

Antitrust Reform and Big Tech Firms

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Antitrust has become a hot topic. After decades evolving in technocratic obscurity, competition policy now commands the attention of lawmakers, academics, and the general public.

One of the driving forces behind this trend has been the rise of a handful of large technology firms: Facebook (now Meta Platforms), Google, Amazon, and Apple. While these “Big Tech” companies have revolutionized the daily lives of billions, they also are accused of obtaining and solidifying dominant positions through anticompetitive conduct.

Meta is currently defending a Federal Trade Commission (FTC) lawsuit that seeks to unwind its acquisitions of the photo-sharing service Instagram and the messaging app WhatsApp.

Google is embroiled in litigation with the Department of Justice (DOJ), state attorneys general, and private plaintiffs over alleged exclusionary conduct related to its search engine, app distribution on Android mobile devices, and its digital-advertising businesses.

Amazon has faced lawsuits challenging pricing restrictions it imposes on third-party merchants. Some commentators have also alleged that the company has engaged in anticompetitive tying, predatory pricing, and unfair self-preferencing.

Several of Apple’s practices have attracted scrutiny, including the firm’s restrictions on the distribution of iOS apps, its use of competitively sensitive information derived from third-party app developers, and its treatment of its proprietary apps. Litigation challenging the iPhone maker’s app-distribution restrictions is currently pending before the Ninth Circuit.

Some lawmakers have also expressed concern about the large number of acquisitions that the Big Tech firms have engaged in over the past decade. In particular, they have worried about the possibility that some of these transactions eliminated sources of potential or nascent competition.

Many of these concerns have prompted calls for legal reform. Some commentators have argued that *ex post* adjudication is ill-equipped to grapple with competition issues in platform markets that have tipped in favor of a single dominant firm. Other critiques of the existing framework focus on specific doctrinal rules or the alleged shortcomings of the consumer-welfare standard—a general normative benchmark that has heavily influenced current law.

For their part, defenders of antitrust adjudication have emphasized the differences between the Big Tech firms. This heterogeneity, they contend, counsels in favor of the fact-specific approach employed by current law and against categorical regulatory treatment. Supporters of the consumer-welfare standard argue that it provides a principled and coherent decision-making framework, in contrast to alternative regimes that would embrace more amorphous goals.

While some reform proposals would adopt special competition regulations for large tech platforms, others would work within existing antitrust law by adjusting burdens of proof and changing certain doctrinal requirements.

The regulatory route raises questions of policy design—namely, how to scope the relevant regulations and select an appropriate regulator to administer them. On the issue of scope, two general models have emerged. One would allow a regulator to designate covered platforms that offer specified services and meet certain quantitative and qualitative criteria. Designated firms would then be subject to the same set of special competition regulations. The other approach is more targeted and would apply special regulations to individual markets. With respect to the selection of a regulator, commentators have proposed giving new authorities to the DOJ and/or FTC, creating a new branch within either of those agencies, or establishing a standalone digital-platform regulator.

As a substantive matter, proposals to reform the competition laws governing Big Tech firms fall into five categories: (1) *ex ante* conduct rules, (2) structural separation and line-of-business restrictions, (3) special merger rules, (4) interoperability and data-portability mandates, and (5) changes to general antitrust doctrine.

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In 2012, a prominent scholar lamented the diminished significance of antitrust in the United States.¹ Although there was once a flourishing antitrust movement, he argued, the subject appeared to attract little interest from lawmakers, academics, and the public.² Political candidates rarely mentioned competition issues, opinion polls reflected indifference toward economic concentration, and the enforcement agencies seemed to operate with a narrow understanding of antitrust’s scope.³

Since then, things have changed—dramatically. In the past several years, antitrust has resurfaced as an issue of both popular and political concern.⁴ The White House has issued an executive order outlining a “whole-of-government” approach to competition policy;⁵ advocates of reform have been appointed to lead the Federal Trade Commission (FTC) and the Department of Justice’s (DOJ’s) Antitrust Division;⁶ and Congress has considered a suite of proposals to overhaul various aspects of antitrust doctrine.⁷

In the words of one commentator, antitrust now “stands at its most fluid and negotiable moment in a generation.”⁸ The subject has not had such political salience, another contends, since 1912.⁹ Interest in reform has been wide-ranging: “[e]verything is up for grabs, and nothing is free of scrutiny.”¹⁰

One of the driving forces behind this trend has been the rise of a handful of large technology firms: Facebook (now Meta Platforms), Google, Amazon, and Apple. In 2020, a House subcommittee released a detailed report (the HJC Report) concluding that the four companies had obtained and solidified dominant positions through anticompetitive conduct.¹¹ These “Big Tech” firms have also faced antitrust lawsuits from regulators and private plaintiffs, both in the United States and abroad.¹²

This report provides an overview of antitrust issues involving the four Big Tech firms and related proposals for legislative reform. It is divided into four parts. First, the report provides an introduction to basic antitrust principles. Second, it reviews selected antitrust allegations against

¹ Maurice E. Stucke, *Reconsidering Antitrust’s Goals*, 53 B.C. L. REV. 551, 553 (2012).

² *Id.* at 553-56.

³ *Id.*

⁴ Daniel A. Crane, *Antitrust’s Unconventional Politics*, 104 VA. L. REV. ONLINE 118, 118-21 (2018).

⁵ Exec. Order No. 14,036, Promoting Competition in the American Economy, 86 Fed. Reg. 36,987, 36,989 (July 14, 2021).

⁶ Brent Kendall, *Senate Confirms Jonathan Kanter as Justice Department Antitrust Chief*, WALL ST. J. (Nov. 16, 2021), <https://www.wsj.com/articles/senate-confirms-jonathan-kanter-as-justice-department-antitrust-chief-11637104400>; David McCabe & Cecilia Kang, *Biden Names Lina Khan, a Big-Tech Critic, as F.T.C. Chair*, N.Y. TIMES (June 15, 2021), <https://www.nytimes.com/2021/06/15/technology/lina-khan-ftc.html>.

⁷ See, e.g., Prohibiting Anticompetitive Mergers Act of 2022, S. 3847, 117th Cong. (2022); Platform Competition and Opportunity Act, S. 3197, 117th Cong. (2021); American Innovation and Choice Online Act, S. 2992, 117th Cong. (2021); Trust-Busting for the Twenty-First Century Act, S. 1074, 117th Cong. (2021); Competition and Antitrust Law Enforcement Reform Act of 2021, S. 225, 117th Cong. (2021); Ending Platform Monopolies Act, H.R. 3825, 117th Cong. (2021).

⁸ Crane, *supra* note 4, at 118.

⁹ Carl Shapiro, *Antitrust in a Time of Populism*, 61 INT’L J. INDUS. ORG. 714, 715 (2018).

¹⁰ ALAN J. DEVLIN, REFORMING ANTITRUST 265 (2021).

¹¹ INVESTIGATION OF COMPETITION IN DIGITAL MARKETS, MAJORITY STAFF REPORT AND RECOMMENDATIONS, SUBCOMM. ON ANTITRUST, COMMERCIAL AND ADMIN. L. OF THE H. COMM. ON THE JUDICIARY 12-17 (2020) [hereinafter “HJC REPORT”]. This report lists the Big Tech firms in the same order as the subcommittee’s report.

¹² See *infra* “The Big Tech Firms: A Summary of Selected Antitrust Allegations.”

the Big Tech companies. Third, it discusses conceptual issues with proposals to reform the competition laws governing Big Tech. Fourth, the report analyzes the substance of specific categories of reform proposals.

Antitrust Law: The Basics

The antitrust laws aim to protect economic competition by prohibiting unreasonable restraints of trade,¹³ exclusionary conduct by dominant firms,¹⁴ and mergers and acquisitions that may “substantially” lessen competition or “tend to create a monopoly.”¹⁵

The following subsections provide a high-level overview of antitrust doctrine to lay the groundwork for later discussions of competition issues in tech markets and proposals for legal reform.

Restraints of Trade

Section 1 of the Sherman Act prohibits “every” contract or conspiracy “in restraint of trade.”¹⁶ Despite this categorical language, the Supreme Court has interpreted Section 1 to bar only *unreasonable* restraints of trade that harm competition.¹⁷

Applying this general standard, the Court has identified some types of agreements that are so likely to be anticompetitive that they are deemed *per se* illegal, meaning courts need not inquire into their effects in individual cases.¹⁸ Restraints in this category include agreements among competitors (“horizontal” agreements) to fix prices,¹⁹ divide markets,²⁰ and restrain output.²¹

While some types of agreements are *per se* illegal under Section 1, most restraints are evaluated using a standard called the “rule of reason.”²² Under the rule of reason, courts conduct fact-specific assessments of a defendant’s market power and the details of a challenged agreement to determine a restraint’s competitive effects.²³

This inquiry typically proceeds via a three-step burden-shifting framework. In that framework, the plaintiff has the initial burden to prove that the challenged restraint has a substantial anticompetitive effect.²⁴ If the plaintiff does so, the burden shifts to the defendant to show a procompetitive justification for the restraint.²⁵ If the defendant makes this showing, the burden

¹³ 15 U.S.C. § 1.

¹⁴ *Id.* § 2.

¹⁵ *Id.* § 18.

¹⁶ *Id.* § 1.

¹⁷ *Texaco Inc. v. Dagher*, 547 U.S. 1, 5 (2006).

¹⁸ *Id.*

¹⁹ *United States v. Socony-Vacuum Oil Co.*, 310 U.S. 150, 218 (1940).

²⁰ *N. Pac. R.R. Co. v. United States*, 356 U.S. 1, 5 (1958).

²¹ *NCAA v. Bd. of Regents of Univ. of Okla.*, 468 U.S. 85, 100 (1984).

²² *Ohio v. Am. Express Co. (Amex)*, 138 S. Ct. 2274, 2283-84 (2018).

²³ *Id.* at 2284. The Supreme Court has explained that a firm has market power if it has the ability to price above competitive levels, *Bd. of Regents*, 468 U.S. at 109 n.38, or the power to constrain market output to raise prices, *Fortner Enters. v. U.S. Steel Corp.*, 394 U.S. 495, 503 (1969).

²⁴ *Amex*, 138 S. Ct. at 2284.

²⁵ *Id.*

shifts back to the plaintiff to demonstrate that the relevant procompetitive benefits could be reasonably achieved through less anticompetitive means.²⁶ Some courts have also added a fourth step in which they balance a restraint's anticompetitive and procompetitive effects.²⁷

Monopolization

While Section 1 of the Sherman Act governs agreements between firms, Section 2 prohibits dominant companies from engaging in unilateral anticompetitive conduct. In the statutory parlance, Section 2 makes it unlawful to “monopolize” commerce.²⁸

The monopolization offense has two elements:

1. the possession of monopoly power; and
2. “the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historical accident.”²⁹

The second element is often referred to as “exclusionary” or “anticompetitive” conduct.³⁰

Monopoly Power

The Supreme Court has explained that a firm possesses monopoly power if it has the ability to “control prices or exclude competition.”³¹ Although that standard is similar to many descriptions of market power,³² the Court has clarified that monopoly power under Section 2 of the Sherman Act requires “something greater” than market power under Section 1.³³ Lower courts have thus concluded that monopoly power entails a large degree of market power.³⁴

Some courts have held that monopoly power can be established through direct evidence of supra-competitive prices and restricted output.³⁵ However, this type of direct proof is rarely available.³⁶ As a result, courts typically evaluate allegations of monopoly power by examining a

²⁶ *Id.*

²⁷ See, e.g., *Bhan v. NME Hosps., Inc.*, 929 F.2d 1404, 1413 (9th Cir. 1991) (acknowledging a possible fourth step); see also Michael A. Carrier, *The Rule of Reason: An Empirical Update for the 21st Century*, 16 GEO. MASON L. REV. 827, 827 (2009) (concluding that courts reached a fourth “balancing” step in four percent of rule-of-reason cases decided between 1977 and 1999). The FTC and some lower courts have also employed an intermediate “quick look” framework to evaluate restraints that are similar to *per se* unlawful conduct but exhibit features warranting additional analysis. See Herbert Hovenkamp, *The Rule of Reason*, 70 FLA. L. REV. 81, 122-31 (2018) [hereinafter “Hovenkamp, *The Rule of Reason*”]. Different courts have described quick-look analysis in different ways, but the basic idea is that some types of restraints can be condemned without the full rule-of-reason inquiry. *Id.* at 122-23.

²⁸ 15 U.S.C. § 2.

²⁹ *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966).

³⁰ See, e.g., EINER ELHAUGE, *UNITED STATES ANTITRUST LAW AND ECONOMICS* 211 (3d ed. 2018).

³¹ *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 391 (1956).

³² See, e.g., *Fortner Enters. v. U.S. Steel Corp.*, 394 U.S. 495, 503 (1969) (defining market power as “the ability of a single seller to raise price and restrict output”).

³³ *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 481 (1992).

³⁴ See, e.g., *Bacchus Indus., Inc. v. Arvin Indus., Inc.*, 939 F.2d 887, 894 (10th Cir. 1991); *Deauville Corp. v. Federated Dep’t Stores, Inc.*, 756 F.2d 1183, 1192 n.6 (5th Cir. 1985).

³⁵ *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 307 (3d Cir. 2007); *PepsiCo, Inc. v. Coca-Cola Co.*, 315 F.3d 101, 107 (2d Cir. 2002) (per curiam); *Conwood Co. v. U.S. Tobacco Co.*, 290 F.3d 768, 783 n.2 (6th Cir. 2002).

³⁶ *United States v. Microsoft Corp.*, 253 F.3d 34, 51 (D.C. Cir. 2001) (per curiam).

market’s structure—in particular, whether a defendant occupies a dominant market share and is protected by entry barriers.³⁷

These inquiries require a plaintiff to define the boundaries of the relevant product market—an exercise that turns on the range of items that are “reasonably interchangeable” with the product at issue.³⁸

The key conceptual issue with market definition is whether buyer substitution to other items would limit a monopolist in an alleged market from raising prices significantly above competitive levels.³⁹ If buyer substitution would constrain even a firm with a dominant share of an alleged market from raising prices significantly, the relevant legal test prescribes that the market must be expanded until buyer substitution of other items would not offer such a constraint.⁴⁰

Courts have relied on a variety of factors in defining markets, including functional similarities and differences between separate items, cross-elasticities of demand (*i.e.*, the extent to which the quantity demanded of one item changes in response to price changes for another item), price differences, price discrimination, and price trends.⁴¹

Once a market has been defined, courts usually look to a defendant’s share of that market to assess claims of monopoly power.⁴² The case law has not identified a definitive point at which monopoly power can be inferred, but courts typically require monopolization plaintiffs to prove that the defendant occupies a market share of 70 percent or more.⁴³

To establish monopoly power, plaintiffs must also show that a defendant’s dominant position is likely to be durable—for example, with evidence of significant entry barriers.⁴⁴ Entry barriers may include legal and regulatory requirements, control of an essential resource, entrenched buyer preferences, and economies of scale.⁴⁵ In some digital markets, entry barriers may also emerge from network effects (whereby a product’s utility increases as it gains more users) and significant switching costs (high costs that users of a product would face in switching to a substitute).⁴⁶

Exclusionary Conduct

As noted, the second element of a monopolization claim is exclusionary conduct. The Supreme Court has described this element as involving “the willful acquisition or maintenance of [monopoly] power as distinguished from growth or development as a consequence of a superior product, business acumen, or historical accident.”⁴⁷

³⁷ *Id.*

³⁸ *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 395 (1956).

³⁹ ELHAUGE, *supra* note 30, at 240.

⁴⁰ *Id.* at 241.

⁴¹ MARKET POWER HANDBOOK: COMPETITION LAW AND ECONOMIC FOUNDATIONS, AM. BAR ASS’N 62-74 (2d ed. 2012).

⁴² *See, e.g., U.S. Anchor Mfg., Inc. v. Rule Indus., Inc.*, 7 F.3d 986, 999 (11th Cir. 1993).

⁴³ U.S. DEP’T OF JUST., COMPETITION AND MONOPOLY: SINGLE-FIRM CONDUCT UNDER SECTION 2 OF THE SHERMAN ACT 21 (2008) (withdrawn May 11, 2009) [hereinafter “DOJ MONOPOLIZATION REPORT”] (collecting cases).

⁴⁴ *See, e.g., Lenox MacLaren Surgical Corp. v. Medtronic, Inc.*, 762 F.3d 1114, 1123-25 (10th Cir. 2014); *W. Parcel Express v. United Parcel Serv. of Am., Inc.*, 190 F.3d 974, 975 (9th Cir. 1999).

⁴⁵ *Rebel Oil Co., Inc. v. Atlantic Richfield Co.*, 51 F.3d 1421, 1439 (9th Cir. 1995).

⁴⁶ *FTC v. Facebook, Inc.*, 581 F. Supp. 3d 34, 51 (D.D.C. 2022).

⁴⁷ *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966).

As a general standard, many have found that description unhelpful. Businesses often “willfully” try to obtain monopoly status *by developing superior products* and *by deploying business acumen*.⁴⁸ The Court’s dichotomy thus offers little clarity on how to distinguish exclusionary conduct from legitimate competition on the merits.

While academics have made several attempts to develop an alternative general standard,⁴⁹ courts have not decisively embraced any of them.⁵⁰ Instead, the doctrine contains a variety of tests that govern specific categories of conduct,⁵¹ along with a burden-shifting framework that is similar to the usual rule-of-reason inquiry in Section 1 cases.⁵²

The following subsections review the standards governing particular types of conduct by dominant firms.

Predatory Pricing

Some monopolization cases involve allegations that a defendant aggressively cut prices in an attempt to exclude rivals from the market—a practice commonly known as predatory pricing.⁵³

Under the Supreme Court’s *Brooke Group* test, plaintiffs must make two showings to prevail on a predatory-pricing claim.⁵⁴ First, plaintiffs must show that the defendant’s prices fell below an appropriate measure of its costs.⁵⁵ Second, plaintiffs must establish a “dangerous probability” that the defendant will recoup its investment in below-cost prices by raising prices upon the elimination of competitors.⁵⁶

These requirements have proven difficult to satisfy. Since the *Brooke Group* decision, predatory-pricing claims have rarely made it past summary judgment.⁵⁷ The Court has defended the restrictiveness of the relevant criteria by arguing that successful predatory pricing is rare and by emphasizing the need to avoid deterring procompetitive price cutting.⁵⁸

Refusals to Deal

Another category of potentially exclusionary conduct involves refusals to deal with rivals. For example, a dominant firm might control key infrastructure or technology that its competitors need

⁴⁸ Many commentators have made this point. For one example, see Daniel Francis, *Making Sense of Monopolization*, 84 ANTITRUST L.J. 779, 779-80 (2022).

⁴⁹ For an overview, see CHRISTOPHER SAGERS, ANTITRUST 205-08 (3d ed. 2021); DOJ MONOPOLIZATION REPORT, *supra* note 43, at 33-47.

⁵⁰ DOJ MONOPOLIZATION REPORT, *supra* note 43, at 33.

⁵¹ *Id.* at 49-141; ELHAUGE, *supra* note 30, at 277-355.

⁵² Viamedia, Inc. v. Comcast Corp., 951 F.3d 429, 463-64 (7th Cir. 2020); United States v. Microsoft Corp., 253 F.3d 34, 58-59 (D.C. Cir. 2001) (per curiam).

⁵³ ELHAUGE, *supra* note 30, at 277.

⁵⁴ Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 222-24 (1993).

⁵⁵ *Id.* at 222.

⁵⁶ *Id.* at 224.

⁵⁷ Lina M. Khan, *Amazon’s Antitrust Paradox*, 126 YALE L.J. 710, 730 & n.107 (2017) [hereinafter “Khan, *Amazon’s Antitrust Paradox*”].

⁵⁸ *Brooke Grp.*, 509 U.S. at 226.

to effectively compete, in which case a denial of access to the relevant property may harm competition.⁵⁹

The Supreme Court has held that monopolists have a duty to deal with rivals only in a narrow set of circumstances. In *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, the Court affirmed Section 2 liability because the only plausible motivation for a monopolist's refusal to deal was a desire to drive its competitor out of business.⁶⁰ In that case, the defendant's refusal was not motivated by efficiency concerns and instead represented a sacrifice of short-term profits to eliminate a rival.⁶¹

In its 2004 decision in *Verizon Communications Inc. v. Trinko*, however, the Court characterized its holding in *Aspen Skiing* as lying "at or near the outer boundary" of Section 2 liability.⁶² In rejecting a refusal-to-deal claim, *Trinko* distinguished *Aspen Skiing* on the grounds that the monopolist in the latter decision had terminated "a voluntary (and thus presumably profitable) course of dealing," which suggested a willingness to sacrifice short-term profits for an anticompetitive end.⁶³ The Court also emphasized that the monopolist in *Aspen Skiing* refused to deal with its rival even if compensated at the prices it charged to other customers, which "revealed a distinctly anticompetitive bent."⁶⁴

Based on these decisions, some lower courts have concluded that refusal-to-deal plaintiffs must establish that a defendant's refusal entailed a sacrifice of short-term profits for an exclusionary purpose.⁶⁵ Some courts have also required plaintiffs to establish this type of profit sacrifice with proof that the defendant terminated a voluntary course of dealing.⁶⁶

Many circuit courts have also accepted a specific theory of refusal-to-deal liability called the "essential facilities" doctrine, which the Supreme Court has declined to either recognize or repudiate.⁶⁷ To establish liability under the essential-facilities doctrine, plaintiffs must establish:

1. the control of an "essential facility" by a monopolist;
2. an inability to "practically or reasonably" duplicate the facility;
3. the denial of the use of the facility to a competitor; and
4. the feasibility of providing access to the facility.⁶⁸

While that doctrine remains on the books as a formal matter,⁶⁹ two commentators have described the Supreme Court's treatment of it as inflicting "death by dicta."⁷⁰ Its viability thus remains uncertain.

⁵⁹ SAGERS, *supra* note 49, at 219.

⁶⁰ *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 608-11 (1985).

⁶¹ *See id.*

⁶² 540 U.S. 398, 409 (2004).

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *E.g.*, *Novell, Inc. v. Microsoft Corp.*, 731 F.3d 1064, 1075 (10th Cir. 2013) (Gorsuch, J.); *Covad Commc'ns Co. v. Bell Atl. Corp.*, 398 F.3d 666, 675 (D.C. Cir. 2005); *but see Viamedia Inc. v. Comcast Corp.*, 951 F.3d 429, 462 (7th Cir. 2020) (concluding that profit sacrifice is relevant but not always dispositive for refusal-to-deal liability).

⁶⁶ *E.g.*, *Novell*, 731 F.3d at 1075.

⁶⁷ *Trinko*, 540 U.S. at 410-11.

⁶⁸ *MCI Commc'ns Corp. v. AT&T Co.*, 708 F.2d 1081, 1132-33 (7th Cir. 1983).

⁶⁹ *See ELHAUGE, supra* note 30, at 353 n.91 (collecting circuit court decisions recognizing the doctrine).

⁷⁰ Brett Frischmann & Spencer Weber Waller, *Revitalizing Essential Facilities*, 75 ANTITRUST L.J. 1, 3 (2008); *see also*

Tying

Tying arrangements are vertical restraints of trade that can be challenged under several provisions of the antitrust laws, including Sections 1 and 2 of the Sherman Act.⁷¹ Tying involves a refusal to sell one product (the tying product) unless buyers also purchase another product (the tied product) from the seller.⁷²

The traditional concern with tying arrangements is that they may allow a firm with market power for the tying product to harm competition in and even monopolize the tied product market.⁷³ Tying may also help a dominant firm preserve a monopoly in the tying market by eliminating potential rivals that may enter via the tied market.⁷⁴

Possible redeeming efficiencies of tying include reputation protection and economies of production or distribution. For example, tying may dissuade consumers from using an inferior substitute to the tied product with the tying product, thereby mitigating the risk of reputational damage to a seller's brand.⁷⁵ Producing and selling different products together may also reduce production, marketing, and distribution costs.⁷⁶

In addition, tying arrangements may encourage investment by allowing a firm to convert fixed costs into variable costs. For example, a franchisor might sell a franchise for less than its market value but employ a tying arrangement to secure overcharges on goods distributed through the franchise.⁷⁷ This type of arrangement might encourage investment by decreasing a franchisee's upfront costs.⁷⁸

Contractual tying arrangements are governed by what is often called a rule of *quasi-per-se* illegality, though some have described that label as a misnomer.⁷⁹ While different circuit courts

HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* 337 (4th ed. 2011) (concluding that “[n]ot many essential facility claims will survive” post-*Trinko*); Khan, *Amazon’s Antitrust Paradox*, *supra* note 57, at 801 (noting that commentators have wondered whether the essential-facilities doctrine is now “a dead letter”).

⁷¹ HOVENKAMP, *supra* note 70, at 435.

⁷² ELHAUGE, *supra* note 30, at 409.

⁷³ CHIARA FUMAGALLI, MASSIMO MOTTA & CLAUDIO CALCAGNO, *EXCLUSIONARY PRACTICES: THE ECONOMICS OF MONOPOLISATION AND ABUSE OF DOMINANCE* 352 (2018). For a discussion of the Chicago School’s influential critique of this “leverage” theory of harm and responses to that critique, see *id.* at 363-99.

⁷⁴ *Id.* at 386-88. For additional theories of harm involving tying, see HOVENKAMP, *supra* note 70, at 436.

⁷⁵ ELHAUGE, *supra* note 30, at 419.

⁷⁶ FUMAGALLI, et al., *supra* note 73, at 353.

⁷⁷ Erik Hovenkamp & Herbert J. Hovenkamp, *Tying Arrangements and Antitrust Harm*, 52 ARIZ. L. REV. 925, 964 (2010).

⁷⁸ *Id.* Some commentators have argued that “variable proportion ties”—whereby consumers purchase a durable tying product (e.g., a printer) and amounts of the tied product (e.g., ink) that vary with their use of the tying product—may also increase welfare in certain circumstances. *Id.* at 951-52. Firms may use variable proportion ties to lower the price for the tying product while raising the price of the tied product, benefitting low-volume users and harming high-volume users. *Id.* Net welfare effects may thus depend on the number of consumers who would not have purchased the tying product absent the price reduction. *Id.* Some commentators have analogized certain conduct in tech markets to variable proportion ties. For example, some have argued that restrictions on app distribution may allow Apple to cut iPhone prices, meaning high-intensity app users effectively subsidize low-intensity users. Thomas A. Lambert, *Addressing Big Tech’s Market Power: A Comparative Institutional Analysis*, 75 SMU L. REV. 73, 104 & n.182 (2022). For an argument that variable proportion ties are typically welfare-reducing, see Einer Elhauge, *Rehabilitating Jefferson Parish: Why Ties Without a Substantial Foreclosure Share Should Not Be Per Se Legal*, 80 ANTITRUST L.J. 463, 476-86 (2016).

⁷⁹ See, e.g., ELHAUGE, *supra* note 30, at 420-21.

have adopted different formulations of the relevant legal test, many of the inquiries are similar.⁸⁰ One commentator has summarized the doctrine as establishing the following requirements for a tying claim:

1. The defendant offered two distinct products;
2. The defendant conditioned the sale of one product (the tying product) on the purchase of the other product (the tied product);
3. The defendant possessed sufficient economic power in the tying product market to coerce purchasers into acceptance of the tied product; and
4. The defendant's conduct affected a "not insubstantial" amount of interstate commerce in the tied product.⁸¹

Some courts have also required plaintiffs to demonstrate that a tying arrangement had anticompetitive effects in the tied product market.⁸²

Although the above test governs most contractual tying arrangements, different standards have been applied to so-called technological ties, whereby a firm physically integrates separate products or designs its products in a way that makes them difficult to use with those offered by other firms.⁸³

In its 2001 decision in *United States v. Microsoft*, for example, the D.C. Circuit held that a technological tie involving a computer operating system and a web browser was governed by the rule of reason, rather than the traditional rule of *quasi-per-se* illegality.⁸⁴ Several other courts have taken a permissive approach to product-design decisions and accepted arguments that challenged technological ties represented procompetitive quality improvements.⁸⁵

Exclusive Dealing

Like tying, exclusive-dealing arrangements are vertical restraints that can be challenged under both Section 1 and Section 2 of the Sherman Act.⁸⁶ Exclusive dealing occurs when a firm limits the freedom of buyers or sellers to deal with other companies.⁸⁷ For example, a seller might offer widgets on the condition that purchasers obtain all of their widgets from the seller.⁸⁸

⁸⁰ HOVENKAMP, *supra* note 70, at 435 (explaining that "[i]n operation the tests are similar," but that some courts have combined elements that other courts recognize as separate requirements).

⁸¹ *Id.*

⁸² *E.g.*, *Kaufman v. Time Warner*, 836 F.3d 137, 141 (2d Cir. 2016); *Amey, Inc. v. Gulf Abstract & Title Inc.*, 758 F.2d 1486, 1503 (11th Cir. 1985); *Driskill v. Dallas Cowboys Football Club, Inc.*, 498 F.2d 321, 323 (5th Cir. 1974).

⁸³ DOJ MONOPOLIZATION REPORT, *supra* note 43, at 33.

⁸⁴ 253 F.3d 34, 89-90 (D.C. Cir. 2001) (per curiam).

⁸⁵ See John M. Newman, *Anticompetitive Product Design in the New Economy*, 39 FLA. ST. U. L. REV. 681, 714-23 (2012) (summarizing the case law).

⁸⁶ HOVENKAMP, *supra* note 70, at 478. Exclusive-dealing agreements can also be challenged under Section 3 of the Clayton Act. 15 U.S.C. § 14. Some courts and commentators have suggested that analysis of such agreements may vary based on which provision is invoked. See, e.g., *United States v. Dentsply Int'l, Inc.*, 399 F.3d 181, 197 (3d Cir. 2005) (concluding that findings in favor of the defendant under Section 1 of the Sherman Act and Section 3 of the Clayton Act did not preclude Section 2 liability for exclusive dealing); ELHAUGE, *supra* note 30, at 371 n.1 (explaining that "some modern courts appear to treat Clayton Act § 3 claims more generously at the margins"). However, the precise differences between the relevant inquiries are not entirely clear. DOJ MONOPOLIZATION REPORT, *supra* note 43, at 132.

⁸⁷ HOVENKAMP, *supra* note 70, at 478.

⁸⁸ *Id.*

These types of restrictions may raise antitrust concerns if they foreclose enough of the market to deter entry or deny rivals the ability to achieve scale economies.⁸⁹ Exclusive dealing may also raise rivals' costs by limiting them to inferior inputs or distribution channels.⁹⁰

Procompetitive justifications for exclusive dealing include the inducement of relationship-specific investments,⁹¹ mitigation of uncertainty about future sales,⁹² and the encouragement of more intense competition for distribution, which may result in lower consumer prices.⁹³

In evaluating exclusive-dealing restrictions, courts ordinarily assess the extent of foreclosure, the duration of the restrictions, and any business justifications for the restrictions.⁹⁴ Although there are exceptions, modern courts have tended to require foreclosure of roughly 40 percent of the market before condemning exclusive dealing.⁹⁵

Monopoly Leveraging

A firm's possession of monopoly power has traditionally given rise to concerns that the firm may use that power to gain a competitive advantage in another market. For many years, the federal courts split over whether Section 2 precluded this type of "monopoly leveraging" in cases where a defendant utilized its monopoly power to harm competition in—but not reasonably threaten to monopolize—a second market. Elhauge, *supra* note 30, at 357-58 nn.97-98 (collecting cases).

In 2004, the Supreme Court rejected one type of leveraging claim, remarking that a lower court had erred to the extent that it dispensed with the requirement that a plaintiff relying on a leveraging theory establish that the defendant had a "dangerous probability" of monopolizing a second market. *Verizon Commc'ns Inc. v. L. Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398, 410 n.4 (2004) (citation omitted). The Court thus rejected the proposition that a defendant could violate Section 2 merely by gaining an unfair advantage in a second market.

In its *Microsoft* decision, however, the D.C. Circuit endorsed what some commentators have called a "defensive leveraging" or "monopoly maintenance" theory. See *United States v. Microsoft Corp.*, 253 F.3d 34, 67 (D.C. Cir. 2001) (per curiam); Robin Cooper Feldman, *Defensive Leveraging in Antitrust*, 87 GEO. L.J. 2079 (1999). While "offensive leveraging" involves a defendant's use of monopoly power in one market to extract additional profits from another market, "defensive leveraging" involves the use of monopoly power to gain an advantage in another market so as to prevent erosion of a primary monopoly. See Feldman, *Defensive Leveraging*, 87 GEO. L.J. at 2080.

In *Microsoft*, for example, the D.C. Circuit concluded that Microsoft had leveraged its operating-system monopoly into the market for web browsers so as to protect its operating-system monopoly. *Microsoft*, 253 F.3d at 64. Specifically, Microsoft imposed several restrictions related to its Windows operating system that were designed to reduce the usage of rival web browsers, which threatened to supplant Windows as platforms for software development. *Id.* at 60. The D.C. Circuit held that some of this conduct constituted unlawful monopolization. *Id.* at 64.

Accordingly, under current monopolization law, an "offensive leveraging" theory requires proof that a defendant's conduct raised a "dangerous probability" of *monopolizing* a second market; simply gaining an unfair advantage in another market is not sufficient. *Trinko*, 540 U.S. at 410 n.4. By contrast, "defensive leveraging"—whereby a monopolist's leveraging of its monopoly power into a second market helps preserve its primary monopoly—may be a viable theory of harm, even without proof that the defendant threatens to monopolize the second market. See *Microsoft*, 253 F.3d at 64, 80-84.

⁸⁹ FUMAGALLI, et al., *supra* note 73, at 239-62.

⁹⁰ HOVENKAMP, *supra* note 70, at 479-80.

⁹¹ ELHAUGE, *supra* note 30, at 375.

⁹² *Id.* at 374.

⁹³ Benjamin Klein & Kevin M. Murphy, *Exclusive Dealing Intensifies Competition for Distribution*, 75 ANTITRUST L.J. 433 (2008).

⁹⁴ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 236 (1st Cir. 1983) (Breyer, J.).

⁹⁵ SAGERS, *supra* note 49, at 173 (collecting cases).

Mergers & Acquisitions

The antitrust laws also place limitations on mergers and acquisitions.⁹⁶ Section 7 of the Clayton Act prohibits mergers whose effect “may be substantially to lessen competition, or to tend to create a monopoly.”⁹⁷ Though less common, Section 2 of the Sherman Act can also be used to challenge mergers that help a firm acquire or maintain monopoly power.⁹⁸

Analysis of mergers varies based on the relationship between the merging parties—specifically, based on whether a merger is horizontal, vertical, or conglomerate.

Horizontal and Vertical Mergers

Like horizontal restraints of trade, horizontal mergers involve firms that compete in the same market.⁹⁹ These types of deals raise two primary types of concerns. First, horizontal mergers may have *unilateral* anticompetitive effects—that is, they may allow the merged firm to raise prices and reduce output irrespective of the conduct of other firms.¹⁰⁰ Second, horizontal mergers may produce *coordinated* anticompetitive effects by creating market structures that facilitate collusion or oligopoly pricing.¹⁰¹

In contrast, vertical mergers involve firms at different stages of the same chain of supply or distribution.¹⁰² These transactions receive less exacting scrutiny than horizontal mergers, because they do not eliminate direct competitors and often generate efficiencies.¹⁰³

The primary concern with vertical mergers is the possibility that such transactions may foreclose sources of supply or distribution previously available to rivals.¹⁰⁴ For example, a vertical merger might give the merged entity the incentive and ability to charge rivals higher prices for inputs or raise rivals’ costs of distribution.¹⁰⁵ At the extreme, a merged firm may refuse to deal with rivals altogether. Without meaningful alternative sources of supply or distribution, the merged firm’s rivals may face competitive difficulties. Foreclosure may also raise entry barriers by requiring a firm’s prospective competitors to enter at two levels of the market rather than one.¹⁰⁶

Vertical mergers may also raise concerns if they give a firm access to competitively sensitive information about rivals or facilitate collusion by allowing the merged entity to monitor compliance with tacit pricing agreements.¹⁰⁷

⁹⁶ For ease of discussion, this report will refer to both mergers and acquisitions as “mergers.”

⁹⁷ 15 U.S.C. § 18.

⁹⁸ *United States v. Grinnell Corp.*, 384 U.S. 563, 576 (1966); *Fraser v. Major League Soccer, LLC*, 284 F.3d 47, 61 (1st Cir. 2002); *BRFHH Shreveport, LLC v. Willis Knighton Med. Ctr.*, 176 F. Supp. 3d 606, 619 (W.D. La. 2016).

⁹⁹ ELHAUGE, *supra* note 30, at 705.

¹⁰⁰ DEP’T OF JUST. & FED. TRADE COMM’N, HORIZONTAL MERGER GUIDELINES § 6 (2010) [hereinafter “HORIZONTAL MERGER GUIDELINES”].

¹⁰¹ *Id.* § 7.

¹⁰² SAGERS, *supra* note 49, at 293.

¹⁰³ DANIEL A. CRANE, ANTITRUST 164 (2014).

¹⁰⁴ DEP’T OF JUST. & FED. TRADE COMM’N, VERTICAL MERGER GUIDELINES § 4 (2020) [hereinafter “VERTICAL MERGER GUIDELINES”].

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* §§ 4-5.

In litigation challenging horizontal and vertical mergers, the plaintiff bears the initial burden of establishing a *prima facie* case that a merger will substantially lessen competition in the relevant market.¹⁰⁸ In horizontal-merger cases, plaintiffs can discharge this burden by establishing that a merger would lead to undue levels of market concentration.¹⁰⁹

Vertical-merger doctrine does not offer plaintiffs a similar shortcut, because vertical mergers do not result in immediate changes in market share.¹¹⁰ Instead, plaintiffs challenging vertical mergers must make a fact-specific showing that a transaction is likely to be anticompetitive.¹¹¹ While the case law on vertical mergers is thin, this *prima facie* case will often involve the concerns discussed above: foreclosure, raising rivals' costs, and access to competitively sensitive information.¹¹²

If a merger plaintiff carries its initial burden, then the defendant must present evidence that the *prima facie* case inaccurately predicts the merger's competitive effects or discredit the evidence underlying that case.¹¹³ For example, a defendant in a horizontal-merger case might argue that the plaintiff's proposed market is poorly defined, that the entry of other firms will discipline its pricing power, or that the merger will create efficiencies that offset any anticompetitive effects.¹¹⁴ In a vertical-merger case, a defendant may contend that it lacks incentives to foreclose rivals, that rivals have adequate alternative sources of supply or distribution, or that the merger would produce efficiencies (e.g., by eliminating double marginalization).¹¹⁵

Upon rebuttal of a *prima facie* case, the burden of producing further evidence of anticompetitive harm shifts back to the plaintiff and merges with the burden of persuasion.¹¹⁶

Conglomerate Mergers

Conglomerate mergers are mergers that are neither horizontal nor vertical.¹¹⁷ Challenges to such mergers are rare.¹¹⁸ One theory of harm in conglomerate cases, however, is particularly relevant to tech markets: the elimination of *potential* competition.

Mergers between potential competitors can raise two types of concerns. First, if the *perception* that a potential competitor may enter a market constrains a firm's pre-merger pricing behavior, then allowing the firm to acquire the potential competitor eliminates that constraint.¹¹⁹ In the

¹⁰⁸ *United States v. AT&T, Inc.*, 916 F.3d 1029, 1032 (D.C. Cir. 2019) (vertical merger); *United States v. Baker Hughes, Inc.*, 908 F.2d 981, 982-83 (D.C. Cir. 1990) (horizontal merger).

¹⁰⁹ *See, e.g., FTC v. H.J. Heinz Co.*, 246 F.3d 708, 715 (D.C. Cir. 2001).

¹¹⁰ *AT&T*, 916 F.3d at 1032.

¹¹¹ *Id.*

¹¹² VERTICAL MERGER GUIDELINES, *supra* note 104, at § 4.

¹¹³ *United States v. Anthem*, 855 F.3d 345, 349 (D.C. Cir. 2017).

¹¹⁴ Herbert J. Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure, and Burdens of Proof*, 127 YALE L.J. 1996, 1997 (2018).

¹¹⁵ VERTICAL MERGER GUIDELINES, *supra* note 104, at §§ 4, 6. By allowing a downstream firm to access inputs at cost instead of paying a markup, vertical mergers may eliminate the "double marginalization" that occurs when two firms within a supply chain each mark-up their prices. *Id.* § 6. The elimination of double marginalization is a key procompetitive benefit that is often cited in defense of vertical mergers. *See id.*

¹¹⁶ *Baker Hughes*, 908 F.2d at 983.

¹¹⁷ ELHAUGE, *supra* note 30, at 811.

¹¹⁸ *Id.* at 812; SAGERS, *supra* note 49, at 321.

¹¹⁹ ELHAUGE, *supra* note 30, at 811.

doctrine, this concern is known as the elimination of “perceived potential competition.”¹²⁰ Second, if a potential competitor *actually* would have entered the relevant market, then a merger would eliminate actual future competition, irrespective of whether the potential competitor constrained pre-merger behavior.¹²¹ This concern is called the elimination of “actual potential competition.”¹²²

The Supreme Court has held that the elimination of perceived potential competition may render a merger unlawful, but has not expressly recognized the elimination of actual potential competition as a viable theory of harm.¹²³

The Court has identified several requirements for a perceived-potential-competition claim. A plaintiff bringing such a claim must show that:

- the relevant market is highly concentrated;
- the potential competitor has the “characteristics, capabilities, and economic incentive to render it a perceived potential *de novo* entrant”; and
- the potential competitor “in fact tempered oligopolistic behavior” by market participants.¹²⁴

While the Court has declined to resolve the validity of the actual-potential-competition doctrine, it has explained that plaintiffs relying on that theory must establish that:

- the relevant market is highly concentrated;
- the potential competitor has “feasible means” of entry other than through the merger; and
- the potential competitor’s entry offers a “substantial likelihood” of deconcentrating the market or producing other significant procompetitive effects.¹²⁵

Lower courts have taken different approaches to actual-potential-competition claims. While the Eighth Circuit has accepted the theory,¹²⁶ other courts have declined to resolve its viability.¹²⁷

Lower courts are also divided on the evidentiary requirements in actual-potential-competition cases. Some courts require plaintiffs to show that an actual potential competitor “probably” would have entered the relevant market or use some variation of that language.¹²⁸ Others have required a

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² *Id.* Arguably, the elimination of potential competition is a horizontal theory of harm, because it involves the claim that a potential competitor would likely enter the acquirer’s market or that the acquirer perceives the potential competitor as being likely to enter its market. SAGERS, *supra* note 49, at 321 n.45. As discussed above, however, challenges based on these theories are evaluated under different standards than challenges to other types of horizontal mergers.

¹²³ *United States v. Marine Bancorporation, Inc.*, 418 U.S. 602, 624-25 (1974).

¹²⁴ *Id.*

¹²⁵ *Id.* at 633.

¹²⁶ *Yamaha Motor Co. v. FTC*, 657 F.2d 971, 977 (8th Cir. 1981).

¹²⁷ *Fraser v. Major League Soccer, LLC*, 284 F.3d 47, 61 (1st Cir. 2002); *Tenneco, Inc. v. FTC*, 689 F.2d 346, 355 (2d Cir. 1982); *FTC v. Atl. Richfield Co.*, 549 F.2d 289, 294 (4th Cir. 1977).

¹²⁸ *FTC v. Steris Corp.*, 133 F. Supp. 3d 962, 978 (N.D. Ohio 2015); *see also Yamaha Motor*, 657 F.2d at 977 (“probably”); *Tenneco*, 689 F.2d at 355 (“would likely”).

“reasonable probability” of entry¹²⁹—a standard that one court has construed as more demanding than a mere “probability” or “more likely than not” test.¹³⁰ Another court has demanded “clear proof” of entry but for the merger.¹³¹ Some courts have further required that the potential competitor be one of only a few potential entrants.¹³²

The Goals of Antitrust

As the above discussion makes clear, the text of the antitrust laws is very general. The operative phrases of the core statutes—“restraint of trade,” “monopolize,” and “substantially . . . lessen competition”—are generic and undefined. One commentator has observed that “[n]owhere else in the United States code are so few words used to regulate so much.”¹³³ Many scholars also agree that the relevant legislative history offers little guidance as to the content of the key statutory prohibitions.¹³⁴

The courts have responded to this indeterminacy by treating the antitrust laws as common-law statutes that vest the judiciary with broad powers to shape competition policy in response to new economic learning and conditions.¹³⁵ In addition to giving judges the power to craft specific doctrinal rules, the flexibility of the antitrust laws leaves courts with a need to identify a normative benchmark to guide decision-making.¹³⁶

The relevant lodestar has changed in the course of antitrust history. For much of the 20th century, courts interpreted the antitrust laws as serving various goals, including the dispersion of economic power, the protection of small businesses, the preservation of open markets and economic liberty, the elimination of concentrated political power, and the minimization of wealth transfers from consumers and producers to large firms.¹³⁷

¹²⁹ *Mercantile Tex. Corp. v. Bd. of Govs. of the Fed. Res. Sys.*, 638 F.2d 1255, 1268-69 (5th Cir. 1981); *United States v. Siemens Corp.*, 621 F.2d 499, 506 (2d Cir. 1980).

¹³⁰ *Mercantile Tex. Corp.*, 638 F.2d at 1268-69; *see also* Order Denying Plaintiff’s Motion for Preliminary Injunction at 41, *FTC v. Meta Platforms Inc.*, No. 5:22-cv-04325 (N.D. Cal. Jan. 31, 2023) (adopting the “reasonable probability” standard, as clarified by the Fifth Circuit to mean “a likelihood noticeably greater than fifty percent”).

¹³¹ *Atlantic Richfield Co.*, 549 F.2d at 300.

¹³² *E.g.*, *Mercantile Tex. Corp.*, 638 F.2d at 1267.

¹³³ Herbert Hovenkamp, *The Text of the Antitrust Laws* 3 (U. Penn. Inst. for L. & Econ. Rsch. Paper No. 23-01, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4277914.

¹³⁴ Daniel A. Crane, *Antitrust Antitextualism*, 96 NOTRE DAME L. REV. 1205, 1206 n.2 (2021); *see also* *United States v. Tans-Mo. Freight Ass’n*, 166 U.S. 290, 318 (1897) (“Looking simply at the history of the [Sherman] bill from the time it was introduced in the senate until it was finally passed, it would be impossible to say what were the views of a majority of the members of each house in relation to the meaning of the act. . . . All that can be determined from the debates and reports is that various members had various views, and we are left to determine the meaning of this act, as we determine the meaning of other acts, from the language used therein.”).

¹³⁵ *See, e.g.*, *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 899 (2007) (“From the beginning the Court has treated the Sherman Act as a common-law statute. . . . Just as the common law adapts to modern understanding and greater experience, so too does the Sherman Act’s prohibition on ‘restraint[s] of trade’ evolve to meet the dynamics of present economic conditions.”) (brackets in original); *Nat’l Soc’y of Pro. Eng’rs v. United States*, 435 U.S. 679, 688 (1978) (explaining that Congress “expected the courts to give shape to [the Sherman Act’s] broad mandate by drawing on common-law tradition”).

¹³⁶ *See, e.g.*, ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 50 (1978) (“[A]ntitrust policy cannot be made rational until we are able to give a firm answer to one question: What is the point of the law—what are its goals? Everything else follows from the answer we give. . . . Only when the issue of goals has been settled is it possible to frame a coherent body of substantive antitrust rules.”); Stucke, *supra* note 1, at 557 (making a similar point).

¹³⁷ *See, e.g.*, Stucke, *supra* note 1, at 560-62; Eleanor M. Fox, *Modernization of Antitrust: A New Equilibrium*, 66

In a 1945 monopolization case, for example, Judge Learned Hand remarked that “great industrial consolidations are inherently undesirable, regardless of their economic results,” noting that one of the purposes of the Sherman Act was to “put an end to great aggregations of capital because of the helplessness of the individual before them.”¹³⁸

The Supreme Court embraced similar views during the relevant period. In a 1962 merger decision, it explained that the Clayton Act was intended “to promote competition through the protection of viable, small, locally owned business,” even if “occasional higher costs and prices might result from the maintenance of fragmented industries and markets.”¹³⁹

Applying these principles, mid-century courts condemned a wide range of practices as *per se* Sherman Act violations,¹⁴⁰ took a skeptical approach to vertical integration,¹⁴¹ and blocked horizontal mergers that would be unlikely to draw the attention of regulators today.¹⁴²

In the 1970s and 1980s, things began to change. During that time, courts abandoned small business protectionism and the socio-political effects of concentrated economic power as salient considerations in antitrust decision-making.¹⁴³ In place of the mid-century “multiple goals” approach, the concept of consumer welfare came to occupy a central place in antitrust doctrine,¹⁴⁴ though its precise meaning and accuracy as a descriptive principle remain contested.¹⁴⁵

CORNELL L. REV. 1140, 1182 (1981).

¹³⁸ *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 428 (2d Cir. 1945).

¹³⁹ *Brown Shoe Co. v. United States*, 370 U.S. 294, 344 (1962).

¹⁴⁰ *E.g.*, *United States v. Topco Assocs., Inc.*, 405 U.S. 596 (1972) (joint venture involving territorial restraints); *Albrecht v. Herald Co.*, 390 U.S. 145 (1968) (maximum resale price maintenance); *United States v. Arnold, Schwinn & Co.*, 388 U.S. 365 (1967) (vertical territorial restraints).

¹⁴¹ *E.g.*, *Brown Shoe Co.*, 370 U.S. at 332-34.

¹⁴² *E.g.*, *United States v. Von's Grocery Co.*, 384 U.S. 270 (1966) (blocking a merger that would have resulted in the merged firm occupying a 7.5 percent market share in an unconcentrated market).

¹⁴³ *See, e.g.*, Joshua D. Wright & Douglas H. Ginsburg, *The Goals of Antitrust: Welfare Trumps Choice*, 81 *FORDHAM L. REV.* 2405, 2405-06 (2013).

¹⁴⁴ Since the 1970s, the Supreme Court has repeatedly described the antitrust laws as being principally concerned with the protection of consumers. *See* *NCAA v. Alston*, 141 S. Ct. 2141, 2151 (2021); *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2284 (2018); *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 886 (2007); *Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co.*, 549 U.S. 312, 324 (2007); *Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 224 (1993); *Jefferson Par. Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 15 (1984); *NCAA v. Bd. of Regents of Univ. of Okla.*, 468 U.S. 85, 107 (1984); *Reiter v. Sonotone Corp.*, 442 U.S. 330, 343 (1979); *see also* John B. Kirkwood & Robert H. Lande, *The Fundamental Goal of Antitrust: Protecting Consumers, Not Increasing Efficiency*, 84 *NOTRE DAME L. REV.* 191, 219-24 (2008) (collecting lower court cases embracing the consumer-welfare standard); ANTITRUST MODERNIZATION COMM'N, REPORT AND RECOMMENDATIONS 35 (Apr. 2007) (“For the last few decades courts, agencies, and antitrust practitioners have recognized consumer welfare as the unifying goal of antitrust law.”).

¹⁴⁵ There are several issues here. First, Robert Bork used the term “consumer welfare” to refer to a total-welfare standard that allows producer gains to offset consumer losses, while many commentators instead use the term “consumer welfare” to mean consumer surplus. *See, e.g.*, Barak Y. Orbach, *The Antitrust Consumer Welfare Paradox*, 7 *J. COMPETITION L. & ECON.* 133, 142-49 (2010). Both versions of the “consumer welfare” standard have supporters. *See* Roger D. Blair & D. Daniel Sokol, *Welfare Standards in U.S. and E.U. Antitrust Enforcement*, 81 *FORDHAM L. REV.* 2497 (2013) (favoring a total-welfare standard); Steven C. Salop, Question: *What Is the Real and Proper Antitrust Welfare Standard? Answer: The True Consumer Welfare Standard*, 22 *LOY. CONSUMER L. REV.* 336 (2010) (favoring a consumer-surplus standard). Second, the extent to which the consumer-welfare standard recognizes harms that *sellers* suffer from anticompetitive conduct remains the subject of ongoing discussion. *See, e.g.*, Herbert J. Hovenkamp, *Is Antitrust's Consumer Welfare Principle Imperiled?*, 45 *J. CORP. L.* 101, 113-15 (2019); C. Scott Hemphill & Nancy L. Rose, *Mergers That Harm Sellers*, 127 *YALE L.J.* 2078 (2018). Third, some commentators have argued that the consumer-welfare standard does not represent an accurate description of current antitrust doctrine for other reasons.

Since the consumer-welfare revolution, courts have pared back some of the more interventionist elements of mid-century antitrust. For example, the Supreme Court has overturned several decisions establishing *per se* Section 1 liability for certain categories of conduct¹⁴⁶ and established restrictive standards for various types of monopolization claims.¹⁴⁷ In a similar vein, lower courts and the antitrust agencies have de-emphasized structural merger analysis in favor of more detailed inquiries into the competitive effects of individual transactions.¹⁴⁸

These shifts have generated controversy.¹⁴⁹ The chair of the FTC and the Assistant Attorney General for the DOJ's Antitrust Division have both criticized the consumer-welfare standard and advocated replacing it with a focus on the "competitive process."¹⁵⁰ In academic work, the FTC's chair has specifically emphasized the consumer-welfare standard's alleged shortcomings with respect to large technology platforms.¹⁵¹ Other commentators have criticized several applications of the consumer-welfare standard as unduly permissive, but have defended the standard itself.¹⁵² These issues are discussed in greater detail later in this report.¹⁵³

The Big Tech Firms: A Summary of Selected Antitrust Allegations

The Big Tech firms have achieved tremendous financial success. As of the publication of this report, the combined market capitalization of Meta, Alphabet (Google's parent), Amazon, and Apple is more than \$5 trillion—a figure that exceeds the value of most national equity markets.¹⁵⁴

E.g., Gregory J. Werden, *Antitrust's Rule of Reason: Only Competition Matters*, 79 ANTITRUST L.J. 713, 713, 743 (2014) (arguing that "the rule of reason focuses solely on how a challenged restraint affects the competitive process," and that antitrust protects consumer welfare by protecting the "competitive process"); *see also* DEVLIN, *supra* note 10, at 254-68 (contending that the consumer-welfare standard is descriptively inaccurate in several respects).

¹⁴⁶ *Leegin*, 551 U.S. 877 (minimum resale price maintenance); *State Oil Co. v. Khan*, 522 U.S. 3 (1997) (maximum resale price maintenance); *Cont'l T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36 (1977) (vertical territorial restraints).

¹⁴⁷ *Pac. Bell Tel. Co. v. linkLine Commc'ns, Inc.*, 555 U.S. 438 (2009) (price squeezes); *Weyerhaeuser*, 549 U.S. 312 (predatory buying); *Verizon Commc'ns Inc. v. L. Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004) (refusals to deal); *Brooke Grp.*, 509 U.S. 209 (predatory pricing).

¹⁴⁸ *See, e.g.*, *United States v. Baker Hughes, Inc.*, 908 F.2d 981 (D.C. Cir. 1990); HORIZONTAL MERGER GUIDELINES, *supra* note 100, at § 5.3.

¹⁴⁹ For a collection of essays—many of them critical—on various aspects of these changes in antitrust theory and doctrine, see *HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST* (Robert Pitofsky ed. 2008). For a sympathetic account, see Elyse Dorsey, et al., *Consumer Welfare & the Rule of Law: The Case Against the New Populist Antitrust Movement*, 47 PEPPERDINE L. REV. 861 (2020).

¹⁵⁰ Khan, *Amazon's Antitrust Paradox*, *supra* note 57, at 744-46; Assistant Att'y Gen. Jonathan Kanter Delivers Remarks at New York City Bar Association's Milton Handler Lecture (May 18, 2022), <https://www.justice.gov/opa/speech/assistant-attorney-general-jonathan-kanter-delivers-remarks-new-york-city-bar-association>.

¹⁵¹ Khan, *Amazon's Antitrust Paradox*, *supra* note 57, at 716-17.

¹⁵² *See, e.g.*, *The Consumer Welfare Standard in Antitrust: Outdated or a Harbor in a Sea of Doubt?: Hearing Before the Subcomm. on Antitrust, Competition & Consumer Rights of the S. Comm. on the Judiciary*, (2017) (testimony of Diana Moss, President, Am. Antitrust Inst.), <https://www.judiciary.senate.gov/imo/media/doc/12-13-17%20Moss%20Testimony.pdf> [hereinafter "Moss Testimony"]; *id.* (statement of Carl Shapiro, Professor, Haas School of Business at Univ. of Cal. at Berkeley), <https://www.judiciary.senate.gov/imo/media/doc/12-13-17%20Shapiro%20Testimony.pdf> [hereinafter "Shapiro Testimony"].

¹⁵³ *See infra* "Substantive Antitrust Doctrine."

¹⁵⁴ *See* Largest Companies by Market Cap, COMPANIESMARKETCAP (last visited Mar. 15, 2023), <https://companiesmarketcap.com/>; Largest Stock Exchange Operators Worldwide as of October 2022, By Market

While some have emphasized the quality of the firms' offerings as the primary driver of their ascent,¹⁵⁵ others have alleged that Big Tech has obtained and cemented monopoly power through anticompetitive conduct.¹⁵⁶

This section of the report reviews selected antitrust allegations against the Big Tech firms.

Meta Platforms

Meta describes itself as a company that builds technology that “helps people connect, find communities, and grow businesses.”¹⁵⁷ More specifically, Meta offers a “family of apps” related to social networking and messaging.¹⁵⁸ This family of apps consists of:

- Facebook (a social network);
- Instagram (a photo-sharing platform);
- Messenger (a messaging app for Facebook users); and
- WhatsApp (a messaging app).¹⁵⁹

In October 2022, Meta reported that Facebook had 1.98 billion daily active users and 2.96 billion monthly active users.¹⁶⁰ The company's family of apps reportedly features 2.93 billion daily active people and 3.71 billion monthly active people.¹⁶¹

Allegations of Market Power

Some observers have argued that Meta possesses significant market power in the market for social networking.¹⁶² The Federal Trade Commission (FTC) shares that view. In an ongoing monopolization lawsuit, the Commission has alleged that Meta has held monopoly power in the market for “personal social networking services” (PSNS) since at least 2011.¹⁶³ To support such

Capitalization of Listed Companies, STATISTA (Jan. 2023), <https://www.statista.com/statistics/270126/largest-stock-exchange-operators-by-market-capitalization-of-listed-companies/>; Market Capitalization of Listed Domestic Companies, THE WORLD BANK (last visited Mar. 15, 2023), <https://data.worldbank.org/indicator/CM.MKT.LCAP.CD>.

¹⁵⁵ E.g., *Investigation into the State of Competition in Digital Markets*, Subcomm. on Antitrust, Commercial, & Admin. L. of H. Comm. on the Judiciary (May 11, 2020) (statement of Randal C. Picker, James Parker Distinguished Service Prof. of Law, The Univ. of Chi. L. Sch. at 34), <https://picker.uchicago.edu/PickerHouseStatement.100.pdf>.

¹⁵⁶ E.g., HJC REPORT, *supra* note 11, at 12-17.

¹⁵⁷ Meta Platforms, Inc., Annual Report (Form 10-K) at 7 (Feb. 3, 2022).

¹⁵⁸ *Id.* Meta also produces augmented and virtual reality products via its Reality Labs division. See Eric Rosenbaum, *Why Reality Labs Will Keep Spending Billions Even as Meta Makes the Biggest Cuts in Its History*, CNBC (Nov. 17, 2022), <https://www.cnbc.com/2022/11/17/why-reality-labs-will-keep-losing-billions-even-as-meta-makes-big-cuts.html>.

¹⁵⁹ Meta Platforms, Inc., Annual Report at 7.

¹⁶⁰ Meta Platforms, Inc., Quarterly Report (Form 10-Q) at 33 (Oct. 27, 2022).

¹⁶¹ *Id.*

¹⁶² HJC REPORT, *supra* note 11, at 133; ONLINE PLATFORMS AND DIGITAL ADVERTISING: MARKET STUDY FINAL REPORT, U.K. COMPETITION & MKTS AUTHORITY 146 (July 1, 2020), https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf [hereinafter “CMA REPORT”]; Fiona M. Scott Morton & David C. Dinielli, *Roadmap for an Antitrust Case Against Facebook*, OMIDYAR NETWORK 11-15 (June 2020), <https://www.omidyar.com/wp-content/uploads/2020/06/Roadmap-for-an-Antitrust-Case-Against-Facebook.pdf>; DIGITAL PLATFORMS INQUIRY: FINAL REPORT, AUSTRALIAN COMPETITION & CONSUMER COMM’N 9 (June 2019), <https://www.accc.gov.au/system/files/Digital%20platforms%20inquiry%20-%20final%20report.pdf> [hereinafter “ACCC REPORT”].

¹⁶³ Substitute Amended Complaint for Injunctive and Other Equitable Relief ¶ 164, *FTC v. Facebook, Inc.*, No.

claims, Meta’s critics have argued that the firm has persistently maintained a large market share and benefited from substantial entry barriers, including powerful network effects and high switching costs.¹⁶⁴

Others disagree. Meta has argued that it operates in a “dynamic, intensely competitive” industry in which there are many substitutes for its services.¹⁶⁵ In its litigation with the FTC, the firm has criticized the Commission’s alleged PSNS market as unduly narrow insofar as it excludes rivals like YouTube, TikTok, LinkedIn, and Twitter.¹⁶⁶

Meta and some commentators have also rejected the notion that entry barriers have caused the market to decisively tip in Meta’s favor.¹⁶⁷ For example, observers have highlighted the ability of differentiated firms like TikTok and Snapchat to rapidly gain scale despite Meta’s ostensible network advantages.¹⁶⁸

Allegations of Anticompetitive Conduct

In addition to facing allegations of monopoly power, Meta has been accused of engaging in anticompetitive conduct. The FTC’s lawsuit contends that Meta has maintained its dominant position through its 2012 acquisition of Instagram and its 2014 acquisition of WhatsApp.¹⁶⁹ The Commission argues that Meta’s Instagram purchase allowed it to neutralize a rapidly growing competitive threat, giving the firm control over what became two of the most popular social networks in the world.¹⁷⁰ Similarly, the FTC contends that Meta’s acquisition of WhatsApp preserved its monopoly by preventing WhatsApp from entering the PSNS market.¹⁷¹

Besides targeting Meta’s major acquisitions, the FTC and some commentators have criticized the company’s treatment of software developers.¹⁷² These allegations involve access to Facebook Platform—an initiative whereby Meta encouraged developers to create apps that interoperate with Facebook.¹⁷³ As part of this initiative, Meta provided software developers with application programming interfaces (APIs) and other tools that allowed them to access certain Facebook data

1:20-cv-03590 (D.D.C. Sept. 8, 2021).

¹⁶⁴ *Id.* ¶ 212; HJC REPORT, *supra* note 11, at 136-47; Scott Morton & Dinielli, *supra* note 162, at 11; ACCC REPORT, *supra* note 162, at 58. The FTC and some commentators have also attempted to establish that Meta has monopoly power with direct evidence, arguing that the firm has degraded the quality of its products without losing significant numbers of users. Substitute Amended Complaint ¶¶ 205-09, FTC v. Facebook, Inc., No. 1:20-cv-03590 (D.D.C. Sept. 8, 2021); Dina Srinivasan, *The Antitrust Case Against Facebook: A Monopolist’s Journey Towards Pervasive Surveillance in Spite of Consumer’s Preference for Privacy*, 16 BERKELEY BUS. L.J. 39 (2019).

¹⁶⁵ Memorandum in Support of Facebook, Inc.’s Motion to Dismiss FTC’s Complaint at 11, FTC v. Facebook, Inc., No. 1:20-cv-03590 (D.D.C. Mar. 10, 2021).

¹⁶⁶ Memorandum in Support of Facebook, Inc.’s Motion to Dismiss FTC’s Complaint at 10, FTC v. Facebook, Inc., No. 1:20-cv-03590 (D.D.C. Oct. 4, 2021).

¹⁶⁷ *Id.* at 13-16; Herbert J. Hovenkamp, *Selling Antitrust*, 73 HASTINGS L.J. 1621, 1623 (2022) [hereinafter “Hovenkamp, *Selling Antitrust*”]; Jay Ezrielev & Genaro Marquez, *Interoperability: The Wrong Prescription for Platform Competition*, COMPETITION POLICY INT’L ANTITRUST CHRON. 8, 13-14 (June 2021).

¹⁶⁸ Hovenkamp, *Selling Antitrust*, *supra* note 167, at 1623; Ezrielev & Marquez, *supra* note 167, at 8.

¹⁶⁹ Substitute Amended Complaint ¶¶ 77-129, FTC v. Facebook, Inc., No. 1:20-cv-03590 (D.D.C. Sept. 8, 2021); *see also* HJC REPORT, *supra* note 11, at 150-60 (arguing that Meta’s Instagram and WhatsApp acquisitions harmed competition).

¹⁷⁰ Substitute Amended Complaint ¶¶ 80-106, FTC v. Facebook, Inc., No. 1:20-cv-03590 (D.D.C. Sept. 8, 2021).

¹⁷¹ *Id.* ¶¶ 107-29.

¹⁷² *Id.* ¶¶ 130-163; HJC REPORT, *supra* note 11, at 166-70; Scott Morton & Dinielli, *supra* note 162, at 24-25.

¹⁷³ Substitute Amended Complaint ¶¶ 25-42, FTC v. Facebook, Inc., No. 1:20-cv-03590 (D.D.C. Sept. 8, 2021).

and functionalities.¹⁷⁴ According to the FTC, Facebook Platform ultimately became key infrastructure for app developers because of Facebook’s large user base.¹⁷⁵

The Commission’s lawsuit alleges that Meta used its control over this key infrastructure to preserve its social networking monopoly. In particular, the FTC claims that Meta required developers that participated in Facebook Platform to refrain from creating apps that would compete with Facebook products.¹⁷⁶ In doing so, Meta allegedly suppressed potential competitive threats.¹⁷⁷

Meta has denied engaging in anticompetitive conduct. The company has argued that its Instagram acquisition was procompetitive because the transaction allowed Meta to invest significant resources and expertise in developing Instagram, thereby hastening the small firm’s growth.¹⁷⁸ Meta has also defended its WhatsApp purchase, arguing that the FTC has failed to present evidence that WhatsApp would have likely entered social networking absent the acquisition.¹⁷⁹ Finally, Meta has argued that its policies governing access to Facebook Platform—which it has since revised—were lawful under duty-to-deal doctrine.¹⁸⁰

As of the publication of this report, the FTC’s monopolization case against Meta is in discovery, a pre-trial stage of litigation in which the parties develop evidence that can be used at trial. Although the district court rejected the agency’s initial complaint for failing to plausibly allege monopoly power,¹⁸¹ the court ultimately allowed the case to proceed after concluding that the Commission’s amended complaint was sufficiently plausible to survive a motion to dismiss.¹⁸²

Google

Google is a ubiquitous presence in the digital economy. The firm began as an internet search company, and is now also a major player in digital advertising, mobile operating systems, app distribution, digital maps, email, and web browsing.¹⁸³ The following subsections discuss antitrust allegations involving Google’s conduct related to online search, mobile operating systems and app distribution, and digital advertising.

¹⁷⁴ *Id.*

¹⁷⁵ *Id.* ¶ 131.

¹⁷⁶ *Id.* ¶ 133.

¹⁷⁷ *Id.* ¶ 134.

¹⁷⁸ Memorandum in Support of Facebook, Inc.’s Motion to Dismiss FTC’s Complaint at 29-30, *FTC v. Facebook, Inc.*, No. 1:20-cv-03590 (D.D.C. Oct. 4, 2021).

¹⁷⁹ *Id.* at 24.

¹⁸⁰ *Id.* at 35.

¹⁸¹ *FTC v. Facebook, Inc.*, 560 F. Supp. 3d 1, 4 (D.D.C. 2021).

¹⁸² *FTC v. Facebook, Inc.*, 581 F. Supp. 3d 34, 43-52 (D.D.C. 2022). While the district court has allowed the FTC’s challenge to Meta’s Instagram and WhatsApp acquisitions to proceed, it has rejected the agency’s claims involving access to Facebook Platform. *Id.* at 57-59. In rejecting the latter claims, the court concluded that Meta had no general duty to allow potential rivals to access Facebook Platform. *Id.* at 58-59. Although the court indicated that specific refusals may be actionable, it held that the refusals alleged by the FTC could not justify injunctive relief because they occurred in 2013 and were not ongoing. *Id.*

¹⁸³ HJC REPORT, *supra* note 11, at 174.

Online Search

Allegations of Market Power

Some commentators have argued that Google has significant market power in the market for general online search.¹⁸⁴ The DOJ agrees. In a pending monopolization lawsuit, the DOJ contends that Google has monopoly power in the market for “general search services” based on an alleged market share of 88 percent and the presence of substantial entry barriers, including economies of scale.¹⁸⁵

For its part, Google has claimed that it operates in a “highly competitive environment” and faces a “vast array of competitors.”¹⁸⁶ The company also argues that, for particular search queries, it competes against a range of firms—such as Amazon, eBay, and Yelp—that would not fall within a market for general search services.¹⁸⁷

Allegations of Anticompetitive Conduct

Search Distribution

The DOJ’s monopolization lawsuit contends that Google has maintained its search monopoly through various exclusionary agreements with firms that control search distribution.¹⁸⁸ In particular, the DOJ alleges that Google pays mobile device manufacturers, wireless carriers, and browser developers to secure default status for its general search engine.¹⁸⁹ Additionally, the company—which also controls the Android mobile operating system—allegedly conditions the availability of some “must-have” Google apps and APIs for Android devices on manufacturers’ agreements to preinstall certain apps that use Google Search as their default search engine.¹⁹⁰

Through such agreements and its control of the Chrome browser, the DOJ argues, Google “effectively owns or controls search distribution channels accounting for roughly 80 percent of general search queries in the United States.”¹⁹¹ By locking up these distribution channels, Google has allegedly prevented rivals from gaining the scale necessary to serve as effective competitors.¹⁹²

¹⁸⁴ CMA REPORT, *supra* note 162, at 73; HJC REPORT, *supra* note 11, at 176-82; ACCC REPORT, *supra* note 162, at 58; Google Search (Shopping) (Case AT.39740), Commission Decision ¶ 271 (June 27, 2017), https://ec.europa.eu/competition/antitrust/cases/dec_docs/39740/39740_14996_3.pdf [hereinafter “EC Google Shopping Decision”].

¹⁸⁵ Amended Complaint ¶¶ 92-96, *United States v. Google LLC*, No. 1:20-cv-03010 (D.D.C. Jan. 15, 2021).

¹⁸⁶ HJC REPORT, *supra* note 11, at 179.

¹⁸⁷ *Id.*

¹⁸⁸ Amended Complaint ¶ 4, *United States v. Google LLC*, No. 1:20-cv-03010 (D.D.C. Jan. 15, 2021). A group of state attorneys general has also brought a similar monopolization case challenging Google’s conduct in search markets. *Complaint, State of Colorado, et al. v. Google, LLC*, No. 1:20-cv-03715 (D.D.C. Dec. 17, 2020).

¹⁸⁹ Amended Complaint ¶ 4, *United States v. Google LLC*, No. 1:20-cv-03010 (D.D.C. Jan. 15, 2021).

¹⁹⁰ *Id.* ¶¶ 72-77.

¹⁹¹ *Id.* ¶ 5.

¹⁹² *Id.* ¶ 8. In July 2018, the European Commission fined Google €4.34 billion for requiring device manufacturers to pre-install the Google Search app and Chrome browser as a condition of licensing the Google Play app store; paying device manufacturers and mobile network operators to exclusively pre-install the Google Search app on their devices; and preventing device manufacturers that pre-install certain Google apps from selling devices that run versions of Android that Google had not approved. *See* Press Release, Euro. Comm’n, Antitrust: Commission Fines Google €4.34 Billion for Illegal Practices Regarding Android Mobile Devices to Strengthen Dominance of Google’s Search Engine

Google has denied the DOJ's allegations. The company argues that its agreements with browser developers do not preclude developers from integrating or promoting other search engines.¹⁹³ Google also contends that, even if the agreements required exclusivity, they are the result of lawful, customer-instigated "competition for the contract" that the firm has won because of the superiority of its search engine.¹⁹⁴

Similarly, Google has argued that its agreements with mobile device manufacturers and wireless carriers do not preclude its counterparties from preinstalling rival apps.¹⁹⁵ The company also claims that the agreements would not result in substantial foreclosure of search distribution channels even if they did require exclusivity.¹⁹⁶

As of the publication of this report, Google's motion for summary judgment is pending before the district court.¹⁹⁷

Self-Preferencing

Commentators and some foreign regulators have also argued that Google has leveraged its dominance in general search to favor its own vertical offerings. For example, the HJC Report concluded that Google has adjusted its search algorithms to automatically elevate some of Google's vertical services, like its video-sharing platform YouTube, in search results.¹⁹⁸

This type of self-preferencing prompted the European Commission—which enforces European Union competition law—to fine Google €2.42 billion in 2017 for giving prominent placement to its comparison-shopping service and demoting rival services in search results.¹⁹⁹

The FTC investigated similar allegations of self-preferencing involving Google Search in 2012, but concluded that it had not found sufficient evidence of an antitrust violation.²⁰⁰ The agency determined that Google's favorable placement of its own verticals could plausibly be viewed as an improvement in the quality of Google's search product.²⁰¹ The Commission also did not find sufficient evidence that Google had manipulated its search algorithms to unfairly disadvantage rival vertical websites.²⁰²

(July 18, 2018), https://ec.europa.eu/commission/presscorner/detail/en/IP_18_4581 [hereinafter "EC Android Case"].

¹⁹³ Defendant's Memorandum of Points and Authorities in Support of its Motion for Summary Judgment at 28-31, *United States v. Google LLC*, No. 1:20-cv-03010 (D.D.C. Jan. 11, 2023).

¹⁹⁴ *Id.* at 35-38.

¹⁹⁵ *Id.* at 39-40.

¹⁹⁶ *Id.* at 40-41.

¹⁹⁷ Dave Simpson, *Google Seeks Win in Default Search Engine Antitrust Suits*, LAW360 (Jan. 11, 2023), <https://www.law360.com/articles/1564958>.

¹⁹⁸ HJC REPORT, *supra* note 11, at 187-92.

¹⁹⁹ EC Google Shopping Decision, *supra* note 184.

²⁰⁰ Statement of the Federal Trade Commission Regarding Google's Search Practices, In the Matter of Google Inc., No. 111-0163 (FTC Jan. 3, 2013).

²⁰¹ *Id.* at 3.

²⁰² *Id.*

Mobile Operating Systems and App Distribution

Allegations of Market Power

Mobile Operating Systems

In addition to operating a major search engine, Google controls Android—a leading mobile operating system. Android and Apple’s iOS represent the two dominant mobile operating systems, together accounting for 99 percent of the market.²⁰³ Because Apple does not license iOS to other device manufacturers, Android by itself occupies a very large share of the market for *licensable* mobile operating systems—by some estimates, 99 percent of that market.²⁰⁴

Some commentators have argued that the market for licensable mobile operating systems is the relevant one for antitrust purposes, based on factors like high switching costs.²⁰⁵ Private plaintiffs and (in a separate case) a group of state attorneys general have argued that Google has monopoly power in this market based on the company’s dominant market share and the presence of substantial entry barriers, such as network effects and research and development costs.²⁰⁶

Google denies such allegations, arguing that consumers “can and do switch and multi-home among and between mobile and nonmobile ecosystems, including between Android and iOS.”²⁰⁷

Mobile App Distribution

Litigants have also contended that, through its Google Play Store, Google has market power in certain markets related to mobile-app distribution. Some plaintiffs have defined the relevant antitrust market as consisting of the distribution of apps to Android users.²⁰⁸ They allege that Google has monopoly power in this market based on the Play Store’s market share of more than 90 percent, strong network effects, high switching costs, and Google’s ability to charge a 30 percent commission on apps purchased through the Play Store.²⁰⁹

Some plaintiffs have also argued in the alternative that Google has market power in a broader market for mobile app distribution—that is, a market not limited to Android users.²¹⁰ A group of

²⁰³ HJC REPORT, *supra* note 11, at 100-02.

²⁰⁴ First Amended Complaint ¶ 7, *State of Utah et al. v. Google LLC*, No. 3:21-cv-05227 (N.D. Cal. Nov. 1, 2021); *see also* Second Amended Complaint for Injunctive Relief ¶¶ 16, 55, *Epic Games, Inc. v. Google LLC*, No. 3:20-cv-05671 (N.D. Cal. Nov. 17, 2022) (alleging a market share of “over 95%”).

²⁰⁵ HJC REPORT, *supra* note 11, at 102. In a 2018 enforcement action, the European Commission concluded that competition from Apple does not sufficiently constrain Google for similar reasons. EC Android Case, *supra* note 192.

²⁰⁶ Second Amended Complaint for Injunctive Relief ¶¶ 55-64, *Epic Games, Inc. v. Google LLC*, No. 3:20-cv-05671 (N.D. Cal. Nov. 17, 2022); First Amended Complaint ¶¶ 44-58, *State of Utah et al. v. Google LLC*, No. 3:21-cv-05227 (N.D. Cal. Nov. 1, 2021).

²⁰⁷ Defendants’ Answers and Defenses to *State of Utah et al.* First Amended Complaint ¶ 55-56, No. 3:21-cv-05227 (N.D. Cal. Nov. 15, 2021); *see also* Defendants’ Answer, Defenses, and Counterclaims to *Epic Games, Inc.’s* Second Amended Complaint for Injunctive Relief ¶¶ 55, 57, No. 3:20-cv-05671 (N.D. Cal. Dec. 1, 2022).

²⁰⁸ Second Amended Complaint for Injunctive Relief ¶¶ 68-72, *Epic Games, Inc. v. Google LLC*, No. 3:20-cv-05671 (N.D. Cal. Nov. 17, 2022); First Amended Complaint ¶¶ 63-73, *State of Utah et al. v. Google LLC*, No. 3:21-cv-05227 (N.D. Cal. Nov. 1, 2021).

²⁰⁹ Second Amended Complaint for Injunctive Relief ¶¶ 75-88, *Epic Games, Inc. v. Google LLC*, No. 3:20-cv-05671 (N.D. Cal. Nov. 17, 2022); First Amended Complaint ¶¶ 76-78, *State of Utah et al. v. Google LLC*, No. 3:21-cv-05227 (N.D. Cal. Nov. 1, 2021).

²¹⁰ Second Amended Complaint for Injunctive Relief ¶ 73, *Epic Games, Inc. v. Google LLC*, No. 3:20-cv-05671 (N.D. Cal. Nov. 17, 2022); First Amended Complaint ¶¶ 79-81, *State of Utah et al. v. Google LLC*, No. 3:21-cv-05227 (N.D. Cal. Nov. 1, 2021).

state attorneys general, for example, has argued that Google occupies a sizeable share of this market, enjoys large profit margins, and benefits from formidable entry barriers.²¹¹

Google rejects these claims. It contends that consumers can use different platforms to access apps and that “Apple and Google compete vigorously in the mobile operating system environment on multiple dimensions, including innovation, price, privacy, and security.”²¹²

In-App Payment Processing

Plaintiffs have further claimed that Google has monopoly power in a market for in-app payment (IAP) processing for Android apps.²¹³ They have based this claim on the Google Play Store’s large share of the market for Android app distribution and Google’s requirement that software developers using the Play Store also use Google’s IAP processor.²¹⁴

As discussed, for many transactions, Google charges a 30 percent commission for IAP processing—a rate that is considerably higher than those charged by other electronic payment processors.²¹⁵

Google has denied possessing monopoly power related to IAP processing.²¹⁶

Allegations of Anticompetitive Conduct

Mobile App Distribution

Google has also been accused of engaging in a variety of anticompetitive activities involving app distribution.

First, Google has allegedly imposed technical barriers that make it difficult for consumers to download Android apps from sources other than the Google Play Store—a practice commonly known as “sideloading.”²¹⁷ In particular, litigants have claimed that sideloading Android apps

²¹¹ First Amended Complaint ¶¶ 79-81, *State of Utah et al. v. Google LLC*, No. 3:21-cv-05227 (N.D. Cal. Nov. 1, 2021). The state attorneys general allege that Google’s share of this market in the United States exceeds 30 percent, while its share of the global market (excluding China) is approximately 53 percent by revenue. *Id.* ¶ 80.

²¹² Defendants’ Answers, Defenses, and Counterclaims to Epic Games, Inc.’s Second Amended Complaint for Injunctive Relief ¶ 80, No. 3:20-cv-05671 (N.D. Cal. Dec. 1, 2022).

²¹³ Second Amended Complaint for Injunctive Relief ¶¶ 158-60, *Epic Games, Inc. v. Google LLC*, No. 3:20-cv-05671 (N.D. Cal. Nov. 17, 2022); First Amended Complaint ¶¶ 182-86, *State of Utah et al. v. Google LLC*, No. 3:21-cv-05227 (N.D. Cal. Nov. 1, 2021).

²¹⁴ Second Amended Complaint for Injunctive Relief ¶¶ 158-60, *Epic Games, Inc. v. Google LLC*, No. 3:20-cv-05671 (N.D. Cal. Nov. 17, 2022); First Amended Complaint ¶¶ 182-86, *State of Utah et al. v. Google LLC*, No. 3:21-cv-05227 (N.D. Cal. Nov. 1, 2021).

²¹⁵ Second Amended Complaint for Injunctive Relief ¶ 160, *Epic Games, Inc. v. Google LLC*, No. 3:20-cv-05671 (N.D. Cal. Nov. 17, 2022). In March 2021, Google announced plans to lower its commissions from 30 percent to 15 percent for the first \$1 million in revenue that developers earn using Google’s billing system. Manish Singh, *Google Play Drops Commissions to 15% from 30%, Following Apple’s Move Last Year*, TECHCRUNCH (Mar. 16, 2021), <https://techcrunch.com/2021/03/16/google-play-drops-commissions-to-15-from-30-following-apples-move-last-year/>.

²¹⁶ Defendants’ Answers, Defenses, and Counterclaims to Epic Games, Inc.’s Second Amended Complaint for Injunctive Relief ¶ 158, No. 3:20-cv-05671 (N.D. Cal. Dec. 1, 2022); Defendants’ Answers and Defenses to *State of Utah et al.* First Amended Complaint ¶ 182, No. 3:21-cv-05227 (N.D. Cal. Nov. 15, 2021).

²¹⁷ First Amended Complaint ¶¶ 83-95, *State of Utah et al. v. Google LLC*, No. 3:21-cv-05227 (N.D. Cal. Nov. 1, 2021).

entails a complicated process that includes several security warnings discouraging such actions.²¹⁸ Google has also been accused of making it unnecessarily difficult to update sideloaded apps.²¹⁹

Second, Google has allegedly barred software developers from distributing competing app stores through the Google Play Store.²²⁰

Third, Google has allegedly required mobile device manufacturers that license Android and certain other key Google services to preinstall the Google Play Store on their devices.²²¹ Plaintiffs have argued that this preinstallation requirement harms competition by giving the Play Store an advantage over other app stores.²²²

Fourth, Google has allegedly required device manufacturers that offer the Google Play Store and other “must-have” Google services to refrain from selling devices that run “Android forks”—modified versions of Android that Google has not approved.²²³ Plaintiffs argue that these restrictions have stifled the development of alternative versions of Android that would be free from some of the restrictions on app distribution discussed above.²²⁴

Fifth, Google has allegedly entered into revenue-sharing agreements that deter device manufacturers from developing competing app stores.²²⁵ In particular, the challenged agreements give device manufacturers a share of Google’s advertising and Play Store revenue from the devices they sell in exchange for a commitment to refrain from competing against the Play Store.²²⁶

Google has either denied engaging in the relevant conduct or rejected the contention that such conduct is anticompetitive.²²⁷

In-App Payment Processing

Plaintiffs have also accused Google of engaging in anticompetitive conduct in the market for Android IAP processing. They have alleged that Google’s requirement that developers using the Play Store also use Google’s IAP processor represents an unlawful tying arrangement.²²⁸

²¹⁸ *Id.*

²¹⁹ *Id.* ¶ 96.

²²⁰ *Id.* ¶¶ 107-10.

²²¹ *Id.* ¶¶ 124-25.

²²² *Id.* ¶ 125.

²²³ *Id.* ¶¶ 105-06.

²²⁴ *Id.*

²²⁵ *Id.* ¶¶ 130-35.

²²⁶ *Id.*

²²⁷ Defendants’ Answers and Defenses to State of Utah et al. First Amended Complaint ¶¶ 83-89, 96, 105-110, 124-25, 130-35, No. 3:21-cv-05227 (N.D. Cal. Nov. 15, 2021).

²²⁸ Second Amended Complaint for Injunctive Relief ¶¶ 161-66, Epic Games, Inc. v. Google LLC, No. 3:20-cv-05671 (N.D. Cal. Nov. 17, 2022); First Amended Complaint ¶¶ 162-67, State of Utah et al. v. Google LLC, No. 3:21-cv-05227 (N.D. Cal. Nov. 1, 2021).

Digital Advertising

Allegations of Market Power

In addition to its search and app-distribution activities, Google is a major force in digital display advertising markets.

In those markets, online ad publishers—like news websites—sell advertising space through exchanges.²²⁹ Those ad exchanges conduct automated auctions in which advertisers can bid for ad space.²³⁰

Intermediaries facilitate this process for both publishers and advertisers. Large publishers manage their ad inventory using a type of software known as an *ad server*, which interfaces with ad exchanges on behalf of publishers.²³¹ On the other side of the market, advertisers employ *ad-buying tools*, which connect them with ad exchanges and allow them to purchase ad space.²³²

Google operates in several segments of these markets via an ad exchange, a publisher ad server, and ad-buying tools for advertisers.²³³

The DOJ and (in a separate lawsuit) a group of state attorneys general (state AGs) have argued that Google has monopoly power in multiple ad-tech markets.

In January 2023, the DOJ filed a complaint alleging that Google has monopoly power in the markets for publisher ad servers,²³⁴ ad exchanges,²³⁵ and advertiser ad networks.²³⁶

In a separate case, a group of state AGs has alleged that Google has monopoly power in the markets for ad exchanges, ad servers, and ad-buying tools for small advertisers.²³⁷ The state AGs also contend that Google has monopoly power or a dangerous probability of acquiring monopoly power in the market for ad-buying tools for large advertisers.²³⁸

In September 2022, a federal district court concluded that the state AGs' allegations involving monopoly power were sufficiently plausible to survive a motion to dismiss.²³⁹

²²⁹ Opinion and Order at 3, In re Google Digital Advertising Antitrust Litigation, No. 21-md-3010 (S.D.N.Y. Sept. 13, 2022).

²³⁰ *Id.*

²³¹ *Id.* at 4.

²³² *Id.* at 10-11.

²³³ *Id.* at 6-12.

²³⁴ Complaint ¶ 285, United States v. Google LLC, No. 1:23-cv-00108 (E.D. Va. Jan. 24, 2023).

²³⁵ *Id.* ¶ 296.

²³⁶ *Id.* ¶ 301.

²³⁷ Opinion and Order at 7-8, 11, In re Google Digital Advertising Antitrust Litigation, No. 21-md-3010 (S.D.N.Y. Sept. 13, 2022).

²³⁸ *Id.* at 11.

²³⁹ *Id.* at 19, 34-35. Google has denied possessing monopoly power in the ad-exchange market, but its motion to dismiss did not challenge the other allegations of monopoly power. *Id.* at 5-6. In response to the DOJ's lawsuit, Google published a blog post in which it argued that competition in online ad markets is "increasing," citing the growing ad businesses of Microsoft, Amazon, Apple, TikTok, and several specialized ad-tech companies. Dan Taylor, *DOJ's Lawsuit Ignores the Enormous Competition in the Online Advertising Industry*, GOOGLE (Jan. 24, 2023), <https://blog.google/outreach-initiatives/public-policy/doj-ad-tech-lawsuit-response/>.

Allegations of Anticompetitive Conduct

The DOJ and state AG lawsuits contend that Google has engaged in a range of anticompetitive practices in several digital-advertising markets, allowing it to obtain and cement a dominant position across the ad-tech stack.

The DOJ's lawsuit claims that, in the early 2000s, Google's ad-buying tools occupied a dominant position on the advertiser side of the ad-tech market.²⁴⁰ Then, in 2008, Google acquired a firm called DoubleClick, which operated a leading publisher ad server and a nascent ad exchange.²⁴¹

After the DoubleClick acquisition, the DOJ contends, Google leveraged its position across the ad-tech chain to benefit its own properties. Among other things, the DOJ alleges that Google made demand from its ad-buying tools available only through its ad exchange.²⁴² Google also allegedly required publishers to use its ad server to receive real-time bids from its ad exchange.²⁴³ The state AG ad-tech lawsuit makes similar allegations.²⁴⁴

In September 2022, a federal district court held that the state AGs had plausibly alleged tying claims under Sections 1 and 2 of the Sherman Act based on their assertion that Google had coerced publishers into using its ad server as a condition of receiving live bids from its ad exchange.²⁴⁵

The DOJ and state AG lawsuits also target a program used by Google's ad server that allegedly gave Google's ad exchange advantages over rival exchanges.²⁴⁶ Another set of accusations involves programs under which Google allegedly manipulated bids from its advertiser clients in ways that advantaged its ad exchange and publisher ad server.²⁴⁷

The September 2022 district court decision in the state AG lawsuit concluded that the allegations of anticompetitive harm from these activities were sufficiently plausible to survive a motion to dismiss.²⁴⁸

The Google ad-tech lawsuits are complex and a full discussion of the relevant claims is beyond the scope of this report. Most of the allegations nevertheless implicate a recurring theme in

²⁴⁰ Complaint ¶¶ 11-13, *United States v. Google LLC*, No. 1:23-cv-00108 (E.D. Va. Jan. 24, 2023).

²⁴¹ *Id.* ¶ 16. The FTC declined to challenge Google's DoubleClick acquisition at the time. Press Release, Fed. Trade Comm'n, Federal Trade Commission Closes Google/DoubleClick Investigation (Dec. 20, 2007), <https://www.ftc.gov/news-events/news/press-releases/2007/12/federal-trade-commission-closes-googledoubleclick-investigation>.

²⁴² Complaint ¶ 89, *United States v. Google LLC*, No. 1:23-cv-00108 (E.D. Va. Jan. 24, 2023).

²⁴³ *Id.* ¶ 104. According to the DOJ's complaint, publishers could use Google's ad exchange without using its ad server by selling ad space based on historical—rather than real-time—prices. *Id.* The DOJ contends, however, that this was not an attractive option because the resulting prices were often considerably lower than those received from real-time bids. *Id.*

²⁴⁴ Opinion and Order at 18, *In re Google Digital Advertising Antitrust Litigation*, No. 21-md-3010 (S.D.N.Y. Sept. 13, 2022).

²⁴⁵ *Id.* at 16-20, 77-78.

²⁴⁶ Complaint ¶¶ 21, 120-25, *United States v. Google LLC*, No. 1:23-cv-00108 (E.D. Va. Jan. 24, 2023); Opinion and Order at 44-50, *In re Google Digital Advertising Antitrust Litigation*, No. 21-md-3010 (S.D.N.Y. Sept. 13, 2022).

²⁴⁷ Complaint ¶¶ 24, 139, 161-62, *United States v. Google LLC*, No. 1:23-cv-00108 (E.D. Va. Jan. 24, 2023); Opinion and Order at 50-55, *In re Google Digital Advertising Antitrust Litigation*, No. 21-md-3010 (S.D.N.Y. Sept. 13, 2022).

²⁴⁸ Opinion and Order at 44-55, *In re Google Digital Advertising Antitrust Litigation*, No. 21-md-3010 (S.D.N.Y. Sept. 13, 2022).

discussions of antitrust and Big Tech firms: the leveraging of economic power to obtain and solidify dominance across different markets.²⁴⁹

Google maintains that its conduct is permissible under antitrust doctrine governing refusals to deal, product design, and tying.²⁵⁰

Amazon

Like Google, Amazon has expanded its remit over time. The company began as an online bookseller, but now operates a leading e-commerce marketplace, a major cloud-computing platform, a logistics network, and a television and film studio.²⁵¹ The discussion below focuses principally on the company's e-commerce activities.

Allegations of Market Power

The HJC Report concluded that Amazon “has significant and durable market power in the U.S. online retail market.”²⁵² While the report acknowledged a wide range of estimates of Amazon's share of that market, it determined that estimates “at about 50% or higher are more credible than lower estimates of 30-40%.”²⁵³ The report also characterized Amazon as the “dominant online marketplace,” noting that the firm reportedly controls “about 65% to 70% of all U.S. online marketplace sales.”²⁵⁴

Based on interviews and other material, the report concluded that Amazon has monopoly power over “most” third-party sellers on its e-commerce marketplace and “many” of its suppliers, in addition to significant market power over consumers.²⁵⁵ Such power is unlikely to erode, the report argued, because of network effects, switching costs, and the difficulty that rivals would face in developing a comparable logistics network.²⁵⁶

The Attorney General for the District of Columbia (D.C. AG) made similar allegations in a 2021 lawsuit brought under District of Columbia law.²⁵⁷ The D.C. AG lawsuit claimed that Amazon had monopoly power among online marketplaces based on an alleged market share of 50%-70%, the company's ability to dictate certain terms to third-party sellers, and entry barriers like network effects, data advantages, and extensive logistics capabilities.²⁵⁸

²⁴⁹ See generally Patrick F. Todd, *Digital Platforms and the Leverage Problem*, 98 NEB. L. REV. 486 (2019).

²⁵⁰ Reply Memorandum of Law in Further Support of Google LLC's Motion to Dismiss Counts I through IV of State Plaintiffs' Third Amended Complaint at 16-30, In re Google Digital Advertising Antitrust Litigation, No. 21-md-3010 (S.D.N.Y. May 5, 2022).

²⁵¹ HJC REPORT, *supra* note 11, at 247.

²⁵² *Id.* at 254.

²⁵³ *Id.*

²⁵⁴ *Id.* at 255.

²⁵⁵ *Id.* at 257, 259.

²⁵⁶ *Id.* at 260.

²⁵⁷ First Amended Complaint, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Sept. 10, 2021).

²⁵⁸ *Id.* ¶¶ 85-86. During an investigation that began in November 2020, the European Commission preliminarily concluded that Amazon occupied a dominant position in certain European markets for the provision of online marketplace services to third-party sellers. Press Release, Euro. Comm'n, Antitrust: Commission Accepts Commitments by Amazon Barring it From Using Marketplace Seller Data, and Ensuring Equal Access to Buy Box and Prime (Dec. 20, 2022), https://ec.europa.eu/commission/presscorner/detail/en/ip_22_7777 [hereinafter “Amazon EC

Amazon rejected those allegations, arguing that it competes in a broader market that includes physical retail stores.²⁵⁹

In 2022, the Superior Court of the District of Columbia dismissed the D.C. AG lawsuit on several grounds, including a failure to plausibly allege monopoly power.²⁶⁰ The D.C. AG has appealed that decision.²⁶¹

Allegations of Anticompetitive Conduct

Most-Favored-Nation and Pricing-Parity Clauses

The D.C. AG lawsuit discussed above focused on most-favored-nation and pricing-parity clauses in Amazon’s agreements with third-party sellers that use its e-commerce marketplace.²⁶² One iteration of these provisions—which Amazon has discontinued—prohibited third-party sellers from offering their products elsewhere online at prices lower than those the sellers offered on Amazon.²⁶³ Under a later version of the relevant policy, Amazon indicated that it may remove or decline to feature products that third-party sellers offered on Amazon at prices significantly higher than those the sellers recently charged in any venue.²⁶⁴

The D.C. AG argued that the latter policy was “effectively identical” to the earlier pricing-parity provision because—in practice—Amazon continued to penalize third-party sellers for *any* offers undercutting the sellers’ prices on Amazon.²⁶⁵ The HJC Report reached similar conclusions about the relevant policies and contended that they harmed competition among e-commerce marketplaces.²⁶⁶

In 2022, the Superior Court of the District of Columbia dismissed the D.C. AG’s allegations. The court reasoned that the newer Amazon policy did not prohibit third-party sellers from offering lower prices in other venues; that any broader implementation of the policy was not attributable to the agreements themselves; and that the D.C. AG had not plausibly alleged monopoly power,

Commitments”].

²⁵⁹ Defendant Amazon.com, Inc.’s Opposed Motion to Dismiss Plaintiff District of Columbia’s Amended Complaint at 15-16, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Oct. 25, 2021); *see also* HJC REPORT, *supra* note 11, at 255 (noting Amazon’s argument that its share of the total retail market is “the most appropriate and relevant” method of estimating its market share).

²⁶⁰ Order at 15-16, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Aug. 1, 2022).

²⁶¹ Notice of Appeal, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Aug. 25, 2022).

²⁶² First Amended Complaint ¶¶ 5-10, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Sept. 10, 2021). The Attorney General of California has filed a similar lawsuit under California unfair-competition law. *See* Complaint, The People of the State of California v. Amazon.com, Inc., No. CGC-22-601826 (Cal. Super. Ct. Sept. 15, 2022). For a discussion of the antitrust issues raised by most-favored-nation clauses in online platform markets, *see* Jonathan B. Baker & Fiona Scott Morton, *Antitrust Enforcement Against Platform MFNs*, 127 YALE L.J. 2176 (2018).

²⁶³ First Amended Complaint ¶¶ 5-8, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Sept. 10, 2021).

²⁶⁴ Order at 8, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Aug. 1, 2022).

²⁶⁵ First Amended Complaint ¶ 9, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Sept. 10, 2021); *see also* Order at 8-9, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Aug. 1, 2022).

²⁶⁶ HJC REPORT, *supra* note 11, at 295-97.

meaning it could not prevail on a claim alleging unilateral anticompetitive conduct.²⁶⁷ As discussed, the D.C. AG has appealed the Superior Court’s decision.²⁶⁸

Tying

The HJC Report and some foreign competition authorities have also taken issue with the link between Amazon’s e-commerce marketplace and its logistics service, Fulfillment by Amazon (FBA).²⁶⁹ According to the report, Amazon effectively requires third-party sellers to use FBA as a condition of participating in Amazon Prime—a subscription service that offers customers fast shipping of eligible products, among other benefits.²⁷⁰ Many third-party sellers also reported their belief that Amazon favors sellers who use FBA in its product search results and in managing its “Buy Box”—the program that determines which sellers “win” particular product sales.²⁷¹ As a result of these practices, the report contends, many third-party sellers regard use of FBA as essential to success on Amazon’s marketplace.²⁷²

Amazon has responded that it provides non-discriminatory access to the Buy Box and that participation in FBA is voluntary.²⁷³

Use of Third-Party Seller Data

Amazon’s dual role as both a marketplace operator and a seller on its own marketplace has also attracted scrutiny. Critics have contended that this integration generates conflicts of interest, which have led Amazon to leverage control of its marketplace to advantage its own products and services in various ways.²⁷⁴

Some of these allegations involve Amazon’s use of data. The HJC Report and European regulators have accused Amazon of using data generated by third-party sellers on its marketplace to identify and imitate popular products for its private-label business.²⁷⁵

²⁶⁷ Order at 8-9, 15-16, *District of Columbia v. Amazon.com, Inc.*, No. 2021-CA-001775 (D.C. Super. Ct. Aug. 1, 2022). The D.C. AG lawsuit also included allegations regarding Amazon’s contracts with suppliers, which are not discussed here.

²⁶⁸ Notice of Appeal, *District of Columbia v. Amazon.com, Inc.*, No. 2021-CA-001775 (D.C. Super. Ct. Aug. 25, 2022).

²⁶⁹ HJC REPORT, *supra* note 11, at 287-90; Amazon EC Commitments, *supra* note 258; Adam Satariano, *Amazon is Fined \$1.3 Billion in Italy Over Antitrust Violations*, N.Y. TIMES (Dec. 9, 2021), <https://www.nytimes.com/2021/12/09/business/amazon-italy-fine.html>.

²⁷⁰ HJC REPORT, *supra* note 11, at 287. While there is a way third-party sellers can become eligible for Prime without using FBA, the HJC Report characterized that option as “entirely impractical” for “most sellers.” *Id.*

²⁷¹ *Id.* at 288-90.

²⁷² *Id.* at 287-88.

²⁷³ *Id.* at 292. In 2022, the European Commission accepted certain commitments from Amazon to resolve similar concerns. *See* Amazon EC Commitments, *supra* note 258. Among other things, Amazon agreed to treat all sellers equally in managing its Buy Box and to allow third-party sellers that participate in Prime to freely choose their logistics and delivery services. *Id.*

²⁷⁴ HJC REPORT, *supra* note 11, at 16; *see also* Lina M. Khan, *The Separation of Platforms and Commerce*, 119 COLUM. L. REV. 973, 985-94 (2019) [hereinafter “Khan, *Platforms and Commerce*”].

²⁷⁵ HJC REPORT, *supra* note 11, at 274-82; Press Release, Euro. Comm’n, Antitrust: Commission Sends Statement of Objections to Amazon for the Use of Non-Public Independent Seller Data and Opens Second Investigation into its E-Commerce Business Practices (Nov. 10, 2020), https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2077.

During congressional testimony in July 2020, Amazon’s founder and former chief executive said that the company has a policy against using *seller-specific* data to aid its private-label business.²⁷⁶ He indicated, however, that he could not guarantee that this policy had never been violated.²⁷⁷ Amazon reportedly does not have a policy against using *aggregated* seller data to assist its retail business.²⁷⁸

Commentators have disputed the competitive effects of a platform’s use of user data to enter new markets. Some commentators have argued that Amazon’s entry into new markets forces other sellers to lower their prices—an outcome that antitrust traditionally encourages.²⁷⁹ Others contend that the alleged copying may have longer-term anticompetitive effects by chilling incentives to innovate.²⁸⁰

Self-Preferencing

Amazon’s dual role as a marketplace operator and private-label seller has led to a range of other concerns about self-preferencing. For example, a 2016 ProPublica investigation concluded that Amazon designed the ranking algorithm for its marketplace to favor its own offerings and products offered by sellers that use FBA.²⁸¹ The HJC Report also alleged that Amazon has engaged in other forms of self-preferencing, such as refusing to allow certain competitors to advertise on Amazon’s platform.²⁸²

Predatory Pricing

Amazon has also been accused of engaging in predatory pricing at various points in its history.²⁸³ These allegations have been directed against several aspects of Amazon’s business, including its sale of e-books,²⁸⁴ its sale of diapers and ultimate acquisition of the parent company of Diapers.com;²⁸⁵ and Amazon Prime.²⁸⁶

²⁷⁶ HJC REPORT, *supra* note 11, at 277-78.

²⁷⁷ *Id.*

²⁷⁸ *Id.* at 278. The European Commission has investigated similar issues. In 2020, the Commission preliminarily concluded that Amazon had relied on aggregated data generated by third-party sellers to support its own retail offerings. *See* Amazon EC Commitments, *supra* note 258. In December 2022, the Commission accepted Amazon’s commitment not to use non-public data derived from third-party sellers to assist its private-label business. *See id.*

²⁷⁹ *See, e.g.,* Francis, *supra* note 48, at 832; Herbert Hovenkamp, *Antitrust and Platform Monopoly*, 130 YALE L.J. 1952, 2015 (2021) [hereinafter “Hovenkamp, *Platform Monopoly*”].

²⁸⁰ ARIEL EZRACHI & MAURICE E. STUCKE, HOW BIG-TECH BARONS SMASH INNOVATION—AND HOW TO STRIKE BACK 54-57 (2022). These issues are discussed in greater detail in *infra* “Use of Nonpublic User Data.”

²⁸¹ Julia Angwin & Surya Mattu, *Amazon Says It Puts Customers First. But Its Pricing Algorithm Doesn’t*, PROPUBLICA (Sept. 20, 2016), <https://www.propublica.org/article/amazon-says-it-puts-customers-first-but-its-pricing-algorithm-doesnt>.

²⁸² HJC REPORT, *supra* note 11, at 283-86.

²⁸³ *See, e.g.,* Shaoul Sussman, *Prime Predator: Amazon and the Rationale of Below Average Variable Cost Pricing Strategies Among Negative-Cash Flow Firms*, 7 J. ANTITRUST ENFORCEMENT 203 (2019).

²⁸⁴ Khan, *Amazon’s Antitrust Paradox*, *supra* note 57, at 756-68.

²⁸⁵ *Id.* at 768-74; HJC REPORT, *supra* note 11, at 297-99.

²⁸⁶ HJC REPORT, *supra* note 11, at 299-300.

In academic work, the chair of the FTC has argued that Amazon exemplifies the rationality of predatory pricing in markets characterized by strong network effects and extreme scale economies, contrary to the assumptions that underpin current doctrine.²⁸⁷

Other commentators have challenged these allegations.²⁸⁸ In response to the claims involving Diapers.com, for example, some have noted that Amazon has not been accused of occupying a monopolistic share of the market for online diaper sales or diaper sales generally.²⁸⁹ Others have argued that the HJC report failed to produce sufficient evidence to conclude that Amazon prices Prime memberships below cost.²⁹⁰

Apple

Apple is the most valuable company in the world.²⁹¹ The firm designs, manufactures, and sells iPhone smartphones, Mac personal computers, iPad tablets, and several wearables and accessories, in addition to offering a range of related services.²⁹² The discussion below focuses on issues related to the company's mobile operating system and App Store.

Allegations of Market Power

As discussed, Apple's iOS and Google's Android are the two dominant operating systems for mobile devices in the United States and globally.²⁹³ More than half of the mobile devices in the United States run a version or derivation of iOS.²⁹⁴ Apple's App Store is the only method by which software developers can distribute apps on iOS devices; Apple does not allow iOS users to download other app stores or sideload apps.²⁹⁵

Based on these restrictions, Apple's market share, and various entry barriers, the HJC Report concluded that Apple has significant and durable market power in markets for mobile operating systems and mobile app stores.²⁹⁶ The report also alleged that Apple has monopoly power over app distribution on iOS devices.²⁹⁷

Epic Games—the developer of the video game Fortnite—has made similar claims in litigation, arguing that Apple has monopoly power in an iOS app distribution market and a market for iOS in-app payment (IAP) processing.²⁹⁸ (Like Google, Apple requires developers to use its IAP

²⁸⁷ Khan, *Amazon's Antitrust Paradox*, *supra* note 57, at 753, 786, 791-92.

²⁸⁸ Kristian Stout & Alec Stapp, *Is Amazon Guilty of Predatory Pricing?*, TRUTH ON THE MARKET (May 7, 2019), <https://truthonthemarket.com/2019/05/07/is-amazon-guilty-of-predatory-pricing/>; Jeffrey Eisenach, *Who Should Antitrust Protect? The Case of Diapers.com*, AM. ENTER. INST. (Nov. 5, 2018), <https://www.aei.org/technology-and-innovation/who-should-antitrust-protect-the-case-of-diapers-com/>.

²⁸⁹ Eisenach, *supra* note 288.

²⁹⁰ Carl Shapiro, *Regulating Big Tech: Factual Foundations and Policy Goals*, NETWORK L. REV. (forthcoming Fall 2023), <https://www.networklawreview.org/shapiro-big-tech/>.

²⁹¹ Largest Companies by Market Cap, COMPANIESMARKETCAP (last visited Mar. 15, 2023), <https://companiesmarketcap.com/>.

²⁹² Apple Inc., Annual Report (Form 10-K) at 1-2 (Oct. 28, 2022).

²⁹³ HJC REPORT, *supra* note 11, at 100-02.

²⁹⁴ *Id.* at 334.

²⁹⁵ *Id.* at 335.

²⁹⁶ *Id.* at 334.

²⁹⁷ *Id.* at 335.

²⁹⁸ Complaint for Injunctive Relief ¶¶ 58, 119, *Epic Games, Inc. v. Apple Inc.*, No. 4:20-cv-05640 (N.D. Cal. Aug. 13,

processor as a condition of accessing its App Store and has charged 30 percent commissions for that service.)²⁹⁹

Apple has denied possessing monopoly power. With respect to software distribution, the company argues that it competes in a market that includes other app stores, the open internet, and physical retail stores.³⁰⁰ In the *Epic Games* litigation involving video-game distribution, Apple has contended that the relevant antitrust market is a market for video game distribution generally, which includes other app stores, gaming stores for personal computers, gaming stores on game consoles, and cloud-based game streaming services.³⁰¹

In September 2021, a federal district court concluded in *Epic Games* that Apple competes in a market for *digital mobile gaming transactions*, as opposed to a broader market for video-game distribution generally or a narrower market for game distribution on iOS devices.³⁰² The court further determined that Apple possesses market power—but not monopoly power—in this market.³⁰³ Epic Games has appealed this decision.³⁰⁴

Allegations of Anticompetitive Conduct

Mobile App Distribution and IAP Processing

Apple has been accused of engaging in several anticompetitive practices in app markets.

One set of allegations focuses on various technical and contractual restrictions that prevent developers from distributing iOS apps outside of the App Store, which allegedly harms competition in markets for app distribution.³⁰⁵ Epic Games has also argued that the requirement that developers using Apple's App Store also use Apple's IAP processor constitutes an unlawful tying arrangement.³⁰⁶

A federal district court has rejected these claims. In *Epic Games*, the court held that the relevant contractual restrictions on app distribution qualified as unilateral rather than concerted conduct.³⁰⁷ Because the court had determined that Apple was not a monopolist, it rejected the plaintiff's claims involving those restrictions.³⁰⁸

While the court concluded that the challenged restrictions were unilateral and thus not illegal absent monopoly power, it acknowledged certain doctrinal ambiguities involving the distinction

2020).

²⁹⁹ *Epic Games, Inc. v. Apple Inc.*, 559 F. Supp. 3d 898, 923 (N.D. Cal. 2021). In November 2020, Apple reduced its IAP processing fees from 30 percent to 15 percent for developers with less than \$1 million in annual net sales on its platform. Kif Leswing, *Apple Will Cut App Store Commissions by Half to 15% for Small App Makers*, CNBC (Nov. 18, 2020), <https://www.cnbc.com/2020/11/18/apple-will-cut-app-store-fees-by-half-to-15percent-for-small-developers.html>.

³⁰⁰ HJC REPORT, *supra* note 11, at 335.

³⁰¹ *Epic Games, Inc.*, 559 F. Supp. 3d at 972-76.

³⁰² *Id.* at 921.

³⁰³ *Id.* at 922.

³⁰⁴ Notice of Appeal, *Epic Games, Inc. v. Apple Inc.*, No. 4:20-cv-05640 (N.D. Cal. Sept. 12, 2021).

³⁰⁵ Complaint for Injunctive Relief ¶¶ 64-81, 87-102, *Epic Games, Inc. v. Apple Inc.*, No. 4:20-cv-05640 (N.D. Cal. Aug. 13, 2020).

³⁰⁶ *Id.* ¶ 129.

³⁰⁷ *Epic Games, Inc. v. Apple Inc.*, 559 F. Supp. 3d 898, 1035 (N.D. Cal. 2021).

³⁰⁸ *Id.* at 1044.

between unilateral and concerted conduct.³⁰⁹ The court thus proceeded to conduct a competitive-effects analysis of the challenged restrictions notwithstanding its holding that they were unilateral.³¹⁰ In conducting this analysis under the rule of reason, the court concluded that:

1. Epic Games had established evidence of the restrictions' anticompetitive effects;³¹¹
2. Apple had proffered valid procompetitive justifications for the restrictions based on security concerns, the promotion of interbrand competition, and the protection of intellectual property;³¹² and
3. Epic Games had not shown that those procompetitive benefits could be achieved through less restrictive means.³¹³

Accordingly, the court held that the contractual restrictions on app distribution did not violate Section 1 of the Sherman Act, even if they amounted to concerted conduct.³¹⁴

The court went on to reject other Section 1 and Section 2 claims involving app distribution and IAP processing for similar reasons—namely, the plaintiff's failure to show that various procompetitive benefits could be achieved through less restrictive means or establish monopoly power.³¹⁵

Finally, the court denied the plaintiff's tying claim on the grounds that IAP processing does not represent a separate product from app distribution.³¹⁶

As noted, Epic Games has appealed the district court's decision.³¹⁷ The Ninth Circuit heard oral arguments in the appeal in November 2022.³¹⁸

Self-Preferencing

The HJC Report alleged that Apple has taken a variety of steps to preference its own apps and harm rival app developers.³¹⁹ Among other things, the report accused Apple of injuring competition by pre-installing its own apps on iPhones;³²⁰ denying third-party apps access to

³⁰⁹ *Id.* at 1036.

³¹⁰ *Id.*

³¹¹ *Id.* at 1036-38.

³¹² *Id.* at 1038-40.

³¹³ *Id.* at 1040-41.

³¹⁴ *Id.* at 1041.

³¹⁵ *Id.* at 1041-44.

³¹⁶ *Id.* at 1047. While the court rejected the plaintiff's federal antitrust claims, it concluded that Apple's anti-steering provisions—which prohibited app developers from including links to external mechanisms for making IAPs—violated California's unfair-competition law. *Id.* at 1058. Apple has cross-appealed that aspect of the district court's decision. Notice of Appeal, *Epic Games, Inc. v. Apple Inc.*, No. 4:20-cv-05640 (N.D. Cal. Oct. 8, 2021).

³¹⁷ Notice of Appeal, *Epic Games, Inc. v. Apple Inc.*, No. 4:20-cv-05640 (N.D. Cal. Sept. 12, 2021).

³¹⁸ Paresh Dave, *Epic's 'Failure of Proof' in Apple Antitrust Case Questioned by Appeals Panel*, REUTERS (Nov. 14, 2022), <https://www.reuters.com/legal/fornite-creator-fight-apple-antitrust-ruling-appeal-hearing-2022-11-14/>.

³¹⁹ HJC REPORT, *supra* note 11, at 352.

³²⁰ *Id.*

certain APIs and device functionalities that are available to its own apps,³²¹ favoring its own apps in search results on its App Store;³²² and removing rival apps from the App Store.³²³

Apple has denied giving preferential treatment to its own apps in search rankings and justified removing specific apps from the App Store as efforts to protect user privacy.³²⁴

Use of Competitively Sensitive Information

Like Amazon, Apple has faced allegations that it uses its access to data generated by dependent businesses to identify and imitate popular offerings.³²⁵ In particular, software developers have accused Apple of using competitively sensitive information about popular apps to build competing apps and integrate certain functionalities into iOS.³²⁶

Apple has responded to questions regarding such allegations by stating that it does not violate other companies' intellectual property rights.³²⁷

Big Tech Mergers and Acquisitions

Some of the allegations discussed above involve Big Tech mergers and acquisitions. As noted, the FTC is currently challenging Facebook's acquisitions of Instagram and WhatsApp,³²⁸ while Google's acquisition of DoubleClick is a key part of the DOJ's monopolization lawsuit targeting the company's ad-tech practices.³²⁹

Some policymakers have expressed broader concerns about Big Tech mergers.³³⁰ The companies have been active dealmakers: between 2000 and 2019, the four firms engaged in hundreds of mergers and acquisitions.³³¹ Many of these transactions fell below the numerical thresholds that trigger pre-merger review by the antitrust agencies.³³²

³²¹ *Id.* at 354. In May 2022, the European Commission preliminarily determined that Apple had violated European Union competition law by limiting rival mobile wallet developers from accessing certain technology that Apple makes available to its own wallet, Apple Pay. *See* Press Release, Euro. Comm'n, Antitrust: Commission Sends Statement of Objections to Apple Over Practices Regarding Apple Pay (May 2, 2022), https://ec.europa.eu/commission/presscorner/detail/en/ip_22_2764.

³²² HJC REPORT, *supra* note 11, at 359-61.

³²³ *Id.* at 364-67.

³²⁴ *Id.* at 361, 366.

³²⁵ *Id.* at 361-64.

³²⁶ *Id.* at 362.

³²⁷ *Id.* at 363.

³²⁸ *FTC v. Facebook, Inc.*, 581 F. Supp. 3d 34 (D.D.C. 2022).

³²⁹ Complaint, *United States v. Google LLC*, No. 1:23-cv-00108 (E.D. Va. Jan. 24, 2023). For a more detailed discussion of mergers and acquisitions in tech markets, see CRS Report R46739, *Mergers and Acquisitions in Digital Markets*, by Clare Y. Cho.

³³⁰ HJC REPORT, *supra* note 11, at 387; SUBCOMM. ON ANTITRUST, COM., AND ADMIN. L. OF THE H. COMM. ON THE JUDICIARY, 116TH CONG., *THE THIRD WAY: ANTITRUST ENFORCEMENT IN BIG TECH 9* (2020) (written by Ken Buck, et al. in response to majority report), https://buck.house.gov/sites/evo-subsites/buck-evo.house.gov/files/wysiwyg_uploaded/Buck%20Report.pdf.

³³¹ Diana L. Moss, *The Record of Weak U.S. Merger Enforcement in Big Tech*, AM. ANTITRUST INST. 6 (July 8, 2019), https://www.antitrustinstitute.org/wp-content/uploads/2019/07/Merger-Enforcement_Big-Tech_7.8.19.pdf.

³³² FED. TRADE COMM'N, *NON-HSR REPORTED ACQUISITIONS BY SELECT TECHNOLOGY PLATFORMS, 2010-2019: AN FTC STUDY* (Sept. 2021), <https://www.ftc.gov/system/files/documents/reports/non-hsr-reported-acquisitions-select-technology-platforms-2010-2019-ftc-study/p201201technologyplatformstudy2021.pdf> [hereinafter "FTC Non-

These deals have prompted some commentators to worry that the Big Tech firms are cementing their dominant positions by acquiring promising potential competitors.³³³ Transactions involving “nascent” competitors have been a particular point of concern.³³⁴ While the concept of a “nascent” competitor has been defined in different ways, it generally refers to an innovative firm whose technology represents a serious yet uncertain future threat to an incumbent.³³⁵

Other commentators have raised concerns about the number of Big Tech mergers that fall below the thresholds that trigger premerger review by the DOJ and FTC.³³⁶

These issues are discussed in greater detail in “Mergers & Acquisitions” *infra*.³³⁷

Antitrust Reform and Big Tech: General Issues

The issues discussed above have prompted calls for policy reform. Some proposals would supplement the antitrust laws with sectoral competition regulations directed at large technology platforms.³³⁸ Others would work within the existing antitrust framework by adjusting burdens of proof and changing certain doctrinal rules.³³⁹

While the relevant options are varied, they all implicate the threshold question of whether the existing antitrust laws are adequate to address competition issues in the tech sector.

Reportable Acquisitions Study”].

³³³ JONATHAN B. BAKER, *THE ANTITRUST PARADIGM: RESTORING A COMPETITIVE ECONOMY* 160-61 (2019); Steven C. Salop, *Dominant Digital Platforms: Is Antitrust Up to the Task?*, 130 *YALE L.J. F.* 563, 578-79 (2021); Mark Glick, et al., *Big Tech’s Buying Spree and the Failed Ideology of Competition Law*, 72 *HASTINGS L.J.* 465, 468-75 (2021); HJC REPORT, *supra* note 11, at 387; Tim Wu & Stuart A. Thompson, *The Roots of Big Tech Run Disturbingly Deep*, N.Y. TIMES (June 7, 2019), <https://www.nytimes.com/interactive/2019/06/07/opinion/google-facebook-mergers-acquisitions-antitrust.html>; STIGLER CTR. FOR THE STUDY OF THE ECON. AND THE STATE, *STIGLER COMM. ON DIGITAL PLATFORMS: FINAL REPORT* 71-72, 75 n.152 (2019), <https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf> [hereinafter “STIGLER REPORT”]; HM TREASURY, *UNLOCKING DIGITAL COMPETITION, REPORT OF THE DIGITAL COMPETITION EXPERT PANEL* 40 (2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf [hereinafter “UK DIGITAL COMPETITION REPORT”].

³³⁴ A. Douglas Melamed, *Mergers Involving Nascent Competition*, Stanford L. and Econ. Olin Working Paper No. 566 (Jan. 17, 2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4009229; John M. Yun, *Are We Dropping the Crystal Ball? Understanding Nascent & Potential Competition in Antitrust*, 104 *MARQ. L. REV.* 613 (2021); C. Scott Hemphill & Tim Wu, *Nascent Competitors*, 168 *U. PA. L. REV.* 1879 (2020); OECD, *START-UPS, KILLER ACQUISITIONS AND MERGER CONTROL* 21-36 (2020), <https://www.oecd.org/daf/competition/start-ups-killer-acquisitions-and-merger-control-2020.pdf> [hereinafter “OECD STARTUP ACQUISITION REPORT”].

³³⁵ Yun, *supra* note 334, at 626-29; Hemphill & Wu, *supra* note 334, at 1883.

³³⁶ STIGLER REPORT, *supra* note 333, at 111.

³³⁷ The FTC was unsuccessful in its first effort to block a Big Tech merger using a potential-competition theory. In January 2023, a federal district court denied the FTC’s motion for an injunction against Meta’s proposed acquisition of Within Unlimited—the developer of a virtual-reality (VR) fitness app. Order Denying Plaintiff’s Motion for Preliminary Injunction, *FTC v. Meta Platforms Inc.*, No. 5:22-cv-04325 (N.D. Cal. Jan. 31, 2023). In that case, Meta was the putative potential entrant. The FTC alleged that, absent the acquisition, Meta would have organically entered the market for VR fitness apps. *Id.* at 39. The Commission also offered a perceived-potential-competition argument, contending that the prospect of Meta’s entry exerted competitive pressures on that market. *Id.* at 60. The district court rejected both theories, concluding that the FTC failed to establish a “reasonable probability” of entry absent the acquisition or that Meta was perceived as a potential competitor. *Id.* at 59, 62.

³³⁸ See *infra* “Ex Ante Conduct Rules,” “Structural Separation and Line-of-Business Restrictions,” “Mergers & Acquisitions” & “Interoperability & Data Portability.”

³³⁹ See *infra* “Changes to General Antitrust.”

The proposals that would supplement antitrust with a new regulatory regime also raise additional questions of policy design—namely, how to scope the relevant regulations and select an appropriate regulator to administer them.

This section of the report discusses these general issues in the debate over antitrust reform directed at Big Tech firms.

Is Existing Antitrust Law Insufficient?

Whether antitrust is ill-equipped to deal with competition issues in the tech industry has been the subject of debate.

Reform proponents have alleged that current law is inadequate for two general reasons. First, they argue that *ex post* adjudication is ill-equipped to address competition concerns raised by the unique structure of certain tech markets.³⁴⁰ Second, they contend that several elements of substantive antitrust doctrine insulate Big Tech firms from liability for specific types of anticompetitive conduct.³⁴¹

Market Structure and the Efficacy of *Ex Post* Adjudication

As discussed, outside of a narrow set of *per se* offenses, antitrust is a fact-specific enterprise. Generally, courts employ a case-by-case approach to evaluate claims of anticompetitive behavior.³⁴² Because liability typically depends on case-specific facts rather than the application of bright-line rules, antitrust investigations and litigation are often time-consuming and expensive.³⁴³ The open-ended nature of the relevant legal standards can also make it difficult to predict whether particular conduct violates the law, which may undermine enforcement by allowing large firms to profit from anticompetitive conduct and treat potential lawsuits as a cost of doing business.³⁴⁴

Advocates of reform have argued that these features of antitrust adjudication make it ill-suited to deal with tech markets characterized by a unique confluence of structural characteristics, such as strong network effects, economies of scale, economies of scope derived from user data, and consumer tendencies to single home.³⁴⁵

³⁴⁰ See, e.g., OECD, EX ANTE REGULATION AND COMPETITION IN DIGITAL MARKETS 6 (2021), <https://www.oecd.org/daf/competition/ex-ante-regulation-and-competition-in-digital-markets-2021.pdf> [hereinafter “OECD REGULATION REPORT”]; STIGLER REPORT, *supra* note 333, at 100; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 123-24.

³⁴¹ See, e.g., HJC REPORT, *supra* note 11, at 395-99.

³⁴² William P. Rogerson & Howard Shelanski, *Antitrust Enforcement, Regulation, and Digital Platforms*, 168 U. PA. L. REV. 1911, 1917-18 (2020).

³⁴³ Rohit Chopra & Lina M. Khan, *The Case for “Unfair Methods of Competition” Rulemaking*, 87 U. CHI. L. REV. 357, 360-62 (2020); Daniel A. Crane, *Rules Versus Standards in Antitrust Adjudication*, 64 WASH. & LEE L. REV. 49, 83 (2007).

³⁴⁴ Chopra & Khan, *supra* note 343, at 360-61.

³⁴⁵ OECD REGULATION REPORT, *supra* note 340, at 9-12; STIGLER REPORT, *supra* note 333, at 7-8, 99; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 5. While many markets have one or more of these features, some commentators have argued that their combination and strength in digital-platform markets raise unique challenges for antitrust enforcers. See, e.g., Michael Kades & Fiona Scott Morton, *Interoperability as a Competition Remedy for Digital Networks*, WASH. CTR. FOR EQUITABLE GROWTH 7 n.14 (Sept. 23, 2020), <https://equitablegrowth.org/working-papers/interoperability-as-a-competition-remedy-for-digital-networks/>.

According to some, these characteristics cause certain tech markets to tip in favor of a single dominant firm.³⁴⁶ After an initial period of competition, one company may gain an edge that becomes self-reinforcing. For example, a platform with a large user base and associated data advantages may be the most attractive to new users, generating a positive feedback loop that allows it to grow even larger and thereby become even more attractive.³⁴⁷ Prospective entrants may then face difficulties achieving the scale necessary to compete with the dominant incumbent.³⁴⁸

Big Tech firms may also derive benefits from their roles as gatekeepers for key digital ecosystems, like mobile operating systems, app stores, online marketplaces, and social networks.³⁴⁹ By controlling access to these ecosystems and setting the rules within them, tech platforms can allegedly preserve their dominant positions and leverage those positions to obtain advantages in related markets.³⁵⁰

Some analysts contend that antitrust adjudication is too slow to adequately police markets characterized by these winner-take-all dynamics.³⁵¹ By the time a market has tipped, they argue, remedies for anticompetitive conduct may be unable to restore meaningful competition.³⁵²

These worries have prompted calls for prophylactic rules to supplement case-by-case antitrust adjudication.³⁵³ Some proposals would also seek to address structural issues in Big Tech markets by imposing affirmative duties designed to catalyze competition.³⁵⁴

Other commentators have rejected the claim that antitrust is unable to grapple with competition issues involving large digital platforms. Some, for example, dispute the proposition that Big Tech markets have all decisively tipped in favor of a single firm.³⁵⁵ Rather, they contend that the tech

³⁴⁶ EZRACHI & STUCKE, *supra* note 280, at 10-11; OECD REGULATION REPORT, *supra* note 340, at 9; STIGLER REPORT, *supra* note 333, at 34-36; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 4.

³⁴⁷ Michael L. Katz & Carl Shapiro, *Systems Competition and Network Effects*, 8 J. ECON. PERSP. 93, 105-06 (1994).

³⁴⁸ Joseph Farrell & Paul Klemperer, *Coordination and Lock-In: Competition with Switching Costs and Network Effects*, in 3 HANDBOOK OF INDUSTRIAL ORGANIZATION 1970, 1974 (Mark Armstrong & Robert H. Porter eds., 2007).

³⁴⁹ EZRACHI & STUCKE, *supra* note 280, at 45-50; Marco Cappai & Giuseppe Colangelo, *Taming Digital Gatekeepers: The More Regulatory Approach to Antitrust Law*, Stanford-Vienna TTLF Working Paper 9 (Stanford-Vienna TTLF, Working Paper No. 55, 2020).

³⁵⁰ OECD REGULATION REPORT, *supra* note 340, at 10.

³⁵¹ Giorgio Monti, *The Digital Markets Act—Institutional Design and Suggestions for Improvement 1* (Tilburg L. & Econ. Ctr., Discussion Paper No. 2021-04, 2021); STIGLER REPORT, *supra* note 333, at 99; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 6.

³⁵² EZRACHI & STUCKE, *supra* note 280, at 173-75; Monti, *supra* note 351, at 1; STIGLER REPORT, *supra* note 333, at 99; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 6.

³⁵³ E.g., STIGLER REPORT, *supra* note 333, at 100-01; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 62-63. Proposals involving *ex ante* conduct rules for Big Tech firms are discussed in “*Ex Ante Conduct Rules*” *infra*.

³⁵⁴ E.g., Rogerson & Shelanski, *supra* note 342, at 1927-30. Proposals involving these types of affirmative obligations are discussed in “*Interoperability & Data Portability*” *infra*.

³⁵⁵ E.g., Hovenkamp, *Platform Monopoly*, *supra* note 279, at 1978; Joint Submission of Antitrust Economists, Legal Scholars, and Practitioners to the House Judiciary Committee on the State of Antitrust Law and Implications for Protecting Competition in Digital Markets at 3-4 (May 15, 2020), https://gai.gmu.edu/wp-content/uploads/sites/27/2020/05/house_joint_antitrust_letter_20200514.pdf [hereinafter “Antitrust Economist Submission”]; see also NICOLAS PETIT, BIG TECH AND THE DIGITAL ECONOMY: THE MOLIGOPOLY SCENARIO 153-71, 257 (2020) (arguing that Big Tech firms face meaningful competitive pressures even when operating in tipped markets); *How Tech’s Defiance of Economic Gravity Came to an Abrupt End*, THE ECONOMIST (Dec. 24, 2022), <https://www.economist.com/business/2022/12/24/how-techs-defiance-of-economic-gravity-came-to-an-abrupt-end> (arguing that some Big Tech firms face “fierce” competition from one another and from new rivals); Ryan Bourne & Rachel Chiu, *A Monopoly of What? Big Tech in Today’s Context*, CATO INST. (Nov. 3, 2022), <https://www.cato.org/commentary/monopoly-what-big-tech>

giants compete in diverse markets characterized by different competitive dynamics.³⁵⁶ While some of those markets may be susceptible to tipping, others arguably retain a competitive fringe or exhibit competition among rivals of comparable size.³⁵⁷

Defenders of the adjudicative model of antitrust enforcement have thus emphasized the heterogeneity of digital-platform markets, which they contend militates against categorical treatment of Big Tech firms and in favor of the existing fact-specific approach.³⁵⁸

Substantive Antitrust Doctrine

Support for fact-specific adjudication over regulation does not necessarily entail wholesale endorsement of prevailing antitrust doctrine. Commentators with diverse antitrust ideologies have argued that certain features of substantive antitrust law allow some types of anticompetitive conduct by Big Tech platforms to escape liability. Among other things, they have criticized the doctrine governing unilateral refusals to deal,³⁵⁹ monopoly leveraging,³⁶⁰ predatory pricing,³⁶¹ and mergers involving potential and “nascent” competitors.³⁶²

These topics are discussed in greater detail throughout the remainder of this report. For purposes of this section, the important point is that alleged doctrinal infirmities represent a concern that is distinct from dissatisfaction with adjudication as an enforcement mechanism. A lawmaker’s preferred policy response may vary based on this distinction. As discussed below, some reform

today’s context (similar); D. Daniel Sokol & Jingyuan (Mary) Ma, *Understanding Online Markets and Antitrust Analysis*, 15 NW. J. TECH. & INTELL. PROP. 43, 48-50 (2017) (“Online markets are constantly transforming. Indeed, online markets typically have innovative challengers against incumbents. Challengers may overtake incumbent firms through new ideas and technologies. In such settings, there are low entry barriers.”).

³⁵⁶ PETIT, *supra* note 355, at 257-58; Hovenkamp, *Platform Monopoly*, *supra* note 279, at 1978; Joshua D. Wright & John M. Yun, *Platforms in the Spotlight at FTC Hearings*, Geo. Mason L. & Econ. Research Paper No. 18-44 at 3 (Nov. 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3280532.

³⁵⁷ Hovenkamp, *Platform Monopoly*, *supra* note 279, at 1978.

³⁵⁸ *Id.*; Antitrust Economist Submission, *supra* note 355, at 8-9; *see also* C.D. HOWE INST. COMPETITION POL’Y COUNCIL, DIGITAL PLATFORMS: OVERSIGHT IF NECESSARY, BUT NOT NECESSARILY REGULATION 7-8 (2021), https://www.cdhowe.org/sites/default/files/attachments/other-research/pdf/Communique_2021_0107_CPC.pdf (arguing that general competition law should be the presumptive framework for addressing competition issues in the tech sector and that special competition regulations for digital platforms are likely to overlook important distinctions among heterogeneous business models); ABA ANTITRUST L. SECTION, COMMON ISSUES RELATING TO THE DIGITAL ECONOMY AND COMPETITION, REPORT OF THE INTERNATIONAL DEVELOPMENTS AND COMMENTS TASK FORCE ON POSITIONS EXPRESSED BY THE ABA ANTITRUST LAW SECTION BETWEEN 2017 AND 2019, at 5 (2020) [hereinafter “ABA DIGITAL ECONOMY REPORT”] (concluding that antitrust authorities should address competition issues in digital-platform markets on a case-by-case basis using existing tools); Group of Seven (G7), *Common Understanding of G7 Competition Authorities on “Competition and the Digital Economy”* (June 5, 2019), https://www.autoritedelaconcurrence.fr/sites/default/files/2019-11/g7_common_understanding.pdf (“Because of its flexible analytical framework, fact-based analysis, cross-sector application, and technology-neutral nature, competition law can effectively apply to digital markets and to harmful anticompetitive behaviors in the digital economy.”).

³⁵⁹ Erik Hovenkamp, *The Antitrust Duty to Deal in the Age of Big Tech*, 131 YALE L.J. 1483, 1525 (2022) [hereinafter “Hovenkamp, *Antitrust Duty to Deal*”]; HJC REPORT, *supra* note 11, at 397-98; STIGLER REPORT, *supra* note 333, at 96-97; Sandeep Vaheesan, *Reviving an Epithet: A New Way Forward for the Essential Facilities Doctrine*, 2010 UTAH L. REV. 911 (2010).

³⁶⁰ HJC REPORT, *supra* note 11, at 396.

³⁶¹ Marshall Steinbaum & Maurice E. Stucke, *The Effective Competition Standard: A New Standard for Antitrust*, 87 U. CHI. L. REV. 595, 608 (2020); HJC REPORT, *supra* note 11, at 396-97; Aaron S. Edlin, *Stopping Above-Cost Predatory Pricing*, 111 YALE L.J. 941 (2002).

³⁶² Hemphill & Wu, *supra* note 334; Kevin A. Bryan & Erik Hovenkamp, *Antitrust Limits on Startup Acquisitions*, 56 REV. OF INDUS. ORG. 615, 632 (2020); HJC REPORT, *supra* note 11, at 394-95.

proposals target large tech platforms with sectoral regulations that would supplement the antitrust laws, while others would make changes within general antitrust doctrine.³⁶³

These debates over specific doctrinal rules take place alongside broader contestation regarding the fundamental goals of antitrust. A group of scholars and policymakers commonly identified as “Neo-Brandeisians” have called for the abandonment of the consumer-welfare standard as a benchmark for antitrust decision-making.³⁶⁴ Members of this movement have argued that a singular focus on consumer welfare has led to lax competition enforcement, which has in turn generated rising economic concentration, growing wealth inequality, and a political system captured by corporate interests.³⁶⁵

Some Neo-Brandeisians have specifically emphasized the consumer-welfare standard’s alleged inadequacy vis-à-vis large tech platforms. In particular, they contend that a focus on short-term price and output effects neglects the ways in which tech platforms forgo immediate profits to establish long-term dominance and then leverage that dominance across business lines.³⁶⁶

Defenders of the consumer-welfare standard fall into two broad camps. Some commentators join the Neo-Brandeisians in arguing that antitrust enforcement has become overly lax, but support the retention of the consumer-welfare standard as a general goal.³⁶⁷ While they object to specific doctrinal developments, these commentators attribute such developments to misapplications of the consumer-welfare standard rather than the standard itself.³⁶⁸ In contrast, others have defended both the consumer-welfare standard and current levels of antitrust enforcement.³⁶⁹

Among other things, supporters of the consumer-welfare standard have argued that many Neo-Brandeisian criticisms are based on an inaccurate view that the standard focuses solely on price to the exclusion of other benefits of competition, like innovation and product quality.³⁷⁰

Abstracting from the merits of the Neo-Brandeisian critique, the possible repudiation of the consumer-welfare standard raises the question of whether an alternative benchmark would replace it.

Several options have been proposed. Some critics of the status quo have argued that antitrust should focus on the “competitive process.”³⁷¹ That phrase has been used for a variety of

³⁶³ See *infra* “Reform Proposals.”

³⁶⁴ See, e.g., TIM WU, *THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE* 135-38 (2018); Sandeep Vaheesan, *The Profound Nonsense of the Consumer Welfare Standard*, 64 ANTITRUST BULL. 479 (2019); Khan, *Amazon’s Antitrust Paradox*, *supra* note 57, at 744-46. The Neo-Brandeisian movement derives its name from Louis Brandeis, a former Associate Justice of the Supreme Court who was also a proponent of vigorous antitrust enforcement and a critic of large corporations. See Lina M. Khan, *The New Brandeis Movement: America’s Antimonopoly Debate*, 9 J. EURO. COMPETITION L. & PRACTICE 131 (2018).

³⁶⁵ Lina M. Khan & Sandeep Vaheesan, *Market Power and Inequality: The Antitrust Counterrevolution and Its Discontents*, 11 HARV. L. & POL’Y REV. 235 (2017).

³⁶⁶ Khan, *Amazon’s Antitrust Paradox*, *supra* note 57, at 747-53, 774-80.

³⁶⁷ See, e.g., Einer Elhauge, *Should the Competitive Process Test Replace the Consumer Welfare Standard?*, PROMARKET (May 24, 2022), <https://www.promarket.org/2022/05/24/should-the-competitive-process-test-replace-the-consumer-welfare-standard/>; Moss Testimony, *supra* note 152; Shapiro Testimony, *supra* note 152.

³⁶⁸ A. Douglas Melamed, *Antitrust Law and Its Critics*, 83 ANTITRUST L.J. 269, 274-79 (2020) (discussing several points of disagreement between “conservatives” and “mainstream progressives” working within the consumer-welfare paradigm).

³⁶⁹ See, e.g., Antitrust Economist Submission, *supra* note 355, at 4-12.

³⁷⁰ Melamed, *supra* note 368, at 281; Dorsey, et al., *supra* note 149, at 902; Moss Testimony, *supra* note 152, at 4.

³⁷¹ E.g., HJC REPORT, *supra* note 11, at 391-92; Tim Wu, *The “Protection of the Competitive Process” Standard*, (Colum. Pub. L. Research Paper No. 14-612, 2018), <https://scholarship.law.columbia.edu/cgi/>

purposes,³⁷² but in this context appears intended to signify a standard that would protect “not just consumers, but also workers, entrepreneurs, independent businesses, open markets, a fair economy, and democratic ideals.”³⁷³ In other work, Neo-Brandeisians have advocated a “citizen interest” standard that would “protect consumers from anticompetitive overcharges and small producers from anticompetitive underpayments, preserve open markets, and disperse economic and political power.”³⁷⁴

Proponents of these approaches have argued that they are more normatively attractive than the consumer-welfare standard and better reflect the full range of considerations that originally motivated the antitrust laws.³⁷⁵ Critics have contended that the proposed alternatives embrace vague and often contradictory goals and thus offer little guidance regarding the types of conduct that they would prohibit or allow.³⁷⁶

These debates are not purely academic. As discussed below, some legislative proposals would subject large tech platforms to special conduct rules that incorporate competitive-effects analysis, either as an element of a plaintiff’s case-in-chief or as an affirmative defense.³⁷⁷ The appropriate standard for assessing competitive harm may thus have important practical consequences beyond its significance in current doctrine.

Error Costs in Digital Markets

Modern antitrust has been heavily influenced by concerns about error costs—the harms that result from decisions prohibiting procompetitive conduct (false positives) or permitting anticompetitive conduct (false negatives). Alan Devlin & Michael Jacobs, *Antitrust Error*, 52 WM. & MARY L. REV. 75, 78-79 (2010).

Antitrust conservatives have offered error-cost arguments favoring limited enforcement. In a 1984 article, Frank Easterbrook—now a federal judge on the Seventh Circuit—argued that false positives are more harmful than false negatives. Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1, 2 (1984). He reasoned that the force of judicial precedent makes false positives difficult to correct, but that monopoly profits eventually induce the entry of new firms, mitigating the costs of false negatives. *Id.* Several Supreme Court decisions later relied upon this

viewcontent.cgi?article=3293&context=faculty_scholarship; Khan, *Amazon’s Antitrust Paradox*, *supra* note 57, at 745.

³⁷² See Herbert Hovenkamp, *The Slogans and Goals of Antitrust Law* 51-58 (U. Penn. Inst. for L. & Econ. Research Paper No. 22-33, 2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4121866#.

³⁷³ HJC REPORT, *supra* note 11, at 391; see also Steinbaum & Stucke, *supra* note 361, at 602 (proposing an “effective competition” standard under which “[a]gencies and courts shall use the preservation of competitive market structures that protect individuals, purchasers, consumers, and producers; preserve opportunities for competitors; promote individual autonomy and well-being; and disperse private power as the principal objective of the federal antitrust laws.”).

³⁷⁴ Khan & Vaheesan, *supra* note 365, at 276.

³⁷⁵ Wu, *supra* note 364, at 135-38; Steinbaum & Stucke, *supra* note 361, at 621-23 & n.91; Khan & Vaheesan, *supra* note 365, at 276.

³⁷⁶ Dorsey, et al., *supra* note 149, at 879; Joshua D. Wright, et al., *Requiem for a Paradox: The Dubious Rise and Inevitable Fall of Hipster Antitrust*, 51 ARIZ. ST. L. J. 292, 362-65 (2019); see also Hovenkamp, *supra* note 372, at 54 (“[A]n antitrust concern articulated as the protection of the competitive process does not give us much help unless we have some background substance to tell us what is intelligent competition policy and what is not.”); Elhauge, *supra* note 367 (arguing that a “competitive process” standard that lacks any supplemental benchmark “amounts to a conclusory I-know-it-when-I-see-it test”); John M. Newman, *Procompetitive Justifications in Antitrust Law*, 94 IND. L.J. 501, 514 (2019) (“[T]he actual content of the competitive-process approach remains mercurial, a cipher. The scholarly arguments in favor of it never seem to identify what, exactly, constitutes the ‘competitive process.’”); Daniel A. Crane, *Four Questions for the Neo-Brandeisians*, COMPETITION POL’Y INT’L ANTITRUST CHRON. 63, 66-67 (Apr. 2018) (“[W]hat would happen in a system that was nominally designed to protect consumers, workers, labor unions, small businesses, new entrants, and existing competitors all at once? Since the interests of those groups are often in conflict, courts and agencies would have to pick their favorites on the fly, without any objective principle to decide among them.”).

³⁷⁷ See *infra* “Self-Preferencing / Non-Discrimination Rules.”

analysis to justify holdings narrowing various aspects of antitrust doctrine. Herbert J. Hovenkamp, *Antitrust Error Costs*, U. PA. J. BUS. L. 293, 295-96 (2022) (collecting cases).

Courts and commentators have grappled with error-cost issues in digital markets. In its 2001 decision in *United States v. Microsoft Corp.*, the D.C. Circuit relied on the novelty of platform software products to conclude that the rule of reason—rather than the traditional rule of *quasi-per-se* illegality—applied to a challenged tying arrangement involving such products. 253 F.3d 34, 89-90 (D.C. Cir. 2001) (per curiam). Other courts and commentators have likewise emphasized the complexity and dynamism of tech markets in arguing for a cautious approach to antitrust intervention. See *FTC v. Qualcomm Inc.*, 969 F.3d 974, 990-91 (9th Cir. 2020); Rachel S. Tennis & Alexander Baier Schwab, *Business Model Innovation and Antitrust Law*, 29 YALE J. ON REG. 307, 319 (2012).

This reasoning is controversial. Some observers have mounted general challenges to the claim that error costs justify permissive antitrust doctrine. See, e.g., Jonathan B. Baker, *Taking the Error Out of “Error Cost” Analysis: What’s Wrong with Antitrust’s Right*, 80 ANTITRUST L.J. 1, 8-12, 23-25 (2015) (disputing the arguments that markets are self-correcting and that erroneous judicial precedent is more durable than market power).

Others have focused their critique on digital markets. For example, John Newman—now the Deputy Director of the FTC’s Bureau of Competition—has argued that false negatives in tech markets are far more common and costly than false positives. John M. Newman, *Antitrust in Digital Markets*, 72 VAND. L. REV. 1497, 1502 (2019). In particular, Newman contends that the structure of many digital markets insulates incumbents from competitive threats; that digital markets provide incumbents with unique anticompetitive strategies; and that challenged conduct in digital markets typically has few redeeming benefits. *Id.* at 1503-48. These features, he maintains, justify more vigilant antitrust scrutiny of tech markets, contrary to what he characterizes as the “orthodox” view of error costs. *Id.* at 1502.

These error-cost debates have important implications for the choice between adjudication and regulation as enforcement mechanisms and the appropriate content of antitrust doctrine.

Scoping Reform Proposals

Reform proposals that would go beyond general antitrust to impose sectoral competition regulations raise additional questions of policy design. Two general models have emerged.

One would apply special regulations to digital platforms that offer specified services and meet certain quantitative and qualitative criteria intended to capture platforms with bottleneck power over business users.³⁷⁸ Because proposals in this category involve the designation of covered platforms by regulators, this report refers to this strategy as the “designated-platform approach.”³⁷⁹

The second model is narrower. While the designated-platform approach would apply the same set of regulations to covered firms in a range of markets (e.g., social networking, e-commerce, online search), some legislation would apply only to individual markets.³⁸⁰ This report refers to this strategy as the “market-specific approach.”

The subsections below review these two models for sector-specific competition regulation.

The Designated-Platform Approach

Policymakers in the United States and EU have explored the designated-platform approach. The EU has adopted legislation titled the Digital Markets Act, which applies special regulations to

³⁷⁸ See *infra* “The Designated-Platform Approach.”

³⁷⁹ As drafted, some of these proposals would apply special regulations to platforms meeting the relevant criteria even if the platforms are not formally designated by a regulator. See, e.g., American Innovation and Choice Online Act, H.R. 3816, 117th Cong. § 2(g)(4) (2021) (Reported Version). Nevertheless, this report adopts the terminology noted above because of the central role that designation would likely have played in the bills’ application.

³⁸⁰ See *infra* “Market-Specific Regulation.”

designated “gatekeepers.”³⁸¹ Firms are to be designated as “gatekeepers” if they offer certain “core platform services”—including search engines, app stores, operating systems, advertising services, social networking, and online marketplaces—and meet certain quantitative and qualitative criteria.³⁸²

In the United States, several bills in the 117th Congress would have adopted a broadly similar approach.³⁸³ Under the bills, “covered platforms” would have included search engines, app stores, operating systems, social networks, and online marketplaces that meet specified quantitative and qualitative criteria.³⁸⁴

The proposals would have empowered the DOJ and FTC to designate a platform offering any of these services as a covered platform based on (1) quantitative thresholds involving market capitalization, annual sales, and active users, and (2) the platform’s status as a “critical trading partner.”³⁸⁵

Different bills would have imposed different types of competition regulations on designated platforms, including rules involving discriminatory conduct against business users,³⁸⁶ vertical integration,³⁸⁷ and mergers.³⁸⁸

Depending on the interpretation of the “critical trading partner” standard, the designation criteria may have encompassed the platforms discussed earlier in this report:

- Facebook, Instagram, and WhatsApp (which are controlled by Meta Platforms);
- Google Search, Android, the Google Play Store, and some of Google’s ad-tech services;
- Amazon Marketplace; and
- Apple’s iOS and App Store.³⁸⁹

Certain Microsoft properties and TikTok—a short-form video app controlled by the Chinese firm ByteDance—may also have fallen within the bills’ coverage.³⁹⁰

The designation criteria employed in these proposals raised several issues. Some commentators criticized the use of market capitalization and annual sales as factors that would have determined

³⁸¹ Press Release, Euro. Comm’n, Digital Markets Act: Rules for Digital Gatekeepers to Ensure Open Markets Enter Into Force (Oct. 31, 2022), https://ec.europa.eu/commission/presscorner/detail/en/IP_22_6423.

³⁸² *Id.*

³⁸³ American Innovation and Choice Online Act, S. 2992, 117th Cong. § 3(d) (2022) (Reported Version); Platform Competition and Opportunity Act of 2021, S. 3197, 117th Cong. § 4 (2021); ACCESS Act of 2021, H.R. 3849, 117th Cong. § 6 (2021); Platform Competition and Opportunity Act of 2021, H.R. 3826, 117th Cong. § 4 (2021); Ending Platform Monopolies Act, H.R. 3825, 117th Cong. § 6 (2021); H.R. 3816 at § 2(d).

³⁸⁴ *See, e.g.*, S. 2992 § 2(a)(9).

³⁸⁵ *See, e.g., id.* §§ 2(a)(5), 3(d).

³⁸⁶ S. 2992; H.R. 3816.

³⁸⁷ H.R. 3825.

³⁸⁸ H.R. 3826. Another proposal—which would have imposed interoperability and data-portability obligations on covered platforms—employed the same general designation standards as the other bills, but would have provided for firm-specific standards rather than categorical regulatory treatment of covered firms. H.R. 3849.

³⁸⁹ Leah Nylen, *Tech Antitrust Bill Threatens to Break Apple, Google’s Grip on the Internet*, BLOOMBERG (July 26, 2022), <https://www.bloomberg.com/graphics/2022-tech-antitrust-bill/#xj4y7vzkg>.

³⁹⁰ *Id.*

a firm's regulatory status.³⁹¹ Those criteria, they contended, have little relevance for a platform operator's ability to harm competition, which instead depends on a firm's market power.³⁹² As discussed, courts typically assess claims of market power by evaluating a firm's size within a relevant antitrust market—not its absolute size.³⁹³ Critics of the designated-platform bills thus argued that the proposals employed arbitrary designation criteria intended to single out a small handful of firms.³⁹⁴

The bills sought to address some of these concerns about arbitrariness with the additional requirement that covered platforms include only “critical trading partners”—a term defined to mean persons with the ability to “restrict or impede” a business user's access to customers or tools or services needed to effectively serve customers.³⁹⁵ This phrase would have represented a novel addition to the antitrust lexicon.

The use of the new “critical trading partner” language instead of the more familiar concept of market power may have been a response to some of the more demanding elements of market-power doctrine. Market definition—which is required if a plaintiff seeks to establish market power via market-share evidence—often involves a costly and time-consuming battle of economic experts.³⁹⁶ The “critical trading partner” terminology may have been motivated in part by a desire to ease these burdens.

Some commentators have also lodged theoretical objections to the centrality of market definition in contemporary antitrust.³⁹⁷ Among other things, they have highlighted the limitations of binary market analysis when it comes to differentiated products.³⁹⁸ Products that fall within a relevant

³⁹¹ Erik Hovenkamp, *Proposed Antitrust Reforms in Big Tech: What Do They Mean for Competition and Innovation?*, COMPETITION POLICY INT'L ANTITRUST CHRONICLE 15, 22 (July 2022) [hereinafter “Hovenkamp, *Proposed Antitrust Reforms*”]; AURELIAN PORTUESE, INFO. TECH. & INNOVATION FDN., THE REVISED (BUT UNCORRECTED) VERSION OF THE KLOBUCHAR BILL (2022), <https://www2.itif.org/2022-revised-uncorrected-klobuchar-bill.pdf>; Comments of the American Bar Association Antitrust Law Section Regarding the American Innovation and Choice Online Act (S. 2992) Before the 117th Congress 8 (Apr. 27, 2022), https://www.americanbar.org/content/dam/aba/administrative/antitrust_law/comments/at-comments/2022/comments-aico-act.pdf [hereinafter “ABA Letter”].

³⁹² Hovenkamp, *Proposed Antitrust Reforms*, *supra* note 391, at 22; PORTUESE, *supra* note 391; ABA Letter, *supra* note 391, at 8.

³⁹³ ELHAUGE, *supra* note 30, at 226.

³⁹⁴ E.g., Herbert Hovenkamp, *Gatekeeper Competition Policy* 18 (U. of Penn., Inst. for L. & Econ., Research Paper No. 23-08, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4347768 [hereinafter “Hovenkamp, *Gatekeeper Competition Policy*”] (arguing that the strategy of designating platforms based on size rather than market share suggests an intent to protect the rivals of covered platforms from aggressive competition rather than a desire to protect consumers); PORTUESE, *supra* note 391.

³⁹⁵ E.g., American Innovation and Choice Online Act, H.R. 3816, 117th Cong. §§ 2(g)(4)(B)(iii), 2(g)(5) (2021) (Reported Version). One of the bills defined the term “critical trading partner” to mean a person with the ability to “restrict or materially impede” a business user's access to customers or tools needed to effectively serve customers. American Innovation and Choice Online Act, S. 2992, 117th Cong. § 2(a)(6) (2022) (Reported Version) (emphasis added). For a more detailed discussion of the American Innovation and Choice Online Act, see CRS Report R47228, *The American Innovation and Choice Online Act*, by Jay B. Sykes.

³⁹⁶ See Hovenkamp, *The Rule of Reason*, *supra* note 27, at 98–99 (discussing the administrative costs associated with the rule of reason); John E. Lopatka & William H. Page, *Economic Authority and the Limits of Expertise in Antitrust Cases*, 90 CORNELL L. REV. 617, 659–60 (2005) (noting that modern courts recognize that “market definition requires the sophisticated use of data and theory,” which in turn requires expert testimony).

³⁹⁷ Louis Kaplow, *Why (Ever) Define Markets?*, 124 HARV. L. REV. 437, 476–79 n.78–79 (2010) (cataloguing academic criticisms of the role that market definition plays under current law).

³⁹⁸ Hovenkamp, *Platform Monopoly*, *supra* note 279, at 1961 (“If a market is product-differentiated, any conclusion about market definition is wrong.”); Joseph Farrell & Carl Shapiro, *Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition*, 10 B.E. J. OF THEORETICAL ECON. art. 9 at 4 (2010) (“Product

antitrust market, for example, all count as equally effective substitutes for the product at issue; the market-definition paradigm does not consider different rates of substitution among products within a relevant market.³⁹⁹ Similarly, firms deemed to fall outside a relevant market are treated as if they exert no competitive pressure on a defendant.⁴⁰⁰

Reality is often more nuanced. In markets with differentiated products—like many technology markets—there may be a range of firms that compete with a defendant to various degrees. Singling out a specific market boundary along this type of continuum may thus yield inaccurate assessments of market power.⁴⁰¹

Other commentators have expressed narrower concerns about current market-power doctrine. For example, some have argued that the Supreme Court’s 2018 decision in *Ohio v. American Express* (*Amex*)⁴⁰²—which adopted special market-definition rules for two-sided transaction platforms—may hamper antitrust enforcement against some tech firms.⁴⁰³

The “critical trading partner” requirement thus appeared to respond to dissatisfaction with existing case law. However, many argued that the requirement’s precise relationship with current doctrine was unclear. The core concern of market definition—the availability of reasonable substitutes—seems relevant to whether a platform has the ability to “restrict or impede” a business user’s access to customers or necessary tools. As a result, some of the considerations that figure in market definition would potentially have played a role in evaluations of the “critical trading partner” requirement. The exact ways in which this inquiry may have differed from traditional market definition accordingly remained uncertain.

The literature also reflected different views of the requirement’s stringency. Some commentators argued that the relevant bills were “carefully targeted” because they would have applied only to “critical trading partners.”⁴⁰⁴ Others contended that the additional criterion would have been unlikely to exclude firms that met the bills’ quantitative thresholds.⁴⁰⁵ The analytical framework

differentiation can make defining the relevant market problematic, notably because products must be ruled ‘in’ or ‘out,’ creating a risk that the outcome of a merger investigation or case may turn on an inevitably artificial line-drawing exercise.”).

³⁹⁹ Hovenkamp, *Platform Monopoly*, *supra* note 279, at 1961.

⁴⁰⁰ *Id.*

⁴⁰¹ See DEVLIN, *supra* note 10, at 281-84; Franklin M. Fisher, *Diagnosing Monopoly*, 19 Q. REV. ECON. & BUS. 7, 16 (1979) (“By focusing on whether products are in or out of the market, one converts a necessarily continuous question into a question of yes or no.”).

⁴⁰² 138 S. Ct. 2274 (2018).

⁴⁰³ JAMES BESSEN, THE NEW GOLIATHS: HOW CORPORATIONS USE SOFTWARE TO DOMINATE INDUSTRIES, KILL INNOVATION, AND UNDERMINE REGULATION 157 (2022); Lina Khan, *The Supreme Court Case That Could Give Tech Giants More Power*, N.Y. TIMES (Mar. 2, 2018), <https://www.nytimes.com/2018/03/02/opinion/the-supreme-court-case-that-could-give-tech-giants-more-power.html>; but see Tim Wu, *The American Express Opinion, the Rule of Reason, and Tech Platforms*, 7 J. ANTITRUST ENF’T 117 (2019) (arguing that *Amex*’s holding is narrow and that the decision is unlikely to impede antitrust enforcement against major tech platforms).

⁴⁰⁴ Letter from Fiona M. Scott Morton, et al., to Sen. Amy Klobuchar & Sen. Charles Grassley 1 (July 7, 2022), <https://som.yale.edu/sites/default/files/2022-07/AICOA-Final-revised.pdf> (“[S. 2992’s] approach is carefully targeted in that its prohibitions apply only to platforms deemed ‘critical trading partners’—meaning they have the power to deprive business users of access to customers or access to inputs necessary for those users to run their businesses. The result is that [S. 2992’s] restrictions apply to the platforms whose market positions confer undue gatekeeping power, and no others.”).

⁴⁰⁵ Monika Schnitzer, et al., *International Coherence in Digital Platform Regulation: An Economic Perspective on the US and EU Proposals*, YALE TOBIN CTR. FOR ECON. POLICY 9 (Aug. 9, 2021), <https://tobin.yale.edu/sites/default/files/Coherence%20in%20Digital%20Platform%20Regulation.pdf>; see also *Reining in Dominant Digital Platforms: Restoring Competition to Our Digital Markets*, Hearing Before the Subcomm. on Competition Policy,

governing assessments of the “critical trading partner” standard would thus have to be fleshed out in practice, if Congress were to enact legislation employing that concept.⁴⁰⁶

The use of the “critical trading partner” language instead of a market-power requirement is not inherent to the designated-platform approach. In empowering a regulator to designate platforms for special competition regulation, Congress could consider limiting designations to firms that possess market power.

In the 117th Congress, S. 1074 would have taken that approach.⁴⁰⁷ The bill would have imposed special merger rules on “dominant digital firms”—a term defined to mean companies that provide online services and possess “dominant market power” in any market related to such services.⁴⁰⁸ Under the legislation, the FTC would have been empowered to designate companies as “dominant digital firms” based on their possession of “dominant market power” and several other factors, including network effects, use of exclusivity agreements, and vertical integration.⁴⁰⁹

In linking platform designation and market power, Congress could address some of the concerns discussed above by dispensing with certain elements of market-power doctrine. For example, Congress could provide that market definition is not necessary to establish market power or abrogate specific decisions like *Amex*. One general antitrust bill in the 117th Congress would have made both of those changes.⁴¹⁰

Besides these issues involving designation criteria, the designated-platform approach implicates the broader question of whether the Big Tech firms (and any other designated firms) are sufficiently similar to warrant categorical regulatory treatment. As discussed, some commentators have argued that Big Tech markets share important structural similarities that justify a consistent regulatory response, while others have emphasized the differences between those markets.⁴¹¹ For proponents of new competition regulations, that issue may be the central question that determines the choice between the designated-platform approach and market-specific regulation.

Antitrust and Consumer Rights of the S. Comm. on the Judiciary (Mar. 7, 2023) (testimony of Daniel Francis, Assistant Professor of Law, New York University School of Law at 85), <https://www.judiciary.senate.gov/imo/media/doc/2023-03-07%20-%20Testimony%20-%20Francis.pdf> [hereinafter “Francis Testimony”] (arguing that the definition of “critical trading partner” in the American Innovation and Choice Online Act was “strikingly broad and vague,” and that it “appears to encompass any business that offers a desirable means of reaching customers for even a single business user”).

⁴⁰⁶ One commentator has proposed a potentially similar test for identifying dominant platforms without resorting to traditional market-power analysis. The relevant proposal would subject platforms to special competition regulations based on an assessment of their “cost of exclusion”—a concept that measures the costs to an individual or business of being excluded from a platform. HAROLD FELD, ROOSEVELT INST., *THE CASE FOR THE DIGITAL PLATFORM ACT: MARKET STRUCTURE AND REGULATION OF DIGITAL PLATFORMS* 41-47 (May 8, 2019), <https://rooseveltinstitute.org/wp-content/uploads/2020/07/RI-Case-for-the-Digital-Platform-Act-201905.pdf>. For a discussion of the mathematics involved in calculating a firm’s “cost of exclusion,” see *id.* at 43-44.

⁴⁰⁷ Trust-Busting for the Twenty-First Century Act, S. 1074, 117th Cong. § 4 (2021).

⁴⁰⁸ *Id.*

⁴⁰⁹ *Id.*

⁴¹⁰ Competition and Antitrust Law Enforcement Reform Act of 2021, S. 225, 117th Cong. §§ 9, 13 (2021); see also DEVLIN, *supra* note 10, at 282 (calling for a reduced role for market definition in antitrust doctrine); HJC REPORT, *supra* note 11, at 399 (arguing that Congress should adopt legislation overriding *Amex* and providing that market definition is not required to prove an antitrust violation). For a defense of market definition, see Gregory J. Werden, *Why (Ever) Define Markets? An Answer to Professor Kaplow*, 78 ANTITRUST L.J. 729 (2013). For a defense of the Supreme Court’s *Amex* decision, see Geoffrey A. Manne, *In Defence of the Supreme Court’s “Single Market” Definition in Ohio v. American Express*, 7 J. ANTITRUST ENFORCEMENT 104 (2019).

⁴¹¹ See *supra* “Market Structure and the Efficacy of *Ex Post* Adjudication.”

Market-Specific Regulation

Some proposals for sectoral competition regulation rely on a more targeted strategy than the designated-platform approach. Instead of applying the same set of regulations to designated firms operating across a range of different tech markets, policymakers could adopt regulations tailored to individual markets. In the 117th Congress, lawmakers introduced bills targeting two industries: app stores and digital advertising.⁴¹²

The Open App Markets Act (OAMA) would have established competition regulations for large app stores.⁴¹³ Among other things, the legislation would have prohibited operators of covered app stores from tying their app stores to their payment processors, preferencing their own apps in search results, and using nonpublic information derived from third-party apps to compete with those apps.⁴¹⁴ The bill's requirements are discussed in greater detail in "*Ex Ante* Conduct Rules" *infra*.

The Competition and Transparency in Digital Advertising Act would have imposed structural-separation requirements and conduct rules on certain digital-advertising platforms.⁴¹⁵ The legislation would have prohibited firms with more than \$20 billion in annual digital-advertising revenue from owning platforms that operate in more than one of the key nodes in the ad-tech supply chain (ad exchanges, sell-side brokerages, and buy-side brokerages).⁴¹⁶ It also would have required firms with more than \$5 billion in annual digital-advertising revenue to abide by customer-protection rules involving best execution, transparency, and conflicts of interest.⁴¹⁷

Choice of Enforcers

A new regulatory regime for large tech platforms would require the selection of a regulator. Several options are available. The designated-platform bills discussed above would have empowered the DOJ and FTC to designate firms for special regulation.⁴¹⁸ One of those bills—which included interoperability and data-portability mandates—would have granted the FTC rulemaking authority to develop standards implementing the relevant requirements.⁴¹⁹ The others would have given enforcement authority to the DOJ and FTC, but did not include explicit grants

⁴¹² Competition and Transparency in Digital Advertising Act, S. 4258, 117th Cong. (2022); Open App Markets Act, S. 2710, 117th Cong. (2022) (Reported Version); Competition and Transparency in Digital Advertising Act, H.R. 7839, 117th Cong. (2022); Open App Markets Act, H.R. 7030, 117th Cong. (2022); Open App Markets Act, H.R. 5017, 117th Cong. (2021).

⁴¹³ S. 2710; H.R. 7030; H.R. 5017.

⁴¹⁴ S. 2710 § 3; H.R. 7030 § 3; H.R. 5017 § 3.

⁴¹⁵ S. 4258; H.R. 7839.

⁴¹⁶ S. 4258 § 2; H.R. 7839 § 2. As discussed in *supra* "Digital Advertising," the DOJ has filed a monopolization lawsuit seeking to compel Google to divest some of its ad-tech businesses.

⁴¹⁷ S. 4258 § 2; H.R. 7839 § 2.

⁴¹⁸ American Innovation and Choice Online Act, S. 2992, 117th Cong. § 3(d) (2022) (Reported Version); Platform Competition and Opportunity Act of 2021, S. 3197, 117th Cong. § 4 (2021); ACCESS Act of 2021, H.R. 3849, 117th Cong. § 6 (2021); Platform Competition and Opportunity Act of 2021, H.R. 3826, 117th Cong. § 4 (2021); Ending Platform Monopolies Act, H.R. 3825, 117th Cong. § 6 (2021); American Innovation and Choice Online Act, H.R. 3816, 117th Cong. § 2(d) (2021) (Reported Version).

⁴¹⁹ H.R. 3849 § 6(c).

of rulemaking power.⁴²⁰ Some of the bills also would have given enforcement authority to state attorneys general.⁴²¹

Some commentators have endorsed an alternative approach involving the creation of a new specialist regulator for large digital platforms.⁴²² In certain proposals, this regulator would be an entirely new agency,⁴²³ while others would establish a new branch with special powers within an existing antitrust authority.⁴²⁴ In the 117th Congress, the Digital Platform Commission Act would have taken the former approach and created a new Federal Digital Platform Commission tasked with regulating “systemically important digital platforms.”⁴²⁵

Reform Proposals

With the conceptual ground cleared, this final section of the report discusses the substance of various proposals to reform the competition laws governing Big Tech platforms. The proposals fall into five categories: (1) *ex ante* conduct rules, (2) structural separation and line-of-business restrictions, (3) special merger rules, (4) interoperability and data-portability mandates, and (5) changes to general antitrust doctrine.

Ex Ante Conduct Rules

As discussed, some commentators and legislators have advocated the adoption of prophylactic conduct rules for Big Tech platforms, which would supplement general antitrust law.⁴²⁶ This subsection reviews several of these proposals for *ex ante* competition regulations.

Self-Preferencing / Non-Discrimination Rules

The ability of large digital platforms to preference their own offerings is a recurring concern in debates over antitrust reform. As discussed, several of the Big Tech firms have been accused of engaging in various forms of self-preferencing. Google has allegedly favored its own verticals in general search results, its own app store and apps through its control of Android, and its own ad-tech businesses through its presence in multiple segments of the ad-tech market.⁴²⁷ Apple has likewise been accused of preferencing its own apps and app store,⁴²⁸ while Amazon has allegedly privileged its own private-label products and products that use its logistics service.⁴²⁹

⁴²⁰ S. 2992; S. 3197; H.R. 3826; H.R. 3825; H.R. 3816.

⁴²¹ S. 2992 § 2(c)(1)(C); S. 3197 § 5(a)(3); H.R. 3826 § 5(a); H.R. 3816 § 2(h)(1)(C). Some of the bills also would have created private rights of action. S. 3197 § 7; H.R. 3826 § 7; H.R. 3816 § 6.

⁴²² STIGLER REPORT, *supra* note 333, at 104-06; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 8.

⁴²³ Rogerson & Shelanski, *supra* note 342, at 1916; STIGLER REPORT, *supra* note 333, at 104-06.

⁴²⁴ ACCC Report, *supra* note 162, at 31; *see also* UK DIGITAL COMPETITION REPORT, *supra* note 333, at 10 (noting both options); FELD, *supra* note 406, at 188-95 (discussing the advantages and disadvantages of creating a new digital-platform regulator).

⁴²⁵ Digital Platform Commission Act of 2022, S. 4201, 117th Cong. (2022); Digital Platform Commission Act of 2022, H.R. 7858, 117th Cong. (2022).

⁴²⁶ S. 2992; H.R. 3816; OECD REGULATION REPORT, *supra* note 340, at 9-15; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 62-63.

⁴²⁷ *See supra* “Google.”

⁴²⁸ *See supra* “Apple.”

⁴²⁹ *See supra* “Amazon.”

The primary concern with this type of conduct involves monopoly leveraging.⁴³⁰ As discussed, leveraging theories of harm can take two forms. Offensive leveraging occurs when a firm attempts to use monopoly power in a primary market to extract additional profits from a secondary market.⁴³¹ By contrast, defensive leveraging involves the use of monopoly power to gain an advantage in a secondary market so as to preserve a primary market monopoly—for example, by eliminating competitive threats that might emerge from the secondary market.⁴³²

Defensive leveraging may be a viable theory of harm under existing monopolization law.⁴³³ Offensive-leveraging claims, however, cannot succeed under Section 2 absent evidence that a defendant had a dangerous probability of *monopolizing* a secondary market; mere harm to competition in the secondary market is not sufficient.⁴³⁴

For some of the self-preferencing allegations against Big Tech firms, these limitations may preclude monopolization claims.⁴³⁵ It may be unlikely, for example, that Amazon will achieve monopoly power over most of the products that it sells on its marketplace. As a result, it would be difficult to challenge the preferential display of those products under an offensive-leveraging theory.⁴³⁶ This type of alleged favoritism may also be a weak foundation for a defensive-leveraging or monopoly-maintenance case; it is not clear that Amazon’s alleged elevation of inferior products helps it maintain a putative e-commerce monopoly.

Similarly, the case law governing unilateral refusals to deal is not an attractive vehicle for challenging platform self-preferencing. A platform operator’s favorable treatment of its own verticals relative to rivals that use its platform is typically less harmful to rivals than an outright refusal of access.⁴³⁷ Because antitrust imposes access duties only in a narrow set of circumstances, many forms of self-preferencing are unlikely to constitute unlawful refusals to deal.⁴³⁸

⁴³⁰ See generally Todd, *supra* note 249.

⁴³¹ GIUSEPPE COLANGELO, INT’L CTR. FOR L. & ECON., ANTITRUST UNCHAINED: THE EU’S CASE AGAINST SELF-PREFERENCING (2022), https://laweconcenter.org/resources/antitrust-unchained-the-eus-case-against-self-preferencing/?doing_wp_cron=1675175836.8782548904418945312500.

⁴³² Robin Cooper Feldman, *Defensive Leveraging in Antitrust*, 87 GEO. L.J. 2079, 2080 (1999); Matthew Levinton, *Defensive Leveraging as Monopolization*, AM. BAR ASS’N (June 22, 2022), https://www.americanbar.org/groups/antitrust_law/resources/newsletters/defensive-leveraging-as-monopolization.

⁴³³ See *United States v. Microsoft*, 253 F.3d 34, 67 (D.C. Cir. 2001) (per curiam).

⁴³⁴ *Verizon Commc’ns Inc. v. L. Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398, 410 n.4 (2004); see also Levinton, *supra* note 432.

⁴³⁵ See GREGORY J. WERDEN, THE FOUNDATIONS OF ANTITRUST: EVENTS, IDEAS, AND DOCTRINES 355 (2020) (discussing leveraging claims under U.S. law and concluding that “[s]elf-preferencing by digital platform monopolists will be minimally constrained in the United States unless Congress creates a new regulatory structure for digital platforms”).

⁴³⁶ Herbert J. Hovenkamp, *Monopolizing and the Sherman Act* 32 (Penn. Carey L. Sch., Research Paper, No. 2769, 2022), https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=3772&context=faculty_scholarship.

⁴³⁷ Hovenkamp, *Antitrust Duty to Deal*, *supra* note 359, at 1546.

⁴³⁸ *Trinko*, 540 U.S. at 409. Refusal-to-deal doctrine is discussed in greater detail in *supra* “Refusals to Deal.” The essential-facilities doctrine is also unlikely to preclude many forms of platform self-preferencing for a variety of reasons, even if that doctrine remains good law. For an overview of the difficulties facing an essential-facilities challenge to “search bias,” for example, see Marina Lao, *Search, Essential Facilities, and the Antitrust Duty to Deal*, 11 NW. J. TECH. & INTELL. PROP. 275, 298-304 (2013).

In the 117th Congress, the American Innovation and Choice Online Act (AICOA) would have responded to these doctrinal difficulties by prohibiting covered platform operators from preferencing their own products and services in certain circumstances.⁴³⁹

Different versions of the legislation structured the prohibition differently.

The Senate Judiciary Committee reported a version of the AICOA that would have prohibited covered platform operators from preferencing their own products “in a manner that would materially harm competition.”⁴⁴⁰

The House Judiciary Committee, by contrast, reported a version of the bill that would have prohibited platform self-preferencing but granted defendants certain competition-related affirmative defenses.⁴⁴¹ In particular, the reported House bill would have allowed defendants to avoid liability if they established by clear and convincing evidence that their conduct would (1) not harm “the competitive process by restricting or impeding legitimate activity by business users,” or (2) increase “consumer welfare.”⁴⁴²

These competing approaches raise a central issue in the debate over conduct rules for Big Tech platforms: the role of business justifications. As discussed, antitrust has developed a general burden-shifting framework that often allows defendants to rebut a *prima facie* case of competitive harm by establishing procompetitive justifications for their conduct.⁴⁴³ The opportunity to offer such arguments likely reduces the incidence of false positives.⁴⁴⁴ One of the primary motivations for *ex ante* conduct rules, however, is a desire to avoid the delays and expense that accompany this type of fact-intensive analysis.⁴⁴⁵ The proper framework for evaluating business justifications thus implicates a key trade-off facing proponents of competition regulation.

The AICOA’s resolution of that trade-off was not entirely clear. As discussed, different versions of the bill employed different approaches to the issue of competitive harm. The self-preferencing prohibition in the reported Senate bill would have made “material harm to competition” an element of the government’s case-in-chief.⁴⁴⁶ The reported House bill, by contrast, offered competition-related affirmative defenses subject to a clear-and-convincing-evidence standard.⁴⁴⁷

That difference might suggest that the reported Senate bill took a more defendant-friendly approach than the reported House bill. Some lawmakers and commentators, however, argued that

⁴³⁹ American Innovation and Choice Online Act, S. 2992, 117th Cong. § 3(a)(1) (2022) (Reported Version); American Innovation and Choice Online Act, H.R. 3816, 117th Cong. § 2(a)(1) (2021) (Reported Version). The OAMA included a more limited prohibition of self-preferencing related to app-store search results. The bill would have prohibited covered firms from “unreasonably preferencing or ranking” their own apps in search results. Open App Markets Act, S. 2710, 117th Cong. § 3(e)(1) (2022) (Reported Version); Open App Markets Act, H.R. 7030, 117th Cong. § 3(e)(1) (2021); Open App Markets Act, H.R. 5017, 117th Cong. § 3(e)(1) (2021).

⁴⁴⁰ S. 2992 § 3(a)(1).

⁴⁴¹ H.R. 3816 §§ 2(a)(1), (c)(1), (c)(3).

⁴⁴² *Id.* §§ 2(c)(1), (c)(3). The bills offered separate affirmative defenses related to user privacy, data security, and compliance with other laws. S. 2992 § 3(b)(1); H.R. 3816 § 2(c)(2). The reported Senate version of the bill also provided an affirmative defense related to the maintenance or enhancement of a platform’s “core functionality.” S. 2992 § 3(b)(1)(C).

⁴⁴³ *See, e.g.,* *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2284 (2018) (describing the framework in a Section 1 case); *Viamedia, Inc. v. Comcast Corp.*, 951 F.3d 429, 463-64 (7th Cir. 2020) (describing the framework in a Section 2 case).

⁴⁴⁴ *See, e.g.,* Crane, *supra* note 343, at 55.

⁴⁴⁵ *See, e.g.,* Chopra & Khan, *supra* note 343, at 360.

⁴⁴⁶ S. 2992 § 3(a)(1).

⁴⁴⁷ H.R. 3816 §§ 2(c)(1), (c)(3).

the meaning of the “materially harm competition” standard in the Senate-reported bill was unclear.⁴⁴⁸ Among other things, they highlighted the novelty of the standard’s materiality language, the absence of a market-power requirement, and the bill’s omission of an explicit consumer-welfare defense.⁴⁴⁹

Those factors made it difficult to predict the type of framework a court might have adopted in applying the “materially harm competition” standard. In particular, it appeared unclear whether that language was intended to broaden the types of competitive harm that antitrust has traditionally recognized.⁴⁵⁰

This issue overlapped with questions about the relationship between the “materially harm competition” standard and antitrust’s existing analytical tools. For example, if that standard was intended to implement something similar to traditional rule-of-reason burden shifting—which allows defendants to offer procompetitive justifications for their conduct—then litigation under the AICOA may have been nearly as costly and time-consuming as Sherman Act lawsuits.⁴⁵¹ On the other hand, an interpretation of the bill that did not permit consumer-welfare or efficiency justifications would have represented a departure from the prevailing framework for assessing competitive harm.⁴⁵² If the AICOA had been enacted, courts may have been reluctant to move away from these existing analytical tools without clearer legislative direction.

⁴⁴⁸ Hovenkamp, *Gatekeeper Competition Policy*, *supra* note 394, at 24 (arguing that the meaning of the “materially harm competition” standard was unclear and that “[i]f the AICOA is redrafted, this provision more than any other needs clarification”); A. Douglas Melamed, *Why I Think Congress Should Not Enact the American Innovation and Choice Online Act*, COMPETITION POLICY INT’L (June 19, 2022), <https://www.competitionpolicyinternational.com/why-i-think-congress-should-not-enact-the-american-innovation-and-choice-online-act/> (arguing that the meaning of the “materially harm competition” standard was not clear); ABA Letter, *supra* note 391, at 5, 9-11 (similar); Transcript of Markup of S. 2992 at 53 (Jan. 20, 2022) (on file with author) [hereinafter “S. 2992 Markup Transcript”] (Sen. Thom Tillis) (“It’s not clear how existing competitor or competition jurisprudence would support or be changed by [S. 2992]. The purpose of competition law is to eliminate harm to consumers not to pick winners and losers. I’m also aware of the spirited debate [over] whether decades of antitrust law based on [the] consumer-welfare standard should be put in the burn pit. I’m open to having [a] separate discussion about potential changes to that standard and I hope that we will. But as it stands in relation to this bill, what standard will enforcers look to[?] What about amendments [that] would insert [the] consumer welfare standard back into the definition of material harm to competition?”).

⁴⁴⁹ Melamed, *supra* note 448; ABA Letter, *supra* note 391, at 6; S. 2992 Markup Transcript, *supra* note 448, at 53.

⁴⁵⁰ Francis Testimony, *supra* note 405, at 55 (“[H]arm to competition’ is just not a phrase with a single self-executing meaning. It *could* be interpreted to mean welfare harm in a manner we would associate with traditional antitrust; or it could be interpreted to mean ‘injury to rivals[.]’”) (emphasis in original); Hovenkamp, *Gatekeeper Competition Policy*, *supra* note 394, at 23-24 (“If competition is defined in an economically sensible way to refer to reduced market output and higher prices, then the statute might end up limiting its reach to conduct posing a realistic threat of competitive harm. If it means something else, such as merely injuring a rival or placing it at a disadvantage on that particular platform as opposed to the market as a whole, then it could end up doing a great deal of harm.”).

⁴⁵¹ See Francis, *supra* note 48, at 823-24 (arguing that antitrust rules allowing defendants to offer justifications for challenged conduct would be “unlikely to lighten the adjudicative load much”). Under this reading of the bill, the self-preferencing prohibition still would have modified existing law by substituting the designation criteria discussed earlier in this report for a market-power requirement. The prohibition also would have potentially covered conduct that currently escapes liability because of the limitations on monopoly-leveraging and refusal-to-deal claims discussed in this section.

⁴⁵² *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2284 (2018); *United States v. Microsoft Corp.*, 253 F.3d 34, 59 (D.C. Cir. 2001) (per curiam); Schnitzer, et al., *supra* note 405, at 20 (interpreting the AICOA to not allow platforms to defend challenged conduct on efficiency grounds, “as might be possible in a standard antitrust case”). The absence of consumer-welfare and efficiency justifications would, however, be consistent with some conceptions of “competition” that prevailed in earlier periods of antitrust history and with the stated aims of the recent Neo-Brandeisian movement. See *supra* “The Goals of Antitrust” & “Substantive Antitrust Doctrine.”

Given the potential expansiveness of a general self-preferencing prohibition,⁴⁵³ these issues involving competitive harm and business justification would likely represent key questions for any similar legislative efforts.⁴⁵⁴ Those issues also underscore that the distinction between adjudicative and regulatory approaches to competition issues in the tech sector may be more of a continuum than an either/or question. Unless *ex ante* rules entail categorical prohibitions based on the form of challenged conduct, the competitive-effects analysis that characterizes modern antitrust adjudication would likely play some role in a new regulatory regime.

Tying

Besides its self-preferencing prohibition, the AICOA would have barred covered platform operators from tying access to or preferred placement on their platforms to the purchase or use of other products or services.⁴⁵⁵ The OAMA included a narrower tying provision. The bill would have prohibited covered firms from conditioning access to their app stores on the use of their payment processors.⁴⁵⁶

As discussed, existing antitrust doctrine prohibits tying in certain circumstances. Under current law, a plaintiff can prevail on a tying claim by showing that:

1. The defendant offered two distinct products;
2. The defendant conditioned the sale of one product (the tying product) on the purchase of the other product (the tied product);
3. The defendant possessed sufficient economic power in the tying product market to coerce purchasers into acceptance of the tied product; and
4. The defendant's conduct affected a "not insubstantial" amount of interstate commerce in the tied product.⁴⁵⁷

Some courts have also required plaintiffs to demonstrate that a tying arrangement had anticompetitive effects in the tied product market.⁴⁵⁸

Unlike this test, neither the AICOA nor the OAMA contained explicit market-power requirements. Instead, as discussed, the AICOA used certain quantitative criteria and a "critical trading partner" standard to identify the platforms that would be subject to its prohibitions.⁴⁵⁹ The OAMA, in contrast, employed only a quantitative threshold. The bill would have applied to companies that control app stores with more than 50 million U.S. users.⁴⁶⁰

⁴⁵³ See Hovenkamp, *Proposed Antitrust Reforms*, *supra* note 391, at 18 (noting the ubiquity of self-preferencing by vertically integrated firms); Randy Picker, *How Would the Big Tech Self-Preferencing Bill Affect Users?*, PROMARKET (June 16, 2022), <https://www.promarket.org/2022/06/16/how-would-the-big-tech-self-preferencing-bill-affect-users/> (reviewing possible implications of a general self-preferencing prohibition for Big Tech platforms).

⁴⁵⁴ See D. Daniel Sokol, *A Framework for Digital Platform Regulation*, 17 COMPETITION L. INT'L 95, 102 (2021) (discussing the role that defenses and competitive-effects analysis may play in a regulatory regime for digital platforms).

⁴⁵⁵ American Innovation and Choice Online Act, S. 2992, 117th Cong. § 3(a)(5) (2022) (Reported Version); American Innovation and Choice Online Act, H.R. 3816, 117th Cong. § 2(b)(2) (2021) (Reported Version).

⁴⁵⁶ Open App Markets Act, S. 2710, 117th Cong. § 3(a)(1) (2022) (Reported Version); Open App Markets Act, H.R. 7030, 117th Cong. § 3(a)(1) (2021); Open App Markets Act, H.R. 5017, 117th Cong. § 3(a)(1) (2021).

⁴⁵⁷ HOVENKAMP, *supra* note 70, at 435 (summarizing the test employed by most federal circuit courts of appeals).

⁴⁵⁸ *Id.* at 435-36.

⁴⁵⁹ See *supra* "The Designated-Platform Approach."

⁴⁶⁰ S. 2710 § 2(3); H.R. 7030 § 2(3); H.R. 5017 § 2(3).

Both bills also would have departed from the tying test employed by some federal courts of appeals that requires proof of anticompetitive effects.⁴⁶¹ The AICOA's tying prohibition would have instead offered defendants certain competition-related affirmative defenses.⁴⁶² The OAMA's enforcement would not have involved competitive-effects analysis.⁴⁶³

In addition to ties involving app stores and payment processors, the AICOA's tying provision potentially would have implicated several of the other practices discussed above, including some of Google's conduct in ad-tech markets and the link between favorable placement on Amazon's marketplace and use of Amazon's logistics service.⁴⁶⁴

Interoperability and Data Access

Other proposals involve the ability of business users to interoperate with and access data they generate on covered platforms.

The AICOA, for example, included an interoperability provision that would have prohibited covered platform operators from restricting or impeding the ability of business users to interoperate with features that are available to the operator's own products or services.⁴⁶⁵ Among other conduct, the prohibition may have been directed at Facebook's alleged refusal to allow certain app developers to access Facebook Platform and Apple's alleged refusal to allow developers to access some APIs and device functionalities that are available to Apple's apps.⁴⁶⁶

The OAMA also contained interoperability requirements. The bill would have required covered companies to allow users of their operating systems to install third-party apps and app stores through means other than the covered companies' app stores.⁴⁶⁷ It also would have mandated that covered firms provide developers with access to operating-system interfaces, development information, and hardware and software features on terms that are functionally equivalent to those that covered firms offer to their own apps.⁴⁶⁸

The AICOA's data-access provision would have prohibited covered platform operators from restricting or impeding a business user from accessing or transferring data generated by the user's activities on a covered platform.⁴⁶⁹

Interoperability and data-portability issues are discussed in greater detail in "Interoperability & Data Portability" *infra*.

⁴⁶¹ See, e.g., *Kaufman v. Time Warner*, 836 F.3d 137, 141 (2d Cir. 2016); *Amey, Inc. v. Gulf Abstract & Title Inc.*, 758 F.2d 1486, 1503 (11th Cir. 1985); *Driskill v. Dallas Cowboys Football Club, Inc.*, 498 F.2d 321, 323 (5th Cir. 1974).

⁴⁶² American Innovation and Choice Online Act, S. 2992, 117th Cong. § 3(b)(2)(A) (2022) (Reported Version); American Innovation and Choice Online Act, H.R. 3816, 117th Cong. §§ 2(c)(1), (c)(3) (2021) (Reported Version).

⁴⁶³ S. 2710; H.R. 7030; H.R. 5017.

⁴⁶⁴ See *supra* "Google" & "Amazon." The tying provision in the reported Senate version of the AICOA would not have barred ties involving products that are "part of or intrinsic to" a covered platform. S. 2992 § 3(a)(5). Some commentators have argued that this exception was vague and would likely be the subject of litigation. See Francis Testimony, *supra* note 405, at 68; ABA Letter, *supra* note 391, at 5-6.

⁴⁶⁵ S. 2992 § 3(a)(4); H.R. 3816 § 2(b)(1).

⁴⁶⁶ See *supra* "Meta Platforms" & "Apple."

⁴⁶⁷ S. 2710 § 3(d)(2); H.R. 7030 § 3(d)(2); H.R. 5017 § 3(d)(2).

⁴⁶⁸ S. 2710 § 3(f); H.R. 7030 § 3(f); H.R. 5017 § 3(f).

⁴⁶⁹ S. 2992 § 3(a)(7); H.R. 3816 § 2(b)(4).

Use of Nonpublic User Data

As discussed, some Big Tech firms have been accused of using their access to user data to identify and imitate popular offerings. Amazon, for example, has allegedly used nonpublic user data to find profitable opportunities for its own private-label business.⁴⁷⁰ Apple has similarly been accused of using competitively sensitive information to replicate fast-growing apps and integrate certain functionalities into iOS.⁴⁷¹

Some proposals would prohibit this conduct. Both the AICOA and OAMA included provisions that would have barred covered companies from using nonpublic data from dependent businesses to support their own offerings.⁴⁷²

This type of prohibition has been debated. Some commentators have argued that a platform operator's imitation of rival products typically increases static efficiency by stimulating competition and lowering prices.⁴⁷³ Others have argued that a ban on the use of nonpublic data by platform operators would boost dynamic efficiency by protecting the incentives of other businesses to innovate.⁴⁷⁴

Most-Favored-Nation and Anti-Steering Policies

Another general category of proposals involves platform restrictions of the activities of business users in other transaction venues.

The reported House version of the AICOA would have prohibited covered platform operators from restricting a business user's pricing of its products or services or its communications on a covered platform regarding other transaction options.⁴⁷⁵ Similarly, the OAMA would have barred covered companies from restricting developers from communicating with users about "legitimate business offers," including pricing terms and product or service offerings.⁴⁷⁶

Some of the pricing restrictions targeted by the House version of the AICOA include most-favored-nation clauses (MFNs), which prohibit a platform's business users from offering lower prices on rival platforms.⁴⁷⁷ Platform MFNs may make it difficult for rivals to compete with a dominant platform by charging lower commissions, because such clauses prevent business users from passing along those savings to consumers.⁴⁷⁸

The primary procompetitive benefit proffered in defense of MFNs involves concerns about free-riding. The basic worry is that, absent an MFN, consumers will use a highly functional platform to search for and compare products, but then make their purchases on a different

⁴⁷⁰ See *supra* "Amazon."

⁴⁷¹ See *supra* "Apple."

⁴⁷² S. 2992 § 3(a)(6); H.R. 3816 § 2(b)(3); S. 2710 § 3(c); H.R. 7030 § 3(c); H.R. 5017 § 3(c).

⁴⁷³ Francis, *supra* note 48, at 832; Hovenkamp, *Platform Monopoly*, *supra* note 279, at 2015; Sokol, *supra* note 454, at 102.

⁴⁷⁴ Andre Hagiu, Tat-How Teh & Julian Wright, *Should Platforms Be Allowed to Sell on Their Own Marketplaces?*, 53 RAND. J. ECON. 297, 32 (2022).

⁴⁷⁵ H.R. 3816 § 2(b)(6), (b)(8).

⁴⁷⁶ S. 2710 § 3(b); H.R. 7030 § 3(b); H.R. 5017 § 3(b).

⁴⁷⁷ Baker & Scott Morton, *supra* note 262, at 2181. As discussed, Amazon has faced a lawsuit challenging its pricing restrictions, though the nature of the relevant policies was disputed. See *supra* "Amazon."

⁴⁷⁸ Baker & Scott Morton, *supra* note 262, at 2195 n.82. Platform MFNs may also facilitate collusion among sellers on a platform. *Id.* at 2182.

low-cost platform.⁴⁷⁹ Under those conditions, platforms may lack incentives to invest in expensive site features like an attractive design or effective comparison tools, even though those features benefit consumers.⁴⁸⁰

The literature has distinguished between “narrow” platform MFNs (which restrict a seller’s prices only on the seller’s own website) and “wide” platform MFNs (which restrict a seller’s prices on all other platforms).⁴⁸¹ Some theoretical analyses have concluded that narrow MFNs are more likely to be procompetitive than wide MFNs.⁴⁸²

The reported House version of the AICOA would have prohibited both narrow and wide platform MFNs.⁴⁸³ Challenged restrictions would have escaped liability, however, if a platform operator established by clear and convincing evidence that its conduct would (1) not harm “the competitive process by restricting or impeding legitimate activity by business users,” or (2) increase “consumer welfare.”⁴⁸⁴

App Preinstallation

The AICOA and OAMA also included provisions prohibiting covered firms from restricting or impeding the uninstallation of preinstalled apps or changing default settings that steer users to a covered firm’s own products or services.⁴⁸⁵

These prohibitions appeared to be directed at concerns that Google and Apple have leveraged control of their operating systems to favor their own apps and app stores.⁴⁸⁶ Though the bills did not explicitly prohibit the preinstallation of a covered firm’s proprietary apps, commentators have debated whether such preinstallation would run afoul of the AICOA’s general self-preferencing prohibition.⁴⁸⁷

Structural Separation and Line-of-Business Restrictions

Several of the proposed rules discussed above respond to concerns that Big Tech firms face conflicts of interest when they operate both a digital platform and vertically related businesses that compete with platform users. The proposals sought to address those concerns by prohibiting specific categories of allegedly problematic conduct. One possible downside of this approach involves administrability.

⁴⁷⁹ *Id.* at 2183-84.

⁴⁸⁰ *Id.* at 2184.

⁴⁸¹ Schnitzer, et al., *supra* note 405, at 18 n.12.

⁴⁸² Baker & Scott Morton, *supra* note 262, at 2184 n.23 (citing examples).

⁴⁸³ American Innovation and Choice Online Act, H.R. 3816, 117th Cong. § 2(b)(8) (2021) (Reported Version).

⁴⁸⁴ *Id.* §§ 2(c)(1), (c)(3).

⁴⁸⁵ American Innovation and Choice Online Act, S. 2992, 117th Cong. § 3(a)(8) (2022) (Reported Version); H.R. 3816 § 2(b)(5); Open App Markets Act, S. 2710, 117th Cong. § 3(d)(1), (d)(3) (2022) (Reported Version); Open App Markets Act, H.R. 7030, 117th Cong. § 3(d)(1), (d)(3) (2021); Open App Markets Act, H.R. 5017, 117th Cong. § 3(d)(1), (d)(3) (2021).

⁴⁸⁶ *See supra* “Google” & “Apple.”

⁴⁸⁷ Compare Picker, *supra* note 453 (arguing that the AICOA’s self-preferencing prohibition may prohibit app preinstallation), with Hal Singer, *Rep. Cicilline’s Nondiscrimination Bill Would Offer a Lifeline to Independent App Developers*, PROMARKET (July 2, 2021), <https://www.promarket.org/2021/07/02/antitrust-self-preferencing-preinstallation-app-developers-apple/> (arguing that the AICOA would not prohibit app preinstallation).

The worry is twofold. First, conduct rules require regulators to continuously monitor the behavior of covered firms.⁴⁸⁸ Second, as discussed, the availability of affirmative defenses means that rule enforcement may entail some of the same issues of cost and timeliness that have led to dissatisfaction with the existing antitrust framework.⁴⁸⁹

Based on these potential difficulties, some commentators have argued that structural restrictions have important advantages over behavioral rules.⁴⁹⁰ Such restrictions can take two general forms. Structural regulation could involve total separation, meaning firms would be prohibited from owning both a covered platform and a business that operates on that platform.⁴⁹¹ Alternatively, regulations could mandate partial or functional separation, whereby firms would be required to house a covered platform and vertically related businesses in separate legal entities.⁴⁹²

There is precedent for these types of structural regulations, including in the railroad, banking, and telecommunications industries.⁴⁹³

In the 117th Congress, H.R. 3825 would have adopted a separations regime for covered platform operators.⁴⁹⁴ The bill would have prohibited covered platform operators from owning, controlling, or having a beneficial interest in a “line of business” that:

- utilizes the covered platform for the sale or provision of products or services;
- offers a product or service that the covered platform requires business users to purchase or utilize as a condition of accessing or receiving preferred placement on the platform; or
- gives rise to a “conflict of interest.”⁴⁹⁵

The bill would have provided that “conflicts of interest” arise when a platform operator’s ownership or control of another “line of business” creates the incentive and ability for its platform to (1) advantage the platform operator’s products or services over those of competitors, or (2) exclude or disadvantage the products or services of competitors.⁴⁹⁶

These types of proposals have generated debate. Critics of separation requirements have argued that a platform’s entry into new markets typically benefits consumers.⁴⁹⁷ For example, by selling its own private-label products on its marketplace, Amazon may offer consumers low-cost

⁴⁸⁸ HJC REPORT, *supra* note 11, at 381; Khan, *Platforms and Commerce*, *supra* note 274, at 1036.

⁴⁸⁹ See, e.g., Francis, *supra* note 48, at 823-24.

⁴⁹⁰ HJC REPORT, *supra* note 11, at 381; Khan, *Platforms and Commerce*, *supra* note 274, at 1036; see also Rory Van Loo, *In Defense of Breakups: Administering a “Radical” Remedy*, 105 CORNELL L. REV. 1955, 2007 (2020) (arguing that breakups may be preferable to access remedies in certain circumstances).

⁴⁹¹ Khan, *Platforms and Commerce*, *supra* note 274, at 1052.

⁴⁹² *Id.*

⁴⁹³ *Id.* at 1037-43, 1045-51.

⁴⁹⁴ Ending Platform Monopolies Act, H.R. 3825, 117th Cong. (2021).

⁴⁹⁵ *Id.* § 2(a).

⁴⁹⁶ *Id.* § 2(b). In the 117th Congress, S. 1204 would have also imposed structural separation requirements on large online marketplaces, exchanges, and search engines. Bust Up Big Tech Act, S. 1204, 117th Cong. § 2 (2021).

⁴⁹⁷ Hagiu, et al., *supra* note 474, at 319; Herbert J. Hovenkamp, *The Looming Crisis in Antitrust Economics*, 101 B.U. L. REV. 489, 541 (2021) [hereinafter “Hovenkamp, *Looming Crisis*”]; Giuseppe Colangelo, *Evaluating the Case for Regulation of Digital Platforms*, in GLOBAL ANTITRUST INSTITUTE REPORT ON THE DIGITAL ECONOMY 905 (2020); Thomas A. Lambert, *The Case Against Legislative Reform of U.S. Antitrust Doctrine* 21-22 (Univ. of Mo. Sch. of L. Legal Studies, Research Paper No. 2020-13, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3598601; Todd, *supra* note 249, at 524-25.

alternatives to established brands.⁴⁹⁸ Integration into related business lines may also create efficiencies.⁴⁹⁹ Apple and Google, for instance, may be well-positioned to produce apps and app stores for their respective operating systems, as well as related devices like earphones and smart watches.⁵⁰⁰

Separation requirements may also face line-drawing difficulties. The boundary between a covered platform and separate services is not always clear.⁵⁰¹ For example, Apple produces many apps and functionalities—including a voice assistant (Siri), a camera app, and a payment system (Apple Pay)—that are integrated with its iOS operating system to various degrees.⁵⁰² Whether these services would qualify as “lines of business” that are distinct from iOS may be uncertain; H.R. 3825 did not define that term. Because tech platforms regularly add new functionalities to their primary services, some observers have argued that an absence of clarity surrounding permissible activities may deter innovation and thereby harm consumers.⁵⁰³

Proponents of separation requirements have acknowledged these criticisms. In response, they have argued that the innovation benefits of an equal playing field would likely outweigh any losses in static efficiency that result from the elimination of a platform operator’s downward pricing pressure in adjacent markets.⁵⁰⁴ In addition, advocates of separation rules contend that any decreases in platform innovation caused by such rules must be weighed against likely increases in innovation by platform users.⁵⁰⁵ The arguments in favor of broad separation requirements have thus focused on innovation policy, in addition to the foreclosure concerns that sound in traditional antitrust analysis.

Mergers & Acquisitions

Substantive Merger Law

Other proposals target Big Tech mergers. In the 117th Congress, H.R. 3826 would have prohibited covered platform operators from acquiring other firms unless they could demonstrate by clear and convincing evidence that a target does not:

- compete with the platform operator;

⁴⁹⁸ Hovenkamp, *Looming Crisis*, *supra* note 497, at 541 (“Many of the brands that compete with Amazon’s own brands are sold by large firms, often at margins that are significantly higher than Amazon’s margins. . . . Forcibly separating Amazon’s brands from the offerings of these companies will almost certainly reduce downward pricing pressure on these national name brands, resulting in higher prices for consumers.”).

⁴⁹⁹ See, e.g., Todd, *supra* note 249, at 514-17.

⁵⁰⁰ Randy Picker, *The House’s Recent Spate of Antitrust Bills Would Change Big Tech as We Know It*, PROMARKET (June 29, 2021), <https://www.promarket.org/2021/06/29/house-antitrust-bills-big-tech-apple-preinstallation/>.

⁵⁰¹ Carl Shapiro, *Protecting Competition in the American Economy: Merger Control, Tech Titans, Labor Markets*, 33 J. ECON. PERSPS. 69, 84 (2019); Hal Singer, *Inside Tech’s “Kill Zone”: How to Deal With the Threat to Edge Innovation Posed by Multi-Sided Platforms*, PROMARKET (Nov. 21, 2018), <https://www.promarket.org/2018/11/21/inside-tech-kill-zone/>.

⁵⁰² Todd, *supra* note 249, at 536.

⁵⁰³ E.g., Rogerson & Shelanski, *supra* note 342, at 1934.

⁵⁰⁴ Khan, *Platforms and Commerce*, *supra* note 274, at 1085; see also Feng Zhu & Qihong Liu, *Competing with Complementors: An Empirical Look at Amazon.com*, 39 STRATEGIC MGMT. J. 2168 (2018) (concluding that, while Amazon’s entry into a new market typically reduces prices, it may also reduce the number of innovative products on Amazon’s marketplace by discouraging participation by third-party sellers).

⁵⁰⁵ Khan, *Platforms and Commerce*, *supra* note 274, at 1085.

- constitute “nascent or potential competition” for the platform operator;
- enhance or increase the platform operator’s market position with respect to products or services offered on or directly related to a covered platform; or
- enhance or increase the platform operator’s ability to maintain its market position with respect to products or services offered on or directly related to a covered platform.⁵⁰⁶

The reported version of the bill included an amendment that would have exempted transactions of less than \$50 million from the prohibition.⁵⁰⁷

For transactions of \$50 million or greater, then, the bill would have prohibited Big Tech firms from engaging in horizontal mergers, mergers involving “nascent or potential” competitors, and vertical and conglomerate mergers that enhance, increase, or help maintain their market positions with respect to products or services “offered on or directly related” to a covered platform.

As drafted, the bill raised three issues. The first involved the legislation’s prohibition of acquisitions involving “potential” competitors.⁵⁰⁸ As discussed, antitrust doctrine has recognized two theories of harm in potential-competition cases: the elimination of perceived potential competition and the elimination of actual potential competition.⁵⁰⁹ Courts have identified prerequisites for both theories.⁵¹⁰

The relationship between those prerequisites and H.R. 3826’s requirement that a Big Tech platform show that a target firm is *not* a “potential” competitor may have generated complex legal questions, if the bill had become law. For example, the bill could have been read to allow platform operators to make such a showing by negating an element of both types of potential-competition claims.⁵¹¹ That is not, however, the only interpretive option; the details surrounding the relevant burden would have had to be fleshed out in practice. That the Supreme Court has recognized only the perceived-potential-competition theory might have complicated this inquiry.

The second issue concerned the bill’s prohibition of Big Tech acquisitions involving “nascent” competitors.⁵¹² Commentators have offered different definitions of the concept of “nascent” competition.⁵¹³ In general, however, the term has been used to refer to new technologies with uncertain prospects that nevertheless pose serious threats to an incumbent.⁵¹⁴

⁵⁰⁶ Platform Competition and Opportunity Act of 2021, H.R. 3826, 117th Cong. § 2(b)(2) (2021). The bill would have also excluded certain categories of transactions that are exempt from pre-merger filing requirements for reasons other than their size. *Id.* § 2(b)(1).

⁵⁰⁷ Amendment to the Amendment in the Nature of a Substitute to H.R. 3826 Offered by Ms. Ross of North Carolina, Markups, H.R. 3843, the Merger Filing Fee Modernization Act of 2021, et al., H. Comm. on the Judiciary, 117th Cong. (June 24, 2021), <https://docs.house.gov/meetings/JU/JU00/20210623/112818/BILLS-117-HR3826-R000305-Amdt-1.pdf>.

⁵⁰⁸ H.R. 3826 § 2(b)(2)(B).

⁵⁰⁹ See *supra* “Conglomerate Mergers.”

⁵¹⁰ *Id.*

⁵¹¹ Under the bill, such efforts would be subject to a clear-and-convincing-evidence standard. H.R. 3826 § 2(b).

⁵¹² *Id.* § 2(b)(2)(B).

⁵¹³ Yun, *supra* note 334, at 626 (“Amongst antitrust practitioners and scholars, various definitions have emerged for nascent competition”); Hemphill & Wu, *supra* note 334, at 1881 (“Nascent competition means different things to different people.”).

⁵¹⁴ *United States v. Microsoft Corp.*, 253 F.3d 34, 79 (D.C. Cir. 2001) (per curiam); Yun, *supra* note 334, at 626-27; Hemphill & Wu, *supra* note 334, at 1886-88; Tracy J. Penfield & Molly Pallman, *Looking Ahead: Nascent Competitor*

Despite posing such threats, acquisitions of “nascent” competitors may be difficult to challenge under existing law. As discussed, to prevail under an actual-potential-competition theory, a plaintiff must establish a “substantial likelihood” that a target firm would deconcentrate the relevant market or produce other procompetitive benefits.⁵¹⁵ In cases involving unproven or developing technology, that burden could prove problematic for a plaintiff. H.R. 3826 was a response to this doctrinal difficulty.⁵¹⁶

While the bill thus sought to address an issue that has generated considerable attention, the analytical framework that would govern inquiries into “nascent” competition remains unsettled. There is little case law addressing issues of “nascent” competition in the merger context.⁵¹⁷ Accordingly, H.R. 3826 would have leaned on the courts to develop standards for evaluating whether a firm constituted a “nascent” competitor of a covered platform.

The third issue raised by H.R. 3826 involved the breadth of the provisions prohibiting mergers that “enhance or increase” a platform operator’s market position or ability to maintain its market position.⁵¹⁸

By their terms, these prohibitions did not distinguish between procompetitive mergers and anticompetitive mergers. As drafted, the bill thus appeared to prohibit mergers that “enhance or increase” a Big Tech platform’s market position by improving the quality of its products or services, even when the target company is not a competitor, potential competitor, or nascent competitor of the platform. As a result, H.R. 3826 may have limited Big Tech platforms to in-house development or licensing of complementary technologies; acquisitions of firms that could enhance a platform’s core offerings would have likely been off-limits.

S. 1074—another bill in the 117th Congress—would have taken a similarly strict approach toward Big Tech mergers.⁵¹⁹ Among other things, S. 1074 would have prohibited companies designated as “dominant digital firms” from engaging in acquisitions valued at more than \$1 million.⁵²⁰

Acquisition Challenges in the “TechLash” Era, ANTITRUST SOURCE 2 (June 2020), https://www.americanbar.org/content/dam/aba/publishing/antitrust-magazine-online/2020/june-2020/jun20_penfield_6_17f.pdf.

⁵¹⁵ *United States v. Marine Bancorporation, Inc.*, 418 U.S. 602, 633 (1974).

⁵¹⁶ There is an ongoing debate within the antitrust community as to whether Section 2 of the Sherman Act provides a more attractive vehicle for challenging acquisitions of nascent competitors than Section 7 of the Clayton Act. *Compare* Hemphill & Wu, *supra* note 334, at 1896-1901 (discussing the advantages of Section 2); Melamed, *supra* note 334, at 6-7 (similar), *with* Scott Sher, Keith Klovers & John Ceccio, *Nascent Competition, Section 2, and the Agencies’ Quixotic Quest to Avoid the Potential Competition Doctrine*, ANTITRUST MAGAZINE ONLINE (Aug. 2021), <https://www.americanbar.org/content/dam/aba/publishing/antitrust-magazine-online/august-2021/atonline-sher.pdf> (arguing that Section 2 is less stringent than Section 7 as applied to mergers); Jonathan Jacobson & Christopher Mufarrige, *Acquisitions of “Nascent” Competitors*, ANTITRUST SOURCE 5-6 (Aug. 2020), https://www.americanbar.org/content/dam/aba/publishing/antitrust-magazine-online/2020/august-2020/aug20_full_source.pdf (similar). Both approaches remain largely untested.

⁵¹⁷ *See, e.g.*, Yun, *supra* note 334, at 635 (“A considerable downside to bringing a nascent competition case under [Section] 7 is that there are no court precedents for doing so. . . . Consequently, a court would need to develop new conditions and requirements to find a violation, which is certainly a major impediment to applying the nascent competition doctrine in [Section] 7 cases.”).

⁵¹⁸ Platform Competition and Opportunity Act of 2021, H.R. 3826, 117th Cong. § 2(b)(2)(C)-(D) (2021).

⁵¹⁹ Trust-Busting for the Twenty-First Century Act, S. 1074, 117th Cong. § 4 (2021).

⁵²⁰ *Id.*

Other proposals are more limited. Several commentators, for example, have advocated a requirement that Big Tech firms bear the burden of proving that their mergers would not harm competition.⁵²¹

Abstracting from specific policy options, the debate over special merger rules for Big Tech firms has focused on two general concerns.

First, opponents of such rules have argued that Big Tech mergers are typically benign or procompetitive.⁵²² Acquisitions of complementary technologies, for example, may reduce the transaction costs associated with licensing arrangements or allow for more efficient integration with a platform's offerings.⁵²³ Mergers may also stimulate competition among Big Tech firms by giving them an attractive means of entering or expanding within each other's core markets.⁵²⁴

Second, some have argued that limitations on Big Tech mergers may reduce startup investment by eliminating a popular exit route for venture investors and other entrepreneurs.⁵²⁵

Proponents of special merger rules for tech platforms have responded that the procompetitive benefits of tech mergers are often overstated.⁵²⁶ Merger limitations targeting a handful of prospective acquirers may also leave startup investors with enough viable exit options to mitigate concerns about dampened investment. Some commentators have also suggested that reducing investment in innovations that end up in the hands of dominant incumbents is the intended outcome of the relevant proposals.⁵²⁷

The Merger Review Process

Before moving on from mergers, one final topic warrants mention: the Hart-Scott-Rodino (HSR) premerger review process. Under the HSR Act, parties to mergers that exceed certain thresholds must report their transactions to the DOJ and FTC and abide by specified waiting periods before closing.⁵²⁸ This process gives the agencies the opportunity to review proposed mergers for antitrust concerns and seek relief before deals are consummated.

Some commentators have expressed concerns about the number of Big Tech mergers that fall below the relevant thresholds and thus evade HSR review.⁵²⁹ In September 2021, the FTC

⁵²¹ STIGLER REPORT, *supra* note 333, at 98, 111; ACCC Report, *supra* note 162, at 109; *see also* OECD STARTUP ACQUISITION REPORT, *supra* note 334, at 38-41 (cataloguing various rebuttable-presumption proposals).

⁵²² Samuel Bowman & Sam Dumitriu, *Better Together: The Procompetitive Effects of Mergers in Tech*, INT'L CTR. FOR L. & ECON. (Oct. 1, 2021), https://laweconcenter.org/resources/better-together-the-procompetitive-effects-of-mergers-in-tech/?doing_wp_cron=1676398306.5821518898010253906250; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 101 (concluding that regulators should adopt a "balance of harms" approach to platform mergers instead of a presumption of illegality because "the majority of acquisitions by large digital companies are likely to be either benign or beneficial for consumers").

⁵²³ Bowman & Dumitriu, *supra* note 522; A. Douglas Melamed & Nicolas Petit, *The Misguided Assault on the Consumer Welfare Standard in the Age of Platform Markets*, 54 REV. OF INDUS. ORG. 741, 754 (2019).

⁵²⁴ Bowman & Dumitriu, *supra* note 522.

⁵²⁵ Gary Dushnitsky & D. Daniel Sokol, *Mergers, Antitrust, and the Interplay of Entrepreneurial Activity and the Investments That Fund It*, 24 VAND. J. OF ENT. & TECH. L. 255 (2022); Jacobson & Mufarrige, *supra* note 516, at 10; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 101.

⁵²⁶ John M. Newman, *Antitrust in Digital Markets*, 72 VAND. L. REV. 1497, 1541 (2019).

⁵²⁷ Hemphill & Wu, *supra* note 334, at 1893.

⁵²⁸ 15 U.S.C. § 18a.

⁵²⁹ STIGLER REPORT, *supra* note 333, at 111.

released a report indicating that the four Big Tech firms discussed in this report and Microsoft together engaged in 819 non-reportable deals between 2010 and 2019.⁵³⁰

In response to worries about these transactions, some have supported a blanket HSR filing requirement for Big Tech acquisitions.⁵³¹ Opponents of such a rule have argued that it would be burdensome and offer few benefits for regulators.⁵³²

Interoperability & Data Portability

Network effects and switching costs are frequent themes in discussions of Big Tech.⁵³³ Some reform proposals seek to address these structural features of certain platform markets by imposing interoperability and data-portability obligations on designated platform operators.⁵³⁴

In broad strokes, interoperability refers to the ability of distinct services to work together and communicate with one another.⁵³⁵ Interoperability can develop organically—as with email and many patent pools—or as a result of a legal mandate.⁵³⁶ Examples in the latter category include the 1996 Telecommunications Act’s requirement that local exchange carriers interconnect with other providers.⁵³⁷ The DOJ’s 2002 monopolization settlement with Microsoft also included an interoperability provision prohibiting Microsoft from excluding other firms’ web browsers from its Windows operating system.⁵³⁸

These types of measures seek to lower the entry barriers associated with networked industries by shifting network effects from individual firms to the market as a whole, thus making them available to nascent and potential competitors of a dominant incumbent.⁵³⁹

Data portability, by contrast, refers to a consumer’s right to move his or her data from one platform to another.⁵⁴⁰ Telecommunications law again offers an example by granting phone users the right to retain their phone numbers when they change carriers.⁵⁴¹ Such requirements decrease the switching costs that might otherwise discourage consumers from taking their business to a more attractive provider.⁵⁴²

⁵³⁰ FTC NON-REPORTABLE ACQUISITIONS STUDY, *supra* note 332, at 10.

⁵³¹ HJC REPORT, *supra* note 11, at 388.

⁵³² ABA DIGITAL ECONOMY REPORT, *supra* note 358, at 16.

⁵³³ See, e.g., HJC REPORT, *supra* note 11, at 40-42; STIGLER REPORT, *supra* note 333, at 38-39, 109; UK DIGITAL COMPETITION REPORT, *supra* note 333, at 35-36.

⁵³⁴ OECD, DATA PORTABILITY, INTEROPERABILITY AND DIGITAL PLATFORM COMPETITION (2021), <https://www.oecd.org/daf/competition/data-portability-interoperability-and-digital-platform-competition-2021.pdf> [hereinafter “OECD INTEROPERABILITY REPORT”]; HJC REPORT, *supra* note 11, at 384-86; STIGLER REPORT, *supra* note 333, at 109-10, 113; see also Kades & Scott Morton, *supra* note 345 (advocating interoperability remedies in antitrust litigation involving tech platforms).

⁵³⁵ Ezrielev & Marquez, *supra* note 167, at 9; OECD INTEROPERABILITY REPORT, *supra* note 534, at 12.

⁵³⁶ Herbert Hovenkamp, *Antitrust Interoperability Remedies*, 123 COLUM. L. REV. F. 1, 10 (2023) [hereinafter “Hovenkamp, *Interoperability Remedies*”].

⁵³⁷ 47 U.S.C. § 251(c).

⁵³⁸ *United States v. Microsoft Corp.*, 215 F. Supp. 2d 1 (D.D.C. 2002). For other examples of antitrust cases in which interoperability has been used as a remedy, see Hovenkamp, *Interoperability Remedies*, *supra* note 536, at 13 n.74.

⁵³⁹ Kades & Scott Morton, *supra* note 345, at 41-42; Becky Chao & Ross Schulman, *Promoting Platform Interoperability*, NEW AM. FDN. 21-22 (May 2020).

⁵⁴⁰ Michal S. Gal & Daniel L. Rubinfeld, *Data Standardization*, 94 NYU L. REV. 737, 739 (2019).

⁵⁴¹ 47 U.S.C. § 251(b)(2).

⁵⁴² Juan Pablo Maicas, et al., *Reducing the Level of Switching Costs in Mobile Communications: The Case of Mobile*

In the 117th Congress, H.R. 3849 would have imposed interoperability and data-portability duties on designated digital platforms.⁵⁴³ The bill would have directed the FTC to develop standards implementing those duties for individual covered platforms.⁵⁴⁴ In promulgating standards under the legislation, the FTC would have been advised by technical committees that included representatives of a platform's competitors, competition and privacy-advocacy organizations, the National Institute of Standards and Technology, and covered platforms.⁵⁴⁵

The obligations contemplated by H.R. 3849 were potentially broader than those in the AICOA, which were discussed earlier in this report.⁵⁴⁶ The AICOA's interoperability provision would have prohibited a covered platform operator from restricting the ability of business users to interoperate with features that are available to the operator's own products or services.⁵⁴⁷ Accordingly, the prohibition would have been limited to a platform operator's unequal treatment of firms that utilize its platform.⁵⁴⁸

In contrast, H.R. 3849 would have granted the FTC rulemaking authority to impose potentially broader, platform-specific interoperability obligations.⁵⁴⁹ For a social network like Facebook, an interoperability rule might have included duties to allow users of other networks to "friend" Facebook users and transmit posted content from Facebook to other networks.⁵⁵⁰ Supporters of interoperability have argued that these types of obligations would catalyze competition by allowing users of upstart social networks to benefit from Facebook's scale.⁵⁵¹

H.R. 3849's data-portability provision was also potentially broader than the parallel requirement in the AICOA. While the AICOA's requirement would have applied only to a platform's business users,⁵⁵² H.R. 3849's data-portability obligation would have encompassed individuals who use a covered platform.⁵⁵³

A rule implementing this duty might have required a social network like Facebook to keep a user's messages, photos, and other content in an accessible format that could be transferred to other platforms.⁵⁵⁴ Although this type of requirement may have partially overlapped with the ongoing transferability contemplated by H.R. 3849's interoperability mandate, it could also have

Number Portability, 33 TELECOMMS. POL'Y 544 (2009).

⁵⁴³ ACCESS Act of 2021, H.R. 3849, 117th Cong. §§ 3-4 (2021).

⁵⁴⁴ *Id.* § 6(c).

⁵⁴⁵ *Id.* § 7.

⁵⁴⁶ See *supra* "Interoperability and Data Access."

⁵⁴⁷ American Innovation and Choice Online Act, S. 2992, 117th Cong. § 3(a)(4) (2022) (Reported Version); American Innovation and Choice Online Act, H.R. 3816, 117th Cong. § 2(b)(1) (2021) (Reported Version).

⁵⁴⁸ The reported House version of the AICOA also included a broader provision that prohibited covered platform operators from restricting a business user's ability to interoperate with "any product or service." H.R. 3816 § 2(b)(9).

⁵⁴⁹ ACCESS Act of 2021, H.R. 3849, 117th Cong. §§ 4, 6 (2021); see also Schnitzer, et al., *supra* note 405, at 22 (contrasting the AICOA's interoperability provision with the "general interoperability requirement" in H.R. 3849).

⁵⁵⁰ Kades & Scott Morton, *supra* note 345, at 16; Transcript of Markup of H.R. 3843, the Merger Filing Fee Modernization Act, et al., at 48,832-48,835 (June 23, 2021) (on file with author) [hereinafter "H.R. 3849 Markup Transcript"] (Rep. Mary Gay Scanlon ("Much like texting allows iPhone owners to communicate with Android owners, so, too, would [H.R. 3849] allow individuals switching to new social media platforms to be able to communicate and interact with their friends and family on Facebook.")).

⁵⁵¹ Kades & Scott Morton, *supra* note 345, at 9.

⁵⁵² S. 2992 § 3(a)(4); H.R. 3816 § 2(b)(1).

⁵⁵³ H.R. 3849 § 3.

⁵⁵⁴ Hovenkamp, *Interoperability Remedies*, *supra* note 536, at 27.

included categories of data not subject to continuous real-time interoperability for technical or other reasons.⁵⁵⁵ Data-portability rules may likewise require Amazon to allow retailers on its marketplace to port their customer reviews to rival e-commerce platforms and Apple to permit iPhone users to transfer their message histories to an Android device.⁵⁵⁶

Objections to interoperability and data-portability mandates take several forms. Some have highlighted the complexity of interoperability requirements, which may pose challenges of implementation and enforcement.⁵⁵⁷ Others have focused on possible privacy and data-security risks that might accompany both interoperability and data-portability rules.⁵⁵⁸

H.R. 3849 attempted to address complexity concerns by directing the FTC to establish technical committees to assist with rule development.⁵⁵⁹ The bill sought to mitigate privacy and data-security risks by imposing data-security requirements on firms that interoperate with or receive ported data from a covered platform.⁵⁶⁰

Another category of criticism directed at interoperability requirements involves innovation concerns. Some have worried that interoperability may result in homogenized markets as an incumbent's rivals coalesce around a single set of standards.⁵⁶¹ Compelled interoperability also potentially implicates the free-rider problems that motivate narrow duty-to-deal doctrine: by requiring firms to share the fruits of their innovation with competitors, policymakers may dampen incentives to invest in new products.⁵⁶² Defenders of interoperability have acknowledged this risk, but maintain that interoperating Big Tech platforms would still face incentives to innovate to prevent rivals from gaining a competitive edge.⁵⁶³

Changes to General Antitrust

While the proposals discussed above would entail special competition rules for large tech platforms, other options involve changes to general antitrust law. Because general antitrust reform is a vast topic, this report does not attempt an exhaustive overview of the relevant proposals. Instead, it briefly reviews selected bills involving exclusionary conduct and merger law.

⁵⁵⁵ See *id.* (arguing that “dynamic” interoperability for social networks might be technically difficult and that the “static” interoperability offered by data portability may thus be a more promising option).

⁵⁵⁶ H.R. 3849 Markup Transcript, *supra* note 550, at 4,564-4,568 (Rep. David Cicilline).

⁵⁵⁷ See, e.g., Hovenkamp, *Interoperability Remedies*, *supra* note 536, at 35; Randy Picker, *Forcing Interoperability on Tech Platforms Would Be Difficult to Do*, PROMARKET (Mar. 11, 2021), <https://www.promarket.org/2021/03/11/interoperability-tech-platforms-1996-telecommunications-act/>.

⁵⁵⁸ See, e.g., Laura Alexander & Randy Stutz, *Interoperability in Antitrust Law & Competition Policy*, COMPETITION POLICY INT'L ANTITRUST CHRON. 31, 36 (June 2021); OECD INTEROPERABILITY REPORT, *supra* note 534, at 24; Peter Swire & Yianni Lagos, *Why the Right to Data Portability Likely Reduces Consumer Welfare: Antitrust and Privacy Critique*, 72 MD. L. REV. 335, 365-75 (2013).

⁵⁵⁹ ACCESS Act of 2021, H.R. 3849, 117th Cong. § 6 (2021).

⁵⁶⁰ *Id.* §§ 3(b), 4(b).

⁵⁶¹ Hovenkamp, *Interoperability Remedies*, *supra* note 536, at 35; Ezrielev & Marquez, *supra* note 167, at 10-11.

⁵⁶² See, e.g., FUMAGALLI, et al., *supra* note 73, at 547; ABA Letter, *supra* note 391, at 14; Ezrielev & Marquez, *supra* note 167, at 10-11; Howard A. Shelanski, *Unilateral Refusals to Deal in Intellectual and Other Property*, 76 ANTITRUST L.J. 369, 371 (2009).

⁵⁶³ Kades & Scott Morton, *supra* note 345, at 26.

Exclusionary Conduct

S. 225, the Competition and Antitrust Law Enforcement Reform Act (117th Cong.)

In the 117th Congress, S. 225 would have made several changes to the legal framework governing exclusionary-conduct claims.⁵⁶⁴ The bill would have amended the Clayton Act to prohibit “exclusionary conduct that presents an appreciable risk of harming competition.”⁵⁶⁵ “Exclusionary conduct” would have been defined to mean conduct that (1) “materially disadvantages” an actual or potential competitor, or (2) “tends to foreclose or limit” the ability of an actual or potential competitor to compete.⁵⁶⁶

S. 225 would have adopted a presumption that exclusionary conduct presents “an appreciable risk of harming competition” if it is undertaken by a firm with a market share of greater than 50 percent or that otherwise has “significant market power” in the relevant market.⁵⁶⁷ That presumption could be rebutted, however, if a defendant established by a preponderance of the evidence that:

1. “distinct procompetitive benefits of the exclusionary conduct in the relevant market eliminate the risk of harming competition presented by the exclusionary conduct”;
2. another firm has “entered or expanded their presence in the market with the effect of eliminating the risk of harming competition posed by the exclusionary conduct”; or
3. “the exclusionary conduct does not present an appreciable risk of harming competition.”⁵⁶⁸

The bill would have provided that several of the conduct-specific tests that courts have adopted in Sherman Act cases would not apply to exclusionary-conduct claims under the amended Clayton Act. Among other things, exclusionary-conduct plaintiffs would not have to show:

- that a defendant terminated a prior course of dealing,⁵⁶⁹ which some courts have held is a prerequisite for refusal-to-deal liability under the Sherman Act;⁵⁷⁰
- that the defendant priced its products below its costs or is likely to recoup losses from below-cost pricing,⁵⁷¹ which are both requirements for predatory-pricing claims under the Sherman Act;⁵⁷² or

⁵⁶⁴ Competition and Antitrust Law Enforcement Reform Act of 2021, S. 225, 117th Cong. §§ 9, 13 (2021).

⁵⁶⁵ *Id.* § 9.

⁵⁶⁶ *Id.*

⁵⁶⁷ *Id.*

⁵⁶⁸ *Id.*

⁵⁶⁹ *Id.*

⁵⁷⁰ *E.g., Novell, Inc. v. Microsoft Corp.*, 731 F.3d 1064, 1075 (10th Cir. 2013) (Gorsuch, J.).

⁵⁷¹ Competition and Antitrust Law Enforcement Reform Act of 2021, S. 225, 117th Cong. § 9 (2021).

⁵⁷² *Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 222-24 (1993).

- that the conduct of a multi-sided platform presents an appreciable risk of harming competition on more than one side of the platform,⁵⁷³ contrary to the rule the Supreme Court adopted for two-sided transaction platforms in *Amex*.⁵⁷⁴

S. 225 also would have provided that market definition is not necessary to prove an antitrust violation, except in cases where the applicable statute includes the phrase “relevant market,” “market concentration,” or “market share.”⁵⁷⁵

S. 1074, the Trust-Busting for the Twenty-First Century Act (117th Cong.)

S. 1074—another bill in the 117th Congress—also would have made changes to the standards governing exclusionary-conduct claims.⁵⁷⁶ The legislation would have provided that, in litigation under Section 1 or Section 2 of the Sherman Act, a defendant that relies upon procompetitive effects to justify its conduct must establish by clear and convincing evidence that:

1. the relevant procompetitive effects “clearly outweigh” any anticompetitive effects; and
2. the defendant “could not obtain substantially similar procompetitive effects through commercially reasonable alternatives that would involve materially lower competitive risks.”⁵⁷⁷

Like S. 225, the bill would have provided that market definition is not required to prove a violation of Section 1 or Section 2.⁵⁷⁸

Mergers

S. 225, the Competition and Antitrust Law Enforcement Reform Act (117th Cong.)

In addition to the exclusionary-conduct provisions discussed above, S. 225 would have modified several aspects of merger law. The bill would have amended Section 7 of the Clayton Act to prohibit mergers that “create an appreciable risk of materially lessening” competition⁵⁷⁹—a change from the current language that prohibits mergers that may “substantially” lessen competition.⁵⁸⁰ The term “materially” was defined to mean “more than a de minimis amount.”⁵⁸¹

S. 225 also would have shifted the relevant burden of proof to the merging parties in certain circumstances.⁵⁸² For example, merging parties would have had the burden of proving that their transactions would not “create an appreciable risk of materially lessening” competition in cases where:

⁵⁷³ S. 225 § 9.

⁵⁷⁴ *Ohio v. Am. Express Co.*, 138 S. Ct. 2274, 2286-87 (2018).

⁵⁷⁵ S. 225 § 13(a).

⁵⁷⁶ Trust-Busting for the Twenty-First Century Act, S. 1074, 117th Cong. § 2 (2021).

⁵⁷⁷ *Id.*

⁵⁷⁸ *Id.*

⁵⁷⁹ S. 225 § 4(b)(1).

⁵⁸⁰ 15 U.S.C. § 18.

⁵⁸¹ S. 225 § 4(b)(3).

⁵⁸² *Id.*

- a merger would lead to a “significant increase in market concentration”;
- a firm with a market share greater than 50 percent or that possesses “significant market power” acquires a competitor or a company that has a “reasonable probability” of becoming a competitor;
- a transaction is valued at more than \$5 billion; or
- the acquiring firm has assets, net revenue, or a market capitalization exceeding \$100 billion and the transaction is valued at \$50 million or more.⁵⁸³

S. 1074, the Trust-Busting for the Twenty-First Century Act (117th Cong.)

S. 1074 also included merger restrictions.⁵⁸⁴ The bill would have prohibited firms with market capitalizations exceeding \$100 billion from engaging in mergers whose effect “may be to lessen competition in any way.”⁵⁸⁵ It also would have explicitly provided that market definition is not necessary to block a merger and that mergers shall not be presumed to be legal on the grounds that the parties are not direct competitors.⁵⁸⁶

S. 3847, the Prohibiting Anticompetitive Mergers Act (117th Cong.)

In the 117th Congress, S. 3847 would have taken a similarly skeptical approach to large mergers. The legislation would have prohibited mergers valued at more than \$5 billion, mergers that result in a market share of over 33 percent for sellers or 25 percent for employers, and mergers that would result in specified levels of market concentration.⁵⁸⁷

S. 3847 also would have made changes to the merger-review process.⁵⁸⁸ Among other things, the bill would have extended the initial HSR waiting period from 30 days to 120 days and allowed the antitrust agencies to block mergers without obtaining a court order.⁵⁸⁹

In addition, the bill would have directed the DOJ and FTC to review mergers consummated after January 1, 2000, if they would have qualified as “prohibited mergers” under the categories mentioned above.⁵⁹⁰ It would have further required the agencies to pursue remedies to restore competition or address the anticompetitive effects of these mergers in specified circumstances.⁵⁹¹

⁵⁸³ *Id.*

⁵⁸⁴ S. 1074 contained both size-based merger restrictions and merger restrictions that would have applied to companies designated as “dominant digital firms.” Trust-Busting for the Twenty-First Century Act, S. 1074, 117th Cong. §§ 3, 4 (2021). The latter are discussed in *supra* “Substantive Merger Law.”

⁵⁸⁵ S. 1074 § 3.

⁵⁸⁶ *Id.*

⁵⁸⁷ Prohibiting Anticompetitive Mergers Act of 2022, S. 3847, 117th Cong. § 3 (2022). The market-concentration prohibition would have barred mergers that would (1) result in a Herfindahl-Hirschman Index (HHI) of greater than 1,800, and (2) increase the relevant HHI by more than 100 points. *Id.* A market with an HHI of 1,800 qualifies as “moderately concentrated” under the current Horizontal Merger Guidelines, but would have been deemed to be “highly concentrated” under the 1992 version of the Guidelines. HORIZONTAL MERGER GUIDELINES, *supra* note 100, at § 5.3; DEP’T OF JUSTICE AND FED. TRADE COMM’N, 1992 MERGER GUIDELINES § 1.5 (1992).

⁵⁸⁸ S. 3847 § 4(b).

⁵⁸⁹ *Id.*

⁵⁹⁰ *Id.* § 6.

⁵⁹¹ *Id.*

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