one ad server to another.



*C. Google Has Engaged in Anticompetitive Conduct To Obtain and/or Maintain Its Power*

U.S. law does not condemn the mere possession of monopoly power. Rather, Section 2 of the Sherman Act prohibits companies from obtaining or maintaining monopoly power through improper means. In our recent paper, Professor Scott Morton and I described twenty different ways in which Google appears to have acted improperly to obtain or maintain its monopoly power in the digital display advertising market. I will not in this testimony describe in detail each of these improper acts, but instead provide this summary (based on evidence made public by the CMA and other public evidence) which paints a compelling picture of improper conduct that could support a monopolization case under Section 2 of the Sherman Act.

The pattern of conduct we describe in our paper suggests a long-term strategy to occupy, through acquisitions, the entirety of the ad tech stack that connects buyers to sellers, and then to use its presence across the stack, its data, and its control of the flow of payments to exclude and prevent entry of competitors, raise rivals' costs, and force buyers and sellers to rely on Google services to effectuate sales. Google has used exclusivity and the denial of interoperability, and leveraged power across the stack to disadvantage competitors and advantage itself. Google's opacity keeps many of the details of its conduct secret, even from customers, which suppresses competition and helps Google to maintain dominance.

Through this conduct, Google both creates and maintains power in the supply of space for display advertising, especially for open display and for video, and reinforces its dominance in the layers of the ad tech stack.

- Google completed a series of transactions that allowed it to participate in every level of the ad stack.
- Google leveraged its power in search advertising, in which it holds monopoly power, to coerce advertisers to use Google products to access the display market as well.

- Google advantaged itself through arbitrage and cross-subsidization opportunities made possible by the fact that it, and it alone, operates at all levels of the value chain.
- Google withheld interoperability in order to disadvantage, foreclose, and punish its ad stack rivals.
- Google designed auction processes that cement its own market power and raise rivals' costs.
- Google kept key market information hidden to shield itself from scrutiny from publishers, advertisers, and potential new entrants, suppressing otherwise natural competitive forces.
- Google leveraged its control over the ad tech stack and Google Analytics to weaken rival sources of display supply.

I am happy to answer questions about any of this conduct but want to highlight just two examples in this written testimony that demonstrate Google's improper use of the power it has obtained through occupation of the entire ad tech stack.

The first example of "improper conduct" relates to YouTube, which Google acquired in 2006. Google initially made the YouTube inventory available for placement by all Demand Side Platforms ("DSPs"), meaning that advertisers could place ads on YouTube through a variety of ad placement tools. But in 2015, Google closed YouTube and made it accessible only through the Google-owned DSP. Because buyers tend to use a single DSP for an entire ad campaign, Google's decision to limit YouTube availability to users of its own DSP forced many buyers into using the Google DSP not just for placing ads on YouTube, but also to place ads on other properties even when they might otherwise choose a rival DSP. An entering DSP that could not place ads on YouTube would not be very useful to advertisers, as YouTube offers as much as 20% of the total inventory of video ads (and up to 50% of the non-Facebook inventory) and has a reach greater even than Facebook.<sup>7</sup>

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<sup>7</sup> Public information confirms that Google instituted this particular policy specifically in response to a perceived competitive threat to its DSP. AppNexus was a company that developed technology for real-time bidding, and also connected advertisers to auctions. Its co-founder provided testimony to the Senate in 2019 in which he described Google's reaction to the threat posed by AppNexus. AppNexus had spearheaded a form of bidding called "header bidding" that

The second example relates to Google’s dominant position in the Publisher Ad Server businesses and how it uses that position to expropriate value from publishers, including magazines and local news outlets. Let’s say, for example, that Golf Magazine uses the Google Publisher Ad Server to market its ad inventory. Through that relationship, Google knows exactly who reads golf.com—a cohort that one can assume has significant disposable income. Because Google knows exactly who is reading golf.com, Google can use that information to sell advertising to those people, even when they are not reading golf.com. An advertiser might be very happy to reach readers of golf.com—because of their high value—even when they are reading, for example, the Bethesda Beat (bethesdamagazine.com), a local news source. Google can sell a high-value ad to a golf.com reader when she is on bethesdamagazine.com, bypassing golf.com entirely. In this way, Google’s takes advantage of its dominance in the Publisher Ad Server Market to expropriate value that rightly belongs to, in this example, golf.com. Golf.com developed its readership through investment and development of its brand and its content, and its relationship with readers is a thing of value that rightly should benefit golf.com, not Google. But because Google’s occupation of the entire ad tech stack allows it to determine where ads are placed and at what price, Google has given itself the ability to expropriate that value and earn what economists call monopoly rents, to the obvious detriment of publishers.

### III. HARMS FLOWING FROM GOOGLE’S MONOPOLIZATION OF THE DISPLAY ADVERTISING MARKET

Google’s monopolization of the display advertising market has had (and, if left unchecked, will continue to have) serious consequences for advertisers, publishers, foreclosed technological rivals, and consumers.

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displeased Google because it bypassed a feature of Google-conducted auctions that advantaged Google. After this success, AppNexus signed a major strategic deal with the largest advertising agency in the world. In 2010, and apparently to punish AppNexus for its promotion of header bidding, Google suddenly cut off AppNexus’s ability to place advertising on YouTube and other supply that was available through real-time bidding—an abrupt shift from prior policy—thereby rendering AppNexus’s new deal with the large advertising agency practically worthless.

With respect to advertisers, the CMA describes evidence indicating that Google’s dominance has allowed it to charge supra-competitive prices to advertisers, while at the same time denying them access to the data and information they would need effectively to evaluate the success of their advertising campaigns and negotiate for lower prices.

Regarding publishers, Google itself determines the “take rate,” meaning the amount of ad spend that it keeps for itself rather than passing it on to the publishers. Again, Google maintains significant secrecy over where that money goes, leaving publishers at a disadvantage were they to attempt to negotiate a lower take rate. The CMA concludes that Google keeps roughly 30% of digital ad spend, which contributes to its 40% return on investment—and extraordinarily high return that suggests supra-competitive pricing.<sup>8</sup> Unfairly low payments to publishers lead to reduced investment and a decrease in the quality of content.

Google’s exclusionary conduct and efforts to raise rivals’ costs also has foreclosed technological rivals from entering the ad tech market, and driven out or hobbled a number of companies, including OpenX and AppNexus. But for Google’s conduct, we might see rivals who would provide better service or pricing than Google, or that acted in a transparent manner that allowed publishers and advertisers to evaluate the value of the services.

Of course, all of these harms flow through to consumers. Economic theory and logic teach us that high prices to advertisers will be passed down in some degree to consumers when they purchase goods and services. Consumers also are harmed by reduced investment by publishers, including the potential loss of publishers such as local news outlets that cannot thrive because Google captures so much of the ad spend. Additionally, because Google determines which ads are placed and their frequency, Google’s dominance risks the possibility that Google will serve more

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<sup>8</sup> Google has at times downplayed the profit it earns in the display advertising market, which is smaller than the profits it earns, for example, through its search engine. But the fact that Google also earns monopoly profits in the search market—which is the subject of a separate paper Professor Scott Morton and I have published and is mentioned above—does not insulate it from liability for, or undercut the significance of, its monopolization of the display advertising market.

ads than are warranted, or the wrong kind of ads, which degrades the consumer experience and raises what economists call the quality adjusted price.

Google's response to commentary about the harms that result from its dominance has focused on the supposed efficiencies it has brought to the display advertising market. But from an antitrust standpoint, the question is not whether the market is working better than it used to. The relevant question is whether Google's conduct has suppressed competition such that the market is not operating as efficiently as it would had Google not suppressed competition. Therefore, the "but for" world is one in which Google—because of competition—would have been forced to innovate even more and faster than it has. That world, we can assume, would reflect lower prices to advertisers, higher payments to publishers, vigorous quality competition by ad tech companies, and substantial consumer benefits.

#### **IV. CONCLUSION**

Public facts show that there is significant reason for concern that Google has violated U.S. antitrust law. Google, largely through acquisitions, acquired all the necessary building blocks to amass dominance. Most notably, it acquired companies whose assets allowed it, and it alone, to occupy the entirety of the ad tech stack connecting publishers to advertisers. It then used its monopoly power in search, and the exclusive data it harvests from its family of consumer-facing products and its related power in analytics, to coerce publishers and advertisers into using Google's ad tech services and relying on the Google exchange to make purchases and sales.

With that structure solidly in place, Google then began foreclosing rivals with a series of actions to hobble those rivals and prevent entry. Google fortified its ability to steer the majority of digital advertising commerce through its own ad tech services with its acquisition of YouTube, a must-have supplier of display inventory that Google makes available exclusively to its own customers. Google has used its structural advantage—it acts as sellers' agent, buyers' agent, and auctioneer—to keep for itself a vast amount of the money advertisers spend, and that publishers may well deserve in a competitive market.

Google protects its market power by denying interoperability to ad tech rivals and by raising their costs, leaving publishers on the open web with effectively one choice in ad serving. To raise its profits still further, Google uses its power in search, designs its systems of measurement and payment, and chooses data policies to disadvantage its rivals in the display supply business, the publishers. Lastly, it insulates itself from natural competitive forces through strategic secrecy over elements of its complex business that, if understood, might invite inquiry or regulation. The public facts paint a monopolization narrative that is clear and compelling.

Google's ad tech services power a multi-billion-dollar market that provides tremendous benefits to the economy and to consumers. But that is exactly why it is so crucial to ensure that the market operates in a manner that is fair and that promotes further innovation. We might not know exactly what that market could look like in the absence of Google's anticompetitive conduct, but it's high time we find out.

A handwritten signature in black ink, appearing to read "David Dinielli", written in a cursive style.

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David Dinielli

September 14, 2020