

Mergers and Acquisitions in Digital Markets

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Mergers and Acquisitions in Digital Markets

Some Members of Congress have expressed concern about mergers and acquisitions in digital markets, specifically those involving "Big Tech"—Alphabet (Google), Amazon, Apple, Facebook, and Microsoft. Mergers can be separated into three categories: (1) a merger between competitors (i.e., horizontal merger), (2) a merger with a firm in the supply chain (i.e., vertical merger), and (3) a merger with a firm in an unrelated or adjacent market. Some Members have specifically raised concern about Big Tech companies' acquisitions of nascent firms, which can occur across all three categories. A merger could potentially increase or decrease competition in digital markets, depending on the characteristics of the markets involved.

SUMMARY

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Section 7 of the Clayton Act prohibits mergers whose effect "may be substantially to lessen competition, or to tend to create a monopoly" (15 U.S.C. §18). Citing this law, the Antitrust Division of the Department of Justice (DOJ), the Federal Trade Commission (FTC), state attorneys general, and private parties can challenge mergers. Merging parties that meet certain conditions must file a premerger notification with the FTC and DOJ under the Hart-Scott-Rodino Antitrust Improvement Act of 1976 (HSR Act). After investigating a proposed merger, the agencies can (1) allow the transaction to proceed unchallenged, (2) allow the transaction to proceed after entering a consent decree with the merging parties with conditions to maintain competition in the market, or (3) seek to stop the transaction by filing suit in federal court. The FTC and DOJ have not sued to block a proposed merger involving Big Tech since 2000; during this time, the Big Tech companies acquired at least 710 companies.

Determining the effect of a merger on competition in digital markets can be challenging. For example, it can be difficult to anticipate how a digital market might evolve and how to determine the merging parties' competitors. Some of these challenges are exemplified in Amazon's acquisition of Whole Foods Market in 2017, Facebook's acquisition of Instagram in 2012, and Google's acquisition of Fibit in 2021. The FTC allowed Amazon's and Facebook's respective acquisitions to proceed unchallenged when it reviewed the premerger notifications, and Google completed its acquisition in January 2021, while the DOJ continued to investigate the merger. In 2020, the FTC and a coalition of state attorneys general filed parallel lawsuits against Facebook, alleging that it has purchased companies that present competitive threats rather than competing with them, specifically citing its acquisition of Instagram and WhatsApp.

Amazon's acquisition of Whole Foods Market may have increased competition in the grocery retail market. Competitive pressure from Amazon may have incentivized other grocery retailers, such as Walmart and Kroger, to offer online grocery delivery services. The acquisition also raised concerns that Amazon could dominate e-commerce by expanding the scope of products it offers online, in addition to strengthening its bargaining power with suppliers. Instagram was a relatively new firm when it was acquired by Facebook. It cannot be known whether Facebook's acquisition of Instagram prevented Instagram from becoming a viable competitor, or if Instagram's success after the merger was partially due to Facebook's resources, such as its advertising services and data-processing infrastructure. Google's acquisition of Fitbit could increase competition in the smartwatch market, which is currently dominated by Apple. Google's access to Fitbit users' health and fitness data following the merger could also reduce competition, including in other markets Google operates in.

The DOJ, FTC, and coalitions of state attorneys general have filed antitrust lawsuits and have ongoing investigations of Big Tech companies. Some Members of the 117th Congress have proposed different legislative actions to address merger enforcement in digital markets. Congress could increase funding for antitrust enforcement in appropriations bills and by increasing merger filing fees paid to these agencies under the HSR Act. Increasing funding could prevent anticompetitive mergers, but there is no guarantee that it will. Congress could also amend antitrust laws. It could shift the burden of proof to the merging parties to show that the proposed merger would not materially lessen competition. It could also establish that enforcement of antitrust laws does not require the definition of a relevant market—allowing the plaintiff to provide evidence of actual or likely harm on competition caused by the merger—or broaden the welfare standard used to evaluate mergers to include more than consumer welfare, such as protecting workers, entrepreneurs, and independent businesses. Congress could create a new federal agency, designate an existing agency, or create a new division within an existing agency to regulate firms that operate in digital markets. These regulations could range from establishing a code of conduct—such as methods to enable greater data mobility across firms—to regulating digital markets as a public utility.

Any legislative action, including a decision not to take action, could have significant effects on digital markets. Congress is not the only legislative body concerned about competition in digital markets; state and foreign laws and regulations could also affect mergers involving U.S. companies.

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Introduction

Some Members of Congress have raised antitrust concerns about "Big Tech"—Alphabet (Google), Amazon, Apple, Facebook, and Microsoft.¹ The first four companies were the focus of an investigation on competition in digital markets conducted by the Subcommittee on Antitrust, Commercial, and Administrative Law of the House Judiciary Committee.² A staff report issued by the subcommittee in 2020³ asserts that, in digital markets, the "significant and durable market power is due to several factors, including a high volume of acquisitions by the dominant platforms."⁴ According to the report, over the past 20 years, Facebook acquired at least 63 companies, Alphabet at least 260, Amazon at least 100, and Apple at least 120.⁵ Microsoft reports acquiring 167 companies during the same time period.⁶

This report discusses the potential effects of mergers and acquisitions⁷ on competition in digital markets.⁸ It explains how federal antitrust agencies review proposed mergers, and explores some of the complications of examining mergers in digital markets. The report concludes with potential legislative options and some considerations for Congress.

Potential Effects of Mergers on Competition

Mergers can be separated into three categories:

- horizontal mergers, or a merger involving firms that are potential or actual competitors;
- vertical mergers, or a merger involving firms in the same supply chain (a supplier or customer);
- mergers involving firms in adjacent or unrelated product markets.

¹ The term "Big Tech" comes from these companies being the largest ones in the "technology" sector, which can be defined as a "sector contain[ing] businesses revolving around the manufacturing of electronics, creation of software, computers, or products and services relating to information technology;" see Jake Frankenfield, "Technology Sector," *Investopedia*, updated January 25, 2021, at https://www.investopedia.com/terms/t/technology_sector.asp. These companies were also the most valuable publicly traded companies in the United States as of the publication date of this report, according to Standard & Poor's data at https://www.spglobal.com/spdji/en/indices/equity/sp-500-top-50/#data.

² The investigation started on June 3, 2019. More information is available at https://judiciary.house.gov/issues/issue/? IssueID=14921.

³ "Investigation of Competition in Digital Markets: Majority Staff Report and Recommendations," Subcommittee on Antitrust, Commercial, and Administrative Law of the Committee on the Judiciary, October 6, 2020, at https://judiciary.house.gov/uploadedfiles/competition_in_digital_markets.pdf (hereinafter House Subcommittee on Antitrust staff report).

⁴ The House Subcommittee on Antitrust staff report discusses other forms of anticompetitive conduct that are not included in this report, such as predatory pricing by dominant platforms and platforms' use of their "gatekeeper power to dictate terms and extract concessions."

⁵ The number of acquisitions is based on publicly available information; additional companies may have been acquired. House Subcommittee on Antitrust staff report, pp. 149, 174, 262, 414-423.

⁶ Microsoft, "Acquisition History," Microsoft Investor Relations, at https://www.microsoft.com/en-us/Investor/ acquisition-history.aspx.

⁷ In this report, the term "acquisition" is used to indicate one firm purchasing another, while the term "merger" is used broadly to include both acquisitions and two firms on relatively equal terms becoming one entity.

⁸ In this report, "digital markets" refers to services that are primarily offered over the internet, as well as products that are typically used to connect to the internet, such as computers, mobile devices, and smart devices.

This section briefly describes each type of merger, highlighting potential effects on competition. It also discusses the acquisition of nascent firms, which has been of particular concern regarding Big Tech mergers.

Defining a Market

A market refers to the exchange of goods and services between buyers and sellers.⁹ Defining the market is a key aspect of evaluating the effect of a merger on competition. The market definition is used to determine the level of competition faced by the merging parties, and to conduct analyses on the potential effects of the merger. How digital markets should be defined is beyond the scope of this report.

Horizontal Mergers

Horizontal mergers involve firms that compete directly with each other, offering similar products or services that are considered substitutes. A horizontal merger inherently means that there will be fewer firms in the relevant product market, although the merger could motivate other firms to enter the market. A firm may have several incentives to enter into a horizontal merger, including to reduce competition or to achieve economies of scale—that is, to increase production and thereby reduce the cost of producing each unit.

The effect of a horizontal merger on competition depends on the specific conditions in the market, such as the market shares held by the merging firms and the level of competition in the market.¹⁰ For example, a merger between the two firms with the largest market shares in a highly concentrated product market could reduce competition and enable the merged firm to raise prices.¹¹ In contrast, a merger between two firms with small market shares in the same product market could enable the merged firm to increase competitive pressure on the market leader, potentially preventing the market leader from raising prices or even forcing it to lower prices. If many firms sell a particular product or other firms can easily enter the product market, a horizontal merger may not significantly affect competition.

Vertical Mergers

Vertical acquisitions can be "upstream" (in which a firm purchases one of its suppliers) or "downstream" (in which a firm purchases one of its customers, a step closer to the final consumer).¹² Vertical mergers can improve efficiency and reduce transaction costs by bringing

⁹ Joan Violet Robinson, "Market: Economics," *Britannica*, February 10, 2017, at https://www.britannica.com/topic/market.

¹⁰ A firm with a large market share is typically assumed to have market power, allowing it to establish prices or terms of service that may not be possible in a more competitive market. In some markets, a firm may have market power without having a large market share, based on asymmetric information or other factors (for more information, see https://www.justice.gov/atr/market-power-without-large-market-share-role-imperfect-information-and-other-consumer-protection). To determine the level of competition in a market, economists typically use the Herfindahl-Hirschman Index (calculated by summing the squares of the market shares of each company in the market); the four-firm concentration ratio (calculated by summing the market shares held by the four largest firms); and the eight-firm concentration ratio (calculated by summing the market shares held by the eight largest firms).

¹¹ Some studies have found that higher levels of concentration in certain industries are associated with higher prices. Heterogeneity across industries can make it difficult to make a broad statement about the effect of higher concentration, highlighting the importance of industry-specific analyses. Steven Berry, Martin Gaynor, and Fiona Scott Morton, "Do Increasing Markups Matter? Lessons from Empirical Industrial Organization," *Journal of Economic Perspectives*, vol. 33, no. 3 (summer 2019), pp. 44-68.

¹² For analysis of the effect of vertical integration on competition in digital markets, see CRS Report R46207,

external dealings within the firm, which may result in lower prices for consumers in a competitive market.¹³ In particular, vertical mergers can address inefficiencies created when a firm with market power in the supply chain marks up the price of its product, which is used to produce a final product. This can lead to lower levels of production and higher prices for the final product.¹⁴

The effect of a vertical merger on competition depends on both the upstream and downstream markets. For example, if a small firm merges with a firm upstream, the merged firm may be able to lower its prices and improve its competitive position in the downstream market against larger firms that benefit from economies of scale. The merger could also reduce competition if the upstream firm is the only supplier of an essential input that competitors in the downstream market cannot develop themselves. The merged firm may choose not to provide the input to its competitors downstream, monopolizing the downstream market and foreclosing competitors' access to the input.

Mergers in Adjacent or Unrelated Product Markets

Firms in digital markets may face incentives to merge with a firm in an adjacent or unrelated product market,¹⁵ such as obtaining a wider range of consumer data and offering more products integrated with the firms' services. By merging with a firm in a different product market, a firm may be able to increase competition in that market or use its dominance in one market to gain a competitive advantage in another. The House Subcommittee on Antitrust staff report raises concern that Big Tech firms have been able to use their dominance in one market as leverage in unrelated lines of business.¹⁶ These mergers can affect how markets are defined, particularly if competitors also start to offer integrated products or services through their own mergers or by developing these products internally.

Acquisitions of Nascent Firms

The acquisition of nascent firms can occur in horizontal and vertical mergers, as well as between firms operating in adjacent or unrelated markets. In some cases, such an acquisition can allow the product or service introduced by the nascent firm to be developed more quickly with the acquiring firm's resources, helping to spur innovation without relying solely on internal research and development. Some nascent firms may be incentivized to create innovative products and services in anticipation of being acquired, particularly in digital markets.¹⁷

Competition on the Edge of the Internet, by Clare Y. Cho. Vertical integration may have different competitive effects in digital markets than in other markets; see CRS Insight IN11462, *Competition in Digital Markets: Vertical Integration and Acquisitions*, by Clare Y. Cho.

¹³ Some companies in digital markets offer certain products or services for free (e.g., Google search, Facebook user account), obtaining revenue from advertisers whose advertisements are placed on the product or service. In this case, the "consumers" would be the advertisers.

¹⁴ This is referred to as the elimination of double marginalization. Rather than having two firms in the supply chain competing in separate markets with different marginal costs (i.e., the cost of producing one additional unit), a merged firm would have a new cost structure and potentially lower marginal costs. It would remove the negative externality of a markup in the production process, which could result in higher levels of production and a lower cost for the final product.

¹⁵ In this report, an adjacent product market consists of products or services that are similar to the ones offered by the firm, but arguably not in the same product market. An unrelated market is a market that consists of products or services that are not similar to the ones offered by the firm.

¹⁶ House Subcommittee on Antitrust staff report, p. 379.

¹⁷ Luis Cabral, "Merger Policy in Digital Industries," Information Economics and Policy, vol. 54 (March 2021): pp. 1-

Acquisitions of nascent firms can also mean firms are acquired before they are able to become viable competitors, allowing incumbent firms to foreclose competition. If the nascent firm's product or service could displace the incumbent's, the merged firm may choose not to further develop the innovative technology, potentially suppressing products, services, or technological improvements.¹⁸ The acquisition of nascent firms may not be closely monitored by antitrust enforcers, particularly if the size of the transaction is relatively small or the firms involved have relatively small market shares.

Oversight of Mergers and Acquisitions

Two federal agencies—the Department of Justice (DOJ)¹⁹ and the Federal Trade Commission (FTC)—review proposed mergers and acquisitions for potential violations of Section 7 of the Clayton Act, which prohibits acquisitions that may substantially lessen competition.²⁰ State attorneys general and private parties can also challenge mergers.²¹ Companies that meet certain conditions, such as thresholds for firm size and the value of the transaction, must file a premerger notification with the FTC and DOJ under the Hart-Scott-Rodino Antitrust Improvement Act of

²¹ For more information about private parties challenging mergers, see M. Royall and Adam Vincenzo, "When Mergers Become a Private Matter: An Updated Antitrust Primer," Antitrust, vol. 26, no. 2 (Spring 2012), pp. 41-46, at https://www.gibsondunn.com/wp-content/uploads/documents/publications/WhenMergersBecomePrivateMatter-AntitrustPrimer-Royall-DiVincenzo0312.pdf. State attorneys general have the authority to challenge mergers under federal antitrust laws and state antitrust statutes, but typically work with the FTC or DOJ; see Shepard Goldfein and Karen Lent, "State Attorneys General and Their Influence on Merger Enforcement," New York Law Journal, September12, 2018, at https://www.law.com/newyorklawjournal/2018/09/12/state-attorneys-general-and-theirinfluence-on-merger-enforcement/. Recently, some state attorneys general have filed separate lawsuits to challenge proposed mergers under federal law. For example, on June 11, 2019, nine state attorneys general and the Attorney General for the District of Columbia filed a lawsuit in a New York federal district court to block a proposed merger between T-Mobile and Sprint; four additional states joined the suit later that month. On July 26, 2019, the DOJ and five state attorneys general filed a lawsuit to block the proposed merger with a federal district court in Washington, DC, and simultaneously filed a proposed settlement that would resolve their competitive concerns. The New York federal district court rejected the claims of the 14 state attorneys general and refused to block the merger on February 11, 2020, and the Washington, DC, federal district court accepted the settlement proposed by the DOJ and five state attorneys general on April 1, 2020. See United States and Plaintiff States v. Deutsche Telekom AG, et al., Department of Justice updated January 28, 2021, at https://www.justice.gov/atr/case/us-et-al-v-deutsche-telekom-ag-et-al; State of New York et al. v. Deutsche Telekom AG et al., case number 1:19-cv-05434, June 11, 2019; "Attorney General James' Multistate Lawsuit to Block T-Mobile and Sprint Megamerger Gains Additional Support from Attorneys General Across the Nation," June 21, 2019, at https://ag.ny.gov/press-release/2019/attorney-general-james-multistate-lawsuit-block-tmobile-and-sprint-megamerger; Department of Justice, "Justice Department Welcomes Decision in New York v. Deutsche Telecom, the T-Mobile/Sprint Merger," Department of Justice Press Release, February 11, 2020, at https://www.justice.gov/opa/pr/justice-department-welcomes-decision-new-york-v-deutsche-telecom-t-mobilesprintmerger.

^{7,} at https://doi.org/10.1016/j.infoecopol.2020.100866.

¹⁸ Michael Mazzeo, Katja Seim, and Mauricio Varela, "The Welfare Consequences of Mergers with Endogenous Product Choice," *Journal of Industrial Economics*, vol. 66, no. 4 (2018), pp. 980-1016; Michael Katz, "Big Tech Mergers: Innovation, Competition for the Market, and the Acquisition of Emerging Competitors," *Information Economics and Policy*, vol. 54 (March 2021): pp. 1-17, at https://doi.org/10.1016/j.infoecopol.2020.100883.

¹⁹ References to the DOJ in this report are to the Antitrust Division of the DOJ. There are other divisions within the DOJ, such as the civil rights division (see https://www.justice.gov/agencies/chart).

²⁰ 15 U.S.C. §18. "Merger Enforcement," *Department of Justice*, at https://www.justice.gov/atr/merger-enforcement; "Merger Review," *Federal Trade Commission*, at https://www.ftc.gov/news-events/media-resources/mergers-andcompetition/merger-review. These agencies also address other antitrust concerns, such as monopolization cases under Section 2 of the Sherman Act. For more information about the Sherman Antitrust Act of 1890 and the Clayton Antitrust Act of 1914, see CRS In Focus IF11234, *Antitrust Law: An Introduction*, by Jay B. Sykes.

1976 (HSR Act).²² The companies must wait for a designated period of time while the FTC or DOJ reviews the premerger notification before proceeding with the merger.²³

The DOJ and FTC examine each proposed merger on a case-by-case basis, oftentimes using detailed data that may be unavailable to the public. Evaluating each merger separately allows unique characteristics of the industry, markets, and merging parties to be carefully analyzed. The agencies outline the principal analytical techniques, practices, and enforcement policy used to review mergers and acquisitions in the *Horizontal Merger Guidelines* and the *Vertical Merger Guidelines*.²⁴ Both agencies "seek to identify and challenge competitively harmful mergers while avoiding unnecessary interference with mergers that are either competitively beneficial or neutral."²⁵ After investigating a proposed merger, the agencies can (1) allow the transaction to proceed unchallenged, (2) enter a consent agreement with the companies that includes provisions to maintain competition, such as requiring that certain operations be divested before or shortly after the merger, and (3) seek to stop the entire transaction by filing suit in federal court.²⁶ The agencies can also file a lawsuit to unwind a consummated merger for alleged violations of antitrust laws.

The DOJ and FTC generally have split enforcement of antitrust laws to avoid overlap and enable each agency to develop industry-specific expertise. The FTC typically reviews cases that involve industries in which consumer spending is high, such as the health care, pharmaceutical, and food industries, while the DOJ usually handles mergers in other industries, such as telecommunications and banking.²⁷ The agencies consult with each other before opening an investigation to ensure

²² 15 U.S.C. §18a. The thresholds for filing a premerger notification are updated annually according to changes in gross national product. Some mergers may be exempt from the premerger notification requirement because they are unlikely to violate antitrust laws. "Premerger Notification Program," *Federal Trade Commission*, at https://www.ftc.gov/ enforcement/premerger-notification-program; "Premerger Notification and the Merger Review Process," *Federal Trade Commission*, at https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/mergers/premerger-notification-merger-review; "To File or Not to File: When You Must File A Premerger Notification Report Form," *Federal Trade Commission*, at https://www.ftc.gov/sites/default/files/attachments/premerger-introductory-guides/ guide2.pdf.

²³ The companies must generally wait 30 days after filing a premerger notification, unless the FTC or DOJ grants early termination of the waiting period or the transaction involves a cash tender offer or bankruptcy. If the agencies make a second request for more information about the transaction, additional time, generally 30 days, may be added to the waiting period ("Premerger Notification and the Merger Review Process," *Federal Trade Commission*, at https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/mergers/premerger-notification-merger-review). On February 4, 2021, the DOJ and FTC suspended early terminations temporarily while reviewing the process (Matthew Perlman, "DOJ, FTC Suspend Early Merger Clearances for Review," *Law360*, February 4, 2021, at https://www.law360.com/competition/articles/1352322/doj-ftc-suspend-early-merger-clearances-for-review).

²⁴ The horizontal and vertical merger guidelines are available at https://www.justice.gov/atr/horizontal-mergerguidelines-08192010 and https://www.justice.gov/atr/page/file/1290686/download, respectively. For a summary of the vertical merger guidelines, see CRS Legal Sidebar LSB10521, *Antitrust Regulators Release New Vertical Merger Guidelines*, by Jay B. Sykes.

²⁵ Federal Trade Commission and Department of Justice, *Vertical Merger Guidelines*, at https://www.justice.gov/atr/page/file/1290686/download.

²⁶ The FTC and DOJ can "seek to stop the entire transaction by filing for a preliminary injunction in federal court pending an administrative trial on the merits." *Federal Trade Commission*, "Premerger Notification and the Merger Review Process," at https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/mergers/premerger-notification-merger-review.

²⁷ *Federal Trade Commission*, "The Enforcers," at https://www.ftc.gov/tips-advice/competition-guidance/guide-antitrust-laws/enforcers.

they are not duplicating their efforts. Both agencies have opened separate investigations of Big Tech.²⁸

The DOJ and FTC have not sued to block a proposed merger involving one of the Big Tech companies since 2000,²⁹ during this time, the Big Tech firms acquired at least 710 companies.³⁰ In 1996, the DOJ filed a lawsuit to block Microsoft's proposed acquisition of Intuit, a producer of personal finance software,³¹ resulting in Microsoft abandoning the merger.³² The agencies have also intervened in proposed mergers in digital markets not involving Big Tech firms. For example, in 2020, the FTC filed a lawsuit against CoStar Group's proposed acquisition of RentPath holdings, stating that the acquisition "would significantly increase concentration in the already highly concentrated markets for internet listing services advertising for large apartment complexes."³³ Actions taken by the FTC and DOJ related to selected mergers in digital markets are listed in **Table 1**.

Date of Latest Action	Acquirer	Proposed Acquiree	Result of Investigation
December 20, 2007	Google	Click Holding Company (DoubleClick)	FTC determined no further action needed at time of merger. ³⁴
May 21, 2010	Google	AdMob	FTC determined no further action needed at time of merger. ³⁵

 Table 1. Selected Mergers in Digital Markets Reviewed by the DOJ or FTC

²⁸ The FTC and DOJ reportedly agreed that the FTC would have oversight of Facebook and Amazon, leaving Apple and Google to the DOJ, but subsequently disagreed over which agency had oversight of which company. Ben Brody and David McLaughlin, "FTC Turns Up Heat with Justice Department in Dueling Tech Probes," *Bloomberg Law*, February 13, 2020, at https://www.bloomberg.com/news/articles/2020-02-13/ftc-turns-up-heat-with-justice-departmentin-dueling-tech-probes; Lauren Feiner, "Here's Why the Top Two Antitrust Enforcers in the US Are Squabbling Over Who Gets to Regulate Big Tech," September 18, 2019, at https://www.cnbc.com/2019/09/18/the-ftc-and-doj-aresquabbling-over-the-right-to-regulate-big-tech.html.

²⁹ The DOJ and FTC have filed antitrust lawsuits against Big Tech firms unrelated to mergers. For example, the DOJ filed a lawsuit in 2020 alleging that Google has unlawfully monopolized general search services and search advertising; see https://www.ftc.gov/enforcement/cases-proceedings/closing-letters/google-inc. For analysis of this case, which is still pending, see CRS Legal Sidebar LSB10544, *The Google Antitrust Lawsuit: Initial Observations*, by Jay B. Sykes, and CRS In Focus IF11692, *Google and Competition: Concerns Beyond the DOJ's Lawsuit*, by Clare Y. Cho.

³⁰ House Subcommittee on Antitrust staff report, pp. 149, 174, 262, 414-423; Microsoft, "Acquisition History," *Microsoft Investor Relations*, at https://www.microsoft.com/en-us/Investor/acquisition-history.aspx.

³¹ United States v. Microsoft Corp., April 27, 1995, at https://www.justice.gov/sites/default/files/atr/legacy/2012/08/07/ 0184.pdf.

³² Elizabeth Corcoran, "Microsoft Halts Merger with Intuit," Washington Post, May 21, 1995, at

https://www.washingtonpost.com/archive/politics/1995/05/21/microsoft-halts-merger-with-intuit/dcfe213d-5dec-4c75-8f19-3d08fd575a30/.

³³ For more information, see https://www.ftc.gov/enforcement/cases-proceedings/201-0061/costar-group-rentpath-holdings-matter.

³⁴ "Proposed Acquisition of Hellman & Friedman Capital Partners V, LP (Click Holding Company) by Google Inc.," *Federal Trade Commission*, last updated December 20, 2007, at https://www.ftc.gov/enforcement/cases-proceedings/071-0170/proposed-acquisition-hellman-friedman-capital-partners-v-lp.

³⁵ "Google, Inc./AdMob, Inc," *Federal Trade Commission*, May 21, 2010, at https://www.ftc.gov/enforcement/cases-proceedings/closing-letters/google-incadmob-inc.

Date of Latest Action	Acquirer	Proposed Acquiree	Result of Investigation
March 23, 2011	Amazon.com	Quidsi	FTC determined no further action needed at time of merger. ³⁶
October 5, 2011	Google	ITA Software	Court approved consent decree between DOJ and merging parties. Acquisition proceeded with conditions. ³⁷
April 22, 2014	Facebook	Oculus	FTC determined no further action needed at time of merger; investigation terminated early. ³⁸
November 25, 2020	Intuit	Credit Karma	Court approved consent decree between DOJ and merging parties. Acquisition proceeded with conditions. ³⁹
December 9, 2020	Facebook	Instagram	FTC sued Facebook in 2020, ⁴⁰ having determined no further action needed when acquisition proposed in 2012. ⁴¹
January 4, 2021	CoStar Group	RentPath Holdings	FTC dismissed complaint after parties abandoned proposed acquisition. ⁴²
January 12, 2021	Visa	Plaid	Companies abandoned merger after DOJ filed suit to block it. ⁴³

Source: Department of Justice and Federal Trade Commission websites.

Notes: The list does not include lawsuits or investigations that are not related to mergers. The FTC's websites list closing letters and early terminations of merger reviews; the FTC provides a closing letter if requested by one of the merging parties or if it believes a letter would be in the public interest. Both the FTC and DOJ websites post lawsuits that have been filed by the respective agency.

Some acquisitions made by Big Tech may not have been reviewed by the FTC or DOJ because they fell below the premerger notification threshold requirement under the HSR Act.⁴⁴ On February 11, 2020, the FTC issued Special Orders⁴⁵ to Big Tech companies, requesting

³⁶ "Amazon.com, Inc./Quidsi, Inc.," *Federal Trade Commission*, March 23, 2011, at https://www.ftc.gov/enforcement/ cases-proceedings/closing-letters/amazoncom-inc-quidsi-inc.

³⁷ "U.S. v. Google Inc. and ITA Software, Inc.," *Department of Justice*, updated July 7, 2015, at https://www.justice.gov/atr/case/us-v-google-inc-and-ita-software-inc.

³⁸ "20140779: Mr. Mark Zuckerberg; Oculus VR, Inc.," *Federal Trade Commission*, April 22, 2014, at https://www.ftc.gov/enforcement/premerger-notification-program/early-termination-notices/20140779.

³⁹ "U.S. v. Intuit Inc. and Credit Karma, Inc.," *Department of Justice*, updated March 19, 2021, at https://www.justice.gov/atr/case/us-v-intuit-inc-and-credit-karma-inc.

⁴⁰ The FTC alleges that Facebook engages in anticompetitive conduct, including acquiring potential rivals such as Instagram, to maintain its monopoly position in personal social networking services (https://www.ftc.gov/system/files/ documents/cases/1910134fbcomplaint.pdf). For more information about the lawsuit, see CRS Legal Sidebar LSB10575, *The Facebook Antitrust Lawsuits and the Future of Merger Enforcement*, by Jay B. Sykes.

⁴¹ "Facebook, Inc./Instagram, Inc.," *Federal Trade Commission*, August 22, 2012, at https://www.ftc.gov/enforcement/ cases-proceedings/closing-letters/facebook-inc-instagram-inc.

⁴² "CoStar Group/RentPath Holdings, In the Matter of," *Federal Trade Commission*, updated January 4, 2021, at https://www.ftc.gov/enforcement/cases-proceedings/201-0061/costar-group-rentpath-holdings-matter.

⁴³ "U.S. v. Visa Inc. and Plaid Inc.," *Department of Justice*, updated December 15, 2020, at https://www.justice.gov/atr/ case/us-v-visa-inc-and-plaid-inc.

⁴⁴ House Subcommittee on Antitrust staff report, p. 44.

⁴⁵ Section 6(b) of the FTC Act empowers the FTC to "prescribe annual or special reports ... or answers in writing to

documentation on the terms, scope, structure, and purpose of transactions consummated between January 1, 2010, and December 31, 2019, that did not meet the conditions for HSR notification.⁴⁶

Examples of Mergers and Acquisitions

This section discusses selected mergers to highlight some challenges of examining the competitive effects of mergers in digital markets. These challenges include defining the relevant market, anticipating the evolution of markets, and determining which firms should be considered competitors.

Amazon's Acquisition of Whole Foods Market

On August 28, 2017, Amazon acquired Whole Foods Market, a grocery retailer, for approximately \$13.2 billion.⁴⁷ After reviewing the proposed acquisition, the FTC determined no further action was needed at the time.⁴⁸ Prior to the acquisition, Amazon offered the online grocery delivery service Amazon Fresh, which launched in 2007,⁴⁹ and Prime Pantry, which launched in 2014 and ended in January 2021.⁵⁰ By acquiring Whole Foods Market, Amazon obtained brick-and-mortar grocery store locations that it was able to integrate with its online services.⁵¹ For example, shoppers with an Amazon Prime membership⁵² are eligible for discounts and free pickup or delivery of Whole Foods Market groceries in selected zip codes,⁵³ and Amazon Hub Lockers—where consumers can pick up products purchased on Amazon's website—are often located in Whole Foods Markets.⁵⁴

⁴⁹ Amazon Fresh initially launched as a pilot study with a limited by-invitation service to selected residents in Mercer Island, WA. Its service was slowly expanded in Seattle, and starting in 2013, expanded to other cities. JeeYoon Park, "Amazon Gets Fresh Challenges with New Grocery Business," *CNBC*, August 27, 2007, at https://www.cnbc.com/id/20463088; Greg Bensinger, "Amazon Expands Grocery Business," *Wall Street Journal*, June 5, 2013, at https://www.wsj.com/articles/SB10001424127887324798904578526820771744676.

⁵⁰ Grace Kay, "Amazon Shuts Down Prime Pantry, Its First Foray into Online Food Delivery, In a Move Towards Simpler Shopping," *Business Insider*, January 8, 2021, at https://www.businessinsider.com/amazon-shuts-down-prime-pantry-2021-1.

⁵¹ Amazon also started opening brick-and-mortar Amazon Fresh locations in August 2020. Jeff Helbling, "Introducing the First Amazon Fresh Grocery Store," *Amazon News*, August 27, 2020, at https://www.aboutamazon.com/news/retail/introducing-the-first-amazon-fresh-grocery-store.

⁵² For \$119 per year, an Amazon Prime membership provides various services, including free two-day shipping on items bought on Amazon and access to Amazon Prime videos, unlimited photo storage, and a free Kindle e-book each month. See https://www.amazon.com/gp/prime/pipeline/partner_landing.

⁵³ Whole Foods Market, "Prime at Whole Foods Market," accessed on March 19, 2021, at https://www.wholefoodsmarket.com/amazon.

specific questions." 15 U.S.C. §46(b).

⁴⁶ "FTC to Examine Past Acquisitions by Large Technology Companies," *Federal Trade Commission Press Release*, February 11, 2020, at https://www.ftc.gov/news-events/press-releases/2020/02/ftc-examine-past-acquisitions-large-technology-companies.

⁴⁷ See Amazon.com Inc., SEC Form 10-K for the fiscal year ending December 31, 2018, p. 52.

⁴⁸ Federal Trade Commission, "Statement of Federal Trade Commission's Acting Director of the Bureau of Competition on the Agency's Review of Amazon.com, Inc.'s Acquisition of Whole Foods Market Inc.," *Federal Trade Commission Press Release*, August 23, 2017, at https://www.ftc.gov/news-events/press-releases/2017/08/statement-federal-trade-commissions-acting-director-bureau.

⁵⁴ Amazon Hub Lockers are also available in other locations, such as convenience stores and apartment buildings. Amazon, "Everything You Need to Know about Amazon Hub Locker," *Prime Insider*, June 21, 2018, at https://www.amazon.com/primeinsider/tips/amazon-locker-qa.html.

Amazon's acquisition of Whole Foods Market may have increased competition in the grocery retail market. Prior to the acquisition, Walmart was the largest grocery retailer, followed by Kroger.⁵⁵ Progressive Grocer, a research group, estimates that in 2020, Walmart had the highest U.S. retail sales of grocery items, followed by Amazon.⁵⁶ However, Duff & Phelps, a consulting firm, indicates that Amazon comprises only a small portion of the grocery retail market and that it serves as "more of a symbolic threat."⁵⁷ Nevertheless, other grocery retailers have responded by implementing changes in response to competitive pressure from Amazon.⁵⁸

Competitive pressure from Amazon may have incentivized other grocery retailers to start offering online delivery services. In 2017, the year Amazon acquired Whole Foods, Walmart launched an online delivery service in selected cities;⁵⁹ Kroger launched an online delivery service in selected cities in 2018.⁶⁰ In 2020, Walmart launched Walmart+,⁶¹ a membership delivery service that does not have a minimum order requirement,⁶² similar to an Amazon Prime membership. Consumers may have benefited from food retailers offering their own online delivery services, particularly as many of these stores offer free delivery on orders over \$35. These changes may have also increased pressure on other online grocery delivery services, such as Instacart, a third-party service that delivers online groceries from selected stores in selected cities; the service launched in 2012 and stopped delivering groceries from Whole Foods in 2019.⁶³

⁵⁵ Jim Dudlicek, "Editor's Note: Masters Tour," *Progressive Grocer*, May 12, 2017, at https://progressivegrocer.com/ editors-note-masters-tour. Commentators have raised concern about increasing concentration in the grocery retail market (e.g., Stacy Mitchell, "Walmart's Monopolization of Local Grocery Markets," *Institute for Local Self-Reliance*, June 2019, at https://ilsr.org/wp-content/uploads/2019/06/Walmart_Grocery_Monopoly_Report-_final_for_site.pdf; "Retail Trends," *USDA Economic Research Service*, last updated September 10, 2020, at https://www.ers.usda.gov/ topics/food-markets-prices/retailing-wholesaling/retail-trends/). Details about concentration in the grocery retail market are beyond the scope of this report.

⁵⁶ Mike Troy, "The PG 100: Walmart, Amazon, Kroger Dominate Top Retailers of Food and Consumables," *Progressive Grocer*, May 11, 2020, at https://progressivegrocer.com/pg-100-walmart-amazon-kroger-dominate-top-retailers-food-and-consumables. The percentage was calculated after combining sales from the previous year. The percentage increase for Amazon was greater than for Whole Foods Market alone (24.5% and 4.7%, respectively).

⁵⁷ Duff & Phelps, "Food Retail Industry Insights," spring 2020, at https://www.duffandphelps.com/-/media/assets/pdfs/publications/mergers-and-acquisitions/food-retail-industry-insights-spring-2020.pdf.

⁵⁸ For example, Walmart is experimenting with using artificial intelligence technologies in stores and new checkout layouts, potentially partially in response to the Amazon Dash Cart, which identifies the items in a customer's cart and automatically processes the payment, allowing the customer to skip the checkout line. Sarah Perez, "Walmart Unveils an AI-Powered Store of the Future, Now Open to the Public," *TechCrunch*, April 25, 2019, at https://techcrunch.com/ 2019/04/25/walmart-unveils-an-ai-powered-store-of-the-future-now-open-to-the-public/; Matt Smith, "New Checkout Experience Seeks to Eliminate the Wait and Add Options at the Register," *Walmart Newsroom*, June 30, 2020, at https://corporate.walmart.com/newsroom/2020/06/30/new-checkout-experience-seeks-to-eliminate-the-wait-and-add-options-at-the-register; Amazon, "Amazon Dash Cart," accessed on March 19, 2021, at https://www.amazon.com/b? node=21289116011.

⁵⁹ Walmart, "Walmart Launches Free Two-Day Shipping on More Than Two Million Items, No Membership Required," *Walmart Newsroom*, January 31, 2017, at https://corporate.walmart.com/newsroom/2017/01/31/walmart-launches-free-two-day-shipping-on-more-than-two-million-items-no-membership-required.

⁶⁰ Kroger, "Kroger Launches Ship," *Kroger Press Release*, August 1, 2018, at http://ir.kroger.com/CorporateProfile/ press-releases/press-release/2018/Kroger-Launches-Ship/default.aspx.

⁶¹ Walmart, "Walmart Introduces Walmart+," *Walmart Newsroom*, September 1, 2020, at https://corporate.walmart.com/newsroom/2020/09/01/walmart-introduces-walmart.

⁶² Walmart offers free next-day and two-day delivery for selected items with a \$35 order minimum requirement or a Walmart+ membership (\$12.95/month or \$98/year). See https://www.walmart.com/plus.

⁶³ Uday Sampath Kumar, "Instacart, Amazon's Whole Foods Relationship to End Next Year," *Reuters*, December 13, 2018, at https://www.reuters.com/article/us-instacart-whole-foods/instacart-amazons-whole-foods-relationship-to-end-next-year-idUSKBN1OC2O4.

Amazon's acquisition of Whole Foods Market raised concern about its growing dominance in the retail industry, particularly in e-commerce. According to eMarketer, a market research company, Amazon had the greatest share of e-commerce sales at 38.7% in 2020; Walmart had the secondgreatest share at 5.3% (Figure 1). The estimate from eMarketer includes all online sales, including products that Amazon does not offer. The House Subcommittee on Antitrust staff report finds that by restricting products to those sold on Amazon, a market share of 50% or higher may be a more credible estimate of Amazon's share of online sales, and that over 60% of all U.S. online product searches begin on Amazon.⁶⁴ Through its acquisition of Whole Foods, Amazon gained access to additional consumer data, strengthening its bargaining power with suppliers.⁶⁵ In addition, Amazon has integrated vertically, such as by offering products under its private label AmazonBasics and by creating its own delivery system. Amazon has reportedly invested \$60 billion since 2014 in its delivery network, including capital leases for warehouses and aircraft; in 2019, it had the fourth-largest share of U.S. package deliveries, behind FedEx, United Parcel Service, and the U.S. Postal Service.⁶⁶ By integrating vertically, Amazon may be able to further strengthen its position in e-commerce; if, for example, it is able to provide faster delivery.⁶⁷ consumers could benefit even if it becomes more difficult for other companies to compete.



Figure 1. Share of U.S. Retail E-Commerce Sales

Source: eMarketer, February 2020.

Notes: Represents the gross value of products or services sold (browser or app), regardless of the method of payment or fulfillment. Excludes travel and event tickets.

⁶⁴ House Subcommittee on Antitrust staff report, pp. 254, 256.

⁶⁵ House Subcommittee on Antitrust staff report, pp. 265.

⁶⁶ Don Davis, "Amazon Is the Fourth-Largest U.S. Delivery Service and Growing Fast," *Digital 360 Commerce*, May 26, 2020, at https://www.digitalcommerce360.com/2020/05/26/amazon-is-the-fourth%E2%80%91largest-us-delivery-service-and-growing-fast/.

⁶⁷ Amazon could also face higher total costs investing in a delivery network rather than working with existing package delivery services.

Facebook's Acquisition of Instagram

Facebook announced that it had reached an agreement to acquire Instagram, a social networking service (i.e., social media platform), for \$1 billion on April 9, 2012.⁶⁸ The FTC reviewed the acquisition, and on August 22, 2012, it closed the investigation without taking action.⁶⁹ On December 9, 2020, the FTC filed a lawsuit against Facebook, alleging that "Facebook has maintained its monopoly position by buying up companies that present competitive threats," in addition to imposing restrictive policies against companies it does not acquire.⁷⁰ A coalition of 46 state attorneys general, led by New York Attorney General Letitia James, filed a parallel lawsuit against Facebook, also alleging that Facebook acquired companies to eliminate competitive threats.⁷¹ Both lawsuits⁷² specifically mention Facebook's acquisitions of Instagram and WhatsApp, a messaging app for mobile devices.⁷³

Prior to the acquisition, Facebook CEO Mark Zuckerberg stated in an internal email that "Instagram has become a large and viable competitor to us on mobile photos, which will increasingly be the future of photos."⁷⁴ This statement has been used to support the claim that Facebook acquired Instagram with the intention of eliminating a potential competitor.

It is unclear how successful Instagram would have been had it not been acquired by Facebook, illustrating the difficulty of predicting whether a nascent firm could become a viable competitor. Instagram was a relatively new company when it was acquired,⁷⁵ and grew rapidly thereafter, from about 100 million monthly active users (MAUs) in February 2013 to 500 million MAUs in

⁶⁸ Facebook, "Facebook to Acquire Instagram," *Facebook Newsroom*, April 9, 2012, at https://about.fb.com/news/2012/04/facebook-to-acquire-instagram/.

⁶⁹ The press release and closing letters to both Facebook and Instagram are available at https://www.ftc.gov/ enforcement/cases-proceedings/closing-letters/facebook-inc-instagram-inc.

⁷⁰ The FTC alleged that Facebook requires third-party apps that use Facebook's application programming interfaces, which are software needed to send and retrieve data from Facebook, to agree not to provide the same core functions as Facebook and to not connect with or promote other social networking services. Federal Trade Commission v. Facebook, Inc., case no. 1:20-cv-03590, December 9, 2020, at https://www.ftc.gov/enforcement/cases-proceedings/191-0134/facebook-inc-ftc-v.

⁷¹ State of New York et al. v. Facebook, Inc., case no. 1:20-cv-03589, December 9, 2020, at https://ag.ny.gov/sites/ default/files/facebook_complaint_12.9.2020.pdf.

⁷² For more information about the lawsuits, see CRS Legal Sidebar LSB10575, *The Facebook Antitrust Lawsuits and the Future of Merger Enforcement*, by Jay B. Sykes. Facebook users and advertisers also filed a lawsuit on December 9, 2020, alleging that they have been harmed by Facebook's lack of transparency; see Nadia Dreid, "Facebook Users Hit Social Media Giant With Monopoly Suit," *Law360*, December 10, 2020, at https://www.law360.com/competition/articles/1336479/facebook-users-hit-social-media-giant-with-monopoly-suit.

⁷³ After Facebook filed a premerger notification of its planned acquisition of WhatsApp in 2014, the FTC allowed the merger to proceed unchallenged, but notified both WhatsApp and Facebook about their privacy obligations. Federal Trade Commission, "FTC Notifies Facebook, WhatsApp of Privacy Obligations in Light of Proposed Acquisition," *Federal Trade Commission Press Releases*, April 10, 2014, at https://www.ftc.gov/news-events/press-releases/2014/04/ ftc-notifies-facebook-whatsapp-privacy-obligations-light-proposed; Alexei Oreskovic, "Facebook Says WhatsApp Deal Cleared by FTC," *Reuters*, April 10, 2014, at https://www.reuters.com/article/us-facebook-whatsapp/facebook-says-whatsapp-deal-cleared-by-ftc-idUSBREA391VA20140410.

⁷⁴ Zuckerberg's comment was made in September 2011, approximately seven months before the acquisition was announced. Federal Trade Commission v. Facebook, Inc., case no. 1:20-cv-03590, December 9, 2020, at https://www.ftc.gov/enforcement/cases-proceedings/191-0134/facebook-inc-ftc-v.

⁷⁵ Instagram launched on October 6, 2010; it was initially accessible only on Apple devices. In April 2012, Instagram became available on Android devices and Facebook announced it had reached an agreement to acquire Instagram. Kim-Mai Cutler, "From 0 to \$1 Billion in Two Years: Instagram's Rose-Tinted Ride to Glory," *TechCrunch*, April 9, 2012, at https://techcrunch.com/2012/04/09/instagram-story-facebook-acquisition/

June 2016 and 1 billion MAUs in June 2018.⁷⁶ As it grew in popularity, Instagram was able to use Facebook's resources, such as its advertising services and its infrastructure, which hosts and processes large amounts of consumer data. These have been key to the profitability of Instagram, which hosts a wide range of users, including "influencers"—that is, users with a large number of followers who are paid by sponsors to market certain products.⁷⁷ It is possible that without the merger, Instagram would have been among the platforms that have struggled to compete in digital markets because of resource constraints. This occurred with the social networking service Friendster, which turned down a \$30 million buyout offer from Google in 2003 but then struggled with technical difficulties as its user base grew; users left the platform for other social media sites, and Friendster eventually closed down.⁷⁸

Another complication in evaluating the effect of Facebook's acquisition of Instagram is determining how the market should be defined, particularly in digital markets that can quickly evolve. Social networking services can include a wide range of platforms. When Facebook acquired Instagram in 2012, one of the defining features of social networking services—a category that than included Friendster and Myspace, among others—was the networks users could create. Users could clearly indicate the users in their respective network(s) on the social networking service,⁷⁹ although some may have chosen to keep their network(s) private. At that time, Instagram was described as a photo-sharing app, arguably competing with apps like Photobucket and Flickr, rather than with Facebook.

Additional types of platforms can be considered social networking services: Reddit allows users to create communities based on their interests; LinkedIn allows users to create connections for business and employment opportunities; and TikTok allows users to share short-form videos.⁸⁰ Some of these platforms allow users to connect with any other user on the platform rather than only with users in their personal network, focusing on the content rather than the user. These changes suggest that a user's ability to create social networks may no longer be the defining feature of social networking services.

In addition, social networking services are not necessarily substitutes for one another. For example, although Instagram and Microsoft's LinkedIn are both typically viewed as social networking services, it is unlikely that users would substitute one platform for the other. One report estimates that internet users had an average of about seven social media accounts, suggesting that some users rely on different social media platforms for different purposes.⁸¹

⁷⁶ Business of Apps using data from various sources, at https://www.businessofapps.com/data/instagram-statistics/#1.

⁷⁷ For a recent list of top Instagram influencers across certain subject areas, see https://blog.hubspot.com/marketing/ instagram-influencers. To learn more about the history of influencers, see https://www.theshelf.com/the-blog/ influencer-marketing-timeline and https://www.forbes.com/sites/petersuciu/2020/12/07/history-of-influencermarketing-predates-social-media-by-centuries--but-is-there-enough-transparency-in-the-21stcentury/?sh=43ed8b340d70.

⁷⁸ Emerging Technology from the arXiv, "An Autopsy of a Dead Social Network," *MIT Technology*, February 27, 2013, at https://www.technologyreview.com/2013/02/27/253657/an-autopsy-of-a-dead-social-network/; Alexandra Samur, "The History of Social Media: 29+ Key Moments," *Hootsuite*, November 22, 2018, at https://blog.hootsuite.com/history-social-media/.

⁷⁹ Danah Boyd and Nicole Ellison, "Social Networking Sites: Definition, History, and Scholarship," *Journal of Computer-Mediated Communication*, vol. 13 (2008): pp. 210-213.

⁸⁰ For discussions on the history of social media platforms, see https://blog.hootsuite.com/history-social-media/, https://www.zenesys.com/infographics/social-media-evolution, and https://interestingengineering.com/a-chronological-history-of-social-media.

⁸¹ Simon Kemp, *Digital 2020: The United States of America*, Datareportal, February 11 2020, slides 17 and 42, at https://datareportal.com/reports/digital-2020-united-states-of-america.

Google's Acquisition of Fitbit

On November 1, 2019, Fitbit, a consumer electronics company,⁸² announced that it had reached an agreement with Google to be acquired for approximately \$2.1 billion.⁸³ Google completed its acquisition of Fitbit on January 14, 2021.⁸⁴ At that time, the DOJ was continuing to investigate the transaction,⁸⁵ but Google was able to complete the merger because the waiting period for the DOJ's premerger review had expired.⁸⁶ The European Commission conditionally approved the merger on December 17, 2020.⁸⁷

By acquiring Fitbit, Google may increase competition for smartwatches (i.e., wrist-worn wearable devices). According to the industry analysis firm Counterpoint Research, Apple had over 50% of the global revenue from smartwatch shipments in the first half of 2020 (**Figure 2**). Google has developed an operating system for smartwatches, WearOS, and partners with other companies that sell watches—such as Fossil, Cassio, and Michael Kors—to create smartwatches.⁸⁸ Prior to its acquisition of Fitbit, Google did not have the means to create its own smartwatches. Fitbit's smartwatches are compatible with both Google's Android and Apple's iOS devices, allowing users to receive notifications about calls, texts, and other alerts from their Android or iOS device on their smartwatch.⁸⁹ Other features, such as answering calls or sending personalized texts, are available only on certain Fitbit smartwatches;⁹⁰ none of the Fitbit devices allow users to make

https://www.consumeraffairs.com/news/doj-says-its-still-investigating-googles-acquisition-of-fitbit-011521.html.

⁸⁶ Ron Amadeo, "Google Says It's Closing the Fitbit Acquisition—Uh, Without DOJ Approval?," *ArsTechnica*, January 14, 2021, at https://arstechnica.com/gadgets/2021/01/google-closes-the-fitbit-acquisition-pledges-to-not-use-data-for-ads/; Jon Swartz, "Google and Fitbit Said 'I Do,' But the Marriage Could Still be Annulled," *MarketWatch*, January 20, 2021, at https://www.marketwatch.com/story/google-fitbit-acquisition-closes-but-antitrust-scrutiny-is-far-from-over-11611154278.

⁸⁷ The European Commission included conditions to its approval that Google agreed to, such as not giving its Google Ads digital advertising business access to the health and wellness data collected from Fitbit devices. European Commission, "Mergers: Commission Clears Acquisition of Fitbit by Google, Subject to Conditions," *European Commission Press Corner*, December 17, 2020, at https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2484. Some commentators have been skeptical about this promise, referencing similar promises that were made and broken with Google's acquisition of DoubleClick, a company that provided online advertising services; for example, see Hugh Langley, "Google's Deal for Fitbit Faces an EU Probe—and Regulators Who Watched the Company Break a Major Promise After Buying DoubleClick in 2008," *Business Insider*, August 4, 2020, at https://www.businessinsider.com/euprobes-googles-fitbit-deal-the-doubleclick-broken-promise-2020-8.

⁸⁸ For a list of some of the companies Google partners with, see https://wearos.google.com/#find-your-watch.

⁸⁹ Fitbit, "How Do I Get Notifications from my Phone on my Fitbit Device?," at https://help.fitbit.com/articles/en_US/ Help_article/1979.htm#Troubles.

⁹⁰ Fitbit, "Make & Take Calls on Watch?," at https://community.fitbit.com/t5/Other-Versa-Smartwatches/Make-amp-Take-calls-on-watch/td-p/2596639; Fitbit, "How Do I Respond to Messages with my Fitbit Device?," at

⁸² Fitbit is primarily known for its smartwatches. More information about additional products offered by Fitbit is available at https://www.fitbit.com/global/us/products.

⁸³ Fitbit, "Fitbit to be Acquired by Google," *Fitbit Press Release Details*, November 1, 2019, at https://investor.fitbit.com/press/press-releases/press-release-details/2019/Fitbit-to-Be-Acquired-by-Google/default.aspx.

⁸⁴ Google, "Google Completes Fitbit Acquisition," *Google Blog*, January 14, 2021, at https://blog.google/products/ devices-services/fitbit-acquisition/.

⁸⁵ The DOJ Deputy Assistant Attorney General at that time reportedly told various media outlets, "The Antitrust Division's investigation of Google's acquisition of Fitbit remains ongoing. Although the Division has not reached a final decision about whether to pursue an enforcement action, the Division continues to investigate whether Google's acquisition of Fitbit may harm competition and consumers in the United States." David McLaughlin, "Google Closes Fitbit Deal Amid Ongoing U.S. DOJ Review," *Bloomberg*, January 14, 2021, at https://www.bloomberg.com/news/ articles/2021-01-14/google-closes-fitbit-deal-amid-ongoing-u-s-doj-review; Sarah Young, "DOJ Says It's Still Investigating Google's Acquisition of Fitbit," *ConsumerAffairs*, January 15, 2021, at

calls. All of these features are available on Apple smartwatches. If Google expands the features offered on Fitbit devices by integrating the WearOS system,⁹¹ Fitbit may be better able to compete with Apple in the smartwatch market.

In the longer run, Google's acquisition of Fitbit could reduce competition in the smartwatch market. For example, if Google were to stop providing WearOS to other sellers, some might be unable to survive in the smartwatch market, particularly if they do not have the means to develop their own operating systems.⁹² In its agreement with the European Commission, Google stated that it would continue to license for free its Android application programming interface (API), maintaining compatibility between Android smartphones and Google competitors' smartwatches.⁹³



Figure 2. Global Smartwatch Shipment Revenue Share by Company

Source: Sujeong Lim, "Global Smartwatch Market Revenue up 20% in H1 2020, Led by Apple, Garmin, and Huawei," *Counterpoint Research*, August 20, 2020, at https://www.counterpointresearch.com/global-smartwatch-market-revenue-h1-2020/.

Note: According to the article, total revenue in the global smartwatch market increased by about 20% from the first half of 2019 to the first half of 2020, with the U.S. market growing by about 5%.

https://help.fitbit.com/articles/en_US/Help_article/2344.htm; Fitbit, "Make Phone Calls on the Sense," at https://community.fitbit.com/t5/Feature-Suggestions/Make-phone-calls-on-the-Sense/idi-p/4485709#.

⁹¹ Fitbit created its own operating system; it did not use WearOS. James Peckham, "Best WearOS Watch 2021: Our List of the Top Ex-Android Wear Smartwatches," *TechRadar*, January 2021, at https://www.techradar.com/news/bestwear-os-watch; Michael Simon, "4 Fitbit Features that Are Likely Going Away After the Google Deal," *MacWorld*, November 4, 2019, at https://www.macworld.com/article/3451360/fitbit-google-devices-features-leavingimproving.html.

⁹² For more information about WearOS, see https://developer.android.com/wear and https://developer.android.com/ training/wearables.

⁹³ For a list of public APIs developed by Google, see https://developers.google.com/apis-explorer. European Commission, "Mergers: Commission Clears Acquisition of Fitbit by Google, Subject to Conditions," *European Commission Press Corner*, December 17, 2020, at https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2484.

A number of companies, including Google, have acquired large amounts of consumer data, including through third-party tracking of individuals' online behavior.⁹⁴ These data can be used for a variety of purposes, including online advertising and creating or refining algorithms. Acquiring Fitbit allows Google to obtain additional consumer data, such as information about users' health and fitness. Google may be able to combine these data with other health-related data it has reportedly acquired. Legislators and commentators have expressed concern about Google obtaining patient data, particularly regarding Project Nightingale, a project to collect and process large amounts of patient data.⁹⁵ Google has reportedly been working with Ascension, a St. Louis-based chain of hospitals, doctors' offices, and other facilities, to design software to process patient data and suggest possible changes to patients' care.⁹⁶ It is unclear whether the potentially large volume of user health data from Fitbit could be used to help develop and improve this software, potentially giving Google a competitive advantage among software providers for the health care industry.

Options for Congress

The DOJ, FTC, and coalitions of state attorneys general have filed antitrust lawsuits and have ongoing investigations of Big Tech companies. It may take years for these court cases or investigations to be resolved. During this time, the companies could further integrate products and services, potentially making it difficult for a court to order a divesture that could create a viable competitor. Divestures could also negatively affect users' experiences with the platforms, such as the interoperability of the services and products, which could also harm the divested business. Digital markets can evolve quickly, and it is possible that a merger that is the subject of a lawsuit has become a less significant factor in competition than a subsequent merger. In addition, there is no guarantee that the courts will determine that a merger violated antitrust law or that a remedy ordered by a court will increase competition in digital markets.

Some Members of the 117th Congress have introduced legislation that could affect merger enforcement (**Table 2**).⁹⁷ Congress may choose not to take legislative action; its concerns about mergers in digital markets may be addressed in lawsuits filed by the DOJ, FTC, and state attorneys general. Congress may also take various forms of legislative action, including increasing funding for merger oversight, amending antitrust laws, or regulating firms that operate in digital markets.

⁹⁴ Reuben Binns and Elettra Bietti, "Dissolving Privacy, One Merger at a Time: Competition, Data, and Third-Party Tracking," *Computer Law and Security Review*, vol. 36 (2020), pp. 1-19, at https://doi.org/10.1016/j.clsr.2019.105369; Jenny Lee, "The Google-DoubleClick Merger: Lessons from the Federal Trade Commission's Limitations on Protecting Privacy," *Communication Law and Policy*, vol. 25, no. 1 (2020), pp. 77-103.

⁹⁵ Laura Lovett, "U.S. Senators Question Ascension on Its Google Collaboration Project Nightingale," *MobileHealthNews*, March 4, 2020, at https://www.mobihealthnews.com/news/us-senators-question-ascension-itsgoogle-collaboration-project-nightingale; Rob Copeland, "Google's 'Project Nightingale' Gathers Personal Health Data on Millions of Americans," *Wall Street Journal*, November 11, 2019, at https://www.wsj.com/articles/google-s-secretproject-nightingale-gathers-personal-health-data-on-millions-of-americans-11573496790.

⁹⁶ Rob Copeland, "Google's 'Project Nightingale' Gathers Personal Health Data on Millions of Americans," *Wall Street Journal*, November 11, 2019, at https://www.wsj.com/articles/google-s-secret-project-nightingale-gathers-personal-health-data-on-millions-of-americans-11573496790.

⁹⁷ Some of these bills were previously introduced in the 116th Congress; see **Table A-1**.

Legislation	Title	Section on Antitrust
S. 225	Competition and Antitrust Law Enforcement Reform Act	Would (1) define market power; (2) amend the definition of unlawful acquisitions, such as prohibiting mergers that materially, rather than substantially, lessen competition; (3) shift the burden of proof for certain merging parties to show that the merger would not harm competition; (4) require companies to report information allowing the DOJ or FTC to assess the competitive impact for five years after a merger; (5) commission studies related to mergers from the FTC and Government Accountability Office; (6) establish an Office of the Competition Advocate under the FTC; (7) make it unlawful to engage in exclusionary conduct that presents an appreciable risk of harming competition; (8) establish civil penalties for violations of antitrust laws; and (9) establish that enforcement of antitrust laws does not require the definition of a relevant market.
S. 228	Merger Filing Fee Modernization Act of 2021	Would adjust premerger filing fees and increase appropriated funding for FY2022.
S. 633	One Agency Act	Would transfer antitrust enforcement functions from the FTC to the DOJ.

Table 2. Selected Legislation in the 117th Congress Related to Antitrust Laws

Source: CRS, using Congress.gov.

Notes: The listed legislation was selected because of its potential effect on merger enforcement in digital markets. The list was last updated on March 24, 2021.

Increase Funding for Antitrust Enforcement

Funding for antitrust enforcement through appropriations bills has been falling in inflationadjusted dollars since 2010.⁹⁸ Some Members of Congress have introduced bills to increase funding for the FTC and Antitrust Division of the DOJ in appropriations bills and by increasing merger filing fees paid to these agencies (S. 225 and S. 228).⁹⁹ The House Subcommittee on Antitrust staff report suggests that increasing the agencies' budgets could "restore the antitrust agencies to full strength."¹⁰⁰

Increasing funding for the FTC and the Antitrust Division of the DOJ may help both agencies enforce existing antitrust laws, including those applicable to mergers. The agencies could use increased funding to hire additional staff to review proposed mergers in digital markets and to

⁹⁸ Michael Kades, "The State of U.S. Federal Antitrust Enforcement," Washington Center for Equitable Growth, September 2019, at https://equitablegrowth.org/wp-content/uploads/2019/09/091719-antitrust-enforcement-report.pdf.

⁹⁹ Merging parties are required to pay a filing fee with the premerger notification under the HSR Act. Although the threshold to determine whether merging parties need to file a premerger notification is updated annually based on changes in gross national product, the premerger filing fees are not; these fees have not been adjusted since 2000 in P.L. 106-553. Inflation for legal services increased by about 36% from 2000 to 2020, according to data from the Bureau of Labor Services producer price index data at https://www.bls.gov/ppi/#data (the estimate for 2020 is preliminary; all indexes are subject to revision four months after original publication). Federal Trade Commission,

[&]quot;The Most Frequently Asked HSR Questions," *Federal Trade Commission HSR Resources*, at https://www.ftc.gov/ enforcement/premerger-notification-program/hsr-resources/most-frequently-asked-hsr-questions; "Federal Trade Commission: Revised Judicial Thresholds for Section 7A of the Clayton Act," 85 *Federal Register* 4984-4985, January 28, 2020.

¹⁰⁰ House Subcommittee on Antitrust staff report, pp. 403.

help pay for expert witnesses. The FTC reportedly told its staff in 2020 that pursuing a record number of antitrust cases had strained its budget.¹⁰¹

Some legislators have expressed skepticism that increasing funding for the FTC and the Antitrust Division of the DOJ would increase antitrust enforcement in digital markets. Some Members of Congress have been critical of the alleged lack of antitrust enforcement by the two agencies, particularly with the acquisitions of nascent firms made by Big Tech companies.¹⁰² Prior to the filing of the DOJ and FTC lawsuits against Google and Facebook, respectively, some Members questioned why the two agencies opened separate investigations into the same Big Tech companies;¹⁰³ S. 633 would create a single antitrust agency by transferring the FTC's antitrust enforcement functions to the DOJ.

Amend Antitrust Laws

Antitrust laws are intended to protect competition and prevent the use of anticompetitive behavior to obtain market power. Congress could amend antitrust laws, if it determines that they are not sufficient for addressing anticompetitive mergers in digital markets. Legislation amending the Clayton Act would apply to mergers in all industries, not only those affecting digital markets, unless otherwise specified.

Shifting Burden of Proof

Section 7 of the Clayton Act prohibits mergers whose effect "may be substantially to lessen competition, or to tend to create a monopoly."¹⁰⁴ As it has been interpreted by the courts, Section 7 places the burden of proof on the plaintiff—such as the DOJ or FTC—to show that a merger has harmed or likely would harm competition in this way. S. 225 would amend the Clayton Act to shift the burden to the merging parties, which could have to show in certain proceedings brought by governmental plaintiffs that a proposed merger would not materially lessen competition.¹⁰⁵

Proponents of shifting the burden of proof have argued that current antitrust laws favor merging parties.¹⁰⁶ They argue that even in cases where merging parties include dominant firms in highly

¹⁰¹ Alex Kantrowitz, "'A Breathtaking Constraint on Capacity': Internal FTC Memo Announces Major Cuts Ahead of Tech Giant Action," *Big Technology*, November 19, 2020, at https://bigtechnology.substack.com/p/a-breathtaking-constraint-on-capacity; Leah Nylen, "FTC Short on Funds as Facebook Case, Amazon Probe Loom," *Politico*, November 24, 2020.

¹⁰² For example, see the Senate Judiciary Subcommittee on Antitrust, Competition Policy, and Consumer Rights hearing "Antitrust Laws Oversight" on September 17, 2019, and the House Judiciary Subcommittee on Antitrust, Commercial, and Administrative Law hearing "Online Platforms and Market Power, Part 4: Perspectives of the Antitrust Agencies" on November 13, 2019.

¹⁰³ Ibid.

¹⁰⁴ 15 U.S.C. §18. For a summary of Section 7 of the Clayton Act, see CRS In Focus IF11234, *Antitrust Law: An Introduction*, by Jay B. Sykes.

¹⁰⁵ S. 225 specifies that the burden of proof would shift for acquisitions that would (1) result in the acquiring person to hold more than \$5 billion in voting securities and assets, or (2) the person being acquired or acquiring person has assets, net annual sales, or market capitalization greater than \$100 billion, and as a result of the acquisition, the acquiring person would hold an aggregate total amount of voting securities and assets in excess of \$50 million. All of these thresholds would be annually updated. Both bills define "materially" as "more than a de minimis amount."

¹⁰⁶ House Subcommittee on Antitrust staff report, p. 393; Krista Brown et al., "The Courage to Learn: A Retrospective on Antitrust and Competition Policy During the Obama Administration and Framework for a New Structuralist Approach," *American Economic Liberties Project*, January 2021, at https://www.economicliberties.us/our-work/ courage-to-learn/.

concentrated markets, antitrust enforcers need to prove that a merger will have anticompetitive effects in order to block it. In particular, they raise concern that it can be difficult to challenge Big Tech's acquisition of a nascent company, which may become a viable competitor even if the transaction would not significantly affect the level of competition in the market at the time of the acquisition.¹⁰⁷ The House Subcommittee on Antitrust staff report suggests amendments requiring merging parties to "show that the transaction was necessary for serving the public interest and that similar benefits could not be achieved through internal growth and expansion."¹⁰⁸ While shifting the burden of proof to merging parties may help antitrust enforcers block anticompetitive mergers, it could also discourage mergers that might ultimately increase competition or lead to greater innovation.¹⁰⁹

Shifting from Defining the Relevant Market

Evaluating whether a merger would reduce competition typically starts by defining the relevant market. S. 225 would change this practice by establishing that the enforcement of antitrust laws does not require the definition of a relevant market. Instead, the plaintiff could provide evidence of actual or likely harm to competition.

Eliminating the requirement to define the relevant market may be particularly consequential for proposed mergers involving firms in digital markets. It can be difficult to determine the boundaries of a digital market, particularly for a product or service that could be placed in multiple markets. For example, Google's YouTube hosts a wide variety of videos, including TV shows and movies (sometimes for a fee), music videos, and videos posted by users. Thus, YouTube could arguably be considered active in at least three different markets: (1) a social media market, competing with companies like Facebook, (2) a video streaming service market, competing with companies like Netflix, and (3) a music streaming service market, competing with consider them substitutes and instead maintain accounts on some or all of these platforms. In digital markets, a unique feature often attracts users to a new service; consumers may not want to use multiple platforms for the same purpose. This can make it easier for one firm—oftentimes the earliest entrant that is able to gain a substantial number of users—to obtain dominance in a digital market.

Even without having to define the relevant market, plaintiffs challenging mergers in digital markets could face difficulties arguing that a proposed merger harms competition. For example, in 2019, the DOJ challenged Sabre's proposed acquisition of Farelogix, alleging that an established dominant provider of airline booking services was seeking to eliminate a potential competitor.¹¹⁰ A federal district court rejected the challenge, finding that the DOJ failed to show

¹⁰⁷ Michael Katz, "Big Tech Mergers: Innovation, Competition for Market, and the Acquisition of Emerging Competitors," *Information Economics and Policy*, vol. 54 (March 2021): pp. 1-17, at https://doi.org/10.1016/j.infoecopol.2020.100883.

¹⁰⁸ House Subcommittee on Antitrust staff report, pp. 388.

¹⁰⁹ Michael Katz, "Big Tech Mergers: Innovation, Competition for the Market, and the Acquisition of Emerging Competitors," *Information Economics and Policy*, vol. 54 (March 2021): pp. 1-17, at https://doi.org/10.1016/ j.infoecopol.2020.100883; Jay Ezrielev, "Shifting the Burden in Acquisitions of Nascent and Potential Competitors: Not so Simple," *Competition Policy International*, November 4, 2020, at

https://www.competitionpolicyinternational.com/shifting-the-burden-in-acquisitions-of-nascent-and-potential-competitors-not-so-simple/.

¹¹⁰ United States v. Sabre Corporation, August 20, 2019, at https://www.justice.gov/opa/press-release/file/1196816.

the two companies are outright competitors.¹¹¹ Determining which companies compete directly against each other in digital markets could remain difficult even if the market is not precisely defined.

The potential challenges of defining a relevant market or determining which competitors are directly affected by a merger in digital markets are highlighted in Facebook's motion to dismiss the lawsuit filed by the FTC.¹¹² Facebook alleges that the FTC has not established "a market that includes all products that consumers consider acceptable substitutes," and that the FTC has not alleged sufficient facts to show that other platforms (such as YouTube, iMessage, LinkedIn, Netflix, and Pinterest, among others) do not compete with Facebook.

Shifting Focus from Consumer Welfare

The House Subcommittee on Antitrust staff report suggests that Congress reassert what the report describes as the original intent and broad goals of antitrust laws by clarifying that these laws protect not only consumers, but also workers, entrepreneurs, independent businesses, and other democratic ideals.¹¹³ Others have made similar suggestions, such as asserting that courts should evaluate the effect of a merger on overall social welfare rather than focusing only on the welfare of consumers of the merging parties' products.¹¹⁴ One justification for this change in focus is that harm to consumer welfare is typically evaluated by examining the potential for the merger to lead to higher consumer prices, which may not be relevant in digital markets where consumers do not pay for the product or service.¹¹⁵

The *Vertical Merger Guidelines* specify that the antitrust enforcement agencies are concerned about harm to competition, not to competitors.¹¹⁶ If the standard for evaluating proposed mergers was expanded to include potential harm to competitors as well as consumers, firms may be more reluctant to propose mergers, including those that might lead to increased competition and innovation. A proposed merger might be deemed to harm competitors, even if it seems unlikely to harm competition.¹¹⁷

¹¹¹ See United States v. Sabre Corp., 452 F.Supp.3d 97 (D. Del. 2020). A federal court of appeals vacated the district court order because Sabre did not follow through with the acquisition. See United States v. Sabre Corp., 2020 WL 4915824 (3d Cir. 2020).

¹¹² Federal Trade Commission v. Facebook, Inc., case no. 1:20-cv-03590-JEB, March 10, 2021, at https://about.fb.com/ wp-content/uploads/2021/03/2021-03-10-56-1-Memo-ISO-FBs-MTD-FTCs-Complaint.pdf. Facebook also filed a motion to dismiss the lawsuit filed by state attorneys general (State of New York et al. v. Facebook, Inc., case no. 1:20cv-03589-JEB, March 10, 2021, at https://about.fb.com/wp-content/uploads/2021/03/2021-03-10-114-1-Memo-ISO-FBs-MTD-States-Complaint.pdf). For a summary of both motions to dismiss, see https://about.fb.com/news/2021/03/ motions-to-dismiss-ftc-state-ag-lawsuits/.

¹¹³ House Subcommittee on Antitrust staff report, pp. 392.

¹¹⁴ Carl Shapiro, "Protecting Competition in the American Economy: Merger Control, Tech Titans, Labor Markets," *Journal of Economic Perspectives*, vol. 33, no. 3 (summer 2019), pp. 69-93; Ken Heyer, "Welfare Standards and Merger Analysis: Why Not the Best?," *Competition Policy International*, vol. 2, no. 2 (autumn 2006), pp. 29-54.

¹¹⁵ Some companies that operate web browsers, search services, social networking services, and other products and services collect consumer data and obtain revenue from advertisers. The consumer data are used to send targeted advertisements. For more information, see CRS In Focus IF11448, *How Consumer Data Affects Competition Through Digital Advertising*, by Clare Y. Cho.

¹¹⁶ Federal Trade Commission and Department of Justice, Vertical Merger Guidelines, p. 2.

¹¹⁷ In this report, to harm competition means to harm the competitive process, such as using exclusionary practices to prevent other firms from competing in the market. For more discussions of how to define "harm to competition," see Department of Justice, "Competition and Monopoly: Single-Firm Conduct Under Section 2 of the Sherman Act: Chapter 1," updated June 25, 2015, at https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-

The lack of antitrust enforcement in digital markets arguably may not be caused by antitrust agencies' reliance on the consumer welfare standard, but rather by how the standard has been applied.¹¹⁸ The *Horizontal Merger Guidelines* mention diminished innovation and "harm to consumers as a result of competitive constraints or incentives," in addition to higher prices and reduced output, as negative outcomes that the agencies examine in merger review. It is possible to define consumer welfare to include more than the price consumers face. If a merger has the potential to reduce quality or innovation, this could be considered a potential harm to consumers, even if prices are not expected to rise.¹¹⁹

Regulate Digital Markets

Individuals and companies that provide content, applications, and services on the internet known as content providers or edge providers—are not federally regulated *as an industry*, although they may be held accountable for violating certain federal laws and regulations that are applicable to firms in other industries as well.¹²⁰ Congress could create a new federal agency, designate an existing agency, or create a new division within an existing agency to regulate firms that operate in digital markets. These regulations could range from establishing a code of conduct—which could include methods to enable greater data mobility across firms—to regulating firms in digital markets as public utilities.¹²¹

One justification for regulating digital markets is that they tend to create natural monopolies. Companies in digital markets benefit from incumbency advantages, such as positive feedback loops from network effects¹²² and economies of scale from the collection and use of large amounts of consumer data.¹²³ The creation of software and intellectual property is typically

under-section-2-sherman-act-chapter-1; Eleanor Fox, "What is Harm to Competition? Exclusionary Practices and Anticompetitive Effect," *Antitrust Law Journal*, vol. 70, no. 2 (2002), pp. 371-411.

¹¹⁸ Kevin Caves and Hal Singer, "When the Econometrician Shrugged: Identifying and Plugging Gaps in the Consumer-Welfare Standard," *George Mason Law Review*, vol. 26, no. 2 (winter 2018), pp. 395-425.

¹¹⁹ "Unlocking Digital Competition: Report of the Digital Competition Expert Panel," *Open Government License*, March 2019, at https://www.gov.uk/government/publications/unlocking-digital-competition-report-of-the-digital-competition-expert-panel (i.e., U.K. Furman Report).

¹²⁰ For example, content providers can be held accountable for violating Section 5(a) of the Federal Trade Commission Act, which prohibits the use of "unfair or deceptive acts or practices in or affecting commerce" (15 U.S.C. §45). For more information about edge providers, see CRS Report R46207, *Competition on the Edge of the Internet*, by Clare Y. Cho. For more information about the regulatory landscape, see CRS Legal Sidebar LSB10309, *Regulating Big Tech: Legal Implications*, coordinated by Valerie C. Brannon.

¹²¹ If Congress chose to regulate digital markets as a public utility, it could include an antitrust savings clause to ensure that antitrust enforcers could still challenge mergers. For example, the Telecommunications Act of 1996 (P.L. 104-104) included an antitrust savings clause, meaning that antitrust authorities can challenge a merger between firms that are operating under the Federal Communications Commission's jurisdiction, such as two land-line telephone companies. Dennis Carlton, "Does Antitrust Need to be Modernized?," *Journal of Economic Perspectives*, vol. 21, no. 3 (2007), pp. 155-176; "Committee for the Study of Digital Platforms: Market Structure and Antitrust Subcommittee Report," *Stigler Center for the Study of the Economy and State*, The University School of Business, July 1, 2019; "Unlocking Digital Competition: Report of the Digital Competition Expert Panel," *Open Government License*, March 2019, at https://www.gov.uk/government/publications/unlocking-digital-competition-report-of-the-digital-competition-expert-panel (i.e., U.K. Furman Report); Dipayan Ghosh, "Don't Break Up Facebook—Treat It Like a Utility," *Harvard Business Review*, May 30, 2019, at https://hbr.org/2019/05/dont-break-up-facebook-treat-it-like-a-utility.

¹²² A network effect is when an increase in the number of users increases the value of the good or service for other users.

¹²³ Michael Katz, "Big Tech Mergers: Innovation, Competition for Market, and the Acquisition of Emerging Competitors," *Information Economics and Policy*, vol. 54 (March 2021): pp. 1-17, at https://doi.org/10.1016/j.infoecopol.2020.100883.

associated with high fixed costs and low marginal costs, which can result in high barriers to entry and limit the number of viable competitors. It is typically less costly for a company to integrate a new feature on an existing online platform than for a new company to create a new platform. The underlying infrastructure needed to make a profitable platform—such as the ability to collect, process, and store large amounts of consumer data—can be costly. In addition, a regulator of content providers could address other issues, including consumer privacy and content moderation concerns.¹²⁴

Antitrust and consumer privacy concerns are intertwined because of the growing importance of consumer data for companies operating in digital markets, particularly for those that rely on online advertising. One incentive for Big Tech firms to enter multiple product markets is to collect large amounts of consumer data, which can be used for a variety of purposes, such as targeting online advertisements and developing and refining algorithms. On December 14, 2020, the FTC issued orders to nine social media and video streaming service companies, "requiring them to provide data on how they collect, use, and present personal information."¹²⁵ It is unclear how the FTC intends to use these data.¹²⁶

Increased competition could address user privacy concerns; it could also exacerbate them by giving firms even greater incentives to use consumer data to gain a competitive edge. Any legislation targeting consumer data and privacy concerns is likely to indirectly affect antitrust concerns and vice versa.

Considerations for Congress

Any legislative action, including a decision not to take action, could have significant effects on digital markets. Additionally, Congress is not the only legislative body concerned about competition in digital markets. State laws and foreign legislation—such as the European Union's proposed Digital Markets Act and Digital Services Act¹²⁷ and bills that establish consumer privacy restrictions, including Virginia's Consumer Data Protection Act,¹²⁸ California's Consumer Privacy Act,¹²⁹ and the European Union's General Data Protection Regulation¹³⁰—all have the potential to affect competition in digital markets and to change the incentives for mergers and acquisitions. Congress may wish to consider what type of legislative actions, if any, would help maintain competition both within the United States and in the global market.

¹²⁴ For more information about social media companies and concerns about their content moderation practices, see CRS Report R46662, *Social Media: Misinformation and Content Moderation Issues for Congress*, by Jason A. Gallo and Clare Y. Cho.

¹²⁵ Federal Trade Commission, "FTC Issues Orders to Nine Social Media and Video Streaming Services Seeking Data About How They Collect, Use, and Present Information," press release, December 14, 2020, at https://www.ftc.gov/ news-events/press-releases/2020/12/ftc-issues-orders-nine-social-media-video-streaming-services.
¹²⁶ Ibid.

¹²⁰ Ibid.

¹²⁷ More information about both pieces of legislation is available at https://ec.europa.eu/digital-single-market/en/ digital-services-act-package.

¹²⁸ The bill, HB 2307 (identical to SB 1392), was signed into law by Governor Ralph S. Northam on March 2, 2021; see https://lis.virginia.gov/cgi-bin/legp604.exe?212+sum+HB2307.

¹²⁹ Title 1.81.5. California Consumer Privacy Act of 2018 [1798.100-1798.199.100], at

https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?division=3.&part=4.&lawCode=CIV&title=1.81.5. ¹³⁰ More information is available at https://gdpr.eu/.

Appendix. Selected Legislation in the 116th Congress Related to Antitrust Laws

Legislation	Title	Section on Antitrust
S. 306	Merger Enforcement Improvement Act	Would have (1) adjusted premerger notification filing fees, (2) required merger filers that entered an agreement with the FTC to report sufficient information to assess the competitive impact of the merger, (3) commissioned studies related to mergers from the FTC and the Government Accountability Office, and (4) increased FTC and Antitrust Division of the DOJ appropriations funding for FY2020.
S. 307	Consolidation Prevention and Competition Promotion Act of 2019	Would have (1) amended the definition of unlawful acquisitions, such as prohibiting mergers that materially, rather than substantially, lessen competition; (2) shifted the burden of proof for certain merging parties to show that the merger would not harm competition; (3) required companies to report information allowing the DOJ or FTC to assess the competitive impact for five years after a merger; and (4) established an Office of the Competition Advocate under the FTC.
S. 1937	Merger Filing Fee Modernization Act of 2019	Would have adjusted premerger filing fees and increased appropriations funding for FY2020.
S. 2237	Monopolization Deterrence Act of 2019	Would have established civil penalties for violating Section 2 of the Sherman Act, or for monopolistic conduct. The FTC and DOJ would also be required to issue joint guidelines for determining the amount of civil penalties they would seek.
S. 3426	Anticompetitive Exclusionary Conduct Prevention Act of 2020	Would have amended the Clayton Act to make it unlawful to engage in exclusionary conduct that presents an appreciable risk of harming competition. It would also establish civil penalties for violations of antitrust laws and establish that enforcement of antitrust laws does not require the definition of a relevant market.
S. 4918	One Agency Act	Would have placed the antitrust enforcement jurisdiction of the FTC under the DOJ, creating one agency to enforce antitrust laws.
S. 5057	Antitrust Freedom Act of 2020	Would have established that antitrust laws would not prohibit any voluntary economic coordination.

Table A-1. Selected Legislation in the 116th Congress Related to Antitrust Laws

Source: CRS, using Congress.gov.

Note: The listed legislation were selected because the proposed amendments to antitrust laws could affect merger enforcement in digital markets.

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