Insight

Google and Digital Advertising

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Executive Summary

- The Department of Justice (DOJ) recently announced an investigation into Google's business practices in the digital advertising market, a move complementing litigation by a coalition of states that alleges the company has unfairly stunted competition in the markets for digital search and display advertising, harming competitors and consumers.
- While these cases could provide clarity on Google's specific conduct, the digital advertising market overall provides myriad benefits to both consumers and the economy in the form of innovation, falling prices, and increased spending.
- In light of these market conditions, lawmakers and regulators should wait until the conclusion of the cases against Google before attempting to address anticompetitive conduct in the broader digital advertising market.

Introduction

The Department of Justice (DOJ) recently brought an antitrust suit against Google for "monopolizing multiple digital advertising technology products in violation of Sections 1 and 2 of the Sherman Act." This action complements a state claim led by the Texas attorney general (AG), as well as bipartisan Senate legislation in the 117th Congress to promote competition in digital ad markets. With reports that senators are prepping to introduce similar legislation in this session of Congress, it is reasonable to anticipate some form of regulation of the digital ads market in the near future.

Critics of large technology firms' digital advertising practices argue that a few companies can dominate the market and act in monopolistic fashion; these claims persuaded a judge to allow discovery in the Texas case and for the DOJ to bring suit.

Yet since AT&T ran the first digital banner ad in 1994, the cost of placing and serving digital ads has consistently declined. Ad spending is expected to continue growing, and innovations in ad technology have continued unabated. Such growth and innovation would likely not occur in a monopolized market, in which one firm uses its dominant position to extract rents from participants, stifle innovation, and raise barriers to entry.

While allegations of anticompetitive conduct by Google are serious and merit pursuit, broad claims of a poorly functioning digital ad market should be viewed with caution. Digital advertising, and advertising generally, is both cheaper for advertisers and attracting greater investment than ever before; moreover, the market is characterized by low barriers to entry and growing competition. Congress should carefully monitor the cases regarding Google's conduct – and wait for these cases to conclude before attempting to address any putative anticompetitive conduct in the broader digital advertising market.

Roles in the Digital Ad Market

Demand-Side, Supply-Side, and Ad Exchanges

Digital advertising is a multi-sided market composed of demand-side providers, supply-side providers, and intermediaries. On the demand side, providers place ads for firms by bidding in auctions for ad impressions (when an ad is displayed) on web pages or purchasing guaranteed line items (a commitment to purchasing ads on a particular site). On the supply side, publishers – websites such as ESPN, Eater, and *The Wall Street Journal* – host advertisements and monetize traffic to their sites. In between the two are intermediaries, colloquially referred to as ad exchanges, both on the demand and supply side, as well as pure intermediaries, which facilitate transactions between the demand and supply side to place ads and collect a transaction fee. (For more technical information on how digital ads are bought and sold through online auctions and Google's role in that process, see the Technical Appendix.)

Google's Digital Advertising Practices and Regulatory Responses

Google owns, operates, and participates in the digital ad market on the demand side by purchasing impressions; it participates on the supply side by auctioning search and digital display impressions; it also runs an intermediary between the demand- and supply-side buyers to coordinate transactions on its domain and for third party platforms. Google's involvement in every component of the digital ad market has led to regulatory action against the firm and proposed legislation to force the firm to divest certain parts of its ad tech business.

Google's Position and Ongoing Litigation

Google relies on advertising for more than 80 percent of its revenue. Through Google Ad Manager, which includes its AdSense network (helps publishers monetize traffic) and the AdX exchange (intermediary), Google offers a one-stop shop for publishers and advertisers to host ads on a particular site, buy impressions in Google Search or YouTube, and facilitate real-time bidding and transactions between publishers, advertisers, and ad agencies.

In 2007, Google acquired publisher ad server DoubleClick, a merger approved 4-1 by the Federal Trade Commission (FTC), which undergirds Google's publisher-side ad services. In 2009, 2010, and 2011, Google acquired three firms that augmented its mobile ad technology, its demand-side services, and its supply-side services, respectively.

In December 2020, the Texas AG, joined by 16 other state AGs as well as the DOJ, alleged that "Google monopolized or attempted to monopolize products and services used by advertisers and publishers in online-display advertising." Specifically, the plaintiffs argue that Google's dominance in online search markets, bundled with the suite of complementary services, such as Gmail or Google Drive and direct distribution agreements with device manufacturers, allows the company to stifle competitors through its scale and network effects. Plaintiffs argue that Google is acting as a monopolist in digital advertising by offering services for both buying and selling ads online, leveraging search engine data and popularity to undercut competitors, limiting certain information about auction outcomes, and introducing new technologies. This case is ongoing.

In January 2023, the DOJ and eight states filed suit alleging Google engaged in monopolistic conduct in the market for digital advertising. The DOJ's case emphasizes four areas of supposed anticompetitive conduct: acquiring competitors, forcing adoption of Google's ad tools, distorting auction competition, and auction manipulation. This case complements the Texas case by focusing solely on Google's dominance in digital advertising markets; it does not investigate Google's role in online search or the network effects derived through

Google Search's popularity and robust data collection.

The suit also highlights Google's introduction of new auction technologies, some of which are exclusive to Google's own ad exchange, AdX, and intended to nudge publishers and advertisers to use their services and disadvantage competitors. The case is ongoing.

Legislation

In the 117th Congress, a bipartisan group of six senators sponsored legislation that would have forced Google to divest parts of its advertising business and created new regulations for digital advertising services. The Competition and Transparency in Digital Advertising Act would have promulgated rules prohibiting a firm with more than $20 billion in digital advertising revenue in a calendar year from owning an ad exchange if that same firm owns either a buy-side or sell-side ad brokerage or is a seller of digital advertising space. The bill included transparency and reporting requirements related to auction activities for any firm with more than $5 billion in digital advertising revenue as well as data retention and privacy, "firewalls" between different services within the ad market, enforcement guidelines for federal and state AGs to seek damages if a violation occurs, and a private right of action for individuals against the largest firms. The bill's drafter Sen. Mike Lee (R-UT) and several cosponsors issued a statement indicating they are working on updated legislation for the current Congress.

Considerations for Future Digital Advertising Regulation

As both lawsuits mentioned above note, Google's DoubleClick exchange is the most used ad exchange, one of the most sought-after publishers for impressions online, and has considerable market share on both the demand and supply side of the market. Google's search engine and ad tech divisions are the leading revenue generators for the company. Critics of Google's digital advertising practices point to the network effects of these two divisions: Google's ability to keep its own prices low and manipulate fees through its position as a buyer and seller of ads. The DOJ suit highlights internal communications that purport to show key acquisitions were not made to improve Google's services but to intentionally stifle competition. These are serious allegations; legislators should wait for these cases to be adjudicated and use the findings to inform an appropriate regulatory path for the larger digital advertising market if one is needed.

Conversely, claims that Google is monopolizing the digital advertising market ignore that the company faces competition from rival search engines, internet platforms, and ad exchanges, as well as the innovation and consumer benefits its services create. Research has shown that advertising costs have never been lower, while spending has risen to all-time highs. Google's share of ad spending has declined below 50 percent for the first time since 2014, and the company is facing stiff competition from other large firms such as Amazon, Facebook, NBC, and Verizon, as well as narrowly focused ad-tech firms such as TradeDesk, the Rubicon Project, Index Exchange, and AppNexus. While both suits allege Google's comprehensive ad offerings discourage competition, in fact, advertisers and publishers are using competing platforms to expand their advertising operations both on the demand and supply side. Google also is facing competition in its search business from e-commerce platforms and artificial intelligence powered competitors. Proponents of regulating the digital ads market to promote competition appear to ignore the competition Google already faces, as well as the increasing competition from rivals' innovations that lower costs for advertisers and publishers.

Finally, some view digital ads as a single component in the larger advertising marketplace, and the competitive pressures from alternative methods of reaching consumers should also factor into the analysis. For example, advertisers and brands are working directly with content creators to advertise to their viewers; while the impressions may be lower with this practice, the audience reached is much more valuable to the advertiser. While spending on television ads has declined since its peak in 1990s, rights for live sports are costlier than ever and are a source of competition for networks to attract more advertising. Research has shown that advertisers view different advertising mediums as substitute or complementary goods, not independent markets. Lawmakers and regulators should be careful not to embrace selective market definitions and distort their view of advertising markets generally.

Conclusion

Google is heavily reliant on advertising to drive revenue, and with statements purporting to show acquisitions were made to avoid competition, it is reasonable to be concerned about concentration. When looking at the digital advertising market, however, it is defined by competition from new entrants, declining costs for advertisers, and greater choice for publishers—all of which challenge Google's dominance. Lawmakers should proceed cautiously when crafting legislation for the digital advertising market, and ensure they take into consideration shifting market dynamics, as well as lessons learned from active litigation.

Technical Appendix: Evolution of Ad Auctions

This appendix provides additional information on the digital advertising market. It illustrates the evolution of auctions for digital ads over the years to provide greater clarity on firm participation and market functions.

Initially, websites and publishers sold advertising through direct contracts and used "waterfall auctions" to sell unsold impressions. If a publisher had unsold space, called remnant inventory, it would turn to an ad server and sequentially engage demand-side providers of the publisher's choosing until a network offered a bid at or above the publisher's impression floor price.

In 2007, DoubleClick, an ad manager and exchange, which was later acquired by Google with the FTC's blessing, introduced dynamic allocation for waterfall bidding. Dynamic allocation improved upon the initial waterfall bidding process by creating a floor price for a specific impression, while soliciting multiple demand-side exchanges at once, leading to auctions that generated greater revenue for publishers and more opportunities for advertisers to place ads. Dynamic allocation made the Google ad network more efficient than other competing exchanges, increased revenues for publishers, and gave advertisers an advantage when using Google products.

In 2015, AppNexus released header bidding technology, introducing greater competition for ad impressions. Header bidding allows multiple demand-side providers and outside ad networks to simultaneously bid on an individual impression. This increases revenue for publishers and enhances competition among demand-side ad buyers because they do not have to go through one specific supply-side provider, such as Google's AdX. This move accompanied an adoption of first-price auctions, which has shown to lessen fees for demand-side advertisers while improving revenue for publishers. Google's version of header bidding, called Open Bidding, debuted in 2018 to compete with this new format.

The most recent advancement in digital advertising is the introduction of in-app bidding for mobile apps. Traditional header bidding relied on JavaScript known as a "wrapper," which sends out requests for bids when a web page is accessed. In mobile apps, this wrapper is not available, so in-app bidding relies on a software development kit integration, a plug-in written in the device's operating system language.