Congressional Research Service
Informing the legislative debate since 1914

Antitrust Reform and Big Tech Firms

Updated November 21, 2023

Congressional Research Service
https://crsreports.congress.gov
R46875

Congressional Research Service
Informing the legislative debate since 1914

SUMMARY

R46875

September 13, 2023

Jay B. Sykes
Legislative Attorney

For a copy of the full report, please call 7-5700 or visit www.crs.gov.

Antitrust Reform and Big Tech Firms

Antitrust has become a hot topic. After decades as a mostly technocratic discipline, 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 affected the daily lives of billions, they are also 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.

The FTC and a putative class of private plaintiffs have accused Amazon of stifling competition among online marketplaces. The lawsuits allege that Amazon has excluded rivals by implementing policies that punish sellers for discounting their products on other websites. The FTC's complaint also claims that Amazon has tied its Prime subscription program to the use of its fulfillment services, hindering the development of independent fulfillment providers that could make selling on other marketplaces more attractive.

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.

Some lawmakers have also expressed concern about the large number of acquisitions that the Big Tech firms have undertaken 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 existing law have emphasized the differences between the Big Tech firms. This heterogeneity, they contend, counsels in favor of the fact-specific approach employed by current doctrine 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 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.

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.

Contents

Contacts

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 view of antitrust's goals.[3]

Things have changed. In the past several years, antitrust has resurfaced as a topic 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 the Big Tech companies. Third, it discusses conceptual issues with proposals to reform the

---

[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.*, American Innovation and Choice Online Act, S. 2033, 118th Cong. (2023); Prohibiting Anticompetitive Mergers Act of 2022, S. 3847, 117th Cong. (2022); Platform Competition and Opportunity Act, S. 3197, 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."

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] Plaintiffs can make this showing directly or indirectly. Direct evidence of anticompetitive harm involves "proof of actual detrimental effects on competition," such as reduced output, increased prices, or decreased quality.[25] The indirect route involves proof of market power,[26] plus "some evidence that the challenged restraint harms competition"—for

[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.

[24] *Id*.

[25] *Id*. (cleaned up).

[26] The Supreme Court has offered various definitions of "market power," many of which are related to a firm's ability (continued...)

example, evidence that the restraint is the type of restriction that tends to produce anticompetitive outcomes.[27]

If the plaintiff makes a *prima facie* case of anticompetitive harm, the burden shifts to the defendant to show a procompetitive justification for the challenged restraint.[28] For example, a defendant might argue that the restraint increases output, creates operational efficiencies, makes a new product available, enhances product quality, or broadens consumer choice.[29]

If the defendant makes this showing, the burden shifts back to the plaintiff to demonstrate that the relevant procompetitive benefits could be reasonably achieved through less anticompetitive means.[30] Some courts have also added a fourth step in which they balance a restraint's anticompetitive and procompetitive effects.[31]

Although most agreements are evaluated under this framework, courts have also recognized a third standard that lies between the full rule of reason and *per se* illegality. This intermediate approach—often called "quick look" review—has been applied to agreements that are not *per se* unlawful but nevertheless exhibit characteristics that make their likely anticompetitive effects clear.[32] Different courts have described quick-look analysis in different ways.[33] The basic idea, however, is that the plaintiff in a quick-look case can discharge its initial burden without the type of detailed evidence of competitive harm required under the full rule of reason.[34] Defendants in quick-look cases, meanwhile, have the opportunity to offer procompetitive justifications for their conduct, distinguishing quick-look review from *per se* analysis.[35]

---

to profitably charge prices higher than those that would exist in a competitive market—that is, a market with many buyers and sellers, homogeneous products, perfect information, no barriers to entry or exit, and no transaction costs. LAWRENCE A. SULLIVAN, ET AL., THE LAW OF ANTITRUST: AN INTEGRATED HANDBOOK 47-48 (4th ed. 2023). Those definitions sweep quite broadly, however, because virtually every firm selling a differentiated product has some market power in this sense; perfect competition is a theoretical abstraction that seldom—if ever—exists in the real world. *Id*. at 47. Commentators have thus observed that, in practice, the legal concept of market power appears to demand a *substantial degree* of pricing power. DANIEL FRANCIS & CHRISTOPHER JON SPRIGMAN, ANTITRUST: PRINCIPLES, CASES, AND MATERIALS 73 (2023). As discussed below, courts typically assess allegations of market power by evaluating structural factors like a firm's market share and any entry barriers in the relevant market. *Id*. at 116. A market share of less than 30% is typically insufficient for market power. *Id*. In contrast, a share of 44% has been deemed sufficient when accompanied by evidence that entry barriers are high and that competitors cannot readily expand their output. *Id*. Higher shares have also supported an inference of market power when paired with evidence of entry barriers. *Id*. (collecting cases). The process for defining antitrust markets is discussed below.

[27] *Amex*, 138 S. Ct. at 2284.

[28] *Id*.

[29] Law v. NCAA, 134 F.3d 1010, 1023 (10th Cir. 1998).

[30] *Amex*, 138 S. Ct. at 2284.

[31] *See, e.g.*, Epic Games, Inc. v. Apple, Inc., 67 F.4th 946, 993-94 (9th Cir. 2023) (recognizing that Supreme Court precedent "neither requires nor disavows" a fourth step, while interpreting Ninth Circuit precedent to require a fourth balancing 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 4% of rule-of-reason cases decided between 1977 and 1999).

[32] Herbert Hovenkamp, *The Rule of Reason*, 70 FLA. L. REV. 81, 122-31 (2018) [hereinafter "Hovenkamp, *The Rule of Reason*"]. Often, "quick look" analysis is described as a type of rule-of-reason analysis, rather than a third standard of review, on the theory that the rule of reason represents a sliding scale that imposes different requirements based on the context. *See id*. at 123-24 (rejecting the idea that quick-look review represents a third "silo" of antitrust analysis that is distinct from the rule of reason).

[33] *Id*. at 122.

[34] FRANCIS & SPRIGMAN, *supra* note 26, at 191.

[35] *Id*.

Monopolization

While Section 1 of the Sherman Act governs agreements between firms, Section 2 prohibits dominant companies from engaging in concerted or unilateral exclusionary conduct by making it unlawful to monopolize, attempt to monopolize, or conspire to monopolize.[36]

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."[37]

The second element is often referred to as "exclusionary" or "anticompetitive" conduct.[38]

Monopoly Power

The Supreme Court has explained that a firm possesses monopoly power if it has the ability to "control prices or exclude competition."[39] Although that standard is similar to many descriptions of market power,[40] the Court has clarified that monopoly power under Section 2 of the Sherman Act requires "something greater" than market power under Section 1.[41] Courts have thus concluded that monopoly power entails a large degree of market power.[42]

Some courts have held that monopoly power can be established through direct evidence of supra-competitive prices and restricted output.[43] However, this type of direct proof is rarely available.[44] As a result, courts typically evaluate allegations of monopoly power by examining structural factors like a defendant's market share and any entry barriers in the relevant market.[45]

These inquiries require a plaintiff to define the scope of the relevant market—an exercise that turns on the range of items that are reasonable substitutes for one another.[46]

There are two general approaches to market definition. One approach—the hypothetical monopolist test (HMT)—attempts to identify the smallest grouping of products over which a

---

[36] 15 U.S.C. § 2.

[37] United States v. Grinnell Corp., 384 U.S. 563, 570-71 (1966).

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

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

[40] *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").

[41] Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 U.S. 451, 481 (1992).

[42] *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). As noted, the legal concept of "market power" in practice appears to involve a substantial degree of "market power" as that concept is used in economic theory. *See supra* note 26. One commentator has thus observed that *monopoly* power requires "a substantial degree of a sort of power that is itself defined to exist only when substantial." Einer Elhauge, *Defining Better Monopolization Standards*, 56 STAN. L. REV. 253, 259 (2003).

[43] 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).

[44] United States v. Microsoft Corp., 253 F.3d 34, 51 (D.C. Cir. 2001) (per curiam). Direct proof of market power is rarely available for a variety of reasons. Perhaps most significantly, it can be difficult to identify and measure a firm's marginal costs. PHILLIP AREEDA, ET AL., ANTITRUST ANALYSIS: PROBLEMS, TEXT, AND CASES 529 (7th ed. 2013).

[45] *Microsoft*, 253 F.3d at 51.

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

single seller could exercise significant market power.[47] Under a version of the HMT known as the SSNIP test, this inquiry starts with the product at issue in a given case and asks whether a hypothetical monopolist selling that product could profitably increase its price by a significant amount (typically 5%-10%) for a non-transitory period of time (typically one year or more).[48] If the answer is yes, then the product represents a relevant antitrust market. However, if consumer substitution would render such a price increase unprofitable, the SSNIP test prescribes that the market must be expanded to include substitute products. This process continues until the point at which a "small but significant non-transitory increase in price" for one of the products would be profitable.[49]

A second approach to market definition involves an evaluation of qualitative similarities and differences between products and services. This methodology is derived from the Supreme Court's 1962 decision in *Brown Shoe Co. v. United States*, which identified a series of "practical indicia" that may be relevant to an evaluation of a market's boundaries.[50] These qualitative factors include industry or public recognition of separate markets, a product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.[51]

The HMT and *Brown Shoe*'s qualitative inquiry both attempt to determine the range of substitutes that constrain a firm's exercise of market power,[52] and judicial decisions often employ both approaches in defining markets.[53]

As mentioned, once a market has been defined, courts typically assess claims of monopoly power by evaluating a defendant's market share and other structural factors like entry barriers.[54] When entry barriers are present, a market share in excess of 70% can establish a *prima facie* case of

---

[47] Gregory J. Werden, *The 1982 Merger Guidelines and the Ascent of the Hypothetical Monopolist Paradigm*, 71 ANTITRUST L.J. 253, 253-54 (2003).

[48] FRANCIS & SPRIGMAN, *supra* note 26, at 68.

[49] *Id*. The SSNIP test runs into a well-recognized baseline problem in cases where a firm is alleged to be charging monopoly prices. In those cases, a SSNIP above prevailing prices may prove unprofitable not because a candidate market is too small to confer significant pricing power on a hypothetical monopolist, but because the defendant is already fully exploiting its monopoly power. The use of prevailing prices to define markets in such circumstances is often called the "*Cellophane* fallacy," because the Supreme Court committed this alleged error in a 1956 monopolization case involving cellophane and other packaging materials. *E.I. du Pont de Nemours & Co.*, 351 U.S. at 400-01. Regulators and courts can avoid this problem by using competitive prices rather than prevailing prices as the baseline for evaluating whether a SSNIP would be profitable. AREEDA, ET AL., *supra* note 44, at 552; *see also* DEP'T OF JUST. & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES § 4.1.2 (2010) [hereinafter "HORIZONTAL MERGER GUIDELINES"] (acknowledging that use of the SSNIP test may require this modification in certain cases). That approach, however, raises the same difficulties with determining competitive prices that often bedevil attempts to establish market power with direct evidence. AREEDA, ET AL., *supra* note 44, at 552. A widely referenced textbook notes that the courts "have avoided tackling this issue and mostly act as if raising price above competitive levels were a self-evidently meaningful and applicable standard." *Id.*

[50] 370 U.S. 294, 325 (1962).

[51] *Id*.

[52] FRANCIS & SPRIGMAN, *supra* note 26, at 74. The above discussion focuses on one component of market definition: the relevant product market. In certain cases—for example, where transportation costs are high or consumers prefer a local provider—geography may also represent an important aspect of market definition. *Id*. at 111.

[53] *E.g.*, United States v. Bertelsmann SE & Co., 2022 WL 16949715 at *12-13, 19-20 (D.D.C. 2022); United States v. H&R Block, Inc., 833 F. Supp. 2d 36, 50-60 (D.D.C. 2011); Olin Corp. v. FTC, 986 F.2d 1295, 1298-99 (9th Cir. 1993).

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

monopoly power.[55] Courts rarely find monopoly power, by contrast, when a firm's market share is less than 50%.[56] Shares between 50% and 70% present "the greatest uncertainty,"[57] with some courts deeming shares in that range to be insufficient absent additional evidence.[58]

To establish monopoly power, plaintiffs also typically must show that a defendant's dominant position is likely to be durable—for example, with evidence of significant barriers to entry.[59] Entry barriers may include legal and regulatory requirements, control of an essential resource, entrenched buyer preferences, and economies of scale.[60] In some digital markets, entry barriers may also emerge from network effects (which cause a product's utility to increase as it gains more users) and significant switching costs (high costs that users of a product would face in switching to a substitute).[61]

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."[62]

As a general standard, many have found that description unhelpful. Firms often "willfully" try to obtain monopoly status *by developing superior products* and *by deploying business acumen*.[63] Moreover, in offering the above formulation, the Supreme Court did not define "business acumen," leaving little guidance as to when practices like aggressive price cutting, bundling separate products, or refusing to share property with rivals represent savvy strategy as opposed to unlawful exclusion.[64]

While academics have made several attempts to develop an alternative general standard, courts have not decisively embraced any of them.[65] Instead, the doctrine contains a variety of tests that

---

[55] 1 ABA SECTION OF ANTITRUST LAW, ANTITRUST DEVELOPMENTS 230 (9th ed. 2022) [hereinafter "ANTITRUST DEVELOPMENTS"] (collecting cases).

[56] *Id*. at 231.

[57] *Id*. at 231-32.

[58] United States v. Dentsply Int'l, Inc., 399 F.3d 181, 187 (3d Cir. 2005) ("Absent other pertinent factors, a share significantly larger than 55% has been required to establish prima facie [monopoly] power."); PepsiCo, Inc. v. Coca-Cola Co., 315 F.3d 101, 109 (2d Cir. 2002) ("Absent additional evidence, such as an ability to control prices or exclude competition, a 64 percent market share is insufficient to infer monopoly power."); Colo. Interstate Gas Co. v. Natural Gas Pipeline Co. of Am., 885 F.2d 683, 694 n.18 (10th Cir. 1989) (noting that "lower courts generally require a minimum market share of between 70% and 80%" to support a finding of monopoly power); Exxon Corp. v. Berwick Bay Real Estate Partners, 748 F.2d 937, 940 (5th Cir. 1984) (per curiam) (noting that "monopolization is rarely found when the defendant's share of the relevant market is below 70%"); United States v. Aluminum Co. of Am., 148 F.2d 416, 424 (2d Cir. 1945) (Hand, J.) (indicating that it is "doubtful" that a share of 64% is sufficient for monopoly power); *but see* Tops Mkts., Inc. v. Quality Mkts, Inc., 142 F.3d 90, 99 (2d Cir. 1998) (indicating that a share between 50% and 70% can "occasionally" show monopoly power if other factors support the inference).

[59] *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).

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

[61] FTC v. Facebook, Inc., 581 F. Supp. 3d 34, 51 (D.D.C. 2022).

[62] United States v. Grinnell Corp., 384 U.S. 563, 570-71 (1966).

[63] *See, e.g.*, Daniel Francis, *Making Sense of Monopolization*, 84 ANTITRUST L.J. 779, 779-80 (2022).

[64] Elhauge, *supra* note 42, at 263.

[65] DEP'T OF JUST., COMPETITION AND MONOPOLY: SINGLE-FIRM CONDUCT UNDER SECTION 2 OF THE SHERMAN ACT 33 (2008) (withdrawn in 2009) [hereinafter "DOJ MONOPOLIZATION REPORT"].

govern specific categories of conduct, along with a burden-shifting framework that is similar to the usual rule-of-reason inquiry in Section 1 cases.

The following sections review efforts to develop a unified theory of monopolization and several of the conduct-specific tests that courts have adopted in place of such a theory.

The Debate over a General Monopolization Standard

Courts have held that a wide range of behavior can violate Section 2 of the Sherman Act. As discussed below, a monopolist can—depending on the circumstances—violate Section 2 by entering into exclusive contracts with customers or suppliers, tying or bundling separate products, aggressively cutting prices to deter entry, or refusing to deal with competitors. Other conduct can also constitute monopolization even if it does not fall neatly into any particular doctrinal category. *See LePage's, Inc. v. 3M*, 324 F.3d 141, 152 (3d Cir. 2003). This diversity has raised a question: is there a unifying principle that explains when conduct will qualify as "exclusionary," as opposed to representing legitimate "competition on the merits"?

Commentators have proposed different answers. One option—the "profit sacrifice" or "no economic sense" test—comes in several varieties. The basic idea, however, is that conduct is "exclusionary" only if it would have no rational purpose other than to exclude rivals. SULLIVAN, ET AL., *supra* note 26, at 112.

Under the "profit sacrifice" version of this theory, unilateral conduct would be deemed anticompetitive only if it entails a sacrifice of short-term profits, which the defendant intends to recoup with monopoly prices after eliminating its rivals. *Id*. The "no economic sense" variant is potentially broader. It would condemn conduct that (1) has a tendency to eliminate competition, and (2) would make no economic sense but for that tendency. Gregory J. Werden, *Identifying Exclusionary Conduct Under Section 2: The "No Economic Sense" Test*, 73 ANTITRUST L.J. 413, 418 (2006).

These approaches are motivated by a desire to avoid chilling procompetitive behavior and may offer greater certainty than the types of balancing tests employed in some monopolization cases. The "profit sacrifice" test has been criticized for failing to account for cases of costless or cheap exclusion, where a monopolist can exclude rivals at little expense. While the "no economic sense" test may avoid this objection, some commentators have faulted it for failing to capture conduct that causes serious anticompetitive harm while creating minor economic benefits. SULLIVAN, ET AL., *supra* note 26, at 115. Neither test has been adopted as a general monopolization standard, but their influence is particularly clear in the doctrine governing predatory pricing and refusals to deal.

An alternative approach would provide that conduct is "exclusionary" if and only if it is likely to exclude from the defendant's market an equally or more efficient competitor. RICHARD A. POSNER, ANTITRUST LAW 194-95 (2d. ed. 2001). Like the "profit sacrifice" and "no economic sense" theories, the "equally efficient competitor" test may avoid the uncertainties that accompany open-ended balancing tests, while still protecting a monopolist's efficient rivals. The test's critics have argued that competition from less efficient rivals is often desirable, including in cases where an upstart firm has not yet acquired the scale or expertise to match the incumbent's efficiency. Administering this approach may also prove challenging, especially in cases that do not involve price predation. DOJ MONOPOLIZATION REPORT, *supra* note 65, at 44. While the test is grounded in principles from predatory-pricing cases, it has not been elevated to the status of a general Section 2 standard.

A third theory involves the type of balancing test alluded to above, which is similar to the usual rule-of-reason inquiry under Section 1. Under this approach, conduct qualifies as "exclusionary" based on its net effect on consumer welfare. Steven C. Salop, *Exclusionary Conduct, Effect on Consumers, and the Flawed Profit-Sacrifice Standard*, 73 ANTITRUST L.J. 311, 330 (2006). Because it entails a totality-of-the-circumstances inquiry into competitive harm, a balancing test may avoid the allegations of underinclusiveness that have been leveled against alternative approaches. On the other hand, commentators have criticized open-ended balancing for being administratively costly and making it difficult for firms to predict whether their behavior is permissible, which may deter procompetitive conduct. DOJ MONOPOLIZATION REPORT, *supra* note 65, at 37-38. Many courts have employed an effects-balancing framework in Section 2 cases, but—like other theories—it has not risen to the level of an all-purpose test. ANTITRUST DEVELOPMENTS, *supra* note 55, at 325.

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.

Predation has been described as "a play in two acts."[66] In the first stage of a predation scheme, a firm charges unsustainably low prices to drive rivals from the market or deter entry.[67] In the second, the firm attempts to recoup the losses incurred in the first stage by raising prices to monopoly levels.[68]

Predatory pricing has played a notable role in antitrust history and was a part of the federal government's landmark monopolization case against the Standard Oil Company, which was broken up in 1911.[69] The practice was also a common target of antitrust enforcement through the 1960s,[70] when some courts evaluated predation claims by focusing on whether the defendant intended to harm rivals.[71]

Today, matters are different. Beginning in the 1950s, academics affiliated with what came to be known as the Chicago School of antitrust analysis mounted a critique of prevailing theories of predatory pricing.[72] They claimed, among other things, that predation is typically an irrational strategy, because monopoly prices charged during the recoupment period will often invite entry, which will in turn drive prices down to competitive levels.[73] Chicago School scholars also contended that monopolists will usually suffer greater losses from a price war than their competitors, because large firms tend to make more sales than smaller ones.[74] Other academics from what is often called the modern Harvard School later offered arguments for a less interventionist posture that were grounded in institutional concerns about the ability of courts to distinguish predatory pricing from vigorous price competition.[75]

These criticisms proved highly influential.[76] In the 1970s and 1980s, many lower courts took a more restrictive approach to predation claims, often requiring plaintiffs to show that the defendant's prices fell below its costs rather than inquiring into the defendant's intent.[77] The Supreme Court ultimately ratified this approach in its 1993 *Brooke Group* decision, which held that predation plaintiffs must establish that (1) the defendant charged below-cost prices, and (2) there is a "dangerous probability" that the defendant will recoup its losses by raising prices upon the elimination of competitors.[78]

---

[66] FRANCIS & SPRIGMAN, *supra* note 26, at 341.

[67] *Id*.

[68] *Id*.

[69] Standard Oil Co. v. United States, 221 U.S. 1 (1911).

[70] William E. Kovacic, *The Intellectual DNA of Modern U.S. Competition Law for Dominant Firms: The Chicago/Harvard Double Helix*, 2007 COLUM. BUS. L. REV. 1, 44 (2007).

[71] Elhauge, *supra* note 42, at 268 & n.47 (collecting cases).

[72] *See, e.g.*, ROBERT H. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 149-55 (1978); John S. McGee, *Predatory Price Cutting: The Standard Oil (N.J.) Case*, 1 J. L. & ECON. 137 (1958).

[73] The Chicago critique is controversial. Economists have identified a variety of circumstances in which predation can, in theory, be a rational business strategy—for example, where entry entails large fixed costs, a dominant firm develops a predatory reputation, capital markets are imperfect, or predation can deny rivals minimum efficient scale. CHIARA FUMAGALLI, ET AL., EXCLUSIONARY PRACTICES: THE ECONOMICS OF MONOPOLISATION AND ABUSE OF DOMINANCE 16-45 (2018).

[74] McGee, *supra* note 72, at 140. Price discrimination can mitigate this effect. For example, a monopolist may be able to limit its losses from predation by cutting prices only in certain markets. FUMAGALLI, ET AL., *supra* note 73, at 17.

[75] *See, e.g.*, Phillip Areeda & Donald F. Turner, *Predatory Pricing and Practices Under Section 2 of the Sherman Act*, 88 HARV. L. REV. 697 (1975).

[76] One commentator has argued that the Areeda-Turner paper "has a strong claim to be the most influential law review article ever written on an antitrust topic." Kovacic, *supra* note 70, at 45.

[77] *Id*. at 45-50.

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

These requirements have proven difficult to satisfy. Since the *Brooke Group* decision, successful predatory-pricing claims have been rare.[79]

Refusals to Deal

Another category of potentially exclusionary conduct involves refusals to deal with rivals. In general, firms—including monopolists—have the right to choose their business partners.[80] In certain cases, however, courts have held that declining to do business with competitors can harm competition without justification and thus violate the Sherman Act.

In *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, for example, the Supreme Court held that a monopolist of downhill skiing services in Aspen, Colorado violated Section 2 by terminating an "all-Aspen" ski ticket that it had offered with the plaintiff.[81] The defendant also made it difficult for the plaintiff to replicate the "all-Aspen" package, refusing to sell the plaintiff lift tickets or accept bank-guaranteed vouchers included in the plaintiff's replacement ticket package.[82] After concluding that the defendant had failed to offer a plausible efficiency justification for its conduct, the Supreme Court affirmed a verdict of Section 2 liability.[83]

However, the Court later cabined the scope of its decision in *Aspen Skiing*, explaining that the case lies "at or near the outer boundary" of monopolization law.[84] The Court offered this guidance in *Verizon Communications Inc. v. Trinko*, in which it held that Verizon did not violate Section 2 by refusing to provide interconnection services to a rival local telephone service provider.[85] The Court distinguished *Aspen Skiing* on the ground that the monopolist in the latter decision had terminated "a voluntary (and thus presumably profitable) course of dealing" with the plaintiff, which suggested a willingness to sacrifice short-term profits for an anticompetitive end.[86] 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 also revealed an anticompetitive purpose.[87] Because those factors were not present in *Trinko*, the Court held that Verizon's conduct did not fall within *Aspen Skiing*'s "limited exception" to the principle that firms are free to refuse to deal with their competitors.[88]

Based on the Supreme Court's reasoning in *Trinko*, some lower courts have concluded that refusal-to-deal plaintiffs must establish that a defendant's refusal entailed a sacrifice of short-term

---

[79] SULLIVAN, ET AL., *supra* note 26, at 121; DEVLIN, *supra* note 10, at 184; Lina M. Khan, *Amazon's Antitrust Paradox*, 126 YALE L.J. 710, 730 & n.107 (2017) [hereinafter "Khan, *Amazon's Antitrust Paradox*"].

[80] *See* United States v. Colgate & Co., 250 U.S. 300 (1919).

[81] 472 U.S. 585, 593-94 (1985).

[82] *Id*.

[83] *Id*. at 608-11.

[84] Verizon Commc'ns Inc. v. L. Offs. of Curtis V. Trinko, LLP, 540 U.S. 398, 409 (2004).

[85] *Id*. at 409-16.

[86] *Id*. at 409.

[87] *Id*.

[88] *Id*.

profits for an exclusionary purpose.[89] Some courts have also required plaintiffs to establish this type of profit sacrifice with proof that the defendant terminated a voluntary course of dealing.[90]

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.[91] To prevail 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.[92]

While that doctrine remains on the books as a formal matter,[93] two commentators have described the Supreme Court's treatment of it as inflicting "death by dicta."[94] Its viability thus remains uncertain.

Refusal-to-deal doctrine implicates a well-recognized trade-off. On the one hand, compulsory dealing will often increase static efficiency. Requiring a vertically integrated monopolist to supply necessary inputs to downstream rivals, for example, may promote price competition in the downstream market and thereby eliminate allocative inefficiencies.[95] Those benefits, however, may come at the expense of dynamic competition insofar as they reduce incentives to invest and innovate.[96]

As *Trinko* makes clear, antitrust doctrine currently places greater emphasis on the latter concern.[97] The Supreme Court has also expressed skepticism about the institutional competence of courts to craft appropriate remedies in refusal-to-deal cases. The worry is that compulsory dealing will often require generalist judges to set prices and other contract terms—tasks that are typically the province of a sectoral regulator.[98]

---

[89] *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).

[90] *E.g.*, FTC v. Qualcomm, Inc., 969 F.3d 974, 993-94 (9th Cir. 2020); *Novell*, 731 F.3d at 1075; In re Elevator Antitrust Litig., 502 F.3d 47, 52 (2d Cir. 2007); Covad Commc'ns Co. v. BellSouth Corp., 374 F.3d 1044, 1049 (11th Cir. 2004).

[91] *Trinko*, 540 U.S. at 410-11.

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

[93] *See* ELHAUGE, *supra* note 38, at 353 n.91 (collecting circuit court decisions recognizing the doctrine).

[94] Brett Frischmann & Spencer Weber Waller, *Revitalizing Essential Facilities*, 75 ANTITRUST L.J. 1, 3 (2008); *see also* HERBERT HOVENKAMP, FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE 337 (4th ed. 2011) [hereinafter "HOVENKAMP, FEDERAL ANTITRUST POLICY"] (concluding that "[n]ot many essential facility claims will survive" post-*Trinko*); Khan, *Amazon's Antitrust Paradox*, *supra* note 79, at 801 (noting that commentators have wondered whether the essential-facilities doctrine is now "a dead letter").

[95] Howard A. Shelanski, *Unilateral Refusals to Deal in Intellectual and Other Property*, 76 ANTITRUST L.J. 369, 371 (2009).

[96] *Id*.

[97] Verizon Commc'ns Inc. v. L. Offs. of Curtis V. Trinko, LLP, 540 U.S. 398, 407-08 (2004) ("Firms may acquire monopoly power by establishing an infrastructure that renders them uniquely suited to serve their customers. Compelling such firms to share the source of their advantage is in some tension with the underlying purpose of antitrust law, since it may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities.").

[98] *Id*. at 408.

As discussed below, in many cases, permissive refusal-to-deal doctrine has significant implications for the viability of antitrust action against major tech platforms under existing law.

Tying

Tying arrangements are vertical restraints of trade (*i.e.*, restraints involving individuals or firms in a customer-supplier relationship) that can be challenged under several provisions of the antitrust laws, including Sections 1 and 2 of the Sherman Act.[99] Tying involves a refusal to sell one product (the tying product) unless buyers also purchase another product (the tied product) from the seller.[100]

The basic 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.[101] 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.[102]

However, tying can also produce procompetitive benefits. For example, tying may dissuade consumers from using an inferior substitute to the tied product with the tying product, mitigating the risk of reputational damage to a seller's brand.[103] Producing and selling different products together may also reduce production, marketing, and distribution costs.[104]

Some ties can also serve as a means of price discrimination—for example, by allowing firms to discriminate between high-intensity and low-intensity users of a product.[105] Commentators have debated the effects of these "requirements" or "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. Firms may employ these types of ties to lower the price of the tying product and raise the price of the tied product, benefitting low-volume users and harming high-volume users.[106] Some commentators have argued that "requirements ties" typically increase total and consumer welfare,[107] while others have come to the opposite conclusion.[108]

Like predatory-pricing doctrine, tying law has changed significantly over the course of antitrust history. Throughout much of the 20th century, courts were highly skeptical of tying arrangements,

---

[99] HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 94, at 435.

[100] Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2 (1984).

[101] FUMAGALLI, ET AL., *supra* note 73, at 352.

[102] *Id*. at 386-88.

[103] ELHAUGE, *supra* note 38, at 419.

[104] FUMAGALLI, ET AL., *supra* note 73, at 353.

[105] Dennis W. Carlton & Michael Waldman, *Tying*, *in* 3 ISSUES IN COMPETITION LAW AND POLICY 1859, 1866 (Wayne Dale Collins ed., 2008).

[106] Erik Hovenkamp & Herbert J. Hovenkamp, *Tying Arrangements and Antitrust Harm*, 52 ARIZ. L. REV. 925, 951-52 (2010).

[107] *Id*. at 925. One observer has analogized certain conduct in tech markets to requirements ties, arguing 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).

[108] 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).

which were deemed *per se* illegal under Section 1 of the Sherman Act.[109] During this period of disapproval, the Supreme Court consistently described tying as inherently anticompetitive.[110]

As in other areas of antitrust, academic work challenged this attitude. Beginning in the 1950s, Chicago School scholars criticized the theory that a firm could leverage power in one market to extract additional profits from another market. They argued that when consumers use complementary products in fixed proportions—for example, nuts and bolts—a monopolist cannot extract additional profits by tying one product to the other.[111] In such cases, they reasoned, there is one profit-maximizing price for the product set, meaning a monopolist of nuts could extract only one monopoly profit from the nut-bolt set. If the market for bolts is competitive, charging a monopoly price for nuts while tying them to bolts sold at a supra-competitive price would result in a price for the nut-bolt set that exceeds the profit-maximizing level.[112] The Chicago critique of leverage theory thus contended that, in these circumstances, firms likely employ tying arrangements because they generate efficiencies.[113]

The single monopoly profit theory (SMPT) described above applies only under certain restrictive assumptions.[114] In addition to being limited to complementary products used in fixed proportions,[115] the SMPT does not eliminate the possibility that a firm may employ a tying arrangement to impair the efficiency of rivals in the tied market. If there are necessary scale economies in the tied market, for example, tying can potentially allow a firm to deny those economies to rivals and thus decrease the competitiveness of that market.[116] The SMPT also does not preclude the use of a tying arrangement to maintain market power in the tying market (*i.e.*, in cases where firms may enter the tying market via the tied market).[117]

Despite these limitations, the Chicago critique of traditional leverage theory—along with the development of various efficiency-based rationales for tying—ultimately led courts to move away from the view that ties are almost invariably anticompetitive.[118] This change prompted an erosion of the *per se* rule. In decisions in the 1970s and 1980s, the Supreme Court retained the label of *per se* illegality for tying arrangements, but limited the rule's application to firms with sufficient market power in the tying market to force purchases of the tied product.[119]

---

[109] N. Pac. Ry. Co. v. United States, 356 U.S. 1, 3 (1958).

[110] Fortner Enters. v. U.S. Steel Corp., 394 U.S. 495, 503 (1969) (stating that tying arrangements "generally serve no legitimate business purpose that cannot be achieved in some less restrictive way"); Standard Oil Co. v. United States, 337 U.S. 293, 305-06 (1949) (concluding that tying arrangements "serve hardly any purpose beyond the suppression of competition").

[111] Ward S. Bowman, Jr., *Tying Arrangements and the Leverage Problem*, 67 YALE L.J. 19, 23 (1957).

[112] *Id*.

[113] *Id*. at 29.

[114] FUMAGALLI, ET AL., *supra* note 73, at 367-99.

[115] As discussed, commentators have taken different views on the welfare effects of ties involving products used in variable proportions.

[116] Einer Elhauge, *Tying, Bundling, and the Death of the Single Monopoly Profit Theory*, 123 HARV. L. REV. 397, 413 (2009).

[117] *Id*. at 417-19.

[118] Ill. Tool Works Inc. v. Independent Ink, Inc., 547 U.S. 28, 35-36 (2006) (noting that "[o]ver the years," the Court's "strong disapproval of tying arrangements has substantially diminished," and that the case law had rejected the assumption that tying arrangements usually have no procompetitive purpose).

[119] Jefferson Parish Hosp. Dist. No. 2 v. Hyde, 466 U.S. 2, 13-16 (1984); U.S. Steel Corp. v. Fortner Enters., Inc., 429 U.S. 610, 620-22 (1977).

Lower courts have adopted different formulations of this modified *per se* rule, but the inquiries are generally similar.[120] One commentator has summarized the doctrine as establishing the following requirements for a *per se* tying claim under Section 1:

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 (an inquiry that focuses on the absolute dollar amount of affected commerce).[121]

Some lower courts have also required plaintiffs to demonstrate that a tying arrangement had anticompetitive effects in the tied product market.[122] Others have entertained and accepted business justifications for challenged ties.[123] In practice, then, the modified *per se* rule against tying appears to be more similar to the rule of reason than it is to traditional *per se* rules.[124]

Courts have also declined to apply the modified *per se* rule to ties involving platform software products. In its 2001 decision in *United States v. Microsoft*, the D.C. Circuit held that a tie involving Microsoft's Windows operating system and its Internet Explorer web browser was governed by the rule of reason, rather than the modified *per se* rule.[125] In rejecting application of the *per se* rule, the D.C. Circuit noted that none of the Supreme Court's tying cases had involved the physical and technological integration of separate products.[126] Condemning such ties without evaluating their competitive effects, the court reasoned, would create an unacceptable risk of error and deter innovation.[127] In 2023, the Ninth Circuit adopted the D.C. Circuit's reasoning to conclude that the rule of reason applied to a tying claim challenging Apple's requirement that software developers use Apple's payment processor for in-app purchases as a condition of distributing apps through its App Store.[128]

As mentioned, tying arrangements can be challenged under Sections 1 and 2 of the Sherman Act. The key differences between the provisions are Section 1's requirement of an agreement; the availability of the modified *per se* rule under Section 1; and Section 2's requirement that challenged conduct contribute to the creation or maintenance of monopoly power (or produce a dangerous probability of those effects).[129]

---

[120] HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 94, 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).

[121] *Id*. The Supreme Court has held that $60,800 in sales was sufficient to meet the "not insubstantial" volume requirement, while some lower courts have held that considerably lower volumes are sufficient. ANTITRUST DEVELOPMENTS, *supra* note 55, at 197 (collecting cases).

[122] *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).

[123] ANTITRUST DEVELOPMENTS, *supra* note 55, at 200.

[124] Viamedia, Inc. v. Comcast Corp., 951 F.3d 429, 468 (7th Cir. 2020) (making this observation).

[125] 253 F.3d 34, 89-91 (D.C. Cir. 2001) (per curiam).

[126] *Id*.

[127] *Id*.

[128] Epic Games, Inc. v. Apple, Inc., 67 F.4th 946, 997 (9th Cir. 2023).

[129] FRANCIS & SPRIGMAN, *supra* note 26, at 382.

In evaluating product-design or "technological tie" claims under Section 2, some decisions have held that the integration of separate products is lawful when it improves quality or reduces cost, even if that conduct forecloses rivals.[130] The *Microsoft* decision, by contrast, employed a rule-of-reason-like burden-shifting framework to the government's Section 2 claims in that case.[131] Another appellate decision has affirmed liability for product integration where evidence of an exclusionary motive cast doubt on the defendant's argument that the challenged design represented a genuine improvement.[132]

Exclusive Dealing

Like tying arrangements, exclusive contracts—in which a firm commits to refrain from dealing with its counterparty's rivals—are vertical restraints of trade that can be challenged under Sections 1 and 2 of the Sherman Act.[133]

Exclusive contracts can harm competition when a dominant firm uses them to foreclose rivals from key inputs or distribution channels.[134] They can also produce procompetitive benefits. For example, exclusivity may induce manufacturers to make relationship-specific investments in dealers by providing sales training, technical support, and other promotional assistance.[135] To the extent that a dealer can use any of this support to promote rival brands, manufacturers may lack the incentive to provide it. Exclusive dealing can eliminate this free-rider problem and thereby encourage investment.[136] Exclusivity may also mitigate uncertainty about future sales or purchases[137] and encourage more intense competition for distribution, which may result in lower consumer prices.[138]

While exclusive dealing has never been deemed *per se* illegal, its treatment has evolved considerably. In its 1949 *Standard Stations* decision, the Supreme Court affirmed a decision finding that foreclosure of 6.7% of the relevant market was sufficient to render an exclusive contract illegal.[139] In doing so, the Court appeared to approve the lower court's refusal to engage in a full rule-of-reason analysis of competitive harm.[140] The decision thus stood for what came to be called the "quantitative substantiality" approach to exclusivity, which focused on the percentage of the relevant market foreclosed by a challenged agreement.[141]

The Supreme Court departed from that approach twelve years later in *Tampa Electric Co. v. Nashville Coal Co.*, where it rejected a challenge to an exclusive contract that foreclosed less than

---

130 *See, e.g.*, Allied Orthopedic Appliances v. Tyco Health Care Grp., 592 F.3d 991, 1000-02 (9th Cir. 2010); Berkey Photo, Inc. v. Eastman Kodak Co., 603 F.2d 263, 286-87 (2d Cir. 1979).

131 *Microsoft*, 253 F.3d at 65-67.

132 C.R. Bard, Inc. v. M3 Systems, 157 F.3d 1340, 1382 (Fed. Cir. 1998).

133 HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 94, at 478.

134 FUMAGALLI, ET AL., *supra* note 73, at 239-62.

135 *Id*. at 273-74.

136 *Id*.

137 *See* Standard Oil Co v. United States (*Standard Stations*), 337 U.S. 293, 306-07 (1949).

138 Benjamin Klein & Kevin M. Murphy, *Exclusive Dealing Intensifies Competition for Distribution*, 75 ANTITRUST L.J. 433 (2008). Chicago School academics also questioned why a rational firm would agree to an exclusive contract that enhanced or preserved the market power of its counterparty. *E.g.*, BORK, *supra* note 72, at 309. In response, economists have developed models showing that buyers may face collective action problems when a monopolist uses exclusive contracts to deny rivals necessary scale economies. FUMAGALLI, ET AL., *supra* note 73, at 243-54.

139 *Standard Stations*, 337 U.S. at 308-09.

140 *Id*.

141 ANTITRUST DEVELOPMENTS, *supra* note 55, at 209.

1% of the relevant market.[142] In *Tampa Electric*, the Court did not limit its analysis to the low foreclosure percentage, explaining that it was necessary to also engage in a qualitative analysis of the agreement's competitive effects.[143]

The quantitative aspect of foreclosure analysis has also become more permissive. In the Court's 1984 *Jefferson Parish* decision, the concurring opinion of four Justices concluded, without a detailed inquiry, that foreclosure of 30% of the market was not sufficient to render an exclusive contract unlawful.[144]

Since these decisions, reviewing courts have tended to require foreclosure of at least 40% of the market before condemning exclusive contracts under Section 1, while also analyzing the duration of the restrictions, any business justifications, and other factors that may bear on an agreement's competitive effects.[145]

Some courts have indicated that the standards for assessing exclusive dealing are more plaintiff-friendly under Section 2, and that a monopolist's use of exclusive contracts may be illegal even if they foreclose less than the 40% figure that is typically necessary for a Section 1 violation.[146]

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 38, at 357-58 nn.97-98 (collecting cases).

In 2004, the Supreme Court rejected one type of leveraging claim, remarking that the leveraging theory offered in that case would be valid only if the defendant had a "dangerous probability" of monopolizing a second market—an element of the attempt-to-monopolize offense. *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. As a result, "monopoly leveraging" does not denote a standalone antitrust offense that is distinct from monopolization or attempted monopolization.

In its 2001 *Microsoft* decision, however, the D.C. Circuit endorsed what some commentators have called a "defensive leveraging" 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 Section 2 doctrine, an "offensive leveraging" theory requires proof that a defendant's conduct raised a "dangerous probability" of *monopolizing* a second market—a prerequisite for an attempt-to-monopolize claim. 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

[142] 365 U.S. 320 (1961).

[143] *Id*. at 329.

[144] 466 U.S. 2, 46 (1984) (O'Connor, J., concurring).

[145] HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 94, at 487.

[146] *E.g.*, United States v. Microsoft Corp., 253 F.3d 34, 70 (D.C. Cir. 2001) (per curiam).

into a second market helps preserve its primary monopoly—is a viable theory of monopoly maintenance, even without proof that the defendant threatens to monopolize the second market. *See Microsoft*, 253 F.3d at 64, 80-84.

Mergers & Acquisitions

The antitrust laws also place limitations on mergers and acquisitions.[147] Section 7 of the Clayton Act prohibits a merger if its effect "may be substantially to lessen competition, or to tend to create a monopoly."[148] Though less common, Section 2 of the Sherman Act has also been used to challenge mergers that help a firm acquire or maintain monopoly power.[149]

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

Horizontal mergers (*i.e.*, mergers between competitors) receive the greatest scrutiny and can raise two primary types of concerns. First, horizontal mergers may allow a firm to unilaterally increase its prices or decrease the quality of its products by eliminating competition between rivals.[150] Second, horizontal mergers may facilitate tacit or express collusion by increasing market concentration (so-called "coordinated effects").[151]

Vertical mergers (*i.e.*, mergers between firms in the same supply chain) receive less exacting scrutiny than horizontal ones, because they do not eliminate direct competitors and are thought to often generate efficiencies.[152] The main concern with vertical mergers is foreclosure; when a firm acquires an important source of inputs or a key distribution channel, it may have the ability and incentive to raise rivals' costs or refuse to do business with rivals altogether.[153] A vertical merger may also prompt concerns if it gives a firm access to competitively sensitive information about rivals or facilitates collusion by allowing the merged entity to monitor compliance with tacit pricing agreements.[154]

Conglomerate mergers are mergers that are neither horizontal nor vertical.[155] Challenges to such mergers are rare.[156] Conglomerate mergers may raise antitrust concerns, however, if they allow a firm to acquire a *potential* competitor.[157]

---

[147] For ease of discussion, this report will refer to both mergers and acquisitions as "mergers."

[148] 15 U.S.C. § 18.

[149] 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).

[150] HORIZONTAL MERGER GUIDELINES, *supra* note 49, at § 6.

[151] *Id*. § 7.

[152] DANIEL A. CRANE, ANTITRUST 164 (2014). 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. DEP'T OF JUST. & FED. TRADE COMM'N, VERTICAL MERGER GUIDELINES § 6 (2020) [hereinafter "VERTICAL MERGER GUIDELINES"] (withdrawn by the FTC in September 2021). The elimination of double marginalization is a key procompetitive benefit that is often cited in defense of vertical mergers. *See id*.

[153] VERTICAL MERGER GUIDELINES, *supra* note 152, at § 4.

[154] *Id*. §§ 4-5.

[155] ELHAUGE, *supra* note 38, at 811.

[156] *Id*. at 812.

[157] The elimination of potential competition is sometimes described as a horizontal theory of harm, because it involves the claim that a potential competitor would likely enter the relevant market or that market participants perceive the potential competitor as being likely to enter their market. CHRISTOPHER L. SAGERS, ANTITRUST 321 n.45 (3d ed. 2021). As discussed below, however, challenges based on these theories are evaluated under different standards than challenges to other types of horizontal mergers.

Merger law has evolved significantly over the last 50 years. During the Warren Court era from the early 1950s through the 1960s, the Supreme Court heard 12 merger cases, siding with the plaintiff in each case where it reached the merits.[158] Some of the Court's decisions blocked small mergers in unconcentrated markets, based in part on a concern about stopping an incipient trend toward concentration and a desire to effectuate congressional intent to protect small businesses.[159]

In this period, courts were heavily influenced by an approach to industrial organization often called the "structure-conduct-performance" (SCP) paradigm, which held that market concentration tended to produce less competitive markets with higher prices.[160] The impact of these theories was made clear in the Supreme Court's 1963 decision in *United States v. Philadelphia National Bank*, which recognized a presumption of illegality for mergers that would result in a firm controlling "an undue percentage share of the relevant market" while significantly increasing market concentration.[161]

This "structural presumption" remains good law, but subsequent developments have chipped away at its strength. In its 1974 decision in *United States v. General Dynamics Corp.*, the Supreme Court held that the defendant coal-mine operator had successfully rebutted the presumption with evidence that almost all of the acquired firm's coal reserves were depleted or committed under long-term contracts.[162] Lower court decisions later interpreted *General Dynamics* as demanding a more detailed inquiry into a merger's competitive effects than was evident in the Warren Court's merger decisions.[163] This shift coincided with a wave of academic criticism directed at SCP theories. Among other things, SCP's detractors argued that high levels of market concentration are often necessary for firms to achieve economies of scale and scope and that many concentrated markets perform competitively.[164]

Today, much of the action in merger enforcement takes place in the antitrust agencies rather than the courts. This is partly the result of Congress's adoption of the Hart-Scott-Rodino Antitrust Improvements Act (HSR Act) in 1976, which created a pre-merger notification regime that allows the DOJ and FTC to review mergers exceeding certain numerical thresholds before they close.[165]

Since 1968, the agencies have published guidelines outlining their analytical approach to merger review, including their application of the structural presumption.[166] Starting with the 1982 guidelines, the agencies have relied on the Herfindahl-Hirschman Index (HHI) measure of market

---

[158] Eleanor Fox, *Antitrust, Mergers, and the Supreme Court: The Politics of Section 7 of the Clayton Act*, 26 MERCER L. REV. 389, 396-97 (1975).

[159] *E.g.*, United States v. Von's Grocery Co., 384 U.S. 270, 278 (1966) (blocking a merger that would have resulted in the merged firm occupying a 7.5% market share, based on a concern "that a market marked . . . by both a continuous decline in the number of small businesses and a large number of mergers would slowly but inevitably gravitate from a market of many small competitors to one dominated by one or a few giants"); Brown Shoe Co. v. United States, 370 U.S. 294, 343-44 (1962) (blocking a merger with both horizontal and vertical elements, based in part on the fact that the integrated firm would be able to offer lower prices than unintegrated firms); *see also* FTC v. Procter & Gamble Co., 386 U.S. 568, 579 (1967) (unwinding a conglomerate transaction involving a large consumer-goods firm and the leading producer of household liquid bleach, based in part on a concern that economies of scope would disadvantage smaller rivals).

[160] William E. Kovacic & Carl Shapiro, *Antitrust Policy: A Century of Economic and Legal Thinking*, 14 J. ECON. PERSP. 43, 52 (2000).

[161] 374 U.S. 321, 363-64 (1963).

[162] 415 U.S. 486, 508-11 (1974).

[163] SULLIVAN, ET AL., *supra* note 26, at 464 n.76 (citing examples).

[164] HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 94, at 544.

[165] P.L. 94-435, 90 Stat. 1383 (1976).

[166] In *Philadelphia National Bank*, the Supreme Court held that the presumption was triggered by a post-merger market share of 30%. 370 U.S. at 364. The Court did not address market-concentration thresholds, however.

concentration in applying the presumption.[167] Revisions to the guidelines in 2010 increased the minimum concentration levels at which the agencies regard horizontal mergers as potentially problematic.[168] While the guidelines are not legally binding, courts often treat them as persuasive authority and appear to accord some significance to the relevant HHI thresholds.[169]

As discussed, the structural presumption can be rebutted—for example, with evidence that the proposed market is poorly defined or that market shares do not reflect a merger's likely competitive effects; that the entry of other firms will discipline any pricing power; or that the merger will produce efficiencies that offset any anticompetitive effects.[170] 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.[171]

While the case law on vertical mergers is sparse,[172] the most recent appellate decision reviewing a vertical deal employed a burden-shifting approach that is similar to the framework used to evaluate horizontal mergers.[173] However, the court indicated that plaintiffs challenging vertical mergers cannot rely on the structural presumption to discharge their initial burden.[174] Instead, the court explained that such plaintiffs must make a fact-specific showing that a transaction is likely to be anticompetitive,[175] which will presumably often involve foreclosure concerns.

The current state of merger law is something of an oddity. Although the Supreme Court's 1960s merger decisions have not been formally overturned, they do not accurately reflect the "law on the ground" as applied by the antitrust agencies and the lower courts.[176] Since the Warren Court, for example, merger doctrine has abandoned "non-economic" goals like the protection of small businesses.[177] While structural evidence continues to play a role in merger analysis, its centrality

[167] FRANCIS & SPRIGMAN, *supra* note 26, at 423. The HHI is a measure of market concentration calculated by summing the squares of each firm's market share. Thus, a market with four firms that each occupy 25% of the market would have an HHI of 2,500 ($25^2 + 25^2 + 25^2 + 25^2$).

[168] *Id*.

[169] SULLIVAN, ET AL., *supra* note 26, at 500 n.41 (collecting cases).

[170] Herbert J. Hovenkamp & Carl Shapiro, *Horizontal Mergers, Market Structure, and Burdens of Proof*, 127 YALE L.J. 1996, 1997 (2018). The availability of an efficiencies defense in merger cases is not entirely settled. In the 1960s, the Supreme Court explicitly rejected such a defense and sometimes identified efficiencies as a reason to *block* mergers. *See* FRANCIS & SPRIGMAN, *supra* note 26, at 494-95. More recently, though, some lower courts have indicated that evidence of efficiencies can be used to rebut a *prima facie* showing of competitive harm. *Id*. at 496 n.688 (collecting cases). The merger guidelines also provide that certain merger-specific efficiencies may be cognizable. HORIZONTAL MERGER GUIDELINES, *supra* note 49, at § 10 ("The Agencies will not challenge a merger if cognizable efficiencies are of a character and magnitude such that the merger is not likely to be anticompetitive in any relevant market."). To date, however, no federal court of appeals has concluded that evidence of efficiencies was sufficient to rebut a *prima facie* case of anticompetitive effects. FRANCIS & SPRIGMAN, *supra* note 26, at 499.

[171] *Baker Hughes*, 908 F.2d at 983.

[172] In 2018, the DOJ's challenge to AT&T's acquisition of Time Warner became the first vertical transaction litigated to judgment since the 1970s. Fruehauf Corp. v. FTC, 603 F.3d 345 (2d Cir. 1979).

[173] United States v. AT&T, Inc., 916 F.3d 1029, 1032 (D.C. Cir. 2019).

[174] *Id*.

[175] *Id*.

[176] SULLIVAN, ET AL., *supra* note 26, at 466 (noting the "quasi-irrelevance" of the Supreme Court in merger law). The Supreme Court has not issued a merits opinion in a merger case since 1975. United States v. Citizens & S. Nat'l Bank, 422 U.S. 86 (1975).

[177] HERBERT HOVENKAMP, THE ANTITRUST ENTERPRISE: PRINCIPLE AND EXECUTION 208 (2005) [hereinafter "HOVENKAMP, ANTITRUST ENTERPRISE"] ("While antitrust casebooks continue to print 1960s-vintage merger decisions that have never been overruled, no one, not even federal judges and certainly not the government enforcement agencies, pay much attention to them. . . . It is not merely that Supreme Court decisions are not followed on technical grounds—(continued...)

has diminished as regulators and courts also consider a broader range of factors that may illuminate a transaction's competitive effects.[178] That may be changing, however. In 2023, the DOJ and FTC released draft merger guidelines that appear to place more weight on structural considerations than previous iterations of the guidelines.[179] It remains to be seen whether courts will follow the agencies in this regard, should the regulators finalize the guidelines in similar form.

Mergers Involving Potential Competitors

Some mergers involve firms that do not compete at the time of the transaction, but may compete in the future absent the merger. These 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. In the doctrine, this concern is known as the elimination of "perceived potential competition." 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. This concern is called the elimination of "actual potential competition."

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

Id. While the Supreme 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 benefits.

Id. at 633. Lower courts have adopted different evidentiary requirements in analyzing whether a firm is likely to enter the market absent a challenged transaction. The Fourth Circuit demands "clear proof" of entry but for the merger. *FTC v. Atlantic Richfield Co.*, 549 F.2d 289, 294-95 (4th Cir. 1977). Others have required that the potential competitor "probably" or "would likely" enter the relevant market. *Tenneco, Inc. v. FTC*, 689 F.2d 346, 352 (2d Cir. 1982) ("would likely"); *Yamaha Motor Co. v. FTC*, 657 F.2d 971, 977 (8th Cir. 1981) ("probably"). Another has demanded a "reasonable probability" of entry, which the court construed to be more demanding than a "probability" or "more likely than not" test. *Mercantile Tex. Corp. v. Bd. of Govs. of the Fed. Res. Sys.*, 638 F.2d 1255, 1268-69 (5th Cir. 1981).

The impact of potential-competition doctrine has been fairly modest. Three decisions have found a merger unlawful based on the perceived-potential-competition theory, all of which also relied on the actual-potential-competition theory. ANTITRUST DEVELOPMENTS, *supra* note 55, at 398.

---

the fundamental ideology of mergers has shifted dramatically over the last three decades and now embodies values that are inconsistent at the most fundamental level with those that the Supreme Court last articulated.").

[178] HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 94, at 544.

[179] *U.S. Antitrust Agencies Propose Sweeping Changes to Merger Guidelines—5 Key Things You Need to Know*, WHITE & CASE LLP (July 20, 2023), https://www.whitecase.com/insight-alert/us-antitrust-agencies-propose-sweeping-changes-merger-guidelines-5-key-things-you. For an overview of the 2023 draft guidelines, see CRS Legal Sidebar LSB11027, *Antitrust Agencies Release Draft Merger Guidelines and Propose HSR Rule Changes*, by Peter J. Benson, Chris D. Linebaugh, and Alexander H. Pepper.

Theoretical Approaches to Antitrust

As the above discussion makes clear, antitrust doctrine has changed significantly over time, often in response to shifts in political ideology and economic theory. Congress has played a limited role in this evolution; the language of the core antitrust statutes has not meaningfully changed since the Celler-Kefauver Act amended Section 7 of the Clayton Act in 1950.[180] Because the flexible nature of the antitrust laws gives the judiciary broad powers to shape competition policy based on prevailing economic and political thinking,[181] this section provides a brief overview of the leading theoretical approaches to antitrust and their historical influence.

As discussed, SCP theories exerted a strong influence on antitrust policy in the middle of the 20th century.[182] This approach to industrial organization was developed by scholars working in a tradition often referred to as the Harvard School, which posited a close causal link between market concentration, firm conduct, and competitive performance.[183] In particular, the SCP literature held that there was a tight connection between high levels of market concentration and certain undesirable outcomes, such as high price-cost margins.[184]

For much of antitrust history—including during the heyday of the SCP paradigm—"non-economic" goals also played a major role in shaping antitrust doctrine. These goals included the protection of small businesses, the dispersion of economic power, the preservation of economic freedom, and the elimination of concentrated political power.[185]

From the 1940s through the 1960s, structuralist economic theories and the above normative concerns provided the theoretical architecture for a highly interventionist approach to antitrust, judged by today's standards. As discussed, the Warren Court's merger jurisprudence was quite restrictive, invalidating small mergers based in part on a desire 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."[186]

Conduct cases during this era reflected similar attitudes. In the federal government's monopolization case against Alcoa, for example, Judge Learned Hand of the Second Circuit reasoned that the Sherman Act was motivated in part by a belief that "great industrial consolidations are inherently undesirable, regardless of their economic results."[187] He thus construed the statute as an attempt to "put an end to great aggregations of capital because of the helplessness of the individual before them."[188] Based on these principles, the Second Circuit held

---

[180] Pub. L. No. 81-899, 64 Stat. 1125 (1950).

[181] *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").

[182] *See* Kovacic & Shapiro, *supra* note 160, at 52.

[183] ROGER VAN DEN BERGH, COMPARATIVE COMPETITION LAW AND ECONOMICS 33-36 (2017).

[184] *Id*. at 35-36.

[185] *See, e.g.*, Stucke, *supra* note 1, at 560-62; Eleanor M. Fox, *Modernization of Antitrust: A New Equilibrium*, 66 CORNELL L. REV. 1140, 1182 (1981).

[186] Brown Shoe Co. v. United States, 370 U.S. 294, 344 (1962).

[187] United States v. Aluminum Co. of Am., 148 F.2d 416, 428 (2d Cir. 1945) (Hand, J.).

[188] *Id*.

that Alcoa violated Section 2 by expanding its capacity in ways that deterred entry.[189] In its Section 1 cases during this period, the Supreme Court likewise condemned a wide range of conduct as *per se* illegal.[190]

The 1970s witnessed a marked shift in theory and doctrine. As discussed, beginning in the 1950s, lawyers and economists affiliated with what came to be known as the Chicago School challenged much of prevailing antitrust thinking.[191] Chicago School scholars criticized SCP theories on a variety of grounds. Among other things, they argued that markets tend to self-correct; that high levels of concentration often reflect growth by the most efficient firms; and that many business practices that attracted antitrust scrutiny had efficiency-based rationales.[192] The Chicago School's most influential contribution, however, was its prescription that antitrust should be limited to promoting economic welfare.[193] An antitrust system that instead committed itself to a series of often-conflicting social objectives, Chicago School scholars claimed, offered no principled method for distinguishing anticompetitive behavior from permissible conduct.[194]

Chicago's empirical claims did not go unchallenged. Scholars working in the "Post-Chicago" tradition generally embraced the Chicago School's focus on economic goals, but developed theories of anticompetitive harm that were not present in the Chicago literature.[195] Many of these Post-Chicago models highlighted the possibility that dominant firms could employ strategic behavior to raise their rivals' costs, relying heavily on game theory.[196] Another group of academics from the so-called "modern Harvard School" tended to fall somewhere between the Chicago School and the ideology of mid-20th century antitrust, focusing on the administrability of antitrust doctrine and the institutional limitations of courts.[197] Like Post-Chicago scholars, the modern Harvard School endorsed the Chicago view that the ultimate purpose of the antitrust laws is to promote economic welfare.[198] The three approaches differ primarily in their empirical claims about market functioning and the competence of courts to remedy market failures.[199]

In general, the Chicago School and the modern Harvard School have had the greatest impact on the shape of current doctrine.[200] Since the 1970s, the Supreme Court has overturned several

[189] *Id*. at 431 ("It was not inevitable that [Alcoa] should always anticipate increases in the demand for ingot and be prepared to supply them. Nothing compelled it to keep doubling and redoubling its capacity before others entered the field. It insists that it never excluded competitors; but we can think of no more effective exclusion than progressively to embrace each new opportunity as it opened, and to face every newcomer with new capacity already geared into a great organization, having the advantage of experience, trade connections and the elite of personnel.").

[190] *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); International Salt Co., Inc. v. United States, 332 U.S. 392 (1947) (tying).

[191] *See, e.g.*, Herbert Hovenkamp & Fiona Scott Morton, *Framing the Chicago School of Antitrust Analysis*, 168 U. PA. L. REV. 1843 (2020).

[192] VAN DEN BERGH, *supra* note 183, at 45-49.

[193] *See* Richard Schmalensee, *Thoughts on the Chicago Legacy in U.S. Antitrust*, *in* HOW THE CHICAGO SCHOOL OVERSHOT THE MARK: THE EFFECT OF CONSERVATIVE ECONOMIC ANALYSIS ON U.S. ANTITRUST 11, 12-14 (Robert Pitofsky ed. 2008); RICHARD A. POSNER, ANTITRUST LAW ix (2d ed. 2001).

[194] Schmalensee, *supra* note 193, at 12.

[195] Christopher S. Yoo, *The Post-Chicago Antitrust Revolution: A Retrospective*, 168 U. PA. L. REV. 2145, 2160-61 (2020).

[196] *Id*.

[197] HOVENKAMP, ANTITRUST ENTERPRISE, *supra* note 177, at 37-38, 45-56.

[198] *Id*. at 31.

[199] *Id*.

[200] *See* Kovacic, *supra* note 70.

decisions establishing *per se* Section 1 liability for certain categories of conduct[201] and established restrictive standards for various types of monopolization claims.[202] Similarly, the 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.[203]

Modern antitrust doctrine has also abandoned explicit consideration of "non-economic" goals like small business protectionism and the sociopolitical effects of concentrated economic power.[204] Since the 1970s, the Supreme Court has repeatedly described the antitrust laws as being principally concerned with the economic welfare of consumers.[205] This proposition—often called the "consumer welfare standard"—has generated an enormous amount of scholarly attention, especially in recent years. While there is disagreement about what the standard does and should mean in practice,[206] contemporary doctrine clearly recognizes economic welfare as the lodestar of antitrust analysis.[207]

Over the past decade or so, this economic orientation has been criticized by a group of academics and policymakers often described as "Neo-Brandeisians." Members of this movement have criticized much of existing antitrust doctrine as unduly permissive and called for increased

---

201 Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877 (2007) (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).

202 Pac. Bell Tel. Co. v. linkLine Commc'ns, Inc., 555 U.S. 438 (2009) (price squeezes); Weyerhaeuser Co. v. Ross-Simmons Hardwood Lumber Co., 549 U.S. 312 (2007) (predatory buying); Verizon Commc'ns Inc. v. L. Offs. of Curtis V. Trinko, LLP, 540 U.S. 398 (2004) (refusals to deal); Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209 (1993) (predatory pricing).

203 *See, e.g.*, United States v. Baker Hughes, Inc., 908 F.2d 981 (D.C. Cir. 1990); HORIZONTAL MERGER GUIDELINES, *supra* note 49, at § 5.3.

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

205 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).

206 There are several issues here. First, Robert Bork—an influential Chicago School academic and later a federal judge—used the term "consumer welfare" to refer to a "total welfare" standard that focuses on the sum of producer and consumer surplus, while many commentators instead use the term "consumer welfare" to refer to a standard that focuses only on 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. *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).

207 *See, e.g.*, 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.").

attention to some of the "non-economic" goals that played a more prominent role in earlier periods of antitrust history.[208] The Neo-Brandeisian movement's prescriptions are discussed in greater detail below.[209]

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 $6.6 trillion—a figure that exceeds the value of all but the largest national equity markets.[210]

While some have emphasized the quality of the firms' offerings as the primary driver of their ascent,[211] others have alleged that Big Tech has obtained and cemented monopoly power through anticompetitive conduct.[212]

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."[213] More specifically, Meta offers a "family of apps" related to social networking and messaging.[214] 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).[215]

---

[208] 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).

[209] *See infra* "Revisiting the Goals of Antitrust: The Neo-Brandeisian Movement."

[210] *See* Largest Companies by Market Cap, COMPANIESMARKETCAP (last visited Nov. 6, 2023), https://companiesmarketcap.com/; Largest Stock Exchange Operators Worldwide as of October 2022, By Market 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.

[211] *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.

[212] *E.g.*, HJC REPORT, *supra* note 11, at 12-17.

[213] Meta Platforms, Inc., Annual Report (Form 10-K) at 7 (Feb. 2, 2023).

[214] *Id*. Meta also produces augmented and virtual reality products via its Reality Labs division. *Id*. at 8.

[215] *Id*. at 7.

In October 2023, Meta reported that Facebook had 2.09 billion daily active users and 3.05 billion monthly active users.[216] The company's family of apps reportedly features 3.14 billion daily active people and 3.96 billion monthly active people.[217]

Allegations of Market Power

Some observers have argued that Meta possesses significant market power in the market for social networking.[218] The Federal Trade Commission (FTC) shares that view. In an ongoing monopolization lawsuit, the Commission alleges that Meta has held monopoly power in the market for "personal social networking services" (PSNS) since at least 2011.[219] To support such 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.[220]

Others disagree. Meta has argued that it operates in a "dynamic, intensely competitive" industry in which there are many substitutes for its services.[221] 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.[222]

Meta and some commentators have also rejected the notion that entry barriers have caused the market to decisively tip in Meta's favor.[223] For example, observers have highlighted the ability of differentiated firms like TikTok and Snapchat to rapidly gain scale despite Meta's ostensible network advantages.[224]

Allegations of Anticompetitive Conduct

Meta has also 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

---

[216] Meta Platforms, Inc., Quarterly Report (Form 10-Q) at 35 (Oct. 26, 2023).

[217] *Id*.

[218] 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"].

[219] Substitute Amended Complaint for Injunctive and Other Equitable Relief ¶ 164, FTC v. Facebook, Inc., No. 1:20-cv-03590 (D.D.C. Sept. 8, 2021).

[220] *Id*. ¶ 212; HJC REPORT, *supra* note 11, at 136-47; Scott Morton & Dinielli, *supra* note 218, at 11; ACCC REPORT, *supra* note 218, 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).

[221] 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).

[222] *Id.* at 10.

[223] *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).

[224] Hovenkamp, *Selling Antitrust*, *supra* note 223, at 1623; Ezrielev & Marquez, *supra* note 223, at 8.

2014 acquisition of WhatsApp.[225] 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.[226] The FTC also contends that Meta's acquisition of WhatsApp preserved its monopoly by preventing WhatsApp from entering the PSNS market.[227]

Besides targeting Meta's major acquisitions, the FTC and some commentators have criticized the company's treatment of software developers.[228] These allegations involve access to Facebook Platform—an initiative whereby Meta encouraged developers to create apps that interoperate with Facebook.[229] 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 and functionalities.[230] According to the FTC, Facebook Platform ultimately became key infrastructure for app developers because of Facebook's large user base.[231] The Commission's lawsuit alleges that Meta leveraged control of this infrastructure to preserve its monopoly, requiring developers that participated in Facebook Platform to refrain from creating apps that would compete with Facebook products.[232]

Meta has denied engaging in anticompetitive conduct. The company has argued that its Instagram acquisition allowed it to invest resources and expertise in a young startup, hastening the small firm's growth.[233] 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.[234] Finally, Meta has argued that its policies governing access to Facebook Platform—which it has since revised—were lawful under duty-to-deal doctrine.[235]

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 dismissed the agency's initial complaint for failing to plausibly allege monopoly power,[236] 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.[237]

---

[225] 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).

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

[227] *Id*. ¶¶ 107-29.

[228] *Id*. ¶¶ 130-163; HJC REPORT, *supra* note 11, at 166-70; Scott Morton & Dinielli, *supra* note 218, at 24-25.

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

[230] *Id*.

[231] *Id*. ¶ 131.

[232] *Id*. ¶ 133. A group of state attorneys general made similar claims in a lawsuit filed in 2020. New York v. Facebook, Inc., 549 F. Supp. 3d 6 (D.D.C. 2021). A federal district court dismissed that lawsuit in 2021, concluding that the claims challenging Facebook's acquisitions were barred by the doctrine of laches (which precludes lawsuits filed after an unreasonable delay); that Facebook's general policy of withholding APIs from rival developers was not exclusionary standing alone; and that specific refusals to deal occurred too long ago to support injunctive relief. *Id*. at 27-31, 34.

[233] 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).

[234] *Id*. at 24.

[235] *Id*. at 35.

[236] FTC v. Facebook, Inc., 560 F. Supp. 3d 1, 4 (D.D.C. 2021).

[237] FTC v. Facebook, Inc., 581 F. Supp. 3d 34, 43-52 (D.D.C. 2022). While the district court has allowed the FTC's (continued...)

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.[238] The following subsections discuss antitrust allegations involving Google's conduct related to online search, mobile operating systems and app distribution, and digital advertising.

Online Search

Allegations of Market Power

Some commentators have argued that Google has significant market power in the market for general online search.[239] The DOJ agrees. In an ongoing 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% and the presence of substantial entry barriers, including economies of scale.[240] The DOJ has also alleged monopolization of separate markets for "general search text advertising" and "search advertising."[241]

For its part, Google has claimed that it operates in a "highly competitive environment" and faces a "vast array of competitors."[242] 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.[243]

Allegations of Anticompetitive Conduct

Search Distribution

The DOJ's monopolization lawsuit contends that Google has maintained its search monopoly through exclusionary agreements with firms that control search distribution.[244] The agreements make Google the default search engine on various products in exchange for a share of Google's advertising revenue.[245]

---

challenge to Meta's Instagram and WhatsApp acquisitions to proceed, it dismissed 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*.

[238] HJC REPORT, *supra* note 11, at 174.

[239] CMA REPORT, *supra* note 218, at 73; HJC REPORT, *supra* note 11, at 176-82; ACCC REPORT, *supra* note 218, 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"].

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

[241] Memorandum Opinion at 5, United States v. Google LLC, No. 1:20-cv-03010 (D.D.C. Aug. 4, 2023).

[242] HJC REPORT, *supra* note 11, at 179.

[243] *Id*.

[244] 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 made similar allegations in a case that has been consolidated with the DOJ's lawsuit. Memorandum Opinion at 5, United States v. Google LLC, No. 1:20-cv-03010 (D.D.C. Aug. 4, 2023).

[245] Memorandum Opinion at 3, United States v. Google LLC, No. 1:20-cv-03010 (D.D.C. Aug. 4, 2023).

The lawsuit focuses on Google's agreements with two categories of counterparties: (1) browser developers, and (2) manufacturers and wireless carriers that sell devices running the Android mobile operating system, which Google acquired in 2005.[246]

Under Google's agreements with browser developers—primarily Apple and Mozilla—the developers have agreed to make Google the default search engine for all search access points on their browsers in exchange for payments from Google.[247]

The DOJ's allegations regarding device manufacturers and wireless carriers involve two types of agreements. One set of contracts requires manufacturers to preinstall Google Search and place an associated search widget on device home screens as conditions of licensing other proprietary Google apps.[248] Under another set of agreements, manufacturers and wireless carriers commit to make Google the only preinstalled search engine on covered devices and the default for all search access points in exchange for payments from Google.[249]

In its lawsuit, the DOJ contends that Google's agreements amount to exclusive contracts that foreclose substantial channels of search distribution, depriving rivals of the scale needed to serve as effective competitors.[250]

Google has made several arguments in response. While Google concedes that its revenue-sharing agreements with manufacturers and carriers require exclusivity, it has denied that its contracts with browser developers and its Android licensing agreements amount to exclusive dealing.[251]

The browser agreements are not exclusive, Google contends, because they do not prevent developers from promoting rival search engines and users can change a browser's default search engine.[252] Similarly, Google argues that its Android licensing agreements do not prohibit manufacturers from preinstalling rival search apps or browsers.[253]

Google further maintains that the relevant agreements would not be anticompetitive even if they did require exclusivity. Rather, Google claims that it has successfully competed with rivals to secure the challenged agreements with browser developers, who have chosen Google as their default search engine based on considerations of quality and price.[254] Google claims that this "competition for the contract" is the type of merits competition that antitrust encourages.[255]

Google also denies that its Android agreements result in substantial foreclosure, arguing that the appropriate measure of foreclosure requires an analysis of consumer behavior absent the agreements, rather than the percentage of the market covered by those agreements.[256] Because few consumers would switch from Google to another search engine if the challenged agreements did not exist, Google argues, the agreements do not substantially foreclose rivals.[257]

[246] *Id*.

[247] *Id*. at 10.

[248] *Id*. at 13.

[249] *Id*. at 13-14.

[250] *Id*. at 30.

[251] *Id*.

[252] *Id*. at 31-33.

[253] *Id*. at 40.

[254] *Id*. at 35-36.

[255] *Id*. at 35.

[256] *Id*. at 42-43.

[257] *Id*. at 43. In its motion for summary judgment, Google argued that the plaintiffs' expert evidence indicated that (continued...)

In August 2023, a federal district court allowed the claims discussed above to proceed, denying in part Google's motion for summary judgment.[258] The court concluded that there were disputed issues of material fact as to whether Google's browser agreements and Android licensing agreements were *de facto* exclusive, including disagreement over the competitive significance of default status.[259] The court likewise held that Google's "competition for the contract" defense and the appropriate measure of foreclosure raised issues that could not be resolved on summary judgment.[260]

Foreclosure metrics are likely to be a key issue at trial, which began in September 2023 and is ongoing as of the publication of this report. While courts regularly look to the share of distribution covered by exclusive contracts in evaluating foreclosure, some commentators have advocated alternative approaches, including the type of counterfactual analysis that Google proposes.[261] The choice between alternative metrics may present the court with a trade-off: while Google's preferred methodology arguably involves a more accurate assessment of the competitive impact of the challenged agreements, the DOJ's simpler approach may be more manageable and appears to be more firmly rooted in the case law.[262]

The issue of procompetitive justification may also prove significant. The DOJ's case relies heavily on the importance of scale in improving search-engine quality. If Google can establish that it has not exhausted the relevant scale economies, those economies may constitute a procompetitive justification for its distribution agreements.[263] To the extent that the court accepts this justification, the DOJ may need to prove that Google can secure those economies through less restrictive means or that the anticompetitive effects of the agreements outweigh their benefits.

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.[264]

---

(1) approximately 1% of all search queries would shift from Google to non-Google search engines if manufacturers and carriers adopted a "choice screen" allowing consumers to select their own default search engines (a remedy implemented in an EU competition case involving Google Search), and (2) approximately 11.6% to 13.5% of search queries would shift from Google to non-Google search engines if a rival search engine was the exclusive preinstalled default on Android devices. *Id*. at 43.

[258] *Id*. at 60.

[259] *Id*. at 34-35.

[260] *Id*. at 36-37, 43. The court granted Google's motion for summary judgment with respect to certain other claims, some brought by the DOJ and some brought by a group of state attorneys general in a case that has been consolidated with the DOJ lawsuit. *Id*. at 60.

[261] Joshua D. Wright, *Moving Beyond Naïve Foreclosure Analysis*, 19 GEO. MASON L. REV. 1163, 1177-81 (2012).

[262] *Id*. at 1177 (observing that "most courts" rely on the share of distribution covered by a challenged agreement to evaluate foreclosure, with "some occasional modifications").

[263] *See* Thom Lambert, *Why the Federal Government's Antitrust Case Against Google Should—and Likely Will—Fail*, TRUTH ON THE MARKET (Dec. 18, 2020), https://truthonthemarket.com/2020/12/18/why-the-federal-governments-antitrust-case-against-google-should-and-likely-will-fail/.

[264] HJC REPORT, *supra* note 11, at 187-92.

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.[265]

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.[266] 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.[267] The Commission also did not find sufficient evidence that Google had manipulated its search algorithms to unfairly disadvantage rival vertical websites.[268]

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% of the market.[269] 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% of that market.[270]

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.[271] Private plaintiffs and (in a separate case that has been settled) 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.[272]

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."[273]

---

[265] EC Google Shopping Decision, *supra* note 239.

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

[267] *Id*. at 3.

[268] *Id*.

[269] HJC REPORT, *supra* note 11, at 100-02.

[270] 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%").

[271] 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. *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 (July 18, 2018), https://ec.europa.eu/commission/presscorner/detail/en/IP_18_4581.

[272] 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).

[273] 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).

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 market as consisting of the distribution of apps to Android users.[274] They allege that Google has monopoly power in this market based on the Play Store's market share of more than 90%, strong network effects, high switching costs, and Google's ability to charge a 30% commission on apps purchased through the Play Store.[275]

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.[276] A group of 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.[277]

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."[278]

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.[279] They have based this claim on the 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.[280]

As discussed, for many transactions, Google charges a 30% commission for IAP processing—a rate that is considerably higher than those charged by other electronic payment processors.[281]

---

[274] 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).

[275] 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).

[276] 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).

[277] 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% by revenue. *Id.* ¶ 80.

[278] 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).

[279] 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).

[280] 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).

[281] 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% to 15% 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/.

Google has denied possessing monopoly power related to IAP processing.[282]

Allegations of Anticompetitive Conduct

Mobile App Distribution

Google has also been accused of engaging in a variety of anticompetitive activities involving app distribution. Some of the allegations are reviewed below.

- 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."[283] Litigants have claimed that sideloading Android apps entails a complicated process that includes several security warnings discouraging such actions.[284] Google has also been accused of making it unnecessarily difficult to update sideloaded apps.[285]
- Google has allegedly barred software developers from distributing competing app stores through the Play Store.[286]
- 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.[287] Plaintiffs have argued that this preinstallation requirement harms competition by giving the Play Store an advantage over other app stores.[288]
- Google has allegedly required device manufacturers that offer the 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.[289] 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.[290]
- Google has allegedly entered into revenue-sharing agreements that deter device manufacturers from developing competing app stores.[291] 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.[292]

---

[282] 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).

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

[284] *Id*.

[285] *Id*. ¶ 96.

[286] *Id*. ¶¶ 107-10.

[287] *Id*. ¶¶ 124-25.

[288] *Id*. ¶ 125.

[289] *Id*. ¶¶ 105-06.

[290] *Id*.

[291] *Id*. ¶¶ 130-35.

[292] *Id*.

Google has either denied engaging in the relevant conduct or rejected the contention that the alleged conduct is anticompetitive.[293]

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.[294]

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.[295] Those ad exchanges conduct automated auctions in which advertisers can bid for ad space.[296]

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.[297] 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.[298]

Google operates in several segments of these markets via an ad exchange, a publisher ad server, and ad-buying tools for advertisers.[299]

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,[300] ad exchanges,[301] and advertiser ad networks.[302]

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.[303] The state AGs

---

[293] 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).

[294] 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).

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

[296] *Id*.

[297] *Id*. at 4.

[298] *Id*. at 10-11.

[299] *Id*. at 6-12.

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

[301] *Id*. ¶ 296.

[302] *Id*. ¶ 301.

[303] 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).

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.[304]

In September 2022, a federal district court concluded that the state AGs' allegations of monopoly power were sufficiently plausible to survive a motion to dismiss.[305] In April 2023, a district court likewise rejected Google's motion to dismiss the DOJ's ad-tech lawsuit.[306]

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.[307] Then, in 2008, Google acquired a firm called DoubleClick, which operated a leading publisher ad server and a nascent ad exchange.[308]

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.[309] Google also allegedly required publishers to use its ad server to receive real-time bids from its ad exchange.[310] The state AG ad-tech lawsuit makes similar allegations.[311]

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.[312]

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.[313] 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.[314]

---

304 *Id*. at 11.

305 *Id*. at 19, 34-35.

306 Order, United States v. Google LLC, No. 1:23-cv-00108 (E.D. Va. Apr. 28, 2023).

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

308 *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.

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

310 *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*.

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

312 *Id*. at 16-20, 77-78.

313 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).

314 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).

Google maintains that its conduct is permissible under antitrust doctrine governing refusals to deal, product design, and tying.[315]

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.[316] As noted, the district court in the DOJ's lawsuit also denied Google's motion to dismiss that case, which focused on the allegations of monopoly power.[317]

The Google ad-tech lawsuits are complex, and a full discussion of the relevant claims is beyond the scope of this report.[318] Most of the allegations nevertheless implicate a recurring theme in discussions of antitrust and tech platforms: the leveraging of economic power to obtain and solidify dominance across different markets.[319]

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.[320] The discussion below focuses on the company's e-commerce activities.

Allegations of Market Power

In a pending monopolization lawsuit, the FTC has alleged that Amazon has monopoly power in two markets: the "online superstore" market and the "online marketplace services" market.[321] The FTC argues that "online superstores"—which are distinguished based on the breadth and depth of their product offerings—are not reasonably interchangeable with other online stores because consumers' overall shopping costs would increase "dramatically" if they tried to replace online superstores by shopping at several different online stores with more limited offerings.[322] Brick-and-mortar stores are not adequate substitutes for online superstores, the complaint alleges, because of the convenience, wider product selection, and personalized shopping experience offered by online superstores.[323]

The FTC also identifies a separate market for "online marketplace services" offered to sellers.[324] The relevant services include access to a significant number of customers; the ability to create

[315] 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).

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

[317] Order, United States v. Google LLC, No. 1:23-cv-00108 (E.D. Va. Apr. 28, 2023).

[318] For a more detailed discussion of the DOJ's lawsuit, see CRS Legal Sidebar LSB10956, *The DOJ's Ad Tech Antitrust Case Against Google: A Brief Overview*, by Alexander H. Pepper & Jay B. Sykes.

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

[320] HJC REPORT, *supra* note 11, at 247.

[321] Complaint ¶¶ 121, 184, FTC v. Amazon.com, Inc., No. 2:23-cv-01495 (W.D. Wash. Sept. 26, 2023).

[322] *Id*. ¶ 148.

[323] *Id*. ¶¶ 140-47.

[324] *Id*. ¶ 184. 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 Commitments"].

and maintain pages with product information; and the ability to display customer reviews to shoppers.[325] The complaint alleges that "online marketplace services" are not reasonably interchangeable with selling as a vendor to online or offline retail stores, which typically involves wholesale pricing and transfer of title to the relevant products.[326]

The FTC's complaint follows similar lawsuits, including an action filed by the D.C. Attorney General (D.C. AG) under D.C. law and another by a putative class of consumers under the Sherman Act.[327] The D.C. AG's complaint alleged that Amazon has monopoly power among online marketplaces,[328] while the consumer lawsuit contends that Amazon has monopoly power in a retail e-commerce market and several e-commerce submarkets for specific products.[329]

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.[330] The D.C. AG has appealed that decision.[331] In contrast, a federal district court has denied Amazon's motion to dismiss the consumer lawsuit, concluding that the plaintiffs plausibly alleged monopoly power, in addition to rule-of-reason claims under Section 1 of the Sherman Act.[332]

Amazon's alleged monopoly power will likely be litigated vigorously. In identifying an "online superstore" market, the FTC appears to be alleging a "cluster" market that consists of a vast array of noncompeting goods.[333] Courts have recognized cluster markets in other contexts. For example, groups of noncompeting financial and medical services have been deemed to be relevant antitrust markets in cases involving banks and hospitals.[334] In another case, the Supreme Court concluded that the relevant market consisted of a package of centrally monitored alarm services.[335]

While some courts have recognized cluster markets based on considerations of administrative convenience (*i.e.*, where distinct markets face similar competitive conditions, obviating the need for separate analyses), the FTC appears to rely on a different theory of clustering grounded in "transactional complementarity."[336] Under this theory, a package of noncompeting goods or services may qualify as a relevant antitrust market if a significant number of consumers would be willing to pay supra-competitive prices for the convenience of receiving the goods or services as a package.[337] Commentators have also argued that economies of scope and network effects may

---

[325] Complaint ¶ 185, FTC v. Amazon.com, Inc., No. 2:23-cv-01495 (W.D. Wash. Sept. 26, 2023).

[326] *Id*. ¶¶ 191-97.

[327] Frame-Wilson v. Amazon.com, Inc., 591 F. Supp. 3d 975 (2022); First Amended Complaint, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Sept. 10, 2021).

[328] First Amended Complaint ¶¶ 85-86, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Sept. 10, 2021).

[329] *Frame-Wilson*, 591 F. Supp. 3d at 989.

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

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

[332] *Frame-Wilson*, 591 F. Supp. 3d at 988-92.

[333] *See, e.g.*, Herbert Hovenkamp, *Digital Cluster Markets*, 2022 COLUM. BUS. L. REV. 246 (2022) [hereinafter "Hovenkamp, *Digital Cluster Markets*"].

[334] United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 356 (1963); ProMedica Health Sys., Inc. v. FTC, 749 F.3d 559, 566-67 (6th Cir. 2014).

[335] United States v. Grinnell Corp., 384 U.S. 563, 572 (1966).

[336] *See ProMedica Health Sys., Inc.*, 749 F.3d at 567 (distinguishing this theory from the administrative-convenience approach); Ian Ayres, *Rationalizing Antitrust Cluster Markets*, 95 YALE L.J. 109, 114-18 (1985) (developing the transactional-complementarity theory of clustering).

[337] *ProMedica Health Sys., Inc.*, 749 F.3d at 567.

be rationales for clustering noncompeting products in the same market.[338] Whether "online superstores" represent an appropriately defined market for any of these reasons will likely turn on the factual evidence that the FTC can ultimately adduce.

By alleging separate markets for "online superstores" and "online marketplace services," the FTC's complaint also raises questions regarding the impact of the Supreme Court's 2018 decision in *Ohio v. American Express* (*Amex*).[339] In *Amex*, the Court held that two-sided transaction platforms like credit-card networks represent a single market, meaning a price increase on one side of such a market (there, an increase in merchant fees) cannot by itself demonstrate an anticompetitive exercise of market power.[340] Instead, the Court concluded that the plaintiffs in *Amex* needed to show anticompetitive effects on the credit-card market "as a whole"—for example, that the defendant's conduct increased the price or reduced the number of credit-card transactions.[341]

Amex's implications for the FTC's case against Amazon are unclear. In a 2018 article, the current FTC Chair argued that the Supreme Court's reasoning in *Amex* appeared to apply to Amazon's marketplace.[342] While the article did not elaborate on that assessment, there are similarities between Amazon's platform and credit-card networks. In *Amex*, the Court justified its single-market conclusion on the ground that credit-card networks cannot make sales "unless both sides of the platform [*i.e.*, merchants and cardholders] simultaneously agree to use their services."[343] As a result, the Court reasoned, credit-card networks cannot set prices for one side of the market without considering the impact of those prices on the other side of the market.[344] Similar dynamics may be at work in Amazon's case. By allegedly charging monopoly prices to sellers, Amazon may risk losing participants on that side of its platform, which would decrease the value of its marketplace to consumers. If consumers shop elsewhere as a result, that would further diminish the value of Amazon's platform to sellers, setting off a negative feedback loop.[345] The court may thus rely on *Amex* to reject the FTC's effort to define separate markets for "online superstores" and "online marketplace services."

Some commentators, however, have highlighted possible distinctions between Amazon's marketplace and credit-card networks. While credit-card networks do little besides facilitate transactions, for example, Amazon offers sellers a range of additional services.[346] Whether these types of distinctions will allow the FTC to sidestep *Amex*'s single-market rule for two-sided transaction platforms remains to be seen.

---

[338] Hovenkamp, *Digital Cluster Markets*, *supra* note 333, at 255-56, 262-71.

[339] 138 S. Ct. 2274 (2018).

[340] *Id*. at 2287.

[341] *Id*.

[342] Lina Khan, *The Supreme Court Just Quietly Gutted Antitrust Law*, VOX (July 3, 2018), https://www.vox.com/the-big-idea/2018/7/3/17530320/antitrust-american-express-amazon-uber-tech-monopoly-monopsony.

[343] *Amex*, 138 S. Ct. at 2286.

[344] *Id*.

[345] *Id*. at 2281 (describing these dynamics and the interconnected pricing that allegedly results from them).

[346] Dan Papscun, *Amazon Antitrust Case Must Clear Amex Bar Set by Supreme Court*, BLOOMBERG LAW (Sept. 29, 2023), https://news.bloomberglaw.com/antitrust/amazon-antitrust-case-must-clear-amex-bar-set-by-supreme-court; Tim Wu, *The* American Express *Opinion, Tech Platforms & the Rule of Reason*, 7 J. ANTITRUST ENFORCEMENT 117 (2018).

Allegations of Anticompetitive Conduct

Anti-Discounting Measures

Several lawsuits have alleged that Amazon has implemented measures to punish sellers on its marketplace for offering lower prices in other transaction venues. The FTC's lawsuit contends that Amazon disqualifies sellers from appearing in its Buy Box—which features a product's price and the "Add to Cart" button, among other information—if Amazon discovers sellers offering their products for a lower price in another online store.[347] The complaint further alleges that Amazon has entered into contracts with certain important sellers that prohibit the sellers from discounting their products in other online stores.[348] The FTC claims that these anti-discounting measures prevent rival online marketplaces from offering products at lower prices and deprives those rivals of necessary scale.[349]

The D.C. AG lawsuit and the consumer class action discussed above made similar allegations.[350] As discussed, the Superior Court of the District of Columbia has dismissed the D.C. AG's complaint,[351] and the D.C. AG has appealed that decision.[352] The district court in the consumer lawsuit, by contrast, denied Amazon's motion to dismiss, concluding that the plaintiffs had plausibly alleged that Amazon's conduct caused anticompetitive harm.[353]

Amazon has rejected the allegation that the relevant policies are anticompetitive, arguing that they reflect a decision to highlight products that are competitively priced.[354]

Tying of Amazon Prime and Amazon's Fulfillment Service

The FTC's lawsuit also alleges that Amazon maintains its monopolies by coercing sellers to use its fulfillment services (*i.e.*, storing, packaging, and preparing products for shipment).[355] Specifically, the FTC contends that Amazon effectively requires sellers to use its fulfillment services as a condition of participating in Amazon Prime—a subscription program that offers customers fast shipping of eligible products, among other benefits.[356] Prime eligibility boosts a seller's chances of winning the Buy Box, the FTC alleges, while sellers that forgo Prime eligibility "effectively disappear from Amazon's storefront."[357]

---

[347] Complaint ¶ 269, FTC v. Amazon.com, Inc., No. 2:23-cv-01495 (W.D. Wash. Sept. 26, 2023).

[348] *Id*.

[349] *Id*. ¶¶ 305-10, 324.

[350] Frame-Wilson v. Amazon.com, Inc., 591 F. Supp. 3d 975, 981-82 (2022); First Amended Complaint ¶¶ 5-10, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Sept. 10, 2021).

[351] Order at 8-9, 15-16, District of Columbia v. Amazon.com, Inc., No. 2021-CA-001775 (D.C. Super. Ct. Aug. 1, 2022).

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

[353] *Frame-Wilson*, 591 F. Supp. 3d at 991-92.

[354] David Zapolsky, *The FTC's Lawsuit Against Amazon Would Lead to Higher Prices and Slower Deliveries for Consumers—And Hurt Businesses*, AMAZON (Sept. 26, 2023), https://www.aboutamazon.com/news/company-news/amazon-ftc-antitrust-lawsuit-full-response.

[355] Complaint ¶ 351, FTC v. Amazon.com, Inc., No. 2:23-cv-01495 (W.D. Wash. Sept. 26, 2023).

[356] *Id*. ¶ 353. In 2022, the European Commission accepted certain commitments from Amazon to resolve similar concerns. *See* Amazon EC Commitments, *supra* note 328. 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*.

[357] Complaint ¶ 352, FTC v. Amazon.com, Inc., No. 2:23-cv-01495 (W.D. Wash. Sept. 26, 2023).

The FTC argues that Amazon's tying of Prime to its fulfillment services stifles the growth of other online marketplaces in two ways. First, by allegedly tying Prime to its fulfillment services, Amazon effectively requires sellers that want to use both Amazon's marketplace and other online marketplaces to use two separate fulfillment providers.[358] This duplication, the FTC contends, creates extra costs that could be avoided by consolidating inventory with one fulfillment provider, which deters sellers from using other online marketplaces.[359] Second, Amazon's conduct allegedly prevents independent fulfillment providers from gaining necessary scale, which likewise increases the costs to sellers of utilizing multiple online marketplaces.[360]

In response, Amazon has said that it allows sellers that participate in Prime to use other fulfillment providers as long as those providers "are able to meet . . . Prime customers' high expectations for fast, reliable delivery."[361]

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.[362]

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.[363]

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.[364] He indicated, however, that he could not guarantee that this policy had never been violated.[365] Amazon reportedly does not have a policy against using *aggregated* seller data to assist its retail business.[366]

Commentators have disputed the competitive effects of a platform's use of user data to enter new markets. Some have argued that Amazon's entry into new markets forces other sellers to lower

---

[358] *Id*. ¶ 366.

[359] *Id*.

[360] *Id*.

[361] Zapolsky, *supra* note 354.

[362] 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*"].

[363] 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.

[364] HJC REPORT, *supra* note 11, at 277-78.

[365] *Id*.

[366] *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 328. 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*.

their prices—an outcome that antitrust traditionally encourages.[367] Others contend that the alleged copying may have longer-term anticompetitive effects by chilling incentives to innovate.[368]

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 its fulfillment services.[369] The HJC Report alleged that Amazon has engaged in other forms of self-preferencing, such as refusing to allow certain competitors to advertise on Amazon's platform.[370]

Predatory Pricing

Amazon has also been accused of engaging in predatory pricing at various points in its history.[371] These allegations have been directed against several aspects of Amazon's business, including its sale of e-books;[372] its sale of diapers and ultimate acquisition of the parent company of Diapers.com;[373] and Amazon Prime.[374]

In previous academic work, the current FTC Chair 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.[375]

Other commentators have challenged these allegations.[376] In response to the claims involving Diapers.com, 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.[377] Others have argued that the HJC Report failed to produce sufficient evidence to conclude that Amazon prices Prime memberships below cost.[378] Commentators have also questioned whether Amazon's critics are

---

[367] *See, e.g.*, Francis, *supra* note 63, at 832; Herbert Hovenkamp, *Antitrust and Platform Monopoly*, 130 YALE L.J. 1952, 2015 (2021) [hereinafter "Hovenkamp, *Platform Monopoly*"].

[368] 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."

[369] 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.

[370] HJC REPORT, *supra* note 11, at 283-86.

[371] *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).

[372] Khan, *Amazon's Antitrust Paradox*, *supra* note 79, at 756-68.

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

[374] HJC REPORT, *supra* note 11, at 299-300.

[375] Khan, *Amazon's Antitrust Paradox*, *supra* note 79, at 753, 786, 791-92.

[376] 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/.

[377] Eisenach, *supra* note 376.

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

relying on a coherent concept of predation, contending that some of the relevant literature appears to reject the idea that raising prices at some point is a necessary part of a predatory strategy.[379]

Apple

Apple is the most valuable company in the world.[380] 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.[381] 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.[382] More than half of the mobile devices in the United States run a version or derivation of iOS.[383] 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.[384] Like Google, Apple requires developers to use its IAP processor as a condition of accessing its App Store and has charged 30% commissions for that service.[385]

In 2020, Epic Games—the developer of the video game Fortnite—challenged these restrictions under Sections 1 and 2 of the Sherman Act. Epic alleged single-brand aftermarkets for iOS app distribution and iOS in-app payment processing in which Apple possessed monopoly power.[386]

Apple denied Epic's allegations, arguing that the relevant market consists of all video game transactions, including transactions involving gaming consoles, personal computers, and streaming services.[387]

In September 2021, a federal district court arrived at a conclusion that fell between the two parties' positions. Instead of a single-brand aftermarket for iOS app distribution or a market for video-game distribution generally, the court held that Apple competes in a market for *digital mobile gaming transactions*, which includes transactions on iOS and Android mobile devices.[388]

---

379 Herbert Hovenkamp, *Whatever* Did *Happen to the Antitrust Movement?*, 94 NOTRE DAME L. REV. 583, 588-89 (2019).

380 Largest Companies by Market Cap, COMPANIESMARKETCAP (last visited Nov. 6, 2023), https://companiesmarketcap.com/.

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

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

383 *Id*. at 334.

384 *Id*. at 335.

385 Epic Games, Inc. v. Apple, Inc., 67 F.4th 946, 967 (9th Cir. 2023).

386 *Id*. at 970. An aftermarket is a market in which demand for a good or service (*e.g.*, an iOS app) depends on an earlier purchase of a durable good (*e.g.*, an iPhone). The Supreme Court has held that, in some cases, single-brand aftermarkets can constitute relevant antitrust markets. Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 U.S. 451 (1992). In acknowledging the possibility of relevant aftermarkets, the Court reasoned that, in certain instances, asymmetric information and high switching costs can result in consumers being "locked in" to the use of aftermarket products, preventing foremarket competition from disciplining a firm's aftermarket conduct. *Id*. at 477-78. Lower courts have generally applied this doctrine narrowly. *See* David A.J. Goldfine & Kenneth M. Vorrasi, *The Fall of the* Kodak *Aftermarket Doctrine: Dying a Slow Death in the Lower Courts*, 72 ANTITRUST L.J. 209 (2004).

387 *Id*.

388 Epic Games, Inc. v. Apple Inc., 559 F. Supp. 3d 898, 921 (N.D. Cal. 2021).

The district court rejected Epic's narrower proposed aftermarkets for several reasons, including Epic's failure to establish consumer unawareness of Apple's restrictions or produce evidence of the magnitude of the relevant switching costs.[389]

The court ultimately concluded that Apple possesses market power—but not monopoly power—in the market for digital mobile gaming transactions.[390]

Epic appealed that decision. In April 2023, the Ninth Circuit took issue with some aspects of the district court's market-definition analysis, but affirmed the court's rejection of Epic's proposed aftermarkets and the holding that Apple does not possess monopoly power.[391]

Allegations of Anticompetitive Conduct

Mobile App Distribution and IAP Processing

As discussed, the *Epic Games* lawsuit challenged Apple's requirement that iOS app developers distribute their apps through Apple's App Store and use Apple's payment processor for in-app purchases.[392] The lawsuit also targeted anti-steering provisions in Apple's developer agreements, which prohibit developers from using certain communications methods—such as in-app links—to inform users about out-of-app payment options.[393]

In *Epic Games*, the district court concluded that the first two restrictions did not violate the Sherman Act, but that Apple's anti-steering provisions violated California competition law.[394] In rejecting Epic's federal antitrust claims, the district court concluded that Apple had proffered valid procompetitive justifications for its App Store and payment-processor requirements based on their promotion of security, privacy, and the monetization of intellectual property.[395] The district court further concluded that Epic had not shown that those procompetitive benefits could be achieved through less restrictive means.[396]

On appeal, the Ninth Circuit affirmed the district court's decision.[397] In affirming the district court's rejection of Epic's Section 1 tying claim, the appellate court concluded that the modified *per se* rule against tying does not apply to ties involving platform software products, following the D.C. Circuit's reasoning in *Microsoft*.[398] While the Ninth Circuit disagreed with some aspects of the district court's rule-of-reason analysis, it affirmed the finding that Epic failed to show that Apple could achieve the relevant procompetitive benefits through less restrictive means.[399]

---

[389] *Id*. at 1021-26.

[390] *Id*. at 922.

[391] Epic Games, Inc. v. Apple, Inc., 67 F.4th 946, 980-81, 998-99 (9th Cir. 2023).

[392] *Id*. at 968.

[393] *Id*.

[394] Epic Games, Inc. v. Apple Inc., 559 F. Supp. 3d 898, 1033-57 (N.D. Cal. 2021).

[395] *Id*. at 1038-40.

[396] *Id*. at 1040-41.

[397] *Epic Games*, 67 F.4th at 981-99.

[398] *Id*. at 997. The district court had denied Epic's tying claim on the ground that app distribution and in-app payment processing are not separate products—a conclusion that the Ninth Circuit rejected. *Id*. at 996.

[399] *Id*. at 993-94.

Self-Preferencing

The HJC Report alleged that Apple has taken a variety of steps to preference its own apps and harm rival app developers.[400] Among other things, the report accused Apple of injuring competition by preinstalling its own apps on iPhones;[401] denying third-party apps access to certain APIs and device functionalities that are available to its own apps;[402] favoring its own apps in search results on its App Store;[403] and removing rival apps from the App Store.[404]

Apple has denied giving preferential treatment to its own apps in search rankings.[405] The company has claimed that it has removed specific apps from its App Store based on violations of its privacy policies.[406]

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.[407] 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.[408]

Apple has responded to such allegations by stating that it does not violate other companies' intellectual property rights.[409]

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,[410] while Google's acquisition of DoubleClick is a key part of the DOJ's monopolization lawsuit targeting the company's ad-tech practices.[411]

Some policymakers have expressed broader concerns about Big Tech mergers.[412] The companies have been active dealmakers: between 2000 and 2019, the four firms engaged in hundreds of

---

400 HJC Report, *supra* note 11, at 352.

401 *Id*.

402 *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.

403 HJC Report, *supra* note 11, at 359-61.

404 *Id*. at 364-67.

405 *Id*. at 361.

406 *Id*. at 366.

407 *Id*. at 361-64.

408 *Id*. at 362.

409 *Id*. at 363.

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

411 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.

412 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 (continued...)

mergers and acquisitions.[413] Many of the transactions fell below the numerical thresholds that trigger pre-merger review by the antitrust agencies.[414]

These deals have prompted some commentators to worry that the Big Tech firms are cementing their dominant positions by acquiring promising potential competitors.[415] Transactions involving "nascent" competitors have been a particular point of concern.[416] While the concept of a nascent competitor has been defined in different ways, it generally refers to an innovative firm that represents a serious yet uncertain future threat to an incumbent.[417]

These issues are discussed in greater detail in "Mergers & Acquisitions" *infra*.[418]

Antitrust Reform and Big Tech: General Issues

The issues discussed above have prompted calls for reform. Some proposals would supplement the antitrust laws with sectoral competition regulations directed at large technology platforms.[419]

---

al. in response to majority report), https://buck.house.gov/sites/evo-subsites/buck-evo.house.gov/files/wysiwyg_uploaded/Buck%20Report.pdf.

[413] 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.

[414] 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-Reportable Acquisitions Study"].

[415] 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); JONATHAN B. BAKER, THE ANTITRUST PARADIGM: RESTORING A COMPETITIVE ECONOMY 160-61 (2019); 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"].

[416] 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"].

[417] Yun, *supra* note 416, at 626-29; Hemphill & Wu, *supra* note 416, at 1883.

[418] 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.

[419] *See infra* "*Ex Ante* Conduct Rules," "Structural Separation and Line-of-Business Restrictions," "Mergers & Acquisitions" & "Interoperability & Data Portability."

Others would work within the existing antitrust framework by adjusting burdens of proof and changing certain doctrinal rules.[420]

While the relevant options are varied, they all implicate the threshold question of whether tech platform markets have unique features that warrant special treatment under competition law. The proposals that would supplement antitrust with a new regulatory regime raise additional questions regarding scope and administration.

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

Are Tech Platforms Special?

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.[421] 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.[422] The open-ended nature of the relevant legal standards can also make it difficult to predict whether certain conduct violates the law, which may undermine enforcement by allowing large firms to profit from anticompetitive strategies and treat potential lawsuits as a cost of doing business.[423]

Advocates of reform have argued that these features of antitrust adjudication make it ill-suited to deal with tech platform 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.[424]

According to some, these characteristics cause certain platform markets to tip in favor of a single dominant firm.[425] 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.[426] Prospective entrants may then face difficulties achieving the scale necessary to compete with the dominant incumbent.[427]

[420] *See infra* "Changes to General Antitrust."

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

[422] 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).

[423] Chopra & Khan, *supra* note 422, at 360-61.

[424] STIGLER REPORT, *supra* note 415, at 7-8, 99; UK DIGITAL COMPETITION REPORT, *supra* note 415, 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/.

[425] EZRACHI & STUCKE, *supra* note 368, at 10-11; STIGLER REPORT, *supra* note 415, at 34-36; UK DIGITAL COMPETITION REPORT, *supra* note 415, at 4.

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

[427] 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).

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.[428] 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.[429]

Some analysts contend that antitrust adjudication is too slow to adequately police markets characterized by these winner-take-all dynamics.[430] By the time a market has tipped, they suggest, remedies for anticompetitive conduct may be unable to restore meaningful competition.[431] Occasionally, this line of argument involves the claim that a particular digital platform is a natural monopoly, meaning its cost structure is such that market demand can be served most efficiently by a single firm.[432] In such industries—public utilities are prominent examples—competition is unable to discipline market participants, which has traditionally led policymakers to favor direct regulations of price, entry, and quality of service.[433]

Other commentators have rejected the claim that antitrust is unable to grapple with competition issues involving large digital platforms. Some dispute that Big Tech markets have all decisively tipped in favor of a single firm.[434] Rather, they contend that the tech giants compete in diverse markets characterized by different competitive dynamics.[435] While some of those markets may be susceptible to tipping, others arguably retain a competitive fringe or exhibit competition among rivals of comparable size.[436] This variety is said to emerge from several characteristics that distinguish many online platforms from traditional natural monopolies, including product differentiation, multi-homing by consumers, and low switching costs.[437] Defenders of the current antitrust regime have thus emphasized the heterogeneity of platform markets, which they contend

---

[428] EZRACHI & STUCKE, *supra* note 368, 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).

[429] OECD, EX ANTE REGULATION AND COMPETITION IN DIGITAL MARKETS 10 (2021), https://www.oecd.org/daf/competition/ex-ante-regulation-and-competition-in-digital-markets-2021.pdf.

[430] 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 415, at 99; UK DIGITAL COMPETITION REPORT, *supra* note 415, at 6.

[431] EZRACHI & STUCKE, *supra* note 368, at 173-75; Monti, *supra* note 430, at 1; STIGLER REPORT, *supra* note 415, at 99; UK DIGITAL COMPETITION REPORT, *supra* note 415, at 6.

[432] FRANCESCO DUCCI, NATURAL MONOPOLIES IN DIGITAL PLATFORM MARKETS 74 (2020) (concluding that Google Search is a natural monopoly); STIGLER REPORT, *supra* note 415, at 99 (arguing that certain structural features "push social media platforms towards natural monopoly"); *see also* UK DIGITAL COMPETITION REPORT, *supra* note 415, at 54 (rejecting the contention that major digital platforms are natural monopolies, while acknowledging that "they share some important characteristics with natural monopolies").

[433] Richard A. Posner, *Natural Monopoly and Its Regulation*, 21 STAN. L. REV. 548, 548 (1968).

[434] *E.g.*, Hovenkamp, *Platform Monopoly*, *supra* note 367, at 1978; *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-todays-context (similar).

[435] PETIT, *supra* note 434, at 257-58; 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.

[436] Hovenkamp, *Platform Monopoly*, *supra* note 367, at 1978.

[437] DUCCI, *supra* note 432, at 42-43.

militates against categorical treatment of Big Tech firms and in favor of the existing fact-specific approach.[438]

Some observers have gone further in their rejection of sectoral regulation, arguing that many tech markets have features that support a cautious approach to intervention under the existing antitrust laws. This perspective emphasizes the distinction between static price competition and the dynamic rivalry prevalent in tech markets, which involves efforts to develop new products, services, and business models.

Commentators have argued that dynamic competition has non-interventionist implications for several areas of antitrust doctrine.

First, in dynamic industries, traditional market definition may overstate the market power of leading firms.[439] In particular, static market shares may exaggerate a platform's market power by failing to account for the threat of displacement by differentiated or innovative rivals.[440] Examples of this type of displacement include Facebook supplanting MySpace as the leading social network and Google unseating Yahoo! and AltaVista to become the dominant search engine. In both cases, the ousted incumbents were widely perceived as invulnerable—an assumption that proved incorrect.[441] Some observers have highlighted these episodes in arguing that Big Tech platforms face constant competitive pressure despite occupying large static market shares.[442]

Second, technological innovation often involves combining products or features that were previously available only as separate offerings. Although this type of product integration often benefits consumers, it is also potentially vulnerable to antitrust challenge under tying law.[443] To avoid chilling innovation, some courts and commentators have endorsed exceptions to the modified *per se* rule against tying for platform software products.[444] Other observers have gone further and advocated a rule of *per se* legality for the introduction of new products.[445]

---

[438] 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"]; 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.

[439] Jerry Ellig & Daniel Lin, *A Taxonomy of Dynamic Competition Theories*, *in* DYNAMIC COMPETITION AND PUBLIC POLICY: TECHNOLOGY, INNOVATION, AND ANTITRUST ISSUES 16, 24, 30 (Jerry Ellig ed. 2001).

[440] J. Gregory Sidak & David J. Teece, *Dynamic Competition in Antitrust Law*, J. COMPETITION L. & ECON. 581, 614-15 (2009); Richard Schmalensee, *Antitrust Issues in Schumpeterian Industries*, 90 AM. ECON. REV. 192, 193 (2000).

[441] Victor Keegan, *Will MySpace Ever Lose Its Monopoly?*, THE GUARDIAN (Feb. 8, 2007), https://www.theguardian.com/technology/2007/feb/08/business.comment; Randall E. Stross, *How Yahoo! Won the Search Wars*, FORTUNE (Mar. 2, 1998), https://money.cnn.com/magazines/fortune/fortune_archive/1998/03/02/238576/.

[442] *See, e.g.*, David S. Evans, *Why the Dynamics of Competition for Online Platforms Leads to Sleepless Nights, But Not Sleepy Monopolies* (Aug. 23, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3009438; D. Daniel Sokol & Jingyuan (Mary) Ma, *Understanding Online Markets and Antitrust Analysis*, 15 NW. J. TECH. & INTELL. PROP. 43, 48 (2017).

[443] *See generally* John M. Newman, *Anticompetitive Product Design in the New Economy*, 39 FLA. ST. U. L. REV. 681 (2012).

[444] *E.g.*, Epic Games, Inc. v. Apple, Inc., 67 F.4th 946, 997 (9th Cir. 2023); United States v. Microsoft, 253 F.3d 34, 89-90 (D.C. Cir. 2001) (per curiam); David S. Evans & Richard Schmalensee, *Some Economic Aspects of Antitrust Analysis in Dynamically Competitive Industries*, 2 INNOVATION POLICY AND THE ECON. 1, 30-33 (2002).

[445] Geoffrey A. Manne & Joshua D. Wright, *Innovation and the Limits of Antitrust*, 6 J. COMPETITION L. & ECON. 153 (2010).

Third, dynamic competition may raise complications in assessing claims of price predation. The alleged difficulty arises from the fact that technology firms often offer low or zero prices to encourage widespread adoption of new products. In winner-take-all markets with network effects, *all* firms may charge low prices—which may entail short-term losses—with an eye toward recoupment once they surpass rivals.[446] Some commentators have questioned the appropriateness of traditional cost and recoupment tests for predation claims in markets characterized by this type of competition.[447]

Others have argued that the two-sided nature of certain platform markets raises additional difficulties for predation analysis. The potential trouble involves indirect network effects, whereby a platform becomes more valuable to users on one side (*e.g.*, advertisers, merchants) as it gains more users on the other side (*e.g.*, users of a search engine, e-commerce customers).[448] In such markets, evaluating a firm's pricing on only one side of a platform may be misleading. For example, a firm may offer below-cost prices to one side of a platform to attract more users on the other side, where it charges above-cost prices.[449] Looking only to one side of a two-sided market may thus yield inaccurate conclusions about predation.[450]

Fourth, some have raised more general concerns about the role of antitrust in tech markets. This strand of the literature builds on the error-cost framework originally developed by Frank Easterbook,[451] who relied on decision theory to argue that antitrust rules should err on the side of permissiveness.[452] Specifically, Easterbrook—who is now a federal judge—reasoned that monopoly profits eventually induce the entry of new firms, mitigating the costs of judicial decisions permitting anticompetitive conduct (false negatives or Type II errors).[453] In contrast, market forces cannot correct decisions condemning procompetitive conduct, leading Easterbrook to conclude that the costs of those mistakes (false positives or Type I errors) are more durable.[454]

---

[446] Evans & Schmalensee, *supra* note 444, at 24-26.

[447] *Id*. To some extent, the doctrine may already accommodate this concern: some lower courts have recognized a "meeting competition" defense to predation claims. ANTITRUST DEVELOPMENTS, *supra* note 55, at 301 (collecting cases). In contrast, one district court has rejected this defense. Spirit Airlines, Inc. v. Northwest Airlines, Inc., 2003 WL 24197742 at *11-12 (E.D. Mich. 2003), *rev'd on other grounds*, 431 F.3d 917 (6th Cir. 2005). The Supreme Court has not directly addressed the issue.

Advocates of more aggressive antitrust intervention have supported stricter predation standards for dominant tech firms, but appear to leave open the possibility of a "meeting competition" defense. *See* Khan, *Amazon's Antitrust Paradox*, *supra* note 79, at 791-92 (advocating a "presumption of predation for dominant platforms found to be pricing products below cost," while suggesting a business justification defense that "could cover" prices that match competition, among other things).

[448] DENNIS W. CARLTON & JEFFREY M. PERLOFF, MODERN INDUSTRIAL ORGANIZATION 393 (2004).

[449] Stefan Behringer & Lapo Filistrucchi, *Areeda-Turner in Two-Sided Markets*, 46 REV. OF INDUS. ORG. 287, 304 (2015); Amelia Fletcher, *Predatory Pricing in Two-Sided Markets*, 3 COMPETITION POL'Y INT'L 221, 222-23 (2007).

[450] The Supreme Court's 2018 *Amex* decision may have implications for this type of analysis. 138 S. Ct. 2274 (2018). For a discussion of *Amex*, see *supra* "Amazon."

[451] Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1 (1984).

[452] Decision theory is a field of microeconomics concerned with the process of making decisions under conditions of costly and imperfect information. C. Frederick Beckner III & Steven C. Salop, *Decision Theory and Antitrust Rules*, 67 ANTITRUST L.J. 41, 41 (1999). The field gained initial traction in legal scholarship during the law-and-economics movement of the 1970s and has proven particularly influential in antitrust. *See* Alan Devlin & Michael Jacobs, *Antitrust Error*, 52 WM. & MARY L. REV. 75, 82-97 (2010).

[453] Easterbrook, *supra* note 451, at 2.

[454] *Id*.

Several commentators have suggested that Easterbrook's argument has particular force in technology markets.[455] They have appealed to what is often called the "inhospitality tradition" of 1960s antitrust—an era in which courts were highly skeptical of nonstandard agreements and business conduct.[456] In one narrative, once courts realized that many challenged practices had benign or procompetitive explanations, the law underwent a needed course correction in which context-specific inquiries into economic effects replaced the formalism of *per se* rules as the dominant mode of antitrust analysis.[457] Some argue that this history has implications for the optimal level of intervention in tech markets, where generalist judges may mistake novel products and business strategies for anticompetitive conduct.[458]

Others have come to the opposite conclusion. John Newman—formerly 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.[459] 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.[460] These features, he maintains, justify more vigilant antitrust scrutiny of tech markets, contrary to what he characterizes as the "orthodox" view of error costs.[461]

Revisiting the Goals of Antitrust: The Neo-Brandeisian Movement

The optimal level of antitrust intervention—in tech markets and more generally—depends on the underlying goals of antitrust law.[462] As discussed, the last 40 years have been marked by a general (though not complete) consensus that antitrust should be limited to promoting some conception of economic welfare.[463] While there are lingering disputes within the welfarist approach,[464] modern

---

455 Joshua D. Wright & Murat C. Mungan, *The Easterbrook Theorem: An Application to Digital Markets*, 130 YALE L.J. F. 622, 634 (2021); Geoffrey Manne, *Error Costs in Digital Markets*, *in* GLOBAL ANTITRUST INSTITUTE REPORT ON THE DIGITAL ECONOMY (2020).

456 Elyse Dorsey, *Anything You Can Do, I Can Do Better—Except in Big Tech?: Antitrust's New Inhospitality Tradition*, 68 KANSAS L. REV. 975, 978, 981 (2020).

457 *Id*. at 985-89.

458 Rachel S. Tennis & Alexander Baier Schwab, *Business Model Innovation and Antitrust Law*, 29 YALE. J. ON REG. 307, 319-20 (2012).

459 John M. Newman, *Antitrust in Digital Markets,* 72 VAND. L. REV. 1497, 1502 (2019).

460 *Id*. at 1503-48.

461 *Id*. at 1502.

462 BORK, *supra* note 72, at 50 ("[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).

463 A. DOUGLAS MELAMED, ET AL., ANTITRUST LAW AND TRADE REGULATION: CASES AND MATERIALS 58 (7th ed. 2018) (noting the "overall consensus" since the 1970s that "economic analysis provides the true north for antitrust law"); 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."); POSNER, *supra* note 193, at ix (explaining that "[a]lmost everyone professionally involved in antitrust today—whether as a litigant, prosecutor, judge, academic, or informed observer" agrees that "the only goal of the antitrust laws should be to promote economic welfare").

464 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 tradition).

doctrine generally eschews "non-economic" considerations like equity, the protection of small businesses, and the promotion of democratic values.[465]

In the past decade, a group of scholars and activists commonly referred to as "Neo-Brandeisians" has mounted a critique of this consensus.[466] Members of this movement have argued that the existing antitrust regime has failed to preserve competition, resulting in rising economic concentration, growing wealth inequality, and a political system captured by corporate interests.[467] Their influence has not been limited to the academy; some self-described Neo-Brandeisians—like FTC Chair Lina Khan and former White House advisor Tim Wu—have occupied policymaking positions within the federal government.[468]

Two separate arguments are evident throughout Neo-Brandeisian scholarship.

First, Neo-Brandeisians deny that antitrust should serve only economic goals like consumer welfare.[469] Instead, they endorse a broader normative vision in which antitrust deconcentrates markets, promotes fairness, and disperses economic and political power.[470]

Second, Neo-Brandeisians have argued that the consumer-welfare standard has failed even when judged on its own terms. They allege that, in applying an exclusively economic approach to antitrust, courts have embraced simplistic theories that downplay the harms from concentration and the likelihood of exclusion, leading to uncompetitive markets with higher prices and degraded quality.[471] Some Neo-Brandeisians have argued that these putative deficiencies are especially severe vis-à-vis large tech platforms, many of which are able to forgo immediate profits to establish long-term dominance and then leverage that dominance across business lines.[472]

This second set of arguments is not unique to Neo-Brandeisians. As discussed, the Post-Chicago tradition challenged the *laissez-faire* prescriptions of Chicago School academics from within the welfarist paradigm.[473] Many commentators also continue to criticize current doctrine as unduly permissive on economic grounds.[474] The distinctiveness of the Neo-Brandeisian critique thus lies in its call for an expansion of the range of antitrust goals—not its repudiation of conservative economic theories.[475]

The key difficulty facing this project involves operational specifics. One of the central criticisms of mid-20th century antitrust was that it allegedly offered no principled standard for weighing

---

465 Wright & Ginsburg, *supra* note 204, at 2406 (noting the 1970s shift in antitrust doctrine from an approach that served "multiple masters" to one in which "economic goals would be exclusive").

466 *See, e.g.*, Sanjukta Paul, *Recovering the Moral Economy Foundations of the Sherman Act*, 131 YALE L.J. 175 (2021); Sandeep Vaheesan, *The Profound Nonsense of the Consumer Welfare Standard*, 64 ANTITRUST BULL. 479 (2019); TIM WU, THE CURSE OF BIGNESS: ANTITRUST IN THE NEW GILDED AGE (2018); Khan, *Amazon's Antitrust Paradox*, *supra* note 79.

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

468 WU, *supra* note 466, at 127-40; Khan, *supra* note 208.

469 Vaheesan, *supra* note 466.

470 Khan & Vaheesan, *supra* note 467, at 276; HJC REPORT, *supra* note 11, at 391-92.

471 Khan, *Amazon's Antitrust Paradox*, *supra* note 79, at 739.

472 *Id*. at 747-53, 774-80.

473 Yoo, *supra* note 195, at 2160.

474 Melamed, *supra* note 464, at 274-79.

475 Lina M. Khan, *The End of Antitrust History Revisited*, 133 HARV. L. REV. 1655, 1671 (2020) ("Post-Chicago's choice to accept Chicago's normative paradigm stands in contrast with the New Brandeis intervention, which rejects the idea that antitrust law should be centered on promoting consumer welfare.").

many of the conflicting goals that courts had read into the antitrust statutes.[476] Some business conduct, for example, may benefit consumers while harming a firm's smaller rivals.[477] An antitrust regime that embraces both consumer welfare and small-business protection may thus have difficulty trading off those values in a coherent fashion. Other constituencies—workers, labor unions, potential entrants, existing competitors—may also have divergent interests.[478] Adding abstract principles like fairness and democracy to the calculus could create even further uncertainty.[479]

The Neo-Brandeisian response appears to involve a preference for bright-line rules over the type of fact-intensive analysis employed by current law.[480] Neo-Brandeisians may thus conceptualize their favored goals as operating at the level of rule formulation, but not as factors that courts must balance in individual cases.

It is unclear, however, whether Neo-Brandeisians intend to reduce *all* of antitrust doctrine to bright-line rules.[481] Moreover, as discussed below, some competition legislation directed at tech platforms would stop short of adopting categorical prohibitions. Instead, it would proscribe specified conduct only upon a showing of harm to "competition," or ban specified conduct while offering an affirmative defense to platforms that show the relevant activities do *not* harm "competition."[482] If this language is not intended to denote a welfarist conception of competitive harm, the ambiguities surrounding alternative understandings of "competition" resurface.

Several commentators—including some Neo-Brandeisians—have supported a "protection of the competitive process" test as an alternative to the consumer-welfare standard.[483] The details of this approach, however, remain hazy.[484] Some advocates have equated it with the promotion of

---

476 *See, e.g.*, Joshua D. Wright, et al., *Requiem for a Paradox: The Dubious Rise and Inevitable Fall of Hipster Antitrust*, 51 ARIZ. ST. L.J. 292, 300 (2019).

477 *See* Elhauge, *supra* note 42, at 268-69 (noting that "all desirable procompetitive behavior and innovation is intended to harm rivals—driving those rivals out of the market by making a cheaper or better product is how firms earn the monopoly profits that reward their investments and innovations in lowering costs and raising quality").

478 Daniel A. Crane, *Four Questions for the Neo-Brandeisians*, COMPETITION POL'Y INT'L ANTITRUST CHRON. 63, 66-67 (Apr. 2018).

479 *See* HJC REPORT, *supra* note 11, at 391-92 (arguing that antitrust should protect, among other things, "a fair economy" and "democratic ideals"); Zephyr Teachout, *Antitrust Law, Freedom, and Human Development*, 41 CARDOZO L. REV. 1081, 1105 (2019) (suggesting that democracy and "greater moral freedom" should be among the goals that antitrust serves).

480 Khan & Vaheesan, *supra* note 467, at 276.

481 *See* Francis, *supra* note 63, at 788-89 (noting that "[t]he literature does not yet contain anything we could call a Neo-Brandeisian theory of monopolization," and that the movement has not produced a comprehensive account of what unilateral conduct should be banned and why); DEVLIN, *supra* note 10, at 174 (arguing that, while Neo-Brandeisians have advocated overturning certain decisions and eliminating certain enforcement policies, they have not identified replacement rules or standards with a high degree of precision).

482 American Innovation and Choice Online Act, S. 2033, 118th Cong. §§ 3(a)(1)-(3), (b)(2) (2023).

483 SULLIVAN, ET AL., *supra* note 26, at 16-22; 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/viewcontent.cgi?article=3293&context=faculty_scholarship; Khan, *Amazon's Antitrust Paradox*, *supra* note 79, at 745.

484 Herbert Hovenkamp, *The Slogans and Goals of Antitrust Law* 54 (U. Penn. Inst. for L. & Econ. Research Paper No. 22-33, 2022) ("[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."); 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/ (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. (continued...)

deconcentrated market structures.[485] Jonathan Kanter—the Assistant Attorney General for the DOJ's Antitrust Division—has similarly described the "competitive process" as protecting "the guarantee that everyone participating in the open market—consumers, farmers, workers, or anyone else—has 'the free opportunity to select among alternative offers.'"[486]

As legal standards, these formulations have been criticized for failing to offer meaningful guidance to courts or litigants. It seems unlikely, for example, that they are intended to mean that *any* conduct that reduces the number of competitors in a market should be illegal; that rule would outlaw many instances of procompetitive price cutting and product improvement, in addition to small mergers in unconcentrated markets.[487] The proposals instead appear to endorse an approach that ensures there are "enough" competitors, though it is not clear whether Neo-Brandeisians would endorse the use of some further analytical criterion in evaluating whether a given market has "enough" firms.[488]

Thus far, Neo-Brandeisian theories do not appear to have made considerable headway with the courts.[489] Some commentators, however, have argued that the movement's influence is evident in several developments at the antitrust agencies, including the FTC's 2023 proposal to ban non-compete clauses in employment contracts,[490] the DOJ's effort to revive its long-dormant authority to pursue criminal monopolization charges,[491] and the 2023 draft merger guidelines.[492] Whether Neo-Brandeisian ideas will have a broader impact on antitrust doctrine or legislative action remains to be seen.

Scoping Reform Proposals

As discussed, some legislative proposals would create special competition rules for large technology platforms.

Two general models have emerged. One model involves special rules for digital platforms that offer specified services and meet certain quantitative and qualitative criteria intended to capture

---

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.'").

485 Khan, *Amazon's Antitrust Paradox*, *supra* note 79, at 745.

486 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 (quoting Nat'l Soc'y of Pro. Eng'rs v. United States, 435 U.S. 679, 695 (1978)) [hereinafter "Kanter Handler Lecture"].

487 Elhauge, *supra* note 484 (noting that a literalist conception of "competition" would "ban two plumbers, in a market with 1,000 plumbers, from forming a partnership to offer better services," and that this approach "would limit our economy to atomistic competition between sole proprietors in a way that would massively reduce our productivity and impede our economic liberty to collaborate with others in efficient ways"); DEVLIN, *supra* note 10, at 10 ("Maximizing competition in the most simplistic sense of the term would be self-destructive.").

488 Elhauge, *supra* note 484. Certain defenses of the "competitive process" approach appear to reject the use of supplementary goals. *See* Kanter Handler Lecture, *supra* note 486 (indicating that "the question of the goals of antitrust starts *and ends*" with "competition and the competitive process") (emphasis added). Some commentators, however, have interpreted Neo-Brandeisian scholarship as endorsing an approach that weighs multiple objectives, including consumer welfare. *See* Thomas A. Lambert & Tate Cooper, *Neo-Brandeisianism's Democracy Paradox*, 49 J. CORP. L. _ (forthcoming 2023).

489 FRANCIS & SPRIGMAN, *supra* note 26, at 24.

490 *Id*.

491 *Id*.

492 *DOJ and FTC Release Draft of New Merger Guidelines*, MORRISON & FOERSTER LLP (July 27, 2023), https://www.mofo.com/resources/insights/230727-doj-and-ftc-release-draft-of-new-merger-guidelines.

platforms with bottleneck power over business users.[493] Because proposals in this category involve the designation of covered platforms by regulators, this report refers to this strategy as the "designated-platform approach."[494]

The second model is narrower. While the designated-platform approach would apply the same set of rules to covered firms in a range of markets (*e.g.*, social networking, e-commerce, online search), some legislation would apply only to individual markets.[495] This report refers to this strategy as the "market-specific approach."

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

The Designated-Platform Approach

Policymakers in the United States and EU have explored the designated-platform approach. The EU has adopted legislation called the Digital Markets Act, which applies special regulations to designated "gatekeepers."[496] 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.[497]

In the United States, several bills in the 117th Congress would have adopted a broadly similar approach.[498] One of those bills has been reintroduced in the 118th Congress,[499] and other legislation in the 118th Congress employs a comparable strategy.[500]

The proposals would empower a regulator to designate a platform offering any of the relevant 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."[501]

---

[493] *See infra* "The Designated-Platform Approach."

[494] 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, S. 2033, 118th Cong. § 2(a)(5)(B) (2023). Nevertheless, this report adopts the terminology noted above because of the central role that designation would likely play in the bills' application.

[495] *See infra* "The Market-Specific Approach."

[496] 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.

[497] *Id*.

[498] 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).

[499] American Innovation and Choice Online Act, S. 2033, 118th Cong. (2023).

[500] Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. (2023).

[501] *See, e.g.*, S. 2033 §§ 2(a)(5), 3(d).

Different bills would impose different types of competition rules on designated platforms, including rules involving discriminatory conduct against business users,[502] vertical integration,[503] and mergers.[504]

Depending on the interpretation of the "critical trading partner" standard, the designation criteria may encompass 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.[505]

Certain Microsoft properties and TikTok—a short-form video app controlled by the Chinese firm ByteDance—may also fall within the bills' coverage.[506]

The designation criteria employed in these proposals raise several issues. Some commentators have criticized the use of market capitalization and annual sales as factors that would determine a firm's regulatory status.[507] Those criteria, they contend, have little relevance for a platform operator's ability to harm competition, which instead depends on a firm's market power.[508] As discussed, courts typically assess claims of market power by evaluating a firm's size within a relevant antitrust market—not its absolute size.[509] Critics of the designated-platform bills thus argue that the proposals employ arbitrary designation criteria intended to single out a small handful of companies.[510]

The bills seek 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

[502] S. 2992; H.R. 3816.

[503] H.R. 3825.

[504] 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 uniform regulatory treatment of covered firms. H.R. 3849.

[505] 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.

[506] *Id*.

[507] 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"].

[508] Hovenkamp, *Proposed Antitrust Reforms*, *supra* note 507, at 22; PORTUESE, *supra* note 507; ABA Letter, *supra* note 507, at 8.

[509] ELHAUGE, *supra* note 38, at 226.

[510] *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 507.

tools or services needed to effectively serve customers.[511] This phrase would represent 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 be 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 indirect evidence—often involves a costly and time-consuming battle of economic experts.[512] The "critical trading partner" terminology may be 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.[513] Among other things, they have highlighted the limitations of binary market analysis when it comes to differentiated products.[514] Products that fall within a relevant 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.[515] Similarly, firms deemed to fall outside a relevant market are treated as if they exert no competitive pressure on a defendant.[516]

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.[517]

The "critical trading partner" requirement thus appears to respond to dissatisfaction with existing law. However, the requirement's precise relationship with current doctrine is 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 play a role in evaluations of the "critical trading partner" requirement. The exact ways in which this inquiry may differ from traditional market definition accordingly remain uncertain.

The literature also reflects different views of the requirement's stringency. Some commentators have argued that the relevant bills are "carefully targeted" because they would apply only to

---

[511] *E.g.*, American Innovation and Choice Online Act, H.R. 3816, 117th Cong. §§ 2(g)(4)(B)(iii), 2(g)(5) (2021) (Reported Version).

[512] *See* Hovenkamp, *The Rule of Reason*, *supra* note 31, 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).

[513] 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).

[514] Hovenkamp, *Platform Monopoly*, *supra* note 367, 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 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.").

[515] Hovenkamp, *Platform Monopoly*, *supra* note 367, at 1961.

[516] *Id*.

[517] *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.").

"critical trading partners."[518] Others have contended that the additional criterion is unlikely to exclude firms that meet the bills' quantitative thresholds.[519] The analytical framework 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.[520]

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 significant market power.

In the 117th Congress, S. 1074 would have taken that approach.[521] 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.[522] 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.[523]

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 uniform regulatory treatment. As discussed, some commentators have argued that certain platform markets share structural similarities that justify a consistent regulatory response, while others have emphasized the differences between those markets. 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.

[518] Letter from Fiona M. Scott Morton, et al., to Sen. Amy Klobuchar & Sen. Charles Grassley 1 (July 7, 2022), https://som.yale.edu/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.").

[519] 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, 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 is "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").

[520] 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.

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

[522] *Id*.

[523] *Id*.

The Market-Specific Approach

Some proposals for sectoral competition regulation rely on a more targeted strategy than the designated-platform approach. Instead of applying the same set of rules to designated firms operating across a range of different tech markets, policymakers could adopt regulations tailored to individual markets. In recent years, lawmakers have introduced bills targeting two industries: app stores and digital advertising.[524]

In the 117th Congress, the Open App Markets Act (OAMA) would have established competition rules for large app stores.[525] 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.[526] The bill's requirements are discussed in greater detail in "*Ex Ante* Conduct Rules" *infra*.

In the 118th Congress, the Advertising Middlemen Endangering Rigorous Internet Competition Accountability (AMERICA) Act would impose structural-separation requirements and conduct rules on certain digital-advertising platforms.[527] The legislation would prohibit 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).[528] It would also require firms with more than $5 billion in annual digital-advertising revenue to abide by customer-protection rules involving best execution and transparency.[529]

Enforcement

Reform proposals have taken different approaches to issues of enforcement.

In the 118th Congress, the Digital Consumer Protection Commission Act (DCPCA) would establish a new federal agency tasked with regulating large online platforms.[530] The new agency would have a broad mandate covering competition, transparency, privacy, and national security issues.[531]

On the competition front, the DCPCA would charge the new agency with enforcing prohibitions of abuses of dominance[532] and conflicts of interest,[533] in addition to granting the agency the authority to block platform mergers under a public-interest standard.[534]

---

[524] Advertising Middlemen Endangering Rigorous Internet Competition Accountability Act, S. 1073, 118th Cong. (2023); 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).

[525] S. 2710; H.R. 7030; H.R. 5017.

[526] S. 2710 § 3; H.R. 7030 § 3; H.R. 5017 § 3.

[527] S. 1073.

[528] *Id*. § 2.

[529] S. 1073.

[530] Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. § 2111 (2023).

[531] *Id*. §§ 2201-2321, 2411-2503.

[532] *Id*. § 2311.

[533] *Id*. § 2312.

[534] *Id*. § 2313.

The bill's abuse-of-dominance provision would make it unlawful for a covered platform operator to abuse its dominance or "otherwise engage in conduct that harms competition or creates or helps maintain an unfair method of competition, a monopoly, or a monopsony, regardless of any alleged procompetitive benefit or efficiencies."[535] While the legislation identifies several practices as presumptive violations of this prohibition, it would also give the new agency rulemaking authority to identify additional practices as presumptive violations.[536] Platforms could rebut a presumptive violation with clear and convincing evidence that their conduct "did not result in any harm to the relevant aggrieved party."[537]

Other proposals adopt a different approach. As discussed, several bills in the 117th Congress (one of which has been reintroduced in the 118th Congress) would have empowered the DOJ and FTC to designate firms based on certain quantitative and qualitative criteria.[538] Designated firms would then be subject to special competition rules. The bills would have charged the DOJ and FTC with enforcing the relevant prohibitions in federal court, but would not have given the agencies rulemaking authority to expand or clarify their scope.

Reform Proposals

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 have advocated the adoption of prophylactic conduct rules for Big Tech platforms, which would supplement general antitrust law. This subsection reviews several of these proposals for *ex ante* competition regulation.

Self-Preferencing

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.[539] Apple has

[535] *Id*. § 2311(b). The "abuse of dominance" language is borrowed from EU competition law, which generally reflects a more restrictive approach to the unilateral conduct of dominant firms than U.S. antitrust law. *See* DANIEL J. GIFFORD & ROBERT T. KUDRLE, THE ATLANTIC DIVIDE IN ANTITRUST: AN EXAMINATION OF US AND EU COMPETITION POLICY 63-196 (2015).

[536] S. 2597 § 2311(e).

[537] *Id*. § 2311(d).

[538] American Innovation and Choice Online Act, S. 2033, 118th Cong. § 3(d) (2023); 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); 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).

[539] *See supra* "Google."

likewise been accused of preferencing its own apps and app store,[540] while Amazon has allegedly privileged its own private-label products and products that use its fulfillment services.[541]

The primary concern with this type of conduct involves monopoly leveraging.[542] 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.[543] 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.[544]

Defensive leveraging may be a viable theory of harm under existing monopolization law.[545] 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.[546]

For some of the self-preferencing allegations against Big Tech firms, these limitations may preclude antitrust claims.[547] 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.[548] 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 elevation of allegedly inferior products would help it maintain a putative e-commerce monopoly.

Similarly, the case law governing refusals to deal may serve as an impediment to antitrust claims 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.[549] Because antitrust imposes access duties only in a narrow set of circumstances, courts would likely find many forms of self-preferencing to be permissible if such conduct is evaluated as a refusal to deal.[550]

---

[540] *See supra* "Apple."

[541] *See supra* "Amazon."

[542] *See generally* Todd, *supra* note 319.

[543] 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.

[544] 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.

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

[546] 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 544.

[547] *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").

[548] 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.

[549] Erik Hovenkamp, *The Antitrust Duty to Deal in the Age of Big Tech*, 131 YALE L.J. 1483, 1546 (2022).

[550] *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 118th Congress, the American Innovation and Choice Online Act (AICOA) would respond to these doctrinal difficulties by prohibiting covered platform operators from preferencing their own products and services "in a manner that would materially harm competition."[551]

Given the ubiquity of self-preferencing by vertically integrated firms, the meaning of the "materially harm competition" standard is key to assessing the prohibition's scope. However, many argue the meaning of that language is not clear.[552] The bill does not by its terms clarify whether the "materially harm competition" standard embodies a consumer-welfare test or one of the alternative standards for assessing competitive harm urged by proponents of antitrust reform.[553] As a result, it is unclear whether the AICOA would permit defendants to justify challenged conduct on the ground that it benefits consumers.

If the AICOA becomes law, this may be a dispositive issue in many litigated cases. A wide range of platform self-preferencing may harm a firm's rivals while also offering consumer benefits. For example, when Google displays a Google Maps result in response to a search query, it may disadvantage rival map services, but benefit consumers.[554] Apple's preinstallation of its own apps on iPhones, Microsoft's inclusion of certain apps with its Windows operating system, and Amazon's free provision of its video-streaming service to Amazon Prime members may have similar effects.[555]

It is not clear how the "materially harm competition" standard would apply to such practices. In cases that do not involve *per se* offenses, Sherman Act defendants typically have the opportunity to defend challenged conduct on the ground that it benefits consumers.[556] To the extent that the "materially harm competition" standard is intended to incorporate prevailing concepts of competitive harm from the antitrust case law, then, consumer-welfare arguments would likely be cognizable.

---

[551] American Innovation and Choice Online Act, S. 2033, 118th Cong. § 3(a)(1) (2023). Versions of the AICOA were also introduced in the 117th Congress. American Innovation and Choice Online Act, S. 2992, 117th Cong. (2022) (Reported Version); American Innovation and Choice Online Act, H.R. 3816, 117th Cong. (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).

[552] Hovenkamp, *Gatekeeper Competition Policy*, *supra* note 510, at 24; 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/; ABA Letter, *supra* note 507, at 5, 9-11.

[553] Francis Testimony, *supra* note 519, 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 510, 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."); *see also* SULLIVAN, ET AL., *supra* note 26, at 13 (noting that the term "competition" can refer to different and inconsistent goals, including "structural numerosity," the protection of small businesses for their own sake, markets in which no single actor can influence price or output, and markets that are "efficient" on some measure).

[554] *Cf*. Statement of the Federal Trade Commission Regarding Google's Search Practices, In the Matter of Google Inc., No. 111-0163 at 3 (FTC Jan. 3, 2013) (concluding that Google's display of its own content at or near the top of search results "could plausibly be viewed as an improvement in the overall quality of Google's search product").

[555] Francis Testimony, *supra* note 519, at 26.

[556] *See, e.g.*, United States v. Microsoft Corp., 253 F.3d 34, 59 (D.C. Cir. 2001) (per curiam).

In interpreting other industry-specific competition statutes, however, some courts and commentators have taken the view that "harm to competition" encompasses types of harm beyond those proscribed by the antitrust laws.[557] Additionally, some of the AICOA's proponents have rejected suggestions to amend the bill to adopt a consumer-welfare test.[558]

An interpretation that eschewed consumer-welfare justifications would also be consistent with the normative vision articulated by many advocates of antitrust reform. As discussed, the role that consumer welfare is meant to play in non-welfarist conceptions of "competition" is not clear.[559] Much of the reformist literature, though, appears to reject the idea that courts and enforcers should balance different antitrust goals against one another.[560] This context, along with the bill's omission of other traditional antitrust concepts like market power, may cut against the argument that consumer-welfare arguments would be cognizable under the "materially harm competition" standard.[561]

The DCPCA appears to be more explicit about this issue. That legislation would make it presumptively unlawful for covered platforms to preference their own products and services, "regardless of any alleged procompetitive benefits or efficiencies."[562] Defendants could rebut an allegation of unlawful self-preferencing only by establishing by clear and convincing evidence that their conduct "did not result in any harm to the relevant aggrieved party."[563]

---

[557] Michael Kades, *Protecting Livestock Producers and Chicken Growers: Recommendations for Reinvigorating Enforcement of the Packers and Stockyards Act*, WASH. CTR. FOR EQUITABLE GROWTH 48-57 (May 2022) (explaining that some courts have equated "harm to competition" under the Packers and Stockyards Act with anticompetitive harm under the antitrust laws, while others have adopted a broader interpretation).

[558] Hearing Transcript at 39-40, *Reining in Dominant Digital Platforms: Restoring Competition to Our Digital Markets, Hearing Before the Subcomm. on Competition Policy, Antitrust and Consumer Rights of the S. Comm. on the Judiciary* (Mar. 7, 2023) (on file with author).

[559] *See supra* "Revisiting the Goals of Antitrust: The Neo-Brandeisian Movement."

[560] *See* Marshall Steinbaum & Maurice E. Stucke, *The Effective Competition Standard: A New Standard for Antitrust*, 87 U. CHI. L. REV. 595, 604 (2020) (proposing an "effective competition" standard under which "a substantial lessening of competition suffices for liability," and "[e]nforcers and courts need not . . . balance the harms to one set of stakeholders against the supposed benefits for another"); *see also* Kanter Handler Lecture, *supra* note 486 (indicating that "the question of the goals of antitrust starts *and ends*" with "competition and the competitive process") (emphasis added); Khan & Vaheesan, *supra* note 467, at 276 (arguing that "[t]he shift from per se rules and presumptions to the rule of reason and other standards-based tests has dramatically undercut antitrust enforcement," and that "antitrust doctrine should be simplified to ease enforcement and avoid interminable and largely fruitless inquiries into market dynamics").

[561] The 117th Congress's consideration of the AICOA featured discussion of the availability of a consumer-welfare defense. The House Judiciary Committee ultimately adopted an amendment offering an affirmative defense under which platform operators could avoid liability if they established by clear and convincing evidence that their conduct would increase consumer welfare. American Innovation and Choice Online Act, H.R. 3816, 117th Cong. § 2(c)(3) (2021) (Reported Version).

The relationship between the "materially harm competition" test and the consumer-welfare standard was also discussed during the Senate Judiciary Committee's markup of the AICOA. 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?").

[562] Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. § 2311(b), (c)(3) (2023).

[563] *Id*. § 2311(d).

Tying

The AICOA, OAMA, and DCPCA also contain provisions prohibiting tying in certain circumstances.

The AICOA would bar covered platform operators from tying access to or preferred placement on their platforms to the purchase or use of other products or services that are not "part of or intrinsic to" a platform.[564] The legislation would offer an affirmative defense, however, for conduct that does not result in "material harm to competition."[565]

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 for in-app transactions.[566]

The DCPCA's tying provision is the broadest of the three bills. It would presumptively prohibit covered platforms from engaging in tying, while offering platforms the ability to rebut an alleged violation with clear and convincing evidence that their conduct "did not result in any harm to the relevant aggrieved party."[567]

All three bills go beyond current tying law. As discussed, the modified *per se* rule against tying allows a plaintiff to prevail 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.[568]

Additionally, some courts have required plaintiffs to demonstrate that a tying arrangement had anticompetitive effects in the tied product market,[569] while others have entertained business justifications for challenged ties.[570] Two cases—the Ninth Circuit's recent decision in *Epic Games v. Apple* and the D.C. Circuit's 2001 *Microsoft* decision—have also held that the rule of reason, rather than the modified *per se* rule, applies to ties involving platform software.[571]

---

564 American Innovation and Choice Online Act, S. 2033, 118th Cong. § 3(a)(5) (2023).

565 *Id*. § 3(b)(2).

566 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).

567 Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. § 2311(c)(2), (d) (2023). The DCPCA's definition of "self-preferencing" also borrows language from the AICOA's tying provision, defining that term to include "conditioning access to the platform or preferred status or placement on the platform on the purchase or use of other products or services offered by the covered platform operator." *Id.* § 2311(a)(5)(D). A tying arrangement employed by a covered platform may thus constitute a presumptive violation of the DCPCA on two independent grounds.

568 HOVENKAMP, FEDERAL ANTITRUST POLICY, *supra* note 94, at 435 (summarizing the test employed by most federal circuit courts of appeals).

569 *Id.* at 435-36.

570 *E.g.*, Mozart Co. v. Mercedes-Benz of N. Am., Inc., 833 F.2d 1342, 1348 (9th Cir. 1987); Dehydrating Process Co. v. A.O. Smith Corp., 292 F.2d 653, 655-57 (1st Cir. 1961).

571 Epic Games, Inc. v. Apple, Inc., 67 F.4th 946, 997 (9th Cir. 2023); United States v. Microsoft, 253 F.3d 34, 89-90 (D.C. Cir. 2001) (per curiam).

In addition to ties involving app stores and payment processors, the tying provisions in the AICOA and DCPCA may implicate several of the practices discussed earlier in this report, 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 fulfillment services.[572]

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 includes an interoperability provision that would prohibit 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, except where such access would lead to a "significant cybersecurity risk."[573] Among other conduct, the prohibition may be 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.[574]

The AICOA's data-access provision would prohibit 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.[575]

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.[576] 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.[577]

The DCPCA contains both interoperability and data-portability mandates for covered platforms. The bill's interoperability provision would require covered platform operators to

- allow business users to interoperate with hardware and software features that are available to services on a covered platform provided by the platform operator;
- provide business users with continuous and real-time access to data generated by the use of certain platform services; and
- provide business users with the necessary tools to access and analyze data on a covered platform without a transfer from the platform.[578]

The DCPCA's data-portability provision would require covered platform operators to maintain a set of interfaces that provide users with "effective portability" of the data they generate using certain platform services.[579]

---

[572] *See supra* "Google" & "Amazon."

[573] American Innovation and Choice Online Act, S. 2033, 118th Cong. § 3(a)(4) (2023).

[574] *See supra* "Meta Platforms" & "Apple."

[575] S. 2033 § 3(a)(7).

[576] Open App Markets Act, S. 2710, 117th Cong. § 3(d)(2) (2022) (Reported Version); Open App Markets Act, H.R. 7030, 117th Cong. § 3(d)(2) (2021); Open App Markets Act, H.R. 5017, 117th Cong. § 3(d)(2) (2021).

[577] S. 2710 § 3(f); H.R. 7030 § 3(f); H.R. 5017 § 3(f).

[578] Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. § 2321(b) (2023).

[579] *Id*. § 2321(a).

Other, potentially broader interoperability and data-portability legislation is discussed in greater detail in "Interoperability & Data Portability" *infra*.

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 data to find profitable opportunities for its own private-label business.[580] Apple has similarly been accused of using competitively sensitive information to replicate fast-growing apps and integrate certain functionalities into iOS.[581]

Some proposals would prohibit this conduct. The AICOA includes a provision that would bar covered companies from using nonpublic data from dependent businesses to support their own offerings.[582] The OAMA included a similar prohibition.[583]

These types of measures have 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.[584] 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.[585]

Most-Favored-Nation Policies

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

In the 117th Congress, 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.[586]

The DCPCA contains a similar prohibition. The bill would make it presumptively unlawful for a covered platform to interfere with or restrict a business user's pricing of its products or services, whether or not those products or services are offered on the platform.[587]

Some of the pricing restrictions targeted by these bills include most-favored-nation clauses (MFNs), which prohibit a platform's business users from offering lower prices on rival platforms.[588] Platform MFNs may make it difficult for rivals to compete with a dominant platform

---

580 *See supra* "Amazon."

581 *See supra* "Apple."

582 S. 2033 § 3(a)(6).

583 S. 2710 § 3(c); H.R. 7030 § 3(c); H.R. 5017 § 3(c).

584 Francis, *supra* note 63, at 832; Hovenkamp, *Platform Monopoly*, *supra* note 367, at 2015; D. Daniel Sokol, *A Framework for Digital Platform Regulation*, 17 COMPETITION L. INT'L 95, 102 (2021).

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

586 American Innovation and Choice Online Act, H.R. 3816, 117th Cong. § 2(b)(6), (b)(8) (2021) (Reported Version).

587 Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. § 2311(a)(5)(C), (c)(3) (2023). The DCPCA would impose this prohibition by defining the term "self-preferencing" to include the specified type of interference and by making "self-preferencing" presumptively unlawful. *Id*.

588 Jonathan B. Baker & Fiona Scott Morton, *Antitrust Enforcement Against Platform MFNs*, 127 YALE L.J. 2176, 2181 (2018). As discussed, Amazon has faced lawsuits challenging its pricing restrictions, though the nature of the relevant policies has been disputed. *See supra* "Amazon."

by charging lower commissions, because such clauses prevent business users from passing along those savings to consumers.[589]

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 low-cost platform.[590] 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.[591]

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).[592] Some theoretical analyses have concluded that narrow MFNs are more likely to be procompetitive than wide MFNs.[593]

Both narrow and wide platform MFNs would fall within the scope of the DCPCA and the reported House version of the AICOA in the 117th Congress. Under the relevant version of the AICOA, challenged restrictions would have escaped liability 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.”[594] Under the DCPCA, by contrast, covered platforms would need to show by clear and convincing evidence that their conduct “did not result in any harm to the relevant aggrieved party.”[595]

App Preinstallation

The AICOA also includes a provision prohibiting covered firms from restricting or impeding the uninstallation of preinstalled apps, unless such conduct is necessary for the security or functioning of the platform or to prevent data from being transferred to a foreign adversary.[596] The OAMA contained a similar prohibition.[597]

These prohibitions appear to be directed at concerns that Google and Apple have leveraged control of their mobile operating systems to favor their own apps and app stores.[598] Though the bills do 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.[599]

---

589 Baker & Scott Morton, *supra* note 588, at 2195 n.82.

590 *Id*. at 2183-84.

591 *Id*. at 2184.

592 Schnitzer, et al., *supra* note 519, at 18 n.12.

593 Baker & Scott Morton, *supra* note 588, at 2184 n.23 (citing examples).

594 American Innovation and Choice Online Act, H.R. 3816, 117th Cong. §§ 2(c)(1), (c)(3) (2021) (Reported Version).

595 Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. § 2311(d) (2023).

596 American Innovation and Choice Online Act, S. 2033, 118th Cong. § 3(a)(8) (2023).

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

598 *See supra* “Google” & “Apple.”

599 *Compare* 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 (arguing that the AICOA’s self-preferencing prohibition may prohibit app preinstallation), *with* Hal Singer, *Rep. Cicilline’s* (continued...)

Structural Separation and Line-of-Business Restrictions

Several of the proposals 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 seek to address those concerns by prohibiting specific categories of allegedly problematic conduct. One possible downside of this approach involves enforcement costs.

The worry is twofold. First, conduct rules require regulators to continuously monitor the behavior of covered firms.[600] Second, 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.[601]

Based on these potential difficulties, some commentators have argued that structural restrictions have important advantages over behavioral rules.[602] 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.[603] 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.[604]

There is precedent for these types of structural regulations, including in the railroad, banking, and telecommunications industries.[605]

The DCPCA would impose a separation requirement on certain tech platforms. The legislation would make it unlawful for a covered platform operator to "maintain, or engage in any action that creates, a platform conflict of interest."[606] It would empower a newly created agency to order divestitures and other necessary remedies to eliminate prohibited conflicts of interest.[607] The new agency would also have the authority to engage in rulemaking to implement this prohibition.[608]

In the 117th Congress, H.R. 3825, the Ending Platform Monopolies Act, contained a more detailed separation requirement.[609] 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

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).

600 HJC REPORT, *supra* note 11, at 381; Khan, *Platforms and Commerce*, *supra* note 362, at 1036.

601 *See, e.g.*, Francis, *supra* note 63, at 823-24.

602 HJC REPORT, *supra* note 11, at 381; Khan, *Platforms and Commerce*, *supra* note 362, 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).

603 Khan, *Platforms and Commerce*, *supra* note 362, at 1052.

604 *Id*.

605 *Id*. at 1037-43, 1045-51.

606 Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. § 2312(a) (2023).

607 *Id*. § 2312(b).

608 *Id*. § 2312(c).

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

- gives rise to a "conflict of interest."[610]

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.[611]

These types of proposals have generated debate. Critics of separation requirements have argued that a platform's entry into new markets typically benefits consumers.[612] For example, by selling its own private-label products on its marketplace, Amazon may offer consumers low-cost alternatives to established brands.[613] Integration into related business lines may also create efficiencies.[614] 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.[615]

Separation requirements may also face line-drawing difficulties. The boundary between a covered platform and separate services is not always clear.[616] 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.[617] 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.[618]

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.[619] In addition, advocates of separation rules contend that any

---

610 *Id*. § 2(a).

611 *Id*. § 2(b).

612 Hagiu, et al., *supra* note 585, 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 (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 319, at 524-25.

613 Hovenkamp, *Looming Crisis*, *supra* note 612, 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.").

614 *See, e.g.*, Todd, *supra* note 319, at 514-17.

615 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/.

616 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/.

617 Todd, *supra* note 319, at 536.

618 *E.g.*, Rogerson & Shelanski, *supra* note 421, at 1934.

619 Khan, *Platforms and Commerce*, *supra* note 362, 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).

decreases in platform innovation caused by such rules must be weighed against likely increases in innovation by platform users.[620]

Mergers & Acquisitions

Substantive Merger Law

Other proposals target mergers involving large tech platforms. The DCPCA would create a new agency charged with reviewing certain mergers that involve covered platform operators.[621] For transactions subject to the HSR Act's pre-merger filing requirement, the bill would require covered platform operators to submit their filings to the new agency, in addition to the antitrust agencies. To proceed with such transactions, covered platform operators would need to prove by clear and convincing evidence that the transactions would "serve the public interest."[622]

The bill lists 13 factors that are relevant to this inquiry, including a transaction's effects on competition, national security, privacy, and local communities.[623] It also identifies certain fact patterns in which a covered transaction "would not" serve the public interest, in addition to fact patterns that "may" support a determination that a transaction would not serve the public interest. The bill prescribes that a covered transaction "would not" serve the public interest if

- the acquired firm offers services or products that overlap or compete with, or that are functionally equivalent to, those offered by the covered platform operator;
- the acquired firm is a "critical trading partner in the supply chains or business ecosystems of the parties"; or
- the transaction would create a "platform conflict of interest."[624]

The legislation identifies the following facts that "may" support a determination that a covered transaction would not serve the public interest:

- the transaction would result in a post-transaction market share of greater than 33% in any relevant market (including labor markets);
- the transaction would (1) result in a Herfindahl-Hirschman Index (HHI) greater than 1,800 in any relevant market, and (2) increase the HHI by more than 100;[625] or

[620] Khan, *Platforms and Commerce*, *supra* note 362, at 1085.

[621] Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. § 2313 (2023).

[622] *Id*. § 2313(b)(1).

[623] *Id*. § 2313(d)(1).

[624] *Id*. § 2313(d)(2).

[625] As discussed, the HHI is a measure of market concentration calculated by summing the squares of each firm's market share. Thus, a market with four firms that each occupy 25% of the market would have an HHI of 2,500 ($25^2 + 25^2 + 25^2 + 25^2$). A market with an HHI of 1,800 qualifies as "moderately concentrated" under the 2010 Horizontal Merger Guidelines, which indicate that mergers in such markets "potentially raise significant competitive concerns and often warrant scrutiny" when they increase the market's HHI by more than 100 points. HORIZONTAL MERGER GUIDELINES, *supra* note 49, at § 5.3. Under the 1992 Merger Guidelines, a market with an HHI above 1,800 would have qualified as "highly concentrated," and the antitrust agencies adopted a rebuttable presumption of illegality for mergers that increased the HHI of such markets by more than 100 points. DEP'T OF JUSTICE AND FED. TRADE COMM'N, 1992 MERGER GUIDELINES § 1.5 (1992).

- the transaction would result in an aggregation of data or access to data that "harms the competitive process or creates or helps maintain a monopoly, a monopsony, market power, or unfair methods of competition."[626]

In addition to requiring covered platform operators to prove by clear and convincing evidence that HSR-reportable mergers would serve the public interest, the DCPCA would empower the newly created platform regulator to block *non-reportable* transactions involving covered platform operators upon a determination that they would not serve the public interest.[627]

The DCPCA would also give the new regulator the authority to review consummated mergers involving covered platform operators and unwind those transactions upon a determination that they "materially harmed the public interest."[628] The bill would allow the regulator to evaluate whether a consummated transaction "materially harmed the public interest" by evaluating the factors identified above, while also providing that such harm is present if

- the covered platform operator acquired a "critical trading partner";
- the transaction resulted in a post-transaction market share of greater than 50% in any relevant market (including labor markets); or
- the transaction (1) resulted in an HHI greater than 2,500 in any relevant market, and (2) increased the HHI by more than 200.[629]

The DCPCA thus envisions a broad overhaul of the legal regime governing mergers involving dominant platforms. In place of the existing framework in which courts inquire primarily into a transaction's economic effects, the bill would adopt *per se* rules against platform mergers that fall into certain categories and empower a new specialist regulator to block platform mergers under a public-interest standard.

Legislation in the 117th Congress likewise would have adopted certain *per se* rules for mergers involving dominant platforms, but would not have established a public-interest standard for those mergers or created a new regulator. H.R. 3826, the Platform Competition and Opportunity Act, 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;
- 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.[630]

---

[626] S. 2597 § 2313(d)(3).

[627] *Id*. § 2313(e).

[628] *Id*. § 2314(a)-(b).

[629] *Id*. § 2314(c).

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

The reported version of the bill included an amendment that would have exempted transactions of less than $50 million from the prohibition.[631]

For transactions of $50 million or greater, then, the bill would have prohibited covered platforms 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.[632] 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.[633] Courts have identified prerequisites for both theories.[634]

The relationship between those prerequisites and H.R. 3826's requirement that a covered 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.[635] However, that is not 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.[636] Commentators have offered different definitions of the concept of nascent competition.[637] In general, however, the term has been used to refer to firms and technologies with uncertain prospects that nevertheless pose serious threats to an incumbent.[638]

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.[639] In cases involving unproven or

[631] 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.

[632] H.R. 3826 § 2(b)(2)(B).

[633] *See supra* "Mergers & Acquisitions."

[634] *See id*.

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

[636] *Id*. § 2(b)(2)(B).

[637] Yun, *supra* note 416, at 626 ("Amongst antitrust practitioners and scholars, various definitions have emerged for nascent competition"); Hemphill & Wu, *supra* note 416, at 1881 ("Nascent competition means different things to different people.").

[638] United States v. Microsoft Corp., 253 F.3d 34, 79 (D.C. Cir. 2001) (per curiam); Yun, *supra* note 416, at 626-27; Hemphill & Wu, *supra* note 416, at 1886-88; Tracy J. Penfield & Molly Pallman, *Looking Ahead: Nascent Competitor 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.

[639] United States v. Marine Bancorporation, Inc., 418 U.S. 602, 633 (1974).

developing technology, that burden could prove problematic for a plaintiff. H.R. 3826 was a response to this doctrinal difficulty.[640]

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.[641] 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.[642]

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 covered 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.[643] Among other things, S. 1074 would have prohibited companies designated as "dominant digital firms" from engaging in acquisitions valued at more than $1 million.[644]

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.[645]

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

[640] There is an ongoing debate 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 416, at 1896-1901 (discussing the advantages of Section 2); Melamed, *supra* note 416, 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.

[641] *See, e.g.*, Yun, *supra* note 416, 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.").

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

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

[644] *Id*.

[645] STIGLER REPORT, *supra* note 415, at 98, 111; ACCC Report, *supra* note 218, at 109; *see also* OECD STARTUP ACQUISITION REPORT, *supra* note 416, at 38-41 (cataloguing various rebuttable-presumption proposals).

First, opponents of such rules have argued that Big Tech mergers are typically benign or procompetitive.[646] 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.[647] 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.[648]

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.[649]

Proponents of special merger rules for tech platforms have responded that the procompetitive benefits of tech mergers are often overstated.[650] Merger limitations targeting a handful of prospective acquirers may also leave startup investors with enough viable exit options to mitigate concerns about dampened investment. Additionally, some commentators have suggested that reducing investment in innovations that end up in the hands of dominant incumbents is the intended outcome of the relevant proposals.[651]

The Merger Review Process

Before moving on from mergers, one final topic warrants mention: the HSR pre-merger review process. As discussed, 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.[652] 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 avoid HSR review.[653] In September 2021, the FTC 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.[654]

[646] 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 415, 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").

[647] Bowman & Dumitriu, *supra* note 646; 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).

[648] Bowman & Dumitriu, *supra* note 646.

[649] 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 640, at 10; UK DIGITAL COMPETITION REPORT, *supra* note 415, at 101.

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

[651] Hemphill & Wu, *supra* note 416, at 1893.

[652] 15 U.S.C. § 18a. As discussed, the DCPCA would require covered platform operators to also submit HSR-reportable deals to a newly created regulator and allow that regulator to block such deals under a public-interest standard. Digital Consumer Protection Commission Act of 2023, S. 2597, 118th Cong. § 2313(a)-(c) (2023).

[653] STIGLER REPORT, *supra* note 415, at 111.

[654] FTC NON-REPORTABLE ACQUISITIONS STUDY, *supra* note 414, at 10.

In response to worries about these transactions, some have supported a blanket HSR filing requirement for acquisitions by dominant tech platforms.[655] Opponents of such a rule have argued that it would be burdensome and offer few benefits for regulators.[656]

Interoperability & Data Portability

Network effects and switching costs are frequent themes in discussions of Big Tech.[657] Some reform proposals seek to address these structural features of certain platform markets by imposing interoperability and data-portability obligations on designated-platform operators.[658]

Interoperability refers to the ability of distinct services to work together and communicate with one another.[659] Interoperability can develop organically—as with email—or as a result of a legal mandate.[660] Examples in the latter category include the 1996 Telecommunications Act's requirement that local exchange carriers interconnect with other providers.[661] 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.[662]

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, making them available to nascent and potential competitors of a dominant incumbent.[663]

Data portability, by contrast, refers to a consumer's right to move his or her data from one platform to another.[664] Telecommunications law again offers an example by granting phone users the right to retain their phone numbers when they change carriers.[665] Such requirements decrease the switching costs that might otherwise discourage consumers from taking their business to a more attractive provider.[666]

In the 117th Congress, H.R. 3849 would have imposed interoperability and data-portability duties on designated digital platforms.[667] The bill would have directed the FTC to develop standards

---

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

656 ABA DIGITAL ECONOMY REPORT, *supra* note 438, at 16.

657 *See, e.g.*, HJC REPORT, *supra* note 11, at 40-42; STIGLER REPORT, *supra* note 415, at 38-39, 109; UK DIGITAL COMPETITION REPORT, *supra* note 415, at 35-36.

658 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 415, at 109-10, 113; *see also* Kades & Scott Morton, *supra* note 424 (advocating interoperability remedies in antitrust litigation involving tech platforms).

659 Ezrielev & Marquez, *supra* note 223, at 9; OECD INTEROPERABILITY REPORT, *supra* note 658, at 12.

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

661 47 U.S.C. § 251(c).

662 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 660, at 13 n.74.

663 Kades & Scott Morton, *supra* note 424, at 41-42; Becky Chao & Ross Schulman, *Promoting Platform Interoperability*, NEW AM. FDN. 21-22 (May 2020).

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

665 47 U.S.C. § 251(b)(2).

666 Juan Pablo Maicas, et al., *Reducing the Level of Switching Costs in Mobile Communications: The Case of Mobile Number Portability*, 33 TELECOMMS. POL'Y 544 (2009).

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

implementing those duties for individual covered platforms.[668] 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.[669]

The obligations contemplated by H.R. 3849 were potentially broader than those in the AICOA, which were discussed earlier in this report.[670] The AICOA's interoperability provision would prohibit 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.[671] Accordingly, the prohibition would have been limited to a platform operator's unequal treatment of firms that utilize its platform.[672]

In contrast, H.R. 3849 would have granted the FTC rulemaking authority to impose potentially broader, platform-specific interoperability obligations.[673] 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.[674] 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.[675]

H.R. 3849's data-portability provision was also potentially broader than the parallel requirement in the AICOA. While the AICOA's requirement would apply only to a platform's business users,[676] H.R. 3849's data-portability obligation would have encompassed individuals who use a covered platform.[677]

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.[678] 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 included categories of data not subject to continuous real-time interoperability for technical or other reasons.[679] Data-portability rules may likewise require Amazon to allow retailers on its

[668] *Id*. § 6(c).

[669] *Id*. § 7.

[670] *See supra* "Interoperability and Data Access."

[671] American Innovation and Choice Online Act, S. 2033, 118th Cong. § 3(a)(4) (2023).

[672] The reported House version of the AICOA in the 117th Congress 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).

[673] ACCESS Act of 2021, H.R. 3849, 117th Cong. §§ 4, 6 (2021); *see also* Schnitzer, et al., *supra* note 519, at 22 (contrasting the AICOA's interoperability provision with the "general interoperability requirement" in H.R. 3849).

[674] Kades & Scott Morton, *supra* note 424, 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.").

[675] Kades & Scott Morton, *supra* note 424, at 9.

[676] S. 2033 § 3(a)(4).

[677] H.R. 3849 § 3.

[678] Hovenkamp, *Interoperability Remedies*, *supra* note 660, at 27.

[679] *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).

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.[680]

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.[681] Others have focused on possible privacy and data-security risks that might accompany both interoperability and data-portability rules.[682]

H.R. 3849 attempted to address complexity concerns by directing the FTC to establish technical committees to assist with rule development.[683] 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.[684]

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.[685] 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.[686] 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.[687]

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.

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.[688] The bill would have amended the Clayton Act to

---

680 H.R. 3849 Markup Transcript, *supra* note 674, at 4,564-4,568 (Rep. David Cicilline).

681 *See, e.g.*, Hovenkamp, *Interoperability Remedies*, *supra* note 660, 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/.

682 *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 658, 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).

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

684 *Id*. §§ 3(b), 4(b).

685 Hovenkamp, *Interoperability Remedies*, *supra* note 660, at 35; Ezrielev & Marquez, *supra* note 223, at 10-11.

686 *See, e.g.*, FUMAGALLI, et al., *supra* note 73, at 547; ABA Letter, *supra* note 507, at 14; Ezrielev & Marquez, *supra* note 223, at 10-11; Shelanski, *supra* note 95, at 371.

687 Kades & Scott Morton, *supra* note 424, at 26.

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

prohibit "exclusionary conduct that presents an appreciable risk of harming competition."[689] "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.[690]

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% or that otherwise has "significant market power" in the relevant market.[691] 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."[692]

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,[693] which some courts have held is a prerequisite for refusal-to-deal liability under the Sherman Act;[694]
- that the defendant priced its products below its costs or is likely to recoup losses from below-cost pricing,[695] which are both requirements for predatory-pricing claims under the Sherman Act;[696] or
- that the conduct of a multi-sided platform presents an appreciable risk of harming competition on more than one side of the platform,[697] contrary to the rule the Supreme Court adopted for two-sided transaction platforms in *Ohio v. American Express*.[698]

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."[699]

[689] *Id*. § 9.

[690] *Id*.

[691] *Id*.

[692] *Id*.

[693] *Id*.

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

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

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

[697] S. 225 § 9.

[698] Ohio v. Am. Express Co., 138 S. Ct. 2274, 2286-87 (2018).

[699] S. 225 § 13(a).

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.[700] 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."[701]

Like S. 225, the bill would have provided that market definition is not required to prove a violation of Section 1 or Section 2.[702]

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" competition[703]—a change from the current language that prohibits mergers that may "substantially" lessen competition.[704] The term "materially" was defined to mean "more than a de minimis amount."[705]

S. 225 also would have shifted the relevant burden of proof to the merging parties in certain circumstances.[706] 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

- a merger would lead to a "significant increase in market concentration";
- a firm with a market share greater than 50% 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.[707]

---

[700] Trust-Busting for the Twenty-First Century Act, S. 1074, 117th Cong. § 2 (2021).

[701] *Id.*

[702] *Id.*

[703] S. 225 § 4(b)(1).

[704] 15 U.S.C. § 18.

[705] S. 225 § 4(b)(3).

[706] *Id.*

[707] *Id.*

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

S. 1074 also included merger restrictions.[708] 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."[709] 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.[710]

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% for sellers or 25% for employers, and mergers that would result in specified levels of market concentration.[711]

S. 3847 also would have made changes to the merger-review process.[712] 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.[713]

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.[714] It would have further required the agencies to pursue remedies to restore competition or address the anticompetitive effects of those mergers in specified circumstances.[715]

Author Information

Jay B. Sykes
Legislative Attorney

---

[708] 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."

[709] S. 1074 § 3.

[710] *Id*.

[711] 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 an HHI of greater than 1,800, and (2) increase the HHI by more than 100 points. *Id*.

[712] S. 3847 § 4(b).

[713] *Id*.

[714] *Id*. § 6.

[715] *Id*.

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.