



Using Antitrust Law To Address the Market Power of Platform Monopolies

By Marc Jarsulic July 28, 2020

The data show that the United States has a competition problem. In many industries throughout the country, there is increased concentration, rising profit margins, declining entry, and low investment relative to profits.¹ Moreover, stock market participants have been signaling the problem by assigning very high equity values to a relatively small subset of public firms earning monopoly profits.²

It is possible to take issue with any one of these measures and to argue that some of these trends actually reflect superstar levels of efficiency and returns to scale. But these alternative explanations are becoming harder to sustain as empirical research accumulates.³

Although the competition problem pervades the economy, there has been intense focus on the market power of large U.S. digital service companies. Even though detailed information about business practices and competitive conditions can be hard to find, there is enough publicly available information to suggest that close antitrust scrutiny is in order for some of these firms.

Interest in these companies derives from the increasingly important role that digital services now play in the lives of individuals, commerce, and politics. Households spend significant resources on digital hardware and software for personal and work-related purposes, using these services for a huge set of activities, including communication, internet search, social networking, and the purchase of goods and services.

Some digital service companies, by virtue of what they sell or provide for free, have developed the capacity to closely monitor the digital activity of individuals across the internet and monetize the results of that surveillance. Their revenue comes from targeted, real-time digital advertising, both commercial and political.

As a consequence of their integration into household behavior and commerce, Apple, Microsoft, Amazon, Google, and Facebook are among the very largest companies in the world in terms of market capitalization.⁴ These valuations reflect the current and expected profitability of these companies.

Although the business activities of these companies are quite complex, it is apparent that they have significant influence over important aspects of the digital economy: Google in online search; Facebook in social networks; Amazon in e-commerce sales and delivery; Apple in smart phones and related software apps; and Microsoft in business software.

These and other factors have raised the antennae of economists, antitrust scholars, and competition authorities in the United States, United Kingdom, European Union, and Australia.

In this economy, market power exists because of entry barriers—factors that prevent competitors from entering a market with higher-than-normal returns. These barriers can derive from a variety of sources. A firm may deliver products or services that others cannot replicate, or at costs they cannot match. Or it may have managed to establish a business protected by network effects—that is to say, one that has the characteristics of a telephone network, becoming more valuable to existing users as more people start to use it. But barriers can also arise from, and be sustained by, behaviors that are designed to frustrate entry and preserve market power.

U.S. antitrust law distinguishes among the different sources of market power. It is intended to prohibit acts that are designed to create or extend monopoly power, while leaving the creation of novel, desirable, and efficiently made products and services untouched. The underlying presumption may be that competitors will eventually find ways to replicate most desirable goods and services, and society will regulate persistent and publicly important monopolies.

This brief explores four examples of areas where there appear to be both entry barriers and potentially anti-competitive behavior at Google, Facebook, Apple, and Amazon. The selection of these examples is not meant to imply that there are not competitive issues elsewhere, at these or other digital service companies. Nor does it imply that an antitrust investigation would lead to an enforcement action after a thorough inquiry that provided access to confidential company information. There is, however, enough publicly available information to suggest the need for close scrutiny by the Federal Trade Commission (FTC) and the U.S. Department of Justice's (DOJ) Antitrust Division.

It is important for that scrutiny to take place. The U.S. economy depends on market competition to direct capital to its most efficient uses, encourage innovation, reduce the costs of what consumers need and want, and provide alternatives to business practices that have negative impacts on people's lives. When large firms, protected by entry barriers, can insulate themselves from the constraints of competition, we stand to lose both economically and socially. U.S. antitrust authorities need to consider whether these or other digital service companies are protected by barriers constructed by anti-competitive behavior, and take appropriate remedial action where required.

Google digital advertising

Google is in the business of digital advertising, which provides most of its revenue.⁵ The company sells search ads on the Google search engine, which has about a 60 percent share of U.S. internet search, and targeted video advertising on YouTube.⁶ Using information such as the IP address of the user, locational information about the IP address, and other data collected elsewhere about the user and the user's internet history, these ads are targeted and delivered in real time for display on the Google search page or on YouTube.⁷ In short, Google sells the information of its services' users to advertisers.

Google also is a key intermediary in the digital advertising business, operating a unique ad-tech stack that connects websites selling display or video advertising space to advertisers who want to place ads in real time on websites as consumers use them. The stack includes supply-side platforms that run real-time auctions for available display ad inventory; demand-side platforms that allow advertisers to bid for this inventory; publisher ad servers that accept ads and load them; and advertiser ad servers that provide the ads to be displayed.⁸ Google is the only entity that is vertically integrated across the ad-tech stack and holds large market shares at each point in the stack.⁹

The scale and scope of free services that Google provides to users of the internet appear to create entry barriers to competitors in the ad-tech space. Because of the free services it offers—via Google search, the Android operating system for cell phones, and apps such as Google Maps, Waze, Gmail, and the Chrome browser¹⁰—Google is able to surveil, collect, and combine data on individuals. It is able to track internet usage and use location information to determine whether advertising is followed by actions such as visits to stores or purchases of travel or entertainment. Based on this detailed knowledge about individuals, Google is able to offer publishers—or the operating websites—and advertisers the ability to instantaneously deliver targeted ads to a user as they read something on a news site or searches for goods or services.

Based on its privileged access to ad-stack data, Google also is able to provide analytics about the delivery and effectiveness of online ads. There is no alternative analytic service to measure the full performance of the ad stack.¹¹ In addition, Google's ownership of YouTube allows it to condition access to this site on advertiser use of its demand-side bidding platform. These factors give Google a remarkable advantage over a competitor who wants to step into any part of the intermediation chain.

However, using its market power in search and its huge data advantages, Google appears to have taken actions to frustrate competition in the multiple stages of ad tech. As Fiona M. Scott Morton and David C. Dinielli have recently written:

[P]ublic sources and the [U.K. Competition and Markets Authority] Report¹² describe a wide variety of conduct that, individually and collectively, reflects a pattern that appears designed to expand Google's occupation and control of this market to the exclusion of competitors.

When viewed collectively, the conduct 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.¹³

Scott Morton and Dinielli discuss 20 such actions, including of acquisitions of the publisher ad server DoubleClick and other firms that allowed Google to integrate across the ad stack; its policy of withholding some output and results from search ads run on the Google search engine unless the ads are delivered using Google's demand-side platform; and its policy of denying competing demand-side platforms access to YouTube for video ads, thereby making them less desirable locations for ad campaigns using both display and video ads. Google has contested these and other analyses that point to possible competition problems.¹⁴

This pattern of business behavior would appear to be subject to challenge under Section 2 of the Sherman Act, which forbids firms with market power to monopolize or attempt to monopolize a market.¹⁵ Should a court determine that Section 2 has been violated, enforcement remedies might include requiring divestiture of parts of the ad stack to limit its market power; requiring that provision of analytic results related to search ads no longer be tied to use of Google's demand-side ad servers; and requiring that Google no longer tie advertiser access to YouTube to user of Google's demand-side servers.

Facebook social media

Facebook is a social media platform with more than 2 billion users that allows individuals to use its sites and apps—including Facebook, Instagram, and WhatsApp—in exchange for Facebook’s ability to gather data about their use of the sites. In the United Kingdom, Facebook sites are estimated to have a 70 per cent share of time spent on social media platforms.¹⁶

Facebook’s revenues are based on its ability to sell ads displayed on its sites. These ad sales are based on its ability to surveil the online behavior of its users and then deliver targeted real-time ads.¹⁷ Like Google, it also sells the ability to target advertising to users of its services.

Facebook’s surveillance of what users do on its own communication platform is hugely magnified by its ability to follow the digital activity of users and nonusers across the web.¹⁸ By placing software “like” buttons on millions of websites, Facebook receives a notification, including the member’s unique ID number and the URL, of what the member visited on the website or mobile app. In addition, Facebook is, in some cases, able to place tracking cookies on the computers of people who are not Facebook users but who visit sites with “like” buttons. Facebook also allows advertisers to import their own data onto the platform to better target specific users on the site.¹⁹

Facebook’s detailed information about individuals, and its control of the social media platform on which Facebook users interact, gives it significant market power with advertisers who want to reach those people. Facebook has information about individuals that’s unavailable elsewhere, and the company can offer exclusive access to the Facebook platform for ads.

These extraordinary network and data advantages create huge barriers to new social media entrants. An established communication network is itself a barrier because a credible alternative must somehow offer a network of similar scope or quality. Yet it must do so without the revenue stream that supports Facebook.

However, there is evidence to suggest that the barriers to new social media entrants have been in some measure constructed and maintained by anti-competitive conduct. As Dina Srinivasan has persuasively argued, Facebook’s dominance in social media was enabled by a policy of deceiving users about privacy:

Facebook is a monopoly that tipped the early market with promises of data privacy and then engaged in a long line of misleading conduct, which foreclosed competition. The historical record tells the story of Facebook’s monopoly power in the social media market. Facebook tried, but could not, degrade the quality of its product to impose commercial surveillance on users through Beacon in the competitive market of 2007.

Thereafter, Facebook pivoted to licensing Like buttons, Logins, and other products to independent businesses, which Facebook could leverage for the same purpose. Yet competition between 2008 and 2014 continued to restrain Facebook's ability to initiate tracking for the purpose of targeted advertising. Facebook had to retreat from alleged accidental tracking, assure consumers and other market participants that the underlying code for social plugins was not used for commercial surveillance, and then promise users an ability to vote on future privacy changes. Only after the exit of competitors, and the barrier to entry that comes with over a billion users on a closed communications protocol, was Facebook able to reverse course. The history of Facebook's market entry and subsequent rise is the story of Facebook's monopoly power. Facebook's pervasive and intrusive commercial surveillance of citizens' digital footprints is merely this titan's form of monopoly rents.²⁰

FTC Commissioner Rohit Chopra has also argued that Facebook's approach to privacy has been deceptive and harmful to users of its sites.²¹

Facebook has a very different characterization of privacy and competition issues related to its operations, which it has advanced on several occasions.²²

While misleading users appears to have been important to establishing the dominance of the Facebook platform, the company has taken other actions to maintain it. As Mark Glick and Catherine Ruetschlin note, Facebook has acquired potential rivals, such as WhatsApp and Instagram, and thereby prevented threats to its dominance in social media. They point out:

Facebook's \$19 billion acquisition of WhatsApp was another landmark deal. In 2014 mobile messaging applications were the fastest growing app category in the mobile market as social media evolved to accommodate increasing smartphone usage. Users relied on these applications for far more than text messaging, with a variety of social activities taking place on the apps including voice calling, image and video sharing, and gaming. Five-year-old WhatsApp was already the largest and fastest growing of these applications worldwide. The app offered a reliable and affordable cross-platform technology for text, voice, image, and video sharing in one-to-one or group contexts that worked across national borders and offered end-to-end encryption.

At the time of the acquisition WhatsApp had 450 million monthly active users and was gaining users at a record rate of one million per day. Importantly, WhatsApp users were unusually engaged; more than seventy percent of WhatsApp users accessed the app daily and its volume of messaging rivaled the global total of telecom SMS. Two characteristics distinguished WhatsApp from its rival messaging services, and from Facebook's corporate model. First, WhatsApp's founders committed the service to almost complete data privacy. Second, WhatsApp was advertising-free. Instead of the intensive data collection, aggregation, and analysis driving advertising revenue on

*other apps and networks, the company elected a paid model with most users charged a \$0.99 annual subscription fee after their first year of service. The app offered an alternative entry point into scaled-down social networking using only existing phone contacts to connect users; it was more personalized and lacked the privacy concerns and tracking characteristic of Facebook.*²³

After acquiring WhatsApp, Facebook ended the annual fee model and moved to replace it with ads and fees for business communications.²⁴ Facebook has, for the time being, backed away from plans to deliver ads on WhatsApp.²⁵

It is interesting to note that when it was in the process of acquiring WhatsApp, Facebook told the European Commission that it would be unable to automatically match WhatsApp user phone numbers with Facebook user identifiers. This would have made ad targeting to WhatsApp users somewhat difficult. However, the commission later discovered that Facebook had matching ability at the time of the merger and fined the company 110 million euros for the misrepresentation.²⁶

Instagram, like WhatsApp, was a potential social media competitor because it was better adapted to mobile communication devices than Facebook and oriented toward visual presentation.²⁷

In addition to acquiring rising competitors, there is evidence that Facebook has used its control over application programming interfaces (APIs) to limit the ability of other digital services to compete with Facebook. For example, the video app Vine, which allowed users to share short, self-made videos, was initially allowed to upload to Facebook. However, after Vine was acquired by Twitter, a rival social media platform, Facebook altered its APIs in a manner that made it impossible to upload Vine videos onto Facebook. Vine was later shut down.²⁸

Facebook's strategy of disguising its data harvesting, acquiring potential entrants, and restricting interoperability appears to fit a pattern of monopolization by a firm with considerable market power, which is prohibited by Section 2 of the Sherman Act. The acquisitions of WhatsApp and Instagram could also be viewed as violations of Section 7 of the Clayton Act, which prohibits mergers that substantially lessen competition or would tend to create a monopoly and allows for the rescission of mergers that have those effects.²⁹

Antitrust remedies requested by enforcement agencies might include requiring Facebook to be explicit about data harvesting; requiring that user agreements to Facebook's surveillance be explicit about tracking and data usage and available on an opt-in basis only; giving users the ability to block the company from combining data about Facebook usage with data about their use of other websites or third-party apps, as German antitrust authorities have recently done;³⁰ requiring divestiture of WhatsApp and Instagram; and requiring cross-platform operability with other social media sites.

Apple's iPhone App Store

The business model of Apple differs from that of Google and Facebook. The company's revenue is not based on surveillance and advertising. As outlined in the recent market study by the Netherlands Authority for Consumers and Markets,³¹ Apple's revenue comes from the sale of smart phone and computer hardware and software and from the sale of services, such as its own Apple Music streaming service, that run on the iPhone. Apple's iPhone, which runs on the iOS operating system, has a 47.4 percent share of the U.S. smart phone market. Other phones, using Google's Android operating system, have a 51.8 percent share.³²

Users of iOS can buy apps for iPhones from Apple and third-party providers only through the App Store, and iPhone owners are not allowed to sideload apps downloaded from the web. All apps sold through the App Store, even if they are distributed for free, must be preapproved by Apple and meet all App Store rules. Apple requires third-party apps that provide digital services on iPhones to pay a commission. Transactions for these apps also have to be made through the App Store itself; they are classified as in-app purchases (IAPs). These apps are not allowed even to mention that the offerings can be purchased outside the App Store. Netflix and Spotify are examples of IAPs. The App Store commission is 30 percent. This fee declines to 15 percent for subscriptions longer than a year. Other apps, such as Twitter, Instagram, or ride-hailing apps, are not charged commissions.

Buyers of iPhones pay premium prices for their devices and are a commercially valuable set of consumers to which Apple has unique access.³³ The revenue from the App Store, for example, is substantial. In the third quarter of 2019, App Store revenue was \$14.2 billion. Even though Android has a far larger user base worldwide—74.1 percent compared to Apple's 25.3 percent³⁴—the Google Play app store had revenue of \$7.7 billion for the same period.³⁵

Apple has an obvious interest in preventing the sale of apps that contain malware or could compromise the operation of iOS and iPhones. However, Apple's total control of the App Store can be used to create significant barriers to entry for digital service providers who wish to compete with Apple's offerings. The combination of Apple-created preapproval requirements and rules that require IAPs appear to function as entry barriers.³⁶

The difficulty that Basecamp, the developer of the Hey email app, had in maintaining approval for downloads on iPhones illustrates the effect of these processes. The app had been approved for distribution without commissions. When Basecamp attempted to make bug fixes to the app, it was told that the app needed to be changed to allow IAPs.³⁷ After a public battle, Apple announced a conditional acceptance of the app³⁸ and that it would allow appeals to decisions about the App Store guidelines and allow a separate process to challenge a guideline.³⁹ Even with these changes, control of the App Store and its rules remains in Apple's hands.

Another digital service provider, the music-streaming service Spotify, has formally complained to the EU competition authority that the conditions under which it is allowed to sell through the App Store amount to an abuse of market dominance under EU law. Spotify cites the conditions placed on IAPs, and Apple's control of app changes via its approval process, in its complaint.⁴⁰ The European Commission has opened an investigation.⁴¹ Apple disputes Spotify's claims.⁴²

In addition, Apple does not give third-party app sellers access to data on buyer demographics, search history, or emails. This makes it difficult for sellers to communicate with their customers with the intent, say, of encouraging their customers to buy directly to avoid the 30 percent App Store commission. It also gives Apple's own app developers a considerable informational advantage, which can limit the ability of a successful entrant to continue to compete with Apple offerings.

The company has also responded to issues raised about the App Store in hearings held before the U.S. House Subcommittee on Antitrust, Commercial and Administrative Law.⁴³ In addition, app developers have filed antitrust lawsuits related to the manner in which they are able to access buyers through the App Store, and consumers have filed lawsuits related to App Store pricing as well.⁴⁴

Given the facts available, it appears that Apple may be using control of the App Store to disadvantage competitor apps by restricting normal business interactions with their customers and making changes to their apps more difficult. These actions could amount to a violation of Section 2 of the Sherman Act.

Antitrust remedies could include allowing an app to link to off-site sign-ups; allowing third-party access to customer data in a manner that would enhance price competition; and limiting internal use of App Store customer data by Apple app developers to prevent anti-competitive advantages.

Amazon's Marketplace

Amazon's business includes online retail sales on Amazon.com; Amazon Marketplace, which allows third parties to sell on the Amazon website; a logistics division that warehouses and delivers goods; Amazon Web Services, which provides cloud computing; and online media streaming. The company also sells online advertising on its website.⁴⁵

Amazon's online retail platform is now the largest in the United States. Lina M. Khan has summarized its market role by noting:

The platform is estimated to capture 52.4% of all U.S. online retail spending and 56.1% of the segment's traffic, while 54% of all product searches originate on Amazon. Amazon's share of ecommerce is more than double the market share of its next nine competitors combined, and even merchants who list products on other sites come to rely on Amazon for up to 90% of their sales. For many merchants, "Not being on Amazon doesn't feel like an option."⁴⁶

Products are found on the Amazon website via a search algorithm controlled by Amazon. The presentation of search results plays a decisive role in what is purchased. Goods that are featured at the beginning of search results—the Buy Box—have a higher likelihood of being purchased.⁴⁷

Amazon appears to have structured the search algorithm to condition appearance in the Buy Box in part on the use of other Amazon services. For example, the search algorithm appears to favor goods sold by third-party sellers who pay for Fulfillment by Amazon (FBA), a service that allows these third-party sellers to warehouse and deliver their goods using Amazon logistics, even when they are not the lowest price offered.⁴⁸ There is also some evidence to suggest that search results favor established brands and third-party sellers who buy ads on Amazon.⁴⁹

These implicit conditions for good search results have the effect of coercing Marketplace sellers—who are both users of the platform and retail competitors with Amazon—into using Amazon logistics and advertising services, even if sellers have less expensive or otherwise preferred options available. This results in higher costs to third-party sellers, making them less effective competitors to Amazon and potentially raising the prices they offer consumers. It also disadvantages logistics companies that are in competition with Amazon.

One of Amazon's rules for third-party use of Marketplace appears to make the creation of competitive online retail platforms more difficult.⁵⁰ Amazon has a fair pricing policy that requires third-party sellers who use Marketplace not to offer goods at a lower price on another platform. Amazon's search algorithm, which presents offers to buyers, disfavors sellers who offer lower prices elsewhere. Moreover, Amazon can delist products that violate this policy.

This means a third-party Marketplace seller, offered lower access fees by a competing platform, will not offer a lower price on the that platform, even if doing so would leave its profit margin unchanged. This forecloses a principal strategy that a competing platform would use to build a third-party presence and attract buyers. A platform populated by third-party sellers offering the Amazon price does not give buyers a good reason to visit it.

Hence competitor platforms need to attract third-party sellers who are both willing to be shut out of Marketplace and are still desirable to buyers. This puts these competitor platforms at a considerable disadvantage.⁵¹

The use of the Amazon search algorithm to favor goods sold by third-party sellers who use FBA, or who purchase ads on Amazon, can be viewed as a tying requirement⁵²—a requirement that businesses who want to sell on Marketplace also pay for FBA or ads. Such arrangements are anti-competitive and prohibited under Section 1 of the Sherman Act.

Amazon's imposition of its fair pricing policy, which involves agreements between Amazon and third-party Marketplace sellers, could also be viewed as a violation of Section 1 of the Sherman Act. Section 1 prohibits agreements that lessen competition, and these agreements are likely to lessen price cutting by online sellers. It might also be viewed as a Section 2 violation, since it acts to make entry of online retail platform competitors more difficult.⁵³

An antitrust remedy to Amazon's anti-competitive behavior might require ending the tying of search outcomes to the use of FBA or purchase of ads and an end to the fair pricing requirement on third-party sellers. However, because of the conflicts of interest that exist between Amazon and Marketplace sellers—and the opacity of the operation of search algorithms—a prohibition on tying might be impossible to implement effectively. If enforcement agencies determined that to be true, divestment or separation of Marketplace might be in order.

Conclusion

Based on the publicly available evidence, there is very good reason to believe that the digital advertising businesses of Google; the social media and advertising businesses of Facebook; the App Store business of Apple; and Amazon Marketplace are protected by barriers to entry that confer market power. There is also good reason to believe that these companies have taken actions to augment their existing monopoly power or to limit the ability of competitors to enter the markets in which they already have market power.

Given the important role that these companies play in domestic commerce and communications, it is important that the FTC and DOJ pay close attention to what, on a prima-facie basis, looks like behavior that has reduced competition, with all that implies. The reports by U.K. and Netherlands competition authorities have been extraordinarily useful. As others have pointed out, the FTC has the authority to conduct investigations of the markets in which these digital service giants operate, and ought to do so.⁵⁴

If antitrust enforcers conclude that anti-competitive effects are as significant as they currently appear, they should vigorously pursue remedies along the lines indicated. However, antitrust actions, and an increase in market competition, may prove insufficient to deal with all the social issues raised by these and other digital platforms. As others have argued, problems such as the conflicts of interest and surveillance that this brief has touched on, and the social harm that comes from the widespread dissemination of disinformation, may require regulatory intervention.⁵⁵ Nonetheless, vigorous enforcement of existing competition law can help to reduce the reach and power of the entrenched and well-defended—and give alternative models a better chance to take hold.

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Endnotes

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