Memorandum 2024-5

Antitrust Law: Status Report

This memorandum¹ provides an update on the status of the Commission's study of antitrust law. The latest developments are described below.

As the Commission knows, the staff recruited experts to assist the Commission in the study. Those experts were formed into seven working groups as follows:

Group 1. Single Firm ConductGroup 2. Mergers and AcquisitionsGroup 3. Concerted ActionGroup 4. Consumer Welfare StandardGroup 5. Technology PlatformsGroup 6. Enforcement and ExemptionsGroup 7. Concentration in California

The scope of the groups' work is described in Memorandum 2023-16. By the end of January 2024, the staff received draft reports from each working group, which the staff and our expert consultant, Cheryl Johnson, are reviewing.

The staff is extremely grateful for the invaluable assistance that these experts have provided. The reports that they prepared for the Commission will establish a critical foundation for the Commission's deliberations.

The staff is proposing the following schedule so that the reports may be presented to the Commission by representatives of the working groups. This will provide the Commission with the opportunity to ask questions about and receive public comment on each report as it is presented. Our expert consultant, Cheryl Johnson, will also be available at the meetings for questions or comments. The Commission could also provide ongoing direction to the staff on any additional information that the commission is seeking. To encourage robust public comment, the staff intends to publish a memorandum with the applicable final expert report attached at least three weeks prior to the scheduled meeting.

¹ Any California Law Revision Commission document referred to in this memorandum can be obtained from the Commission. Recent materials can be downloaded from the Commission's website (www.clrc.ca.gov). Other materials can be obtained by contacting the Commission's staff, through the website or otherwise.

The Commission welcomes written comments at any time during its study process. Any comments received will be a part of the public record and may be considered at a public meeting. However, comments that are received less than five business days prior to a Commission meeting may be presented without staff analysis.

- March 21, 2024, 9:30 a.m. 1:30 p.m.: Hybrid meeting. Concentration in California
- April 18, 2024, 9:30 a.m. 1:30 p.m.: In-person meeting Sacramento. Single Firm Conduct
- June 20, 2024, 9:30 a.m. 1:30 p.m.: In-person meeting Silicon Valley. *Technology Platforms*
- August 15, 2024, 9:30 a.m. 1:30 p.m.: In-person meeting Los Angeles. *Mergers and Acquisitions*
- September 12, 2024, 9:30 a.m. 1:30 p.m.: Hybrid meeting. *Consumer Welfare Standard and Concerted Action*
- October 10, 2024, 9:30 a.m. 1:30 p.m.: Hybrid meeting. *Enforcement and Exemptions*

The Commission should decide whether to adopt the proposed schedule for the presentation of expert reports, with or without changes. After the Commission has had an opportunity to review and hear all the reports and to consider public comment, the Commission could then turn to consideration of potential recommendations to the Legislature.

PUBLIC COMMENT

At its June 22, 2023, meeting the Commission heard a presentation regarding European Competition Law by Professor Alison Jones. In response to that discussion, the Chamber of Progress commissioned a study by Professor Jonathan Barnett² titled, "Does the European Union's Digital Markets Act Provide an Appropriate Model for Maintaining Competition in California's Innovation Economy?" That study is attached to this memorandum. According to the Chamber, it commissioned this study to examine how the implementation of European antitrust regimes like the Digital Markets Act (DMA) would impact Californians.

According to its website, the Chamber of Progress is a 501(c)(6) industry trade association devoted to a progressive society, economy, workforce, and consumer climate, that supports public policies that will build a fairer, more inclusive country in which all people benefit from technological leaps.³ The Chamber's website indicates:

² Professor Jonathan Barnett is the director of USC Gould School of Law's Media, Entertainment and Technology Law Program. See https://gould.usc.edu/faculty/profile/jonathan-barnett/. The study was prepared by Prof. Jonathan Barnett on behalf of ICP Analytics LLC, an independent research organization commissioned by the Chamber of Progress.

³ See https://progresschamber.org/.

Our work is supported by our corporate partners, but the Chamber of Progress remains true to our stated principles even when our partners disagree. No partner companies sit on our board of directors or have a vote on our work.⁴

The Chamber's corporate partners range from large multinational companies to smaller startup businesses across a variety of technology industries.⁵ According to Kaitlyn Harger, Ph.D, who is a Senior Economist at the Chamber, while the study aligns with the Chamber's views on the topic, it does not represent the views of all of the chamber's partner companies.

Respectfully submitted,

Sharon Reilly Executive Director

⁴ See https://progresschamber.org/partners/.

Does the European Union's Digital Markets Act Provide an Appropriate Model for Maintaining Competition in California's Innovation Economy?

ICP Analytics LLC

Commissioned by the Chamber of Progress December 2023

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EXECUTIVE SUMMARY

This report was prepared by Prof. Jonathan Barnett on behalf of ICP Analytics LLC, an independent research organization commissioned by the Chamber of Progress. The views expressed in this report solely reflect the views of ICP Analytics LLC and should not be attributed to any other entity or institution.

The California Law Revision Commission has been authorized by the California legislature to study whether California state law "should be revised in the context of technology companies so that analysis of antitrust injury in that setting reflects competitive benefits such as innovation" or "in any other fashion . . . [to] ensure the tangible and intangible benefits of free market competition for Californians . . .".¹ Among various policy options, the Commission is studying whether California should adopt one or more elements of the Digital Markets Act (the DMA) recently enacted and (since May 2023) being implemented by the European Union. This report addresses this option.

The language of the Commission's statutory mandate reflects the legislature's recognition of the foundational role played by innovation and free market competition in driving California's virtually unparalleled track record as a national and global innovation leader. This report addresses whether adopting state legislation based on the DMA would be consistent with these driving principles behind California's innovation success. This report concludes that it would not.

Adopting the DMA's approach toward competition policy in the digital sector would depart substantially from those foundational principles and, as a result, endanger California's ability to maintain its strong record of innovation leadership and free-market competition. As such, any such policy shift would risk doing significant harm to the broad and diverse range of stakeholders (including consumers, startups and other small businesses, platforms, employees, suppliers, and investors) that support and rely on California's innovation ecosystem.

The DMA is a sweeping piece of legislation that institutes a regulatory structure that applies to large technology platforms that are designated as "gatekeepers" or even deemed to be "foreseeable" gatekeepers. So far three of the six companies designated as gatekeepers by EU regulators (and therefore subject to the DMA's limitations) are headquartered in California² and, based on the gatekeeper criteria in the DMA, it is expected that more companies (a large number of which would be based in California) are likely to fall within its scope. These companies play a critical role in the digital economy such that the DMA is expected to impact not only the platforms designated as gatekeepers but the broader digital ecosystem of hundreds of millions of large and small business users and individual users that regularly interact with those platforms around the world.

The DMA exhibits three core features that are incompatible with the two-fold commitment to innovation and free-market competition that are hallmarks of California's tech ecosystem.

¹ 2022 Cal. Stat. res. ch. 147.

² The six designated companies are Alphabet, Amazon, Apple, ByteDance (parent of TikTok), Meta and Microsoft, see European Commission, Commission designates six gatekeepers under the Digital Markets Act, 6 Sept. 2023. Alphabet, Apple, and Meta are headquartered in California. Amazon and Microsoft have a significant number of employees in California. ByteDance is headquartered in China.

- 1. The DMA institutes "ex ante" prohibitions of certain common business practices that federal antitrust and California state antitrust law typically assess on an "ex post" case-by-case basis. This tailored fact-based approach, which has been refined by decades of case law through various forms of the "rule of reason," reflects widespread recognition among courts, regulators, and scholars that these practices generally give rise to a complex mix of procompetitive and anticompetitive effects. Given this complexity, both U.S. federal antitrust and California state antitrust law have disfavored "per se" presumptions of illegality that can give rise to erroneous findings of liability when courts are precluded from weighing evidence as to whether a particular business practice ultimately promotes or constrains competition. Those errors are of greatest concern when courts mistakenly uphold antitrust claims that target practices that reduce prices for consumers.
- 2. The DMA's rigid approach reflects a puzzling return to a widely discredited "big is bad" approach that seeks to freeze in place idealized market structures and business models without inquiry into the competitive effects of particular practices in specific markets. The U.S. tradition of fact-intensive antitrust adjudication assesses the competitive effects of any contested practice by taking into account the characteristics of particular market environments, rather than condemning certain types of practices across the board. This adaptive case-specific approach enables courts and regulators to identify and deter anticompetitive practices while preserving the market's ability to continuously adjust business strategies and organizational structures in response to changing economic and technological conditions. In particular, the DMA's wholesale prohibition of certain bundling practices is liable to interfere with the capacity of digital ecosystems to disrupt existing business models by combining complementary assets and capacities to challenge incumbents through differentiated products and services that ultimately benefit consumers.
- 3. The DMA reflects a rule-bound regulatory apparatus that would necessitate a permanent regulatory agency that would impose administrative and compliance costs that could exceed the costs expended through the current litigation-focused approach that addresses potential threats to competitive markets on a case-by-case basis. A rigid administrative system grounded in categorical prohibitions would be difficult to reconcile with the already-potent suite of enforcement tools that are actively deployed by government and private plaintiffs under federal antitrust law and California state antitrust and unfair competition laws. The DMA's approach reflects Europe's long-standing tendency to favor command-and-control approaches to technological development and interventionist approaches to competition law, which have coincided with Europe's multi-decade decline in most technology industries. Some commentators also ascribe the DMA to European efforts to develop national digital champions by restraining the growth of US-based platforms. It would be imprudent or even irrational for California to follow this regulatory model.

These conclusions are based on the economic characteristics and historical development of platform-based technology ecosystems, the historical record of U.S. antitrust law (including California state antitrust law) in developing nuanced approaches toward assessing the competitive effects of business practices in innovation-based economies, and the divergent

trajectory of tech ecosystems and competition policy in the U.S. and Europe. The report also takes into account the potent toolbox of legal tools that are already available to federal and state enforcers, and private plaintiffs, to target business practices that interfere with the forces of competition and entrepreneurship that drive California's innovation economy.

Part 1. The Institutional Fabric of California's Innovation Ecosystem

California's innovation economy currently has no peer anywhere in the world. Yet it is often unappreciated that the leadership position occupied by California, and Silicon Valley in particular, in computing, communications, and other digital technologies emerged only in the early 1970s. Firms such as Intel in semiconductors and Apple and Hewlett-Packard in computing hardware pioneered the California tech ecosystem and, with the launch of the internet, were followed by firms such as eBay, Yahoo! and, in semiconductors for mobile devices, Qualcomm. Some of today's technology and e-commerce leaders were founded only in the late 1990s or early to mid-2000s: Netflix was founded in 1997; Alphabet was founded (as Google) in 1998; Amazon was founded in 1994; Salesforce was founded in 1999; Meta Platforms was founded (as Facebook) in 2004; Twitter (now X) was founded in 2006; Airbnb was founded in 2008; and Lyft was founded in 2012.

It should not be assumed that California's leadership position in the global innovation economy is impregnable. Unlike "brick and mortar" economies that are grounded principally in physical assets, technology-focused economies are grounded principally in intangible capital (ideas), financial capital, and human capital that are mobile and can therefore more easily migrate to other regions. Innovation clusters are engaged in a constant competition to offer the most attractive institutional environment to attract the capital, talent, and other resources that are necessary to support a knowledge-based economy. Innovation economies that fail to do so can cede position to other economies, as illustrated by once-prominent but now-lapsed technology clusters in northern New Jersey (the home of Thomas Edison's famous "idea factory" and Bell Labs), Cleveland and Detroit (steel, electrical machinery, and automotive), and Boston and upstate New York (computing hardware). Today technology clusters are growing in Austin (computing and automotive) and Arizona (semiconductors), and Boston vigorously competes with San Diego and the San Francisco Bay Area for leadership in the life sciences.

California's innovation economy has been characterized by vigorous competitive conditions that preserve opportunities for entrepreneurial firms to challenge and "disrupt" incumbents that may be wedded to existing technologies. During this period, California has deployed a "balancing" approach to competition policy that enables enforcers and courts to deploy a mix of federal and state antitrust and unfair competition statutes in a surgical approach that seeks to deter anticompetitive conduct without inadvertently constraining the competitive pursuit of novel business strategies. This nuanced evidence-based approach stands in stark contrast to the European approach to competition law, which has tended to adopt rule-based approaches that can impede the competitive process by leading regulators and courts to condemn innovative business practices even without proof of competitive harm. The DMA adopts and "ramps up" this categorical approach through a quasi-regulatory apparatus that targets key elements of the platform-based business models that stand at the heart of California's tech economy. Given Europe's decline as a global innovation leader over the past decades, there is strong reason to doubt that Europe's rigid and intrusive approach to competition policy would provide a sound foundation for California's entrepreneurial innovation ecosystem.

1.1 California's Balancing Approach to Competition Policy

Some commentary on antitrust policy may give the impression that California's technology economy operates without robust scrutiny by regulators or other enforcers of antitrust law.

The reality is far different. Even setting aside foreign competition laws, California-based firms are exposed to liability under federal antitrust laws (principally, the Sherman Act), state antitrust laws (known as the Cartwright Act), and state unfair competition statutes. These statutes are actively enforced by multiple entities, including federal agencies, state attorneys general, the class-action plaintiffs' bar, competitor plaintiffs, and other parties that seek relief for harms recognized under the antitrust laws. As discussed subsequently in Part 5.1.a of this report, California-based technology platforms (the companies that are targeted by the DMA) have been the target of at least 10 lawsuits brought by federal and state plaintiffs since 2020, most of which are still ongoing. This figure does not encompass other lawsuits brought by private plaintiffs.

In adjudicating antitrust lawsuits against California-based companies, courts are guided by a common set of unifying principles that run across the Sherman Act and the Cartwright Act. Most importantly, outside price-fixing and other clear forms of collusion (practices that fall outside the DMA), courts generally apply both statutes in accordance with the rule of reason. As will be discussed extensively in this report, this standard demands that courts assess and weigh evidence of anticompetitive and procompetitive effects in determining whether a contested practice violates the antitrust laws. This case-specific methodology reflects the view that competition policy demands a prudential approach that avoids both underdeterrence, which can arise when standards of proof are unduly relaxed, and overdeterrence, which can arise when standards of proof are unduly strict. In turn, this standard provides markets with assurance that the antitrust laws will be applied in a manner that takes due care to target practices that unfairly tilt the playing field to favor incumbents without suppressing practices that pose little to no risk of competitive harm.

As a supplemental deterrence mechanism, California enforcers and courts have the legal authority to target anticompetitive practices that may not clearly fall within the scope of the federal antitrust laws. The California Supreme Court has specifically recognized that the Cartwright Act provides latitude to target practices that may violate the "spirit" but not the "letter" of the federal antitrust laws.³ As I discuss subsequently in Parts 5.1.a-b of this report, California courts have used this authority to develop innovative applications of competition policy in various areas, such as potentially anticompetitive settlements between pharmaceutical incumbents and generic manufacturers. Additionally, plaintiffs may bring actions against California-based companies under the Unfair Competition Law, which has similarly been interpreted to enable claims against "unfair" practices (and especially, "incipient" anticompetitive practices) that may not necessarily fall within the scope of federal antitrust law.⁴

There is much room for reasonable debate concerning the appropriate application of the mix of federal antitrust, state antitrust, and state unfair competition laws to preserve competitive conditions in the digital economy. However, there can be little doubt that existing bodies of law provide governmental and private plaintiffs with a rich set of tools to challenge potentially anticompetitive practices while enabling courts to assess those challenges through an approach that is consistent with a vigorous, evidence-based application of the antitrust laws in technology markets.

³ Aryeh v. Canon Business Solutions, Inc., 292 P.3d 871, 1195 (Cal. 2013).

⁴ Cel-Tech Communications v. LA Cellular Telephone Co., 973 P.2d 527, 543 (Cal. 1999).

1.2 Cautionary Lessons from Europe's Rules-Based Competition Policy

Some commentators and policymakers laud the European approach to competition law on the ground that it provides enforcers with greater powers to take action against potentially anticompetitive practices. EU competition law facilitates enforcement by lowering the burden of proof that regulators must satisfy to show liability. Specifically, EU competition law has historically relied on "form-based" tests (akin to what is known in U.S. antitrust law as a "per se" rule) for identifying anticompetitive practices concerning certain types of single-firm conduct that would be addressed under U.S. antitrust law under some form of the rule of reason.⁵ Whereas the rule of reason demands that plaintiffs provide adequate evidence of anticompetitive effects, the per se standard only requires that plaintiffs establish the existence of a prohibited practice. However, the reduction in plaintiffs' evidentiary burden comes at a price. Lowering the burden of proof may counterproductively impede competition by exposing businesses to the risk that an innovative business practice is erroneously condemned as "anticompetitive." In fast-moving technology markets, the prospect of potential legal liability for value-enhancing practices may have significant adverse effects on the vigor with which firms pursue novel business models and strategies.

As will be discussed in detail in Part 4.3 of this report, the DMA significantly expands this per se-style approach by identifying multiple practices that are deemed to be anticompetitive without any investigation into market power, competitive harm, or countervailing competitive benefits. There are two principal reasons to be skeptical about re-modeling U.S. antitrust law on this formalistic and fact-insensitive model, as reflected in the DMA.

First, EU competition law's more expansive use of form-based, per se-style liability tests has been widely criticized by antitrust scholars and commentators on the ground that this approach sometimes reaches arbitrary outcomes that ignore economic evidence concerning the competitive effects of particular practices.⁶ Reflecting this critique, some European courts and regulators had increasingly favored the use of "effects-based" approaches (akin to the rule of reason) outside cases of direct horizontal collusion.⁷ This shift in policy starting approximately in the late 1990s was modeled on U.S. antitrust law's integration of economic concepts and methodologies⁸ and, in 2009, the European Commission issued a Guidance Paper that adopted a more effects-based approach in assessing "abuse of dominance" claims.⁹ Reflecting this approach, the General Court of the European Union held in 2017 that the

⁵ Gregory J. Werden & Luke M. Froeb, Antitrust and Tech: Europe and the United States Differ, and It Matters, CPI Antitrust Chronicle, Oct. 2019.

⁶ Nicolas Petit, From Formalism to Effects? The Commission's Communication on Enforcement Priorities in Applying Article 82 EC, in World Competition: Law & Economics Review 485-503 (2009); Robert

O'Donoghue & Jorge Padilla, The Law and Economics of Article 82 EC (Oxford 2006), at 185; Jordi Gual et al, An Economic Approach to Article 82, 2 Competition Policy Int'l. 111 (2006).

⁷ Monopolkommission: The "More Economic Approach" to State Aid, in Structure and Effects in EU Competition Law: Studies on Exclusionary Conduct 325 (ed. Jurgen Basedow & Wolfgang Wurmnest, Kluwer Law Intl: 2011) (stating that the "European Commission is reorienting European competition law to the more economic approach in antirust law. Its aim is to establish an effects-based approach in contrast to the traditional structure-oriented or form-based approach").

⁸ Jurgen Basedow, Introduction, in Structure and Effects in EU Competition Law, supra note 7.

⁹ Communication from the Commission, 'Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings' issued in December 2008, [2009] OJ C45/7.

Commission had erred in treating exclusivity rebates offered by Intel as per se violations¹⁰, and in 2022 overturned a \$1.14 billion fine against Intel, on the ground that the Commission had failed to provide evidence that those rebates caused competitive harm by foreclosing asefficient competitors.¹¹

Given these developments, some commentators had argued that EU and U.S. antitrust law were converging to some extent on the consistent application of evidence-based economic methodologies toward single-firm conduct (while recognizing that important differences still persisted between the two jurisdictions).¹² Hence the DMA, which consists almost entirely of per se liability standards that by design preclude any inquiry into market power or competitive effects, represents an intellectually questionable return to an approach that some European regulators and courts had abandoned and that many if not most antitrust scholars had criticized as lacking any robust foundation in antitrust economics. Given the DMA's lack of a solid grounding in competition policy principles, some commentators ascribe its enactment to protectionist motivations to develop European "digital champions,"¹³ a policy purpose that is irrelevant in the US or California context and runs precisely counter to California's interest in maintaining its leadership position in the global innovation economy.

Second, there should be great caution in adopting the DMA's rule-bound approach to antitrust law given the remarkably poor innovation record of the European economy during the decades under which it has operated under a more interventionist form of competition law compared to U.S. antitrust law as applied by regulators and the judiciary during that same period.

From approximately the late 1970s through the present, U.S. antitrust law has expanded the use of various forms of the rule of reason to almost all business practices, outside clear cases of direct collusion. During that same time, European competition law, as discussed above, has tended to apply per se-like form-based tests for liability to a broader set of business practices (although, as noted, there had recently been a modest shift toward greater use of effects-based tests akin to the rule of reason). Concurrently, the U.S. innovation economy in general and the California innovation economy in particular have produced a remarkable sequence of globally leading technology firms, ranging from Amazon in e-commerce marketplaces, Microsoft in computing operating systems, Google in search, Oracle in enterprise software, and Qualcomm in semiconductors, just to name a few. As a result, all but one of the currently designated gatekeepers under the DMA are U.S.-based and none are based in Europe. Remarkably, among the top 15 largest technology firms in the world as ranked by revenue during each of the years 2018-2021, most are based in the U.S., a significant minority are based in Asia, and *not one* firm is based in Europe.¹⁴ While there are many factors that may account for this divergence, the more interventionist and formalist approach to competition law in Europe, which has now been revived and reinvigorated by the

 ¹⁰ Case C-413/14 P – Intel Corporation Inc. v European Commission, judgment of 6 September 2017, para. 139
¹¹ Case T-286/09 RENV Intel Corporation v Commission, judgment of 26 January 2022.

¹² American Bar Assoc., Antitrust Law Section, Differences and Alignment: Final Report of the Task Force on International Divergence of Dominance Standards 18 (2019),

 $https://www.americanbar.org/content/dam/aba/administrative/antitrust_law/comments/october-2019/report-sal-dominance-divergence-10112019.pdf$

¹³ See, e.g., Meredith Broadbent, Implications of the Digital Markets Act for Transatlantic Cooperation, Center for Strategic & International Studies, Sept. 15, 2021.

¹⁴ Source: Forbes Global 500.

DMA, may have played a role in impeding the emergence and growth of a robust innovation ecosystem in Europe.

Chapter Summary

Successful innovation economies are a rare species and rely on an institutional environment that is hospitable to entrepreneurship and competition. During the period in which California has emerged as an unequaled innovation leader, it has operated under a multi-layered antitrust regime that has consistently sought to navigate between over- and underdeterrence outcomes by adopting an evidence-based approach that demands adequate evidence of competitive harm before condemning a business practice as a violation of the antitrust laws. During that same period, Europe has tended to pursue a rules-based approach to competition policy that often applies categorical prohibitions of certain business practices even absent evidence of competitive harm. While this approach, which is reflected throughout the DMA, may enhance deterrence, it runs the risk of constraining the competitive and entrepreneurial forces that have propelled California's success as a technology powerhouse.

PART 2. WHY ANTITRUST LAW FAVORS THE RULE OF REASON

The Sherman Act, enacted in 1890, prohibits only three offenses: "restraints of trade," "monopolization," and "attempted monopolization."¹⁵ The Clayton Act, enacted in 1914, prohibits certain tying and exclusive dealing practices that "substantially lessen competition or tend to create a monopoly."¹⁶ The substantive content of these compactly articulated statutes has been refined for over a century by courts and antitrust agencies through a trialand-error process that reflects advances in the economic understanding of practices that may threaten competitive markets. Through this incremental process, courts and regulators have sought to devise a tailored approach that deters anticompetitive practices without suppressing practices that are innocuous or enhance competition. In the case of virtually all practices outside outright collusion among direct competitors, that approach now takes some form of the rule of reason and has done so for almost half a century. The federal and state judiciary has adopted this step-by-step approach because it reflects the fact that most business practices contested in antitrust litigation (and virtually all cases of single-firm conduct) yield a complex mix of countervailing effects on competitive conditions. That state of affairs demands an analytical scalpel, not a sledgehammer.

2.1 The Origins of the Rule of Reason

An overly broad understanding of the aspirational language of the antitrust statutes would have a chilling effect on the vigor of a free-market economy, causing firms to "play it safe," and depriving consumers of the rough-and-tumble competitive process that leads to lower prices, higher quality, and continuous innovation as firms strive to meet consumer demand. As the Supreme Court observed shortly after enactment of the Sherman Act, a literal interpretation of the statute's prohibition of "restraints of trade" would absurdly cast doubt on the enforceability of a wide range of everyday business relationships.¹⁷

Judicial overreach in finding antitrust liability under overly expansive definitions of anticompetitive practices, or insufficiently demanding standards of proof, can encourage abuse of the litigation process by lagging competitors or inefficient incumbents that seek to place obstacles in the path of competitors that offer superior products or services. At the same time, an inappropriately narrow definition of anticompetitive practices, or overly demanding standards of proof, would disempower regulators and courts in deterring practices that unfairly shield incumbents from competitive threats or enable collusive action that distorts the market's pricing mechanism.

In 1899, Judge (and later-President) William Howard Taft devised an approach that still underlies courts' and regulators' efforts to find the "sweet spot" between overly expansive and overly restrictive applications of the antitrust laws.¹⁸ In the case of "naked" restraints, such as outright cartels, Taft held that the antitrust laws should deem a practice illegal merely by demonstrating its existence. These practices almost never have any countervailing positive effects on competitive conditions and therefore it is not necessary to adopt a fact-intensive balancing approach that could unduly delay enforcement and erode the statute's deterrent function. However, Taft held that a more thorough analysis was merited before

¹⁵ 15 U.S.C. §§ 1-2.

¹⁶ 15 U.S.C. § 14.

¹⁷ U.S. v. Joint Traffic Ass'n, 171 U.S. 505, 567-69 (1898).

¹⁸ Addyston Pipe & Steel Co. v. U.S., 175 U.S. 211 (1899).

passing judgment on restraints that are "ancillary" to a larger undertaking that may have a positive impact on competitive conditions. Examples can be found everywhere in competitive markets: joint ventures, partnerships, and other cooperative business arrangements, restaurant franchises, auto dealerships, medical, legal, and accounting practices, trade and industry associations, professional organizations, and sports leagues.

To use a medical analogy, Taft was effectively distinguishing between easy-to-diagnose, higher-risk cases that merit rapid condemnation and difficult-to-diagnose, moderate to lower-risk cases that require closer scrutiny to avoid inadvertently suppressing or discouraging a "healthy" business practice. Building on this approach, Justice Louis Brandeis took the concept one step further in *Chicago Board of Trade v. U.S.*, a 1918 Supreme Court decision¹⁹ that articulates and implements the rule of reason approach. Remarkably, that same approach in various forms still applies to all but the clearest allegations of antitrust offenses. Brandeis' insightful analysis illustrates why the rule of reason occupies such a critical place in antitrust law and policy.

The case involved a rule adopted by the Chicago Board of Trade, then the country's leading commodities exchange, that restricted exchange members to a limited time-period each day after closing for transacting in short-term futures contracts. The restraint understandably raised antitrust concerns: the leading commodities exchange in the Midwest was restricting after-hours trading by its members, seemingly extending its dominant position into the after-hours trading market that had formerly operated without restriction. A per se approach would summarily condemn this practice as an illegal undertaking to block competition.

Brandeis took a more measured approach. Based on the factual record, Brandeis, writing on behalf of a unanimous court, held that the rule was "ancillary" to a procompetitive objective: namely, to provide a transparent market in which prices for futures contracts were observable to buyers and sellers. Compared to the opaque after-hours market in which hundreds of "country dealers and farmers" had faced off against a small group of well-informed trading houses, the rule leveled the playing field for less sophisticated sellers and may have expanded the market by inducing less-informed sellers to participate with confidence in a "free and open interchange of bids and offers."²⁰ Using the fact-sensitive rule-of-reason framework, the court reached a determination that preserved a practice that was *nominally* restrictive but *effectively* promoted both efficiency and fairness.

2.2 Why the Rule of Reason Has Prevailed

Throughout the historical trajectory of U.S. antitrust law, Brandeis' emphasis on balancing competitive "goods" and "bads" has largely persisted as courts and regulators have developed increasingly tailored approaches to assess the competitive effects on balance of the large set of business practices that do not clearly support an immediate verdict of antitrust illegality. At various times in U.S. antitrust history, courts have periodically expanded and constrained the categories of practices to which the rule of reason applies or have applied the rule in various degrees of completeness depending on the circumstances.

Since at least the late 1970s, federal courts and antitrust agencies have followed the Supreme Court's instruction to reserve the per se rule for only those practices "that have proved to be

¹⁹ Chicago Board of Trade v. U.S., 246 U.S. 231 (1918).

²⁰ Id., at 240.

predominately anticompetitive."²¹ Moreover, the Supreme Court has specifically instructed courts to adopt a flexible approach that customizes the level of inquiry under the rule of reason—ranging from a "quick look" to a full-blown rule-of-reason inquiry—to reflect the perceived likelihood of competitive harm.²² When a court determines that a particular business practice is highly likely to be anticompetitive, the standard of proof is relaxed; when a court assesses that anticompetitive risk is low, the standard of proof is heightened.

The historical record of antitrust case law shows that the increased investment in enforcement, fact-gathering, and litigation activities necessitated by the rule of reason has often enabled courts to avoid reaching erroneous outcomes that would have run counter to the purposes of the antitrust laws. An example from the creative industries can illustrate this point.

CBS Inc. v. Broadcast Music, Inc. (1979)

In 1979, the Supreme Court addressed an antitrust challenge to Broadcast Music Inc. (BMI), one of the two leading collective licensing entities in the music industry. BMI offered a blanket license to the public performance rights associated with a large portfolio of musical compositions, which had been licensed to BMI by the rights holders.²³ The blanket license (which was principally directed at radio stations) effectively implemented an agreement on price by thousands of copyright owners, together representing a large share of the market for licensing musical compositions. Normally, a per se rule would apply to a direct agreement on price among individuals or entities that would otherwise be in direct competition.

Yet the court adopted a nuanced approach. It held that per se condemnation was inappropriate since, without this collective mechanism, the transaction costs of licensing musical works on an individual basis to a mass market comprising hundreds of thousands of licensees would exceed the benefits.

Even a brief inquiry into this specific practice distinguished it from a classic cartel.

Through cooperative action, copyright owners had avoided a transactional roadblock that would have suppressed the market entirely or compelled it to operate far less efficiently. At the same, the risk of collusion was mitigated by the fact that copyright owners had a non-exclusive relationship with BMI, which permitted individual owners to license outside (and therefore compete with) the collective entity for specific transactions. This cooperative mechanism benefited artists, music publishers, radio stations, and listeners by sustaining a rich market in public performance rights for musical compositions that would otherwise have been practically infeasible. Recalling Brandeis' counterintuitive insight several decades earlier, the restraint expanded the market and increased output—precisely the goals the antitrust laws seek to encourage.

This insight could only have been reached through some form of the rule of reason.

To appreciate this point, consider the outcome that would have been reached under per se treatment, which would have deemed copyright owners' collective licensing arrangement illegal with little factual inquiry. The result would almost certainly have been adverse for all

²¹ Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co., 472 U.S. 284 (1985).

²² California Dental Ass 'n v. FTC, 526 U.S. 756 (1999).

²³ Broadcast Music, Inc. v. CBS, Inc., 441 U.S. 1 (1979).

stakeholders, especially individual artists who were not superstars and other smaller copyright owners. Given the transaction costs of negotiating, administering, and enforcing licenses to, musical compositions among millions of users, a per se ban on collective action in this context would likely have restricted licensing to the most well-resourced copyright owners who could maintain an independent licensing infrastructure. Just like the commodities exchange rule that had been upheld by the Supreme Court in *Chicago Board of Trade* in 1918, the blanket license upheld by the Supreme Court more than a half-century later promoted a level playing field for smaller producers to participate in the market. Turning antitrust law on its head, mechanical application of the per se rule would have led to an outcome that would have undermined both efficiency and fairness.

To be clear, this is not to say that the rule of reason inherently leads courts to reject liability under the antitrust laws. The following example can illustrate this point.

NCAA v. Alston (2021)

In 2021, the Supreme Court applied the rule of reason to put an end to an anticompetitive practice that had harmed college-athletes.²⁴ In *NCAA v. Alston*, the Court undertook a rule-of-reason inquiry to address the competitive effects attributed to limitations imposed by the NCAA on education-related cash benefits (such as scholarships) that member institutions could offer college athletes. While the Court accepted the NCAA's argument that limitations on non-education-related cash benefits may be warranted to differentiate college sports from professional sports, it found that the limitations imposed by the NCAA on education-related competition among member institutions for the services of student-athletes. Effectively, NCAA members were found to have coordinated through the NCAA's rulemaking process to depress compensation for student-athletes. The effects of *NCAA v. Alston* have been palpable. The NCAA not only lifted the now-prohibited caps on education-related cash benefits but, within 10 days of the Court's decision, announced that it would permit student-athletes to earn outside compensation through the sale of name, image, and likeness rights.²⁵ In this case, application of the rule of reason resulted in termination of a practice that was both inefficient and unfair.

2.3 Why Hard Cases Demand a Rule-of-Reason Inquiry

In cases involving horizontal restraints among direct competitors, U.S. antitrust law has appropriately reserved per se treatment for the "easy cases"—that is, agreements to coordinate price and output decisions that clearly have no countervailing positive impact on competitive conditions. In all other cases, courts have developed various forms of the rule of reason. This "easy case/hard case" distinction underlies the development of the case law concerning vertical restraints—that is, contracts or other relationships between firms (or firms and consumers) at different levels of a supply chain. Since a landmark decision by the Supreme Court in 1977²⁶, U.S. antitrust case law (and guidelines developed by the federal antitrust agencies) have generally applied various forms of the rule of reason to vertical

²⁴ NCAA v. Alston, 141 S. Ct. 2141 (2021).

²⁵ NCAA, NCAA adopts interim name, image and likeness policy, June 30, 2021,

https://www.ncaa.org/news/2021/6/30/ncaa-adopts-interim-name-image-and-likeness-policy.aspx

²⁶ Continental TV, Inc. v. GTE Sylvania, Inc., 433 U.S. 36 (1977).

restraints (including exclusive dealing, tying, and resale price maintenance), with the exception of certain narrow circumstances.

The predominance of the rule of reason concerning these practices rests on a solid evidentiary foundation. Scholarship by economists and legal academics has shown that vertical restraints typically fall into the category of difficult-to-diagnose, lower to moderate-risk practices identified by Judge Taft in 1898. The most comprehensive and widely-cited review of the literature finds that, while there is variation in theoretical models of the competitive effects of tying practices, "the empirical evidence concerning the effects of vertical restraints on consumer well-being is surprisingly consistent . . . when manufacturers choose to impose such restraints, not only do they make themselves better off but they also typically allow consumers to benefit from higher quality products and better service provision."²⁷ Given the complexity involved in diagnosing the competitive effects of vertical restraints, coupled with a body of evidence indicating that these practices typically *benefit* consumers in real-world markets, the courts' and agencies' fact-intensive, case-specific approach is a prudent course of action.

Consider the common practice of tying, where a firm conditions the sale of one product on the purchase of another complementary product, whether explicitly by contract or implicitly by technological design, or bundling, where a firm sells two or more products as a package. Antitrust law had once treated these practices as per se illegal in a broad range of circumstances, based upon an expansive reading of Section 3 of the Clayton Act (which bars tying practices that "substantially lessen competition" or "tend to create a monopoly"). Yet the ubiquity of these practices in a broad range of everyday settings, including markets in which no firm plausibly exerts pricing power, led courts to adopt an approach that approximates the rule of reason in most circumstances. This measured approach has enabled courts to weigh the anticompetitive and procompetitive effects of a challenged tying practice, and, as a result, assess more thoroughly its legality under the antitrust laws.

Illustration: Cloud Computing

To illustrate this point, consider the cloud computing market, which supports millions of desktop and mobile applications for hundreds of millions of businesses and individual users around the world.

The infrastructure segment of this market was pioneered and initially dominated by Amazon through its "AWS" product starting in 2006. Microsoft was able to subsequently challenge Amazon by offering a differentiated service that bundled Azure, its cloud computing service, with its complementary office productivity applications. Similarly, Google has secured significant share in this market by offering Google Cloud, a cloud computing service, that is bundled with its complementary applications in search and data storage. More recently, Oracle has sought to gain market share by bundling a cloud computing service with its leading suite of complementary applications in enterprise software. In 2017, Amazon held 51.8% of the worldwide public cloud infrastructure market; however, by the fourth quarter of

²⁷ Francine Lafontaine and Margaret Slade, Exclusive Contracts and Vertical Restraints: Empirical Evidence and Public Policy, in Handbook of Antitrust Economics 409 (ed. Paolo Buccirossi 2008).

2022, its share had fallen to 40%, while Microsoft had secured 21.5% and Google had secured 7.7% of the market.²⁸

A per se approach might have prohibited these bundling strategies outright. Such swift condemnation would have overlooked the fact that bundling strategies, rather than shielding the incumbent, challenged it by enabling entry by competitors that offered a differentiated bundle comprising a package of complementary services that elicited demand from certain customers. Counterproductively, a per se approach would have protected the incumbent by limiting competitors from deploying the full range of strategies to challenge AWS, which had been initially perceived as an almost unbeatable incumbent.

Chapter Summary

From its inception and most clearly during the almost half-century from the late 1970s through the present, federal case law has deployed various forms of the rule of reason to fashion standards for antitrust liability that navigate the inherent tradeoff between overenforcement, which discourages practices that enhance competitive conditions and can counterproductively deter entry in some circumstances, and underenforcement, which overlooks strategies that fall outside competition on the merits and can counterproductively shield incumbents from competitive threats. The per se standard is an appropriate tool to deter the clearest cases of collusive action, which have few or no offsetting benefits so that overenforcement risk is largely moot. In virtually all other cases, courts have recognized that "antitrust is usually hard" and an appropriately tailored form of the rule of reason is necessary to assess accurately the competitive effects of most contested practices.

²⁸ Statista, Vendor share of the public cloud infrastructure as a service (IaaS) market worldwide from 2015 to 2022 (based on data from Gartner).

PART 3. HOW THE RULE OF REASON PRESERVES COMPETITION IN DIGITAL MARKETS

Digital markets have prompted widespread concerns over the market shares held by leading platforms and whether those platforms are engaging in activities that harm, or pose a risk of harming, competitive markets. Just as was the case during the federal government's landmark litigation against Microsoft over two decades ago, these concerns are appropriate given the tendency of digital markets to exhibit a trajectory in which an initial period of intense rivalry among multiple competitors is followed by a period in which only a handful of providers account for an overwhelming portion of the market. In the search market, initial providers such as Yahoo!, Lycos, Excite, and Alta Vista were overtaken by Google, who now occupies a commanding lead over Bing, its closest competitor. In the social networking market, initial providers such as MySpace and Friendster were outmatched by Facebook, which until recently enjoyed seemingly uncontested market leadership. In the word processing and spreadsheet software market, Microsoft challenged early leaders such as WordPerfect, Lotus 1-2-3, and Quattro Pro, and secured long-lasting market leadership in the office productivity software market.

Yet it is important to observe that, while digital markets tend to converge on "winner-takemost" outcomes, that is often not the end of the story. A reigning market leader's tenure can sometimes unravel with surprising rapidity when confronted with a sufficiently innovative entrant.

In the social networking market, Facebook has faced stiff competition since 2019 from TikTok, which by some recent estimates (as of 2022) accounts for 20% of the global socialmedia networking market (as compared to 46% for Facebook and Instagram).²⁹ In the office productivity software market, Microsoft's long-standing leadership has been contested recently by Google's Workspace applications suite, which by one estimate as of 2022 accounted for almost half of the global market.³⁰ In the mobile device communications market, initial leaders such as Motorola, Nokia, Ericsson, and Blackberry enjoyed large market shares in the 1990s—in 1999, Nokia and Motorola accounted for 27% and 17% of the global market³¹—but were rapidly dislodged in the mid-2000s by Apple's iPhone and Android-based devices produced by Samsung and other firms. In the online shopping market, Amazon has faced robust competition from Walmart and, in apparel, now faces robust competition from Shein and Temu.³² In the search market, Google has always faced competition in "vertical" search markets from leading providers in those segments, such as Expedia and Booking.com in travel, Zillow and Redfin in real estate, and Yahoo!, Bloomberg and Reuters in finance.

The historical evolution of digital and other technology markets tends to exhibit an unusual concurrence of high concentration punctuated by periodic moments in which an innovative entrant successfully challenges seemingly dominant incumbents. In certain cases, the entrant may be another platform that challenges the incumbent by deploying assets and capacities

²⁹ Author's calculations, based on Statista, Advertising & Media Outlook, Oct. 7, 2022.

³⁰ Statista, Market Share of Major Office Productivity Software Worldwide in 2022 (Feb. 2022) (based on survey by Enlyft).

³¹ Mobile Phone Sales Increased 65% in 1999, Wireless Networks Online, Feb. 10, 2000.

³² Sebastian Herrera and Shen Lu, Amazon's New Challenge: Bargain Retailers That Are Playing a Different Game, Wall St. J., Sept. 22, 2023.

that it developed in an adjacent market. As mentioned previously, this was the strategy adopted by Microsoft and Google when challenging Amazon's AWS in the infrastructure segment of the cloud computing market. In other cases, the entrant is a smaller firm that develops a new technology or different business model that outperforms the incumbent. For example, it was Amazon that challenged eBay, the incumbent in the e-commerce market, by offering a different business model that relied principally on centralized order-processing that increased delivery speed and reduced fraud.³³ In another iteration of the competitive cycle, it is now Shein and Temu that are offering stiff competition to Amazon in the online apparel market.

These periodic fluctuations in market leadership in certain digital markets counsel against grounding antitrust enforcement in any simple "big is bad" principle that targets certain practices undertaken by the largest firms without a thorough assessment of the complete range of anticompetitive and procompetitive effects reasonably attributable to any contested business practice. This nuanced approach is especially appropriate for digital markets, precisely because they tend to converge periodically on high concentration levels that raise concerns about competitive risks but, without a case-specific inquiry, may support overly hasty findings of antitrust liability. Consistent with this objective, the rule-of-reason framework provides a toolbox for assessing competitive effects through a fact-intensive approach that avoids a rush to judgment that may erroneously condemn practices that confer gains on consumers in the form of lower prices, higher quality, or new functionalities.

3.1 Assessing Entrenchment in Digital Markets

It has become common to make blanket assertions that digital markets are uniformly and inherently prone to entrenched monopoly outcomes. Closer analysis of specific digital markets, however, shows that the likelihood and longevity of entrenchment outcomes can vary considerably. To develop the best approach in applying antitrust law in digital markets, it is important to understand precisely the factors that can give rise to, and impact the stability of, entrenchment outcomes.

3.1.a Network Effects

Network effects arise in any market where the value of a particular product or service increases as the number of users of that product or service increases. The Facebook platform with one or two users has little value; the Facebook service with many groups of connected friends and acquaintances has great value. In other cases, the value of a service increases when it connects two different but complementary groups of users on different sides of the platform. For example, the Google and Bing search platforms connect advertisers with users. For advertisers, the value of the search platform increases as the number of users increases since advertisers can reach a greater number of users than would otherwise be possible. Similarly, the Uber or Lyft platform connects drivers with passengers. For each group, the value of the platform increases as the number of users on the other side of the platform increases in number, increasing rides for drivers and reducing wait times for passengers.

³³ Brad Stone, Amid the Gloom, an E-Commerce War, N.Y. Times, Oct. 11, 2008.

These and other examples are listed in the Table below.

Platform Market	Principal Platforms	Connected User Populations
Social media	Facebook, Instagram, Snap, TikTok, Twitter	Users, advertisers
Vehicle transportation	Uber, Lyft	Users, drivers
Food delivery	DoorDash, GrubHub, UberEats	Users, vendors, couriers
Search	Google, Bing	Users, advertisers
Employment	LinkedIn, Glassdoor, ZipRecruiter	Employees, employers
Operating system	Microsoft Windows, MacOS	Users, developers
E-commerce	Amazon, Walmart, Target, Shopify, Shein, Temu	Users, vendors

Table 1. Selected Platforms and Connected User Populations

Network effects explain why, after an initial period of intense competition, digital platform markets tend to converge on a handful of providers. It is important to appreciate that this tendency toward concentration is a sign of a *well-functioning* platform market. Without convergence on a small number of platforms, users would remain dispersed across multiple platforms and the value generated by network effects would never be realized. That value relies on the dramatic reduction in transaction costs (specifically, search and matching costs) enabled by a successful platform that accounts for a large and even predominant portion of the total user population.

The network effects, and resulting savings in search and matching costs, that characterize the successful development of a platform market, give rise to an economically virtuous domino effect that facilitates the formation of other platform markets. This domino effect confers further gains on users in the form of new or improved products or services that would not otherwise be feasible. Transportation service platforms such as Uber and Lyft, which outperform traditional taxi services on pricing, transparency, and availability, would not be possible without the iPhone and Android platforms that enable communication between the transportation platform, users, and drivers. Vehicle purchasing platforms, such as Cars.com and Edmunds.com, which outperform non-digital sources of information on new and used cars on pricing (being usually free to users), completeness, and accuracy, would not be possible without the platform provided by the Chrome and Safari internet browsers. The same is true of food-delivery platforms such as UberEats, DoorDash, and Grubhub, which connect customers and restaurants and, in doing so, expand the customer base that can be reached by restaurants and conversely, the number and variety of restaurants that can be accessed by customers.

In general, network effects can give rise to ambiguous effects as a matter of competition policy.

On the one hand, network effects are a precondition for unleashing the reduction in transaction costs that yields consumer benefits in the form of new and improved products and services. Additionally, that reduction in transaction costs lowers entry barriers for small businesses (or, in creative industries, individual performers), who can reach a far larger audience through a widely adopted digital platform. On the other hand, network effects imply winner-take-most outcomes that necessarily involve high concentration levels and therefore may pose a risk to competitive conditions. However, as antitrust case law and agency guidelines have long recognized, high concentration levels only confer market power when incumbents are protected against the threat posed by existing or potential competitors.³⁴ Without what the business world calls a "moat" against existing or potential challengers, high market share cannot translate into market power and winner-take-most conditions would not raise antitrust concern since incumbents would remain exposed to the discipline of the market. To fully appreciate whether network effects in any particular digital market yield an entrenched monopoly outcome and therefore translate into market power, it is necessary to consider other factors that may shield an incumbent from competitive entry.

3.1.b Switching Costs

In digital environments, switching costs are a key factor that impacts the vulnerability of an incumbent platform to potential challengers. In the platform context, switching costs can arise on any side of the platform—for example, users and advertisers in the two-sided search market, or users, vendors, and couriers in the three-sided food-delivery market. In general, as switching costs increase on one or more sides of a platform, there should be greater concern that a leading platform may occupy an entrenched position shielded from competition; conversely, as switching costs decline, those concerns are reduced. If a particular digital market has converged on a handful of leading providers but users can costlessly switch to another provider (or use multiple providers concurrently), then even a provider with high market share remains exposed to competitive discipline.

This is the case in most segments of the e-commerce market, where consumers can generally move easily among different sites. For example, a user shopping for sneakers on Amazon can easily compare prices for any particular item at other e-commerce sites (for example, Walmart or Shopify) or at the brand's individual site. The same is true in the food-delivery market where both users and vendors tend to use multiple services and can switch among those services easily.³⁵ It is therefore unlikely that any individual online food-delivery service exerts market power, even if it holds high market share in a particular geographic region. By contrast, switching costs are likely high in moving from an Apple to an Android smartphone, or vice versa, although even in that case the market offers applications to mitigate those costs to some extent.

³⁴ See, e.g., *Oahu Gas Service, Inc. v. Pacific Resources Inc.*, 838 F.2d 360, 366 (9th Cir. 1988) ("A high market share, though it may ordinarily raise an inference of market power, will not do so in a market with low entry barriers or other evidence of a defendant's inability to control prices or exclude competitors"); U.S. Dept. of Justice and Federal Trade Commission, Horizontal Merger Guidelines 28 (2010) ("A merger is not likely to enhance market power if entry into the market is so easy that the merged firm and its remaining rivals in the market . . . could not profitably raise price or otherwise reduce competition . . .").

³⁵ Tom Kaiser, Half of U.S. Consumers Now Using Meal Delivery as Sales Grow, FoodOnDemand, Jan. 6, 2022, <u>www.foodondemand.com/</u>01062022/half-of-u-s-consumers-now-using-meal-delivery-as-sales-grow/.

3.1.c Differentiation Costs

The extent to which a leading digital platform remains exposed to competitive discipline can be impacted by the extent to which existing or potential competitors can offer a new service that is differentiated from the incumbent's service and more closely tracks the preferences of a sufficiently large consumer population. That is: incumbents may be vulnerable to competitive discipline not by lower-priced services but by new or enhanced services that outperform the functionalities offered by the incumbent.

This scenario can be illustrated by the office productivity software market, in which Microsoft's MS Office product once appeared to enjoy a nearly complete monopoly. Google has captured significant market share by offering an office productivity software suite (formerly known as the G Suite, now known as Google Workspace) that replicates much of the functions in MS Office but also incorporates new functionalities that facilitate document sharing and retention. In another example, Facebook's apparently unbeatable leadership in the social media networking market has been challenged by TikTok, which developed differentiated service with functionalities that diverted users away from the incumbent and captured significant market share. In one of the most rapid losses of market leadership, the introduction of the Apple iPhone in 2007 rapidly unseated Blackberry as the market leader in the higher-end mobile device market, a position that it had seemed to occupy securely. As these examples illustrate, even a seemingly entrenched platform can be overcome by a sufficiently innovative newcomer.

Contrary to common assertions, digital markets do not pose a uniformly high level of antitrust risk reflecting an inevitable tendency toward incumbent entrenchment. Rather, antitrust risk varies across markets or within the same market at different points in time. The tendency of digital markets to evolve toward high concentration levels merits close examination as a matter of antitrust policy, but without adopting a presumption that high market share inherently implies market power. As antitrust law has long recognized, any such examination involves assessing the extent to which incumbents' substantial share of the relevant market is exposed to competitive threats.³⁶ In the digital context, that risk depends on (among other things) switching costs on the part of platform users and differentiation costs on the part of competitors. Just like other markets, the level of antitrust risk in digital markets depends on a close analysis of case-specific factors—precisely the type of analysis for which the rule of reason framework is designed.

3.2 How Scale Lowers Costs and Facilitates Access in Digital Markets

In U.S. antitrust law, it is well-settled that large market share by itself does not support an antitrust cause of action.³⁷ This principle is vitally important because without it, the antitrust laws would be converted into a tool that would penalize the most successful firms simply for

³⁶ See, e.g., *Will et al. v. Comprehensive Accounting Corp.*, 776 F.2d 665, 672 n.3 (1985) ("Unless barriers to entry prevent rivals from entering the market at the same cost of production, even a very large market share does not establish market share").

³⁷ See, e.g., *Verizon Communications Inc. v. Law Offices of Curtis v. Trinko, LLP,* 540 U.S. 398 (2004) (citing *U.S. v. Grinnell Corp.,* 384 U.S. 563, 570-71 (1986)) ("[i]t is settled law that . . . [a monopolization] offense requires, in addition to the possession of monopoly power in the relevant market, 'the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident").

having outperformed all other competitors. The effect would be a counterproductive antitrust penalty on the market's most efficient and innovative firms.

In digital markets in particular, antitrust enforcement grounded in a mechanical "big is bad" principle would likely impose harm on consumers. That is because these markets exhibit economies of scale, which arise in any industry characterized by high fixed costs (for example, developing a software application) and low marginal costs (for example, digital delivery of a copy of the application). Economies of scale enable a digital platform to spread its development and maintenance costs over a large volume of transactions, resulting in a low per-unit cost that may be passed on to consumers. While it can cost a software firm hundreds of millions of dollars to develop an operating system, the per-unit price for consumers is reasonable because the firm can spread those costs over tens of millions of sales. In digital markets characterized by economies of scale, "big can sometimes be good" whenever large firm size confers gains on consumers in the form of lower (or even zero) prices, lower transaction costs, and an expanded variety of products and services.

These gains to users should not be underestimated. Today the typical user of a digital platform can access previously unimaginable volumes of information and content through general and specialized search services offered at no out-of-pocket cost and all of which rely on an internet browser, which too is provided at no out-of-pocket cost. This experience far surpasses the amount of information made available through a public library or a bookstore in pre-digital environments. Similarly, a driver can access GPS-located traffic information and driving directions through the Waze platform at no out-of-pocket cost or can access "real time" information on public transport services through the Moovit platform at no out-of-pocket cost. This experience far surpasses in detail, accuracy, and convenience the information available through a physical road map or bus schedule. The list could go on.

Yet, as economists always point out, there can be no free lunch. It is important to appreciate that a platform can only offer these services at no out-of-pocket cost so long as it is able to operate at a scale that is sufficient to recover both the substantial fixed costs incurred to establish the platform and the substantial ongoing costs incurred to maintain and upgrade the platform. A common solution to this dilemma is well-known. Platforms cross-subsidize the provision of "free" services to the more price-sensitive side of the platform (usually, individual users) through the provision of "pay" services to the less price-sensitive side of the platform (often advertisers or other business users).

This model minimizes costs and maximizes output for consumers through the combination of scale economies and cross-subsidization. A sufficient volume of sales on the "pay" side covers, and earns a return on, the up-front and continuous investments made by the platform to deliver services to the "free" side. This business model delivers exceptional gains for consumers, who enjoy dramatically increased access to informational and other services at no out-of-pocket cost (and in exchange, often implicitly or explicitly provide certain data in the course of using those services). This constitutes an expansion of access and output on both sides of the platform that is consistent with the fundamental objectives of the antitrust laws.

Notwithstanding these transformative gains for end-users and business users, the remarkable scale of the most successful digital platforms—as of 2023, YouTube had approximately 868

million users worldwide and Facebook had approximately 2.9 billion users³⁸—and the extension of those platforms across multiple markets (for example, search and advertising) has appropriately elicited concern about the risks posed to competitive conditions by firms that operate at such exceptional scale. This is a critical question that merits serious examination through an analysis that takes into account the economic and technological characteristics of particular platforms and markets, rather than relying on sweeping generalizations about digital markets in general.

In undertaking that exercise, it is vital to reject the presumption that "big is bad"—meaning, the presumption that large firm size necessarily threatens competitive markets and injures consumers. As the economics literature has shown extensively, and as regulators have recognized repeatedly, there is no consistent relationship between large firm size, high concentration levels, and market competitiveness.³⁹ There are many circumstances in which large firm size (which typically accompany high concentration levels) yields economies of scale that, especially when combined with a cross-subsidization strategy, translate into declining per-unit production and distribution costs, which may be passed on partially or entirely to consumers. When that is the case (and empirical research has identified such circumstances in U.S. markets⁴⁰), using antitrust law to engineer an idealized model of atomistic markets that are confined to separate lines of business would preclude the most efficient platforms from maximizing scale economies and cross-subsidization effects, which in turn could inflate prices and reduce product variety for consumers.

Given these considerations, it is inappropriate to treat scale reflexively as an antitrust "bad" under a per se-style approach to antitrust enforcement. This point deserves emphasis in digital markets, which are inherently prone to converge on concentrated markets occupied by a handful of large platforms—precisely the observation that leads some commentators and policymakers to advocate moving away from an "ex post" approach grounded in the rule of reason toward an "ex ante" approach grounded in per se prohibitions of certain business practices in digital platform markets. In fact, the logic operates in just the opposite direction. Since successful platform markets necessarily exhibit large firm size and high concentration levels, which in general can give rise to a mix of effects on competitive conditions (especially when economies of scale are driving firm size), digital markets present precisely the type of ambiguous conditions that necessitate the case-specific balancing approach that has been developed by courts within the rule-of-reason framework.

3.3 Lessons from the Microsoft Case: Applying the Rule of Reason in Digital Markets

It is now common to assert that antitrust law, and specifically the case law developed by courts when applying the antitrust laws, is unsuited to evaluate the competitive risks peculiar to digital markets. This assertion is somewhat puzzling since the federal courts pioneered the application of the antitrust laws to technology markets over a quarter-century ago in the

³⁸ On YouTube, see Statista, Number of YouTube users worldwide from 2019 to 2028; on Facebook, see: Statista, Leading countries based on Facebook audience size as of January 2023.

³⁹ For a classic source in the economics literature, see Harold Demsetz, Industry Structure, Market Rivalry, and Public Policy, 16 J. L. & Econ. 1 (1973).

⁴⁰ For one of the most comprehensive studies, see Sharat Ganapati, Growing Oligopolies, Prices, Output, and Productivity, 13 Am. Econ. J. Microeconomics 309 (2021), who finds that increased concentration in non-manufacturing industries in the U.S. during 1972-2012 tends to reflect increases in firm size that "expand real output and hold down prices, raising consumer welfare . . . ".

landmark litigation during the late 1990s and early 2000s against Microsoft concerning its practices in the internet browser market. The fact-intensive and nuanced methodology of the appellate court's opinion continues to provide a template for applying the rule of reason to address the complexities involved in analyzing the effects on competitive markets arising from business practices in digital markets. While adapted for the digital context, that template represents an extension of the fact-intensive, case-specific analysis that Justice Brandeis had pioneered almost a century earlier in the *Chicago Board of Trade* decision.

To provide some context, Microsoft at the time of the litigation enjoyed an overwhelming share of a relevant market that appropriately raised antitrust concerns—just like digital platform markets today. Specifically, Microsoft enjoyed a near-complete monopoly in the operating system market for personal computers, aside from the portion of the market occupied by Apple's Macintosh product. The question in this complex case was a familiar one: had Microsoft maintained its monopoly because it had a better product or because it had impeded competition?

To answer this question, the government deployed the concepts of network effects and switching costs—precisely the concepts that are being used today to assess competitive conditions in digital platform markets. Specifically, the government argued (and the court agreed) that the thousands of applications that had been developed for the Windows operating system by independent developers constituted an implicit barrier to entry by any rival operating system.⁴¹ The rationale was a chicken-and-egg problem. Due to network effects, developers preferred to write applications compatible with the Windows operating system, which had a user base numbering in the hundreds of millions, and therefore would be reluctant to incur the costs required to do so for any other platform. At the same time, users would be reluctant to incur the costs of switching to any other operating system since developers would be unlikely to write applications for that alternative system. Hence Windows enjoyed not only a high market share but a "moat" to deter entrants.

By itself, the observation that Microsoft enjoyed market power was insufficient to support a finding of antitrust liability. Rather, the government had to show that Microsoft had acquired or maintained market power using anticompetitive tactics that fell outside "competition on the merits."

There was little room for argument that Microsoft had acquired its leadership position through the classic combination of technological innovation and business acumen that the antitrust laws seek to reward. It is widely argued that Microsoft Windows had overtaken Apple's Macintosh as the dominant operating system due to the fact that it had elected to disclose part of its source code (specifically, the application programming interfaces) to outside developers.⁴² By contrast, Apple had focused on internal development of software applications. Microsoft effectively forfeited to outside developers some of the economic value generated by Windows but, in the process, generated the pool of applications that would later protect Microsoft's leadership in the operating system market. There was nothing anticompetitive about Microsoft's giveaway strategy—to the contrary, it had seeded a rich

⁴¹ U.S. v. Microsoft Corp., 253 F.3d 34, 54-55 (D.C. Cir. 2001).

⁴² Jonathan M. Barnett, The Host's Dilemma: Strategic Forfeiture in Platform Markets for Informational Goods, 124 Harvard L. Rev. 1861, 1872-1874 (2011).

market in software applications for end-users and business users and, in the process, had cultivated a competitive market in software applications for the Windows platform.

Even if Microsoft had acquired its operating system monopoly through a procompetitive business strategy (which also happened to create entry opportunities for software developers), the court had to assess whether its subsequent actions in response to Netscape, which had pioneered the browser market with its Netscape Navigator market (and held about 55% of the browser market at the time of trial⁴³), constituted illegitimate practices to maintain its position as the leading platform in the computing ecosystem. The government's theory of competitive harm reflected the view that developers and end-users could eventually migrate to the Netscape browser as the platform component in the "PC stack," rendering Windows a "commodity" component and eroding Microsoft's pricing power.

Among other actions, the court assessed the competitive merits of Microsoft's exclusive dealing and tying practices. First, the court assessed contractual agreements in which Microsoft provided inducements to internet access providers (such as America Online) and PC makers (such as Dell or IBM) not to offer, or to refrain from promoting, the Netscape Navigator service to end-users. Second, the court assessed a technological tie in which Microsoft integrated its browser, the Internet Explorer, into the Windows operating system, and then offered the package at no additional cost, which may have dissuaded device makers and end-users from adopting Netscape's browser as an additional application, especially since Microsoft had succeeded in replicating much of Netscape's browsing functionalities.

The court's treatment of these practices illustrates how a balancing analysis can assess competitive conditions in the digital context in an appropriately nuanced manner.

Concerning exclusive dealing, the court applied a form of the rule of reason, which generally bars exclusive commercial relationships only in circumstances in which the practice forecloses entry into a substantial share of the market and, as some courts consider, there are no countervailing efficiencies.⁴⁴ As the court recognized, a per se approach would be inappropriate since exclusive contractual relationships are a common business practice and, in general, facilitate investments in promotional and other value-enhancing investments. Even under a flexible rule-of-reason-type standard, the court found that Microsoft's practices had precluded Netscape from accessing two of the most effective distribution channels to reach end-users. Sensitive to the risks of underenforcement, the court rejected Microsoft's defense that users could still access Netscape Navigator through physical mail or internet download (a slow process at the time).

Concerning the technological tie, the court rejected a per se test that the case law applies to ties in limited circumstances. Microsoft had argued that integration enhanced the functionalities of the combined OS-plus-browser product. Given the apparent technical justification for integrating the browser into the operating system and wariness over adopting a "wooden application of per se rules" that "may cast a cloud over platform innovation,"⁴⁵ the court held that a rule-of-reason analysis, which in this context would balance technical efficiencies against exclusionary effects, was appropriate. The result: the technological

⁴³ Andrew Pollack, Netscape Plays It Cool as Rival Is Sued, N.Y. Times, May 25, 1998.

⁴⁴ Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320 (1961); ZF Meritor LLC v. Eaton Corp., 696 F.3d 254 (2012).

⁴⁵ U.S. v Microsoft Corp., 253 F.3d 34, 95 (D.C. Cir. 2001).

integration of the browser and the operating system was left untouched but Microsoft was compelled to end any exclusive or quasi-exclusive arrangements with PC makers, internet access providers, and software developers.

Much has changed in digital markets since the time of the Microsoft litigation. Internet Explorer is no longer a leading browser, the Windows operating system was unable to transition successfully into the mobile computing market, and Apple's OS X has made significant inroads into the desktop computing market. Yet the concepts developed by the courts in the Microsoft litigation—among others, network effects and switching costs—are still pertinent in current digital markets and, as the court showed, can be integrated into the rule of reason framework to assess whether a leading platform enjoys market power and has acquired or maintained that position through practices that unfairly exclude efficient competitors. Critically, the Microsoft litigation demonstrates that a per se approach would be wholly unsuited to reflect the subtleties involved in assessing business practices in digital markets. Those markets present a complex mix of countervailing competitive effects that demands a factually sensitive analysis, rather than a categorical approach that risks impeding the competitive processes that antitrust law seeks to encourage.

Chapter Summary

For some policymakers and commentators, it has become received wisdom that digital markets are inherently prone to converge on entrenched outcomes due to a combination of network effects, switching costs, and economies of scale. If that were the case, then it would follow-as such policymakers and commentators recommend-that antitrust law should adopt per se rules that limit or bar leading platforms from engaging in certain business practices or corporate acquisitions. Yet both the economics and history of technology markets in general, and digital markets in particular, tell a more complex story. It is true that digital markets tend to converge on a handful of leading providers as those markets mature. However, history shows that the leaders are sometimes unexpectedly toppled by rivals that offer more innovative products and services. Most critically, the network effects and scale economies that account for the large size of leading platforms and the high concentration levels of platform markets are the very same characteristics that enable platforms to deliver a broad range of products and services to individual users and business users at low or even zero prices. Given these offsetting effects, the federal judiciary has developed customized applications of the rule-of-reason framework to assess contested business practices in digital markets, starting with the Microsoft litigation and running through the present. While there is certainly room for debate about the application of the rule-of-reason framework to particular circumstances, there seems little doubt that adopting a per se approach would be fundamentally unsuited to address the economic complexities of digital environments.

PART 4. THE RADICAL SHIFT: THE DIGITAL MARKETS ACT AS PREEMPTIVE "PER SE" ANTITRUST

In September 2022, the European Parliament enacted the Digital Markets Act (DMA), which became applicable starting in May 2023 and is currently being implemented by the European Commission.⁴⁶ The rigid prohibitions and limitations adopted by the DMA are incompatible with fundamental institutional and substantive elements of U.S. antitrust law, which reflect an adaptive approach that seeks to balance the risks of overenforcement against the risks of underenforcement. Critically, the DMA's inflexible approach would risk impeding the freedom to develop novel business models and strategies that drive a vigorous digital ecosystem.

The DMA effectively institutes an antitrust regime specifically for the largest technology platforms that meet certain criteria used by regulators to designate "gatekeeper" entities. This reflects the view that platform markets are prone to "tip" toward an entrenched monopoly outcome in which incumbents are shielded from competition. Given this assumed high level of antitrust risk, the DMA departs from an "ex post" system of antitrust enforcement, implemented through litigation usually governed by the rule of reason (or roughly analogous "effects-based" tests under EU competition law), to an "ex ante" system of industry regulation that designates certain practices as per se illegal and is implemented primarily through regulatory action. This categorical per se approach departs from the decades-long effort by courts and regulators in the U.S. (and, to a substantial extent in more recent years, EU courts and, to a lesser extent, regulators⁴⁷) to develop an analytical framework that seeks to balance the countervailing positive and adverse effects on competitive conditions of any contested business practice. This structure precludes a regulator or adjudicator from taking into account any procompetitive efficiencies attributable to a particular practice or even to assess whether a particular business practice causes harm to competitive conditions or whether an entity has market power to act unilaterally.

U.S. law has only adopted this type of per se approach concerning practices such as outright collusion that are known to almost always yield anticompetitive effects, in which case undertaking a balancing analysis would be an unnecessary exercise. However, these are *not* the types of practices targeted by the DMA. Rather, the DMA addresses practices that in general give rise to a mix of procompetitive and anticompetitive effects. If that is the case, then a per se approach will necessarily yield overenforcement errors arising from the preemptive condemnation of practices that promote competition on balance.

The DMA's approach rests on the assumption that large technology platforms are indefinitely entrenched and certain business practices are inherently anticompetitive when practiced by those platforms. Yet, as discussed in Parts 3.1-2 of this report and discussed further in this

⁴⁶ Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022, on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and 2020/1828 (Digital Markets Act) (DMA).

⁴⁷ On the EU's movement toward effects-based enforcement concerning exclusionary practices under Article 102 of the Treaty on the Functioning of the European Union, see Linsey McCollum, A dynamic and workable effects-based approach to abuse of dominance, Competition policy brief, Issue 1, Mar. 2023; Damien M.B. Gerard, The effects-based approach under Article 101 TFEU and its paradoxes: modernization at war with itself?, in Ten years of effects-based approach in EU competition law (eds. Jacques Bourgeois and Denis Waelbroeck 2013).

Part 4.2 below, neither assumption rests on sound economic evidence. Even the largest platforms often face competitive threats and the business practices designated by the DMA typically give rise to a complex mix of offsetting competitive effects that merit case-specific inquiry, rather than a flat prohibition. By rejecting the rule of reason approach (or similar effects-based approaches under EU law) and instead adopting a categorical approach that overlooks the complex interplay of procompetitive and anticompetitive effects, the DMA threatens to cast a cloud of liability over business practices that may pose little competitive risk while delivering benefits to consumers in the form of reduced prices, increased convenience, and new products and services. Moreover, contrary to common assumptions, the DMA's shift from rule-of-reason-type principles to per se rules is likely to increase, rather than decrease, compliance costs and legal uncertainty by compelling providers that fall within its scope to engage continuously with regulatory personnel concerning the interpretation, waiver, and enforcement of the DMA's rules.

4.1 The DMA's Inherently Expanding Scope

The DMA applies to designated "core platform services"—broadly defined to cover digital services ranging from search engines to digital assistants⁴⁸—that are offered by companies that are designated as "gatekeepers." Based on the designations announced so far by the Commission, currently there are 22 CPSs (CPSs) offered by six companies that have been designated as gatekeepers.⁴⁹ Collectively, these companies and services represent a substantial portion of the U.S. and California economies and an even larger portion of the U.S. and California tech economies.

The DMA's scope is likely to expand, capturing an increasingly large number of companies and CPSs and, as a result, an increasingly large portion of economic activity. Moreover, given the scope and scale of currently designated platforms, the effects of the DMA will impact a broad and growing range of stakeholders, including individual users, small businesses and other business users, employees, investors, and pension holders. Since the digital economy encompasses such significant portions of economic activity, the DMA will effectively displace competition law (which typically operates under more evidence-intensive standards of proof) to a substantial extent and, in doing so, subject much of the digital economy to a type of rule-based industrial regulation that has little in common with the adaptive balancing approach that characterizes U.S. antitrust law.

The expansive and expanding reach of the DMA derives from the manner in which it defines the gatekeeper category and the regulatory discretion involved in making that determination. Gatekeeper status depends on a combination of quantitative thresholds (which measure turnover and the number of users within a three-year period in the EU market), which is used to establish a presumption of gatekeeper status, and qualitative criteria (including most notably, whether the platform has an "entrenched and durable position").⁵⁰ Three of the

⁴⁸ The full list of core platform services includes online intermediation services, online search engines, online social networking services, video-sharing platform services, number-independent interpersonal communications services, operating systems, web browsers, cloud computing services, and online advertising services offered together with any of the other core platform services (DMA, Art. 2(2)).

 ⁴⁹ European Commission, Digital Markets Act: Commission designates six gatekeepers, Sept. 6, 2023.
⁵⁰ DMA, Art. 3(1) and 3(2).

currently six designated gatekeeper companies are headquartered in California, two are headquartered elsewhere in the United States, and one is located in China.

Gatekeeper Criteria	Entities Designated as Gatekeepers; Headquarters Location	Covered Platform Services
<i>Qualitative criteria:</i> Any entity that has (1) a "significant impact" on the EU's internal market, (2) provides a "core platform service" that is an important "gateway" for	Alphabet (CA/USA) Amazon (Wash/USA) Apple (CA/USA)	<i>Alphabet:</i> Google Maps, Google Play, Google Shopping, Google Ads, Chrome (browser), Google Android, YouTube, Google Search
companies to reach end users, and (3) has an "entrenched and durable" position.	ByteDance (parent of TikTok) (China)	<i>Amazon:</i> Amazon Marketplace, Amazon ads
<i>Quantitative criteria</i> (which support a presumption that the	Meta Platforms (CA/USA)	<i>Apple:</i> AppStore, Safari (browser), iOS (mobile operating system)
qualitative criteria are met): (1) turnover equal to at least \notin 7.5	Microsoft (Wash/USA)	<i>ByteDance:</i> TikTok
(approx. \$7.96) billion in each of the previous three years, or market capitalization equal to at least €75 (approx. \$79.6) billion		<i>Meta:</i> Facebook, Instagram, Meta Marketplace, Meta ads, WhatsApp, Facebook Messenger
in the previous year, and (2) at least 45 million monthly active end-users and 10,000 yearly active business users during each of the previous three years.		<i>Microsoft:</i> LinkedIn, Windows (PC operating system)

Table 2. Designated Gatekeepers and Covered Platform Services (as of Sept. 2023)⁵¹

Based on one estimate, currently the Commission could designate up to an additional 12 firms as gatekeepers (most of which are U.S.-based).⁵² Another estimate identifies an additional eight firms that could be designated, five of which are based in California (Airbnb, Paypal, Salesforce, Uber, and Yahoo!) and one of which (Oracle) has significant operations in California.⁵³ The ultimate number of gatekeepers that could be designated at any point in time is a moving target since, while the quantitative criteria that can support a presumptive gatekeeper designation are objective, the qualitative criteria for qualifying as a gatekeeper are subjective and therefore must be applied through regulatory discretion. Given that the DMA does not specifically provide a mechanism for updating the quantitative thresholds to reflect inflation, it is expected that a growing number of entities will at least become presumptively eligible for gatekeeper status. Additionally, the Commission can designate smaller platforms

 ⁵² Copenhagen Economics, The Implications of the DMA for External Trade and EU Firms 31 (June 2021).
⁵³ Bruegel, Insights for successful enforcement of Europe's Digital Markets Act, May 11, 2022, https://www.bruegel.org/blog-post/insights-successful-enforcement-europes-digital-markets-

⁵¹ Source (column 1): DMA. Source (columns 2 and 3): European Commission, Digital Markets Act: Commission designates six gatekeepers, Sept. 6, 2023. The Commission is considering requests for exemptions (despite satisfaction of the quantitative criteria) for the following services: Microsoft's Bing, Edge and ad services, and Apple's iMessage service.

as gatekeepers that are deemed to meet the qualitative but not the quantitative criteria.⁵⁴ Finally, the DMA also provides that the regulator may place companies that do not yet occupy an "entrenched and durable" position in the category of a "foreseeable" gatekeeper, which would then be subject to some of the limitations applicable to gatekeepers.⁵⁵ This determination is also reserved for the regulator in its discretion.

Even assuming conservatively that the DMA applies only to the currently designated six companies, and ignoring entities that may be designated as gatekeepers in the future or may qualify as foreseeable gatekeepers, the statute's practical scope is already considerable. As of July 2023, those designated gatekeepers (excluding ByteDance) together constituted approximately 28% of the total value of the companies included in the S&P 500.⁵⁶ Moreover, given the size of the EU market (representing, as of 2023, 14.6% of the world economy, based on GDP adjusted for purchasing power, as compared to 15.4% for the U.S.⁵⁷), there can be little doubt that the DMA will have a significant impact on the global digital economy in general and U.S.-based and California-based firms in particular. Moreover, there is a risk that other countries may adopt legislation that mimics the DMA, which would extend the *de facto* reach of the DMA and magnify its impact on California and U.S.-based digital leaders.

The quantitative thresholds used by the DMA to define gatekeepers reflect a reflexive and rigid "big is bad" approach that ignores the fluid and heterogenous competitive dynamics of digital markets. As a result, the DMA's gatekeeper criteria, combined with the designation of CPSs, may yield arbitrary treatment of different firms, or different services offered by the same firm, in many digital markets. For example, while Alphabet is designated as a gatekeeper, the Commission has designated Google Shopping as a CPS, but has omitted Gmail. That is a curious choice since Google Shopping is largely viewed as a commercial failure whereas Gmail is a popular application used by tens of millions of users in the European market. Similarly, while Apple iOS, Google Android, and Windows are treated as CPSs, Apple's Mac OS is not, even though it is the second-leading operating system in the personal computing market. In other cases, there is a risk that gatekeeper and CPS designation could advantage incumbents over challengers. For example, since Apple and Amazon are designated gatekeepers, the regulator could treat Apple Music and Amazon Music as CPSs (currently that is not the case), while Spotify, the largest music streaming service, might escape regulation altogether since it currently falls short of the quantitative thresholds that support a presumptive gatekeeper designation.

4.2 The False and Costly Assumptions Behind the DMA

The DMA rests on the assumption that "digital is different"—that is, the view that digital markets are prone to entrenched monopolies that are shielded from competition and entry due to a combination of network effects and switching costs. If that is the case, then it would be

⁵⁴ DMA Art. 3(8) ("The Commission shall designate as a gatekeeper . . . any undertaking providing core platform services that meets each of the [qualitative] requirements . . . but does not satisfy each of the [qualitative] thresholds").

⁵⁵ DMA Art. 17(4). Those gatekeepers would be subject to, among other prohibitions, the prohibitions of price parity clauses (Art. 5(3)) and tying a CPS with use of an identification service, web browser engine, or payment service (Art. 5(7)), and the obligations concerning interoperability (Art. 6(4)) and data portability (Art. 6(9)). ⁵⁶ Jess Menton and Elena Popina, History Says Big Tech's Rule Over U.S. Stocks Shouldn't Be Feared, Bloomberg, July 9, 2023.

⁵⁷ World Bank, GDP based on PPP, share of world,

https://www.imf.org/external/datamapper/PPPSH@WEO/EU/CHN/USA

reasonable to believe that digital markets—and, in particular, the largest platforms in those markets—merit a different approach to competition policy than the diverse range of markets that antitrust law has addressed in the past.

Yet, as discussed in Part 3.1 of this report, it is not clear that digital markets are especially prone to entrenched monopoly outcomes as compared to other markets that antitrust law has addressed in the past. Rather, digital markets appear to present a similarly complex mix of competitive and anticompetitive effects that antitrust law has addressed successfully in the past using the analytical tools provided by the rule of reason. History, theory, and evidence drawn from the century-long development of U.S. antitrust law suggest that, outside the clearest cases of horizontal collusion among direct competitors, a case-specific analysis is necessary to assess the susceptibility of any particular market to an entrenched monopoly outcome or, at a more granular level, whether any particular practice is being deployed principally for entrenchment purposes.

The history of technology markets suggests that the incidence of long-lived monopoly outcomes vary considerably across industry segments. In many markets, as discussed in Part 3.1 of this report, the more common pattern seems to be an iterative sequence of concentrated markets, punctuated by the periodic entry of a successful challenger who unexpectedly topples the incumbent. This is not to say that antitrust law has no role to play during each period of market leadership. Rather, antitrust law can and must play a critical role in scrutinizing whether a leading firm in any particular digital market is using anticompetitive tactics to maintain its leadership position or used such tactics to acquire that position in the first place.

U.S. antitrust law is currently being deployed for this purpose. As discussed in Part 5.1.a of this report, several major litigations are currently ongoing that address whether some of the largest technology companies in the U.S. and global economy have engaged in such anticompetitive practices. Unlike EU regulators operating under the per se prohibitions imposed by the DMA, however, U.S. courts in those litigations, applying decades' worth of accumulated antitrust law, will be able to assess those practices using a nuanced framework that assesses whether the defendant exercises market power and, if so, then weighs relevant evidence to identify and balance the procompetitive and anticompetitive effects of those practices. Unless there is compelling evidence that a particular type of business practice almost always results in anticompetitive harm (and none of the practices at issue in those litigations fall into that category), then this rule of reason approach should be preferred over the per se alternative adopted by the DMA.

4.2.a The Costs of Overenforcement

It is important to appreciate the costs that can arise from a one-sided approach that flatly bars the largest digital platforms—which in turn represent substantial portions of the digital economy as a whole—from engaging in whole categories of business practices without any inquiry into market power, actual harms to competition, offsetting efficiencies, and other relevant factual elements that would otherwise be encompassed by a holistic rule-of-reason analysis. Aside from the administrative, enforcement, and compliance costs associated with a rule-based administrative approach to competition policy (which I discuss subsequently), a per se approach necessarily suppresses innocuous or efficient practices unless it is clearly the case that a particular prohibited practice usually or almost always harms competitive conditions. Yet it is well-settled, both as a matter of U.S. antitrust case law and the relevant economics literature, that this proposition only holds true for the clearest cases of collusion between competitors—a practice that is rightfully subject to per se treatment under U.S. antitrust law. In all other cases, a per se approach lacks empirical grounding and is liable to result in consumer harm, both directly by suppressing efficient practices and indirectly by casting a cloud of uncertainty that chills the competitive forces that antitrust is designed to sustain. On this point, it should be noted that *none* of the practices prohibited by the DMA involve horizontal collusion.

This willful blindness to economic evidence (which was even noted by the European Commission's Regulatory Scrutiny Board when reviewing the legislation⁵⁸) is especially pressing in the case of the large digital platforms that fall within the scope of the DMA. This point may seem counterintuitive since the exceptional size and scope of these entities naturally raise legitimate antitrust concerns that deserve serious examination. However, it is precisely those same characteristics that enable those entities to deliver economic gains to individual users and business users as a result of network effects that substantially reduce the transaction costs of matching buyers, sellers, and other market participants, and economies of scale that substantially reduce per-unit production and distribution costs. Erroneous antitrust intervention could therefore reverse those effects, ultimately resulting in higher prices, degraded product quality, or a reduced range of products and services for consumers.

4.2.b Re-understanding Network Effects and Scale Economies

The DMA reflects the common assertion that network effects and scale economies act as barriers to entry that necessarily suppress competitive threats and entrench incumbent platforms. The intuition is that it is difficult or implausible for a challenger to replicate these effects without exceptional investments of capital. While that is certainly a valid concern that deserves serious consideration in any competition policy analysis, this observation is incomplete in two fundamental respects.

First, this observation overlooks the fact that, in certain circumstances, network effects are not sufficient to defend a leader's market position, especially in segments where switching costs are sufficiently low. As illustrated by TikTok's challenge to Facebook, Google Chrome's challenge to Microsoft's Internet Explorer, or the Apple iPhone's challenge to Blackberry, a new entrant that offers an attractively differentiated product can divert a sufficient number of users to pose a threat to, or displace, the incumbent. Moreover, in certain software-based markets and other digital environments, scale economies can be achieved rapidly due to the low capital investment required to achieve distribution on a mass scale, as compared to capital-intensive physical markets in "old economy" environments. Hence, assuming an entrant offers a product that elicits sufficient user demand, it may not always be infeasible to achieve the economies of scale required to challenge the incumbent.

⁵⁸ The European Commission's Regulatory Scrutiny Board, which reviewed the EU Commission's rationales for the DMA, expressed concern about the lack of evidence supporting the DMA's underlying assumptions concerning the purported negative effects of certain platform practices. The board urged the commission to "consider the negative consequences of curtailing size advantages following from network economies and economies of scale for consumers." Foo Yun Chee, Watchdog highlights shortcomings in EU rules to curb tech companies, Reuters, Dec. 21, 2020.

Second, this observation overlooks the fact that network effects and scale economies have procompetitive effects through transformative cost-reductions that not only lower prices and reduce transaction costs in existing product markets but enable the development of new business models in a range of industries. Online shopping platforms often deliver products to consumers at lower costs and greater convenience as compared to offline vendors, while travel accommodation platforms such as Airbnb or online food delivery platforms such as DoorDash or GrubHub reflect a new service category altogether.

This is not to say that the various practices treated by the DMA as per se illegal pose no risk to competitive markets. Rather, the key point is that, even in the case of the large platforms targeted by the DMA, these practices are not consistently anticompetitive to an extent that merits per se treatment that relieves plaintiffs and courts from case-specific factual inquiry into market power and the net effects on competitive conditions that can be attributed to those practices. Yet the DMA proceeds on the unsupported intuition that gatekeepers almost always exercise market power and these practices are almost always adverse for competitive markets and therefore bans them outright.

4.3 A Puzzling Reversion to Per Se Rules

The DMA's rejection of balancing tests in a broad range of business practices contrasts sharply with U.S. antitrust law, which, as discussed in Part 2.3 of this report, generally reserves per se treatment for the clearest cases of horizontal coordination over price or output. Even in those cases, U.S. courts may (and often do) adopt a rule-of-reason approach if coordination is ancillary to an arrangement that has procompetitive effects. This bifurcated approach—per se treatment for practices that are almost certainly anticompetitive and rule of reason approaches for all other practices—reflects a reasonable concern about avoiding the costs associated with overenforcement that may suppress efficient or innocuous business practices that promote or do not harm competitive conditions.

Any such concerns about overenforcement are set aside in the DMA, which seeks almost entirely to avoid underenforcement errors and pays little if any attention to the risk of overenforcement.

The erroneous condemnation of efficient practices is inherent to a per se prohibition whenever it is applied to practices that do not consistently give rise to predominately adverse effects on competitive conditions. Courts, regulators, and scholars generally agree that only horizontal collusion among two or more firms over price or other competitive parameters fall into this category.⁵⁹ Since the DMA solely addresses single-firm conduct, the DMA—and any legislation in other jurisdictions modeled on it—will by necessity sometimes suppress or discourage business practices that pose no risk to competitive markets or may enhance competitive conditions by lowering prices, expanding output, enhancing quality, or promoting innovation. All those outcomes are poor competition policy.

The DMA designates a total of 10 practices as being inherently anticompetitive and therefore illegal when undertaken by firms that qualify as gatekeepers, and also imposes certain affirmative obligations on those firms. These practices and obligations are listed in full in

⁵⁹ On this point, see Herbert Hovenkamp, The Rule of Reason, 70 Florida L. Rev. 81, 83 (2018) (noting that per se rule only applies to price fixing and market division agreements and a limited number of other practices in specialized circumstances).

Appendix A. This list of prohibitions and obligations has a catch-all provision since the DMA provides the regulator with discretion to add other practices to the list to promote fairness or to remove barriers to competition.⁶⁰ Hence, just as the DMA is prone to capture increasing numbers of digital platforms within the gatekeeper category due to regulatory discretion, so too it is likely to capture increasing types of business practices within the per-se illegal category. For each practice designated as per se illegal, the regulator is relieved from the obligation to define a relevant market, show market power, or demonstrate competitive harm, as would typically be required under rule-of-reason analysis in U.S. antitrust law. The DMA also denies the defendant any opportunity to demonstrate that the contested practice yields countervailing efficiency effects that promote competitive markets (although the defendant can contest the remedy on grounds of lack of "proportionality"⁶¹).

This is a regulatory framework that is driven by a "big is bad" logic that pursues the deterrence objective at all costs, even if that necessarily means certain firms will be penalized for engaging in practices that pose no risk to competitive markets or may even deliver benefits to consumers. Both the deterrence effect, and the inherent risk of overenforcement outcomes, are compounded by the draconian fines that can be assessed by the Commission. The DMA provides that the Commission may, subject to the undefined principle of proportionality, impose a fine of up to 10% of a company's worldwide annual turnover and up to 20% in the case of a repeat offense⁶² or, in other circumstances involving certain disclosure and related technical violations, a penalty payment of up to one percent of a company's worldwide annual turnover.⁶³ Moreover, the Commission has authority to order behavioral and structural remedies in cases of "systematic non-compliance."⁶⁴

This one-sidedly plaintiff-friendly approach—a low probative burden and punitive penalties—only makes sense if it is believed that the practices prohibited by the DMA usually or always pose a high risk to competitive market *and* underenforcement outcomes (failing to suppress an anticompetitive business practice) yield economic and other social costs that far outweigh overenforcement outcomes (erroneously prohibiting a procompetitive business practice). There does not appear to be any economic evidence to support these strong assumptions across the board concerning platform entities in digital markets and the types of business practices that are prohibited by the DMA.

These concerns are illustrated by the DMA's per se prohibition of various forms of tying, "data leveraging," and "most-favored nations" practices (when undertaken by gatekeepers). It is curious that the DMA treats these practices as per se illegal since a rich economic literature generally recognizes that each of these practices can only pose a risk to competitive conditions in limited circumstances, while in all other cases, these practices confer gains on consumers in the form of convenience, quality, or pricing effects. For this reason, as discussed in more detail below, U.S, antitrust law has generally favored rule-of-reason treatment of these types of practices, outside limited circumstances. A closer look at the

⁶⁰ DMA Art. 12(1).

⁶¹ Id., at Recitals (75) (providing Commission with "power to impose any remedy . . . having due regard to the principle of proportionality"), and 86 (providing for proportionality in setting fines and penalties for infringements).

⁶² Id., at Arts. 30(1), (2).

⁶³ Id., at Art. 31, 32(1).

⁶⁴ Id., at Art. 18(1).

analytical complexities raised by most-favored nations, tying, bundling, and "leveraging" practices illustrates the rationale behind this measured approach.

4.3.a Most-Favored Nations Clauses

The DMA bars gatekeeper entities from requiring that vendors on a digital platform agree to a most-favored nations (MFN, also known as a "price parity") clause that requires that the prices charged by the vendor for any particular product on the platform do not exceed the lowest price at which the vendor sells the product on its own website or any other platform.⁶⁵ The DMA prohibits this practice outright, which would imply that it cannot plausibly give rise to countervailing efficiency effects and therefore any case-specific factual inquiry would generally be unwarranted. Following a formalist approach to competition law, this prohibition might seem reasonable since an MFN clause *appears* to impede price competition. Yet economic analysis that focuses on substance rather than form (the approach that has characterized much of U.S. antirust case law, at least since the Supreme Court's 1977 decision in *Continental TV v. GTE Sylvania*⁶⁶) shows that these types of clauses typically yield benefits for consumers, which may be offset in some cases by adverse competitive effects. Hence the case for a blanket prohibition seems contestable.

Lessons from More than a Hundred Years of Case Law

MFN clauses are closely related to "resale price maintenance" (RPM) practices, which antitrust law has addressed for over a century and modern economic scholarship has analyzed closely. As a result, there is a great deal of economic learning and historical experience that can be deployed to understand the likely competitive effects of MFN clauses in digital platform markets. A review of the empirical literature as of 2005 found that RPM clauses generally had procompetitive effects.⁶⁷ These findings support the position of U.S. antitrust law, which has generally tolerated RPM clauses or, when ruled illegal, has permitted functional equivalents. While a 1917 U.S. Supreme Court precedent prohibited RPM clauses under a per se rule⁶⁸, a subsequent ruling in 1919 qualified that decision by permitting firms to decline to sell to retailers who did not comply with "suggested" prices.⁶⁹ Moreover, from 1937 through 1975, federal legislation permitted states to legalize RPM clauses and most states chose to do so. In 2007, the Supreme Court explicitly adopted a rule-of-reason standard for RPM clauses⁷⁰, which means that such clauses are generally expected to be upheld so long as there is no evidence that the clause is being used to enforce collusion among retailers or producers.

This approach is consistent with the consensus view in the antitrust economics literature, which recognizes that RPM policies generally are used to fund investments in promotion and customer service by retailers or, in the case of certain consumer goods, to protect brand

⁶⁵ DMA Art. 5(3) ("The gatekeeper may not prevent business users from offering the same products or services to end users through third-party online intermediation services or through their own direct online sales channel at prices or conditions that are different than those offered through the online intermediation services of the gatekeeper").

⁶⁶ 433 U.S. 36, 58-59 (1977) (stating that "departure from the rule of reason standard [to adopt a per se rule] must be based upon demonstrable economic effect, rather than . . . upon formalistic line-drawing").

 ⁶⁷ James C. Cooper et al., Vertical antitrust policy as a problem of inference, 23 Intl. J. Ind. Org. 639 (2005).
⁶⁸ Dr. Miles Medical Co. v. John D. Park & Sons Co., 220 U.S. 373 (1911).

⁶⁹ U.S. v. Colgate & Co., 250 U.S. 300 (1919).

⁷⁰ Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877 (2007).

goodwill. Without an RPM clause, any individual retailer would be discouraged from investing in promotion since this may simply drive customers toward "discount" retailers who would free-ride on those promotional efforts. By enabling retailers to internalize the gains from promotional efforts, an RPM clause generally enhances competition among different brands to a greater extent than any constraint imposed on competition within the same brand. In specialized circumstances, RPM can be used for anticompetitive purposes to enforce a cartel among retailers or among entities at higher levels in the supply chain.⁷¹

The Rule of Reason Goes Digital: What We Know About MFN Clauses

In the case of MFN clauses in the online context, this same rule-of-reason approach is appropriate since, like RPM clauses in the brick-and-mortar context, these clauses often if not typically perform several efficient functions that ultimately benefit consumers. There are two principal functions.

First, an MFN clause can provide users with assurance that the prices offered by a particular platform are the lowest available, which reduces users' search costs by relieving users from having to undertake extensive price comparisons. Relatedly, the MFN clause enables the platform to make a credible commitment to users that it consistently offers the lowest prices available for any particular product. Platforms that attract a large user population due to low search costs can attract a large vendor population, resulting in positive feedback benefits for users in the form of product variety and "one-stop-shopping" convenience.

Second, an MFN clause can protect a platform against free-riding by individual vendors, which, if left unchecked, would degrade the quality of the platform for both vendors and users. To appreciate this point, it is necessary to observe that vendors that sell and distribute products through e-commerce platforms generally receive services from the platform, such as promotion, cybersecurity, technical support, and transaction-processing services, in exchange for a commission fee on sales executed through the platform. An MFN clause protects the platform against free riding by vendors who "acquire" users through a platform's marketing and technical infrastructure and then offer those users the option to execute the sale elsewhere at a lower price that reflects the absence of a commission fee to the platform. By deterring this type of free-riding (which may be especially likely in the online context since users bear no transportation costs in moving from one vendor to another⁷²), MFN clauses maintain incentives for the platform to invest in the marketing and technical infrastructure that drives customer acquisition, which in turn benefits vendors and users collectively over time.

Under certain circumstances, MFN clauses can facilitate price coordination among platforms or vendors (which could use the platform to coordinate compliance), although this requires evidence showing that the alleged cartel-like arrangement occupies a sufficiently large market share to secure and maintain supracompetitive prices in the face of competitive threats. In that scenario, antitrust law might simply treat this practice as a form of horizontal collusion over price, which is illegal on a per se basis. This was the legal theory behind the government's successful antitrust litigation against Apple and a group of the largest book publishers, who were found to have coordinated on e-book retail prices and to have enforced

⁷¹ Kenneth F. Elzinga & David E. Mills, The Economics of Resale Price Maintenance, in 3 Issues in Competition Law and Policy 1841 (ABA Section of Antitrust Law 2008).

⁷² Pinar Akman & D. Daniel Sokol, Online RPM and MFN under Antitrust Law and Economics, 50 Rev. Ind. Org. 133 (2017).

that arrangement through an MFN clause in vertical agreements between Apple and each publisher.⁷³ The clause (which required that publishers sell any e-book on the Apple platform at a price no higher than the lowest price available on any other platform) was designed to induce the publishers to negotiate a similar arrangement with Amazon, the leading e-books platform. The court treated this practice as a form of horizontal collusion (coordinated through Apple), which is per se illegal, and therefore did not consider potentially countervailing efficiencies (in particular, the threat that Apple's business model might have posed to Amazon's leadership in the e-books market).

In short: there are many different business strategies involving MFN clauses in the online context, most of which pose little or no competitive risk but some of which, especially when involving coordination across vendors, may pose such a risk. Given this level of variation, a blanket prohibition of MFN clauses does not appear to be justified and may discourage platforms from making investments in promotion and user experience, resulting in fewer sales for vendors (especially smaller vendors that cannot independently support extensive promotion) and a degraded experience for users. MFN clauses, like the RPM clauses to which they are related, are best addressed through a rule of reason approach that allows courts to assess the potentially divergent effects of these clauses on competitive conditions in particular markets. This nuanced approach, rather than the blunt tool of a per se prohibition, best reflects our understanding of the complex economics of MFN and related contractual practices and is especially appropriate given that our understanding of those practices in online environments is still evolving.

4.3.b Tying, Bundling, and Leveraging Practices

The DMA institutes several related prohibitions on tying, bundling and leveraging practices, including (1) tying CPSs, (2) tying a CPS and ancillary services such as payment and identification services, and (3) "leveraging" user data across multiple CPSs.⁷⁴ These prohibitions are driven by a common intuition: namely, that a gatekeeper entity can use its market power in one CPS to establish a competitive advantage, and block entry or compel exit by rivals, in other CPSs or ancillary services. These prohibitions are among the most disruptive in the DMA since they would require unraveling or substantially modifying key elements of the business model used by some leading platforms. Such far-reaching changes can only be justified if there is a high level of confidence that these practices consistently impose competitive harms without generating offsetting competitive gains. Based on our current understanding of tying, bundling, and leveraging practices in general, as well as our evolving understanding of the specific practices targeted by the DMA prohibitions, this condition is not satisfied.

Lessons from Tying and Bundling Case Law

Tying refers to business practices where a seller conditions sale of one product on the purchase of a complementary product, while bundling refers to business practices where a seller sells two products as a single package. Leveraging refers to a more loosely defined set

⁷³ U.S. v. Apple Inc. et al., 952 F.Supp.2d 638 (S.D.N.Y. 2013).

⁷⁴ DMA Arts. 5(2) (use of personal data across CPSs), 5(7) (tying CPS and ancillary services), and 5(8) (tying multiple CPSs).

of practices in which a firm seeks to "extend" its pricing power in one market segment into another, typically through a bundling or tying practice.

At least since a Supreme Court decision in 1984⁷⁵, U.S. antitrust law has generally assessed tying and bundling practices under a rule-of-reason-type treatment, whether explicitly or effectively.⁷⁶ This robust tendency in the case law reflects antitrust scholarship showing that, in a wide range of circumstances, tying and bundling practices give rise to procompetitive effects due to (among other reasons) technological efficiencies, transaction-cost savings, or bundled discounts.⁷⁷ This position should be intuitive: tying and bundling are ubiquitous practices that consumers encounter on a day-to-day basis, even in markets in which no firm plausibly exercises pricing power.⁷⁸ McDonald's offers a discount on the "bundle" constituted by a burger, soft drink and fries, as compared to purchasing each item separately; car dealers only sell a car when "tied to" a steering wheel, air-conditioning, and brakes already installed. None of these practices raise competitive risks in most circumstances.

To be clear, antitrust case law and scholarship does recognize specialized circumstances in which tying and bundling practices can impede competition. Yet, it is generally recognized that these circumstances are the exception, rather than the norm, and therefore any antitrust challenge to these types of practices merits a rule of reason approach that can balance out the anti- and procompetitive effects attributable to any such practice. A per se approach to the tying, bundling, and data-leveraging practices widely engaged in by leading platforms bypasses these complexities by discarding the balancing analysis implemented through the rule of reason.

Evaluating the DMA's Per Se Rules on Tying and Bundling

In light of our understanding of tying and bundling practices, based on a rich body of case law and economic scholarship, the DMA's per se approach to these practices in the digital context may impose significant harms on consumers and the competitive process.

This point can be illustrated by returning to the *Microsoft* litigation. The government alleged that Microsoft had bundled its Internet Explorer browser with Windows at no additional price, effectively removing any incentive for consumers to purchase the Netscape browser, which had been sold at a positive price since Netscape, unlike Microsoft, did not have other significant complementary revenue streams. A fuller analysis shows a more complex picture.

While Microsoft's bundling strategy may ultimately have toppled Netscape (which, after all, was the incumbent) in the browser market, it also conferred gains on consumers, for whom

⁷⁵ Jefferson Parish Hospital District No. 2 v. Hyde, 466 U.S. 2 (1984).

⁷⁶ Stated precisely, U.S. antitrust law continues to apply a nominal per se rule to tying practices when adjudicated under Section 1 of the Sherman Act or Section 3 of the Clayton Act. However, the Supreme Court has conditioned the rule on three conditions (market power in the tying market, economically separate products, and a significant adverse impact on the tied market) so that, as a practical matter, the analysis may approximate to a substantial extent the rule-of-reason analysis that applies explicitly when the same claims are brought under Section 2 of the Sherman Act.

⁷⁷ David S. Evans, Tying: The Poster Child for Antitrust Modernization, in Antitrust Policy and Vertical Restraints (ed. Robert Hahn, Brookings Institution 2006).

⁷⁸ Herbert J. Hovenkamp & Erik Hovenkamp, Complex Bundled Discounts and Antitrust Policy, 57 Buffalo L. Rev. 1227, 1228 (2009) ("[b]undled discounting is an exceedingly common practice in commercial contracts involving suppliers of multiple interrelated products").

the price of a browser suddenly fell to zero. By implication, this means that flatly prohibiting the operating system-browser bundle would have had regressive pricing effects for consumers. For that reason (among others, including a reluctance to make judgments about the technical efficiencies of operating system/browser integration), the court declined to treat the Windows/Internet Explorer bundle as an antitrust offense⁷⁹ (although, as discussed previously, the court did bar Microsoft from engaging in certain exclusive dealing practices involving key distribution channels to reach consumers).

The prohibitions on tying, bundling, and leveraging practices in the platform context may appear to have the salutary effect of blocking the expansion of leading platforms into adjacent markets and lowering the entry barriers faced by smaller or other providers of certain standalone complementary services. However, any such effects must be weighed against at least three countervailing harms to competitive conditions.

First, limiting the ability of platforms to enter adjacent markets can suppress a competitive threat to incumbent platforms in those same markets. Given the significant technical and capital requirements necessary to achieve entry into certain platform technology markets, this prohibition can eliminate a key source of competitive discipline. To illustrate this point, consider again the cloud computing market (and specifically, the infrastructure-as-a-service segment of the market), which was pioneered and initially dominated by Amazon with the launch of its AWS service. Subsequently Amazon has been challenged by Microsoft's Azure service and Alphabet's Google Cloud service. In both cases, entry was facilitated by a bundling strategy: Microsoft bundled its cloud computing services with its office applications suite, while Google bundled its cloud computing services with its email, search, and data storage applications. Under the DMA, these practices would appear to be illegal (assuming cloud computing is designated as a CPS), in which case AWS would have been protected from its most potent challengers.

Second, these prohibitions can reduce a platform's incentives to invest in the development and maintenance of ancillary services, or hybrid offerings that combine complementary functionalities across services, which can benefit consumers by combining complementary services into a "seamless" experience for users across adjacent market segments.

Third, and perhaps most critically, these prohibitions can pose a risk to the crosssubsidization business model that platforms often use to fund the provision of "free" services to end users through revenues derived from advertising and other complementary services sold to paying business users in adjacent markets. Most notably, the DMA's limitation on mixing user data across CPSs (subject to a limited opportunity to secure user consent)⁸⁰ would place at risk the ability of a platform to offer targeted advertising services to paying business users. The revenue stream from advertising services enables the platform to invest in maintaining the quality and volume of services offered at no out-of-pocket cost to endusers. In response, a platform may elect to reduce quality or output or shift to a subscriptionbased model, all of which would constitute adverse effects for users (or, in the last case, at least lower-income users).

⁷⁹ U.S. v. *Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (remanding determination of whether tie constitutes an antitrust offense, under the rule of reason standard).

⁸⁰ DMA Art. 5(2) (precluding platform from moving users' personal data across multiple CPSs, unless user consent is specifically requested and provided, but limiting such request to once a year).

To be clear, this is not to say that the various tying, bundling, and data-leveraging practices prohibited by the DMA in the case of gatekeeper entities never pose any risk to competitive markets and should never prompt antitrust scrutiny. The large market shares generally held by leading firms in mature digital markets certainly demand antitrust scrutiny. However, that analytical exercise should be anchored in the accumulated body of knowledge embodied in decades of case law and economic scholarship. That body of knowledge shows that, among the business practices recurrently addressed by antitrust law and scholarship, tying and bundling practices give rise to what is perhaps the most complex mix of procompetitive and anticompetitive effects (although, as noted previously, empirical studies tend to find that procompetitive effects strongly predominate⁸¹). As such, some form of the rule of reason, rather than a blanket per se prohibition, remains the most appropriate framework for assessing antitrust challenges to these practices.

4.4 How the DMA Increases Compliance Costs and Legal Uncertainty

The DMA's policy rationale relies substantially on the view that designating certain practices (when engaged in by the largest digital platforms) as per se illegal avoids the costs, delay, and uncertainty associated with lengthy antitrust litigations that proceed under some form of the rule of reason (or the approximately analogous effects-based approach under EU law). This cost-savings justification for a per se liability rule rests on weak grounds.

Compared to the current, ex post litigation-based antitrust system, it is just as likely that the DMA will increase the enforcement costs borne by regulators and the compliance costs borne by the firms that fall within its scope, while almost certainly increasing legal uncertainty. All these costs will ultimately be reflected in the prices borne by end-users and business users in digital platform markets, while legal uncertainty may discourage or delay the development and launch of new products and services. Note that these costs do not include the consumer harms that may arise whenever a per se liability rule suppresses, or discourages, a business practice that has a favorable effect on competitive markets, especially practices that have favorable pricing effects.

As an ex ante regime of regulatory oversight, the DMA continuously imposes enforcement and compliance costs on regulators and regulated firms. By contrast, an ex post regime implemented largely through litigation only imposes these costs on firms periodically. In this respect, the DMA is more akin to the statutes and regulations administered by the Securities and Exchange Commission than the antitrust statutes enforced periodically by federal and state authorities. Like the securities laws, the DMA will require that the regulator invest resources in developing and updating rules and regulations and making case-specific determinations in implementing the statute concerning particular practices.

The European Commission has already started to undertake these types of activities—for example, after a process of internal review, it has designated certain digital platforms as gatekeepers and certain services offered by those platforms as CPSs, while addressing positions expressed by certain firms that have sought to contest those determinations. The inevitable cycle of making, applying, waiving, and amending rules is inherent to any administrative regime and will necessitate significant dedicated personnel to support it. A European think tank estimates that the EU competition regulator will be required to dedicate

⁸¹ Lafontaine and Slade, *supra* note 27.

up to 605 full-time personnel and \$658 million to implement and enforce the DMA during 2021-2027, depending on the number of firms designated as gatekeepers.⁸² This estimate does not include the compliance costs borne by in-house legal departments and other personnel at gatekeeper entities.

Costs for both the regulator and regulated firms are likely to arise from three characteristics of the statute.

First, it may sometimes be unclear whether a firm should be designated a gatekeeper due to the subjectivity of the qualitative criteria used in the statutory definition and, as discussed previously, the discretion given to the regulator to designate a firm as a gatekeeper even it does not meet the quantitative thresholds⁸³, to designate a firm as a "foreseeable" gatekeeper (which triggers the application of a smaller set of obligations)⁸⁴, or to remove a firm from the list of designated gatekeepers.⁸⁵

Given these uncertainties and the harsh remedies to which a firm is exposed once it falls within the scope of the DMA, firms would likely elect to incur significant costs to contest designation as a gatekeeper or to resist designation of a particular business practice as a CPS. Those costs may be considerable since the DMA provides that, once a firm meets the quantitative threshold for qualifying as a gatekeeper, it bears the burden of showing that it does not meet the qualitative criteria.⁸⁶ Firms should be expected to take similar action in response to designations of certain services as CPSs, which would then be subject to the limitations and requirements set forth in the DMA. These contingencies have already been realized. Samsung, Alphabet, and Microsoft have engaged in negotiations with the EU regulator to avoid having certain services designated as CPSs (and, in Samsung's case, to avoid being designated a gatekeeper).⁸⁷ Apple, ByteDance, and Meta have filed suit against the Commission to contest their designation as gatekeepers.⁸⁸

Second, even when a firm has qualified as a gatekeeper and one or more of its services has been designated as a CPS, the scope of the various per se prohibitions is often unclear when applied in specific industry contexts. While the statute seeks to achieve certainty by prohibiting certain practices on a per se basis, the definitions of those practices inherently give rise to ambiguities concerning its scope of application in particular circumstances. For example, the DMA prohibits gatekeeper entities from treating "more favourably, in ranking and related indexing and crawling, services and products offered by the gatekeeper itself than similar services or products of a third party."⁸⁹ This language rests on two terms the meaning of which is not self-evident: "favorably" and "similar." The inevitable lack of clarity will likely give rise to negotiations with regulators, or formal disputes in court, concerning the application of the statute.

⁸² Bruegel, *supra* note 53.

⁸³ DMA Art. 8.

⁸⁴ Id. For further detail, see *supra* note 55.

⁸⁵ DMA, Art. 4(1).

⁸⁶ Id., Art. 3(2).

⁸⁷ Go-Woon Yi and Jeong-Soo Hwang, Samsung Electronics avoids EU's digital market regulations, Korea Economic Daily, Sept. 7, 2023.

 ⁸⁸ Foo Yun Chee, TikTok asks EU court to suspend EU gatekeeper label until its ruling, Reuters, Dec. 1, 2023.
⁸⁹ DMA, Art. 6(5).

Third, the statute often qualifies its per se rules by providing the regulator with discretion to extend or constrain the application of the rule or even with discretion to extend the list of prohibited practices. For example, the DMA provides the regulator with discretion to designate additional business practices as per se violations⁹⁰, to initiate a process to develop greater specification of certain obligations to which gatekeepers are subject⁹¹, or to add to the list of designated CPSs.⁹² In other cases, the statute provides regulated firms the opportunity to seek a temporary exemption from a particular obligation to which a gatekeeper is subject, on grounds of economic viability, public health, or security.⁹³ These opportunities to exercise regulatory discretion (only some of which have been described) will induce firms to contest or elicit certain regulatory determinations (in addition to, as discussed previously, the initial designation of a firm as a gatekeeper entity and the initial designation of a business practice as a CPS). Regulatory determinations that result in a fine can ultimately be appealed to court⁹⁴—bringing the parties back to the same adjudicative process the DMA purportedly seeks to avoid. It is not obvious how this state of affairs saves costs compared to a litigation-based enforcement approach.

All these anticipated responses to the DMA—regulatory intervention, objections raised by regulated firms, and recourse to court—are familiar occurrences in any regulated industry and, in the context of the digital economy, will generate significant costs for regulators and regulated firms, aside from generating legal uncertainty that may discourage the use of efficient or innovative business practices that would redound to the benefit of end-users and business users. These costs are compounded by the fact that the DMA provides for enforcement of its provisions not only by regulators but through private causes of action, including a representative-class mechanism akin to U.S. class-action litigation.⁹⁵ While class-action litigation is a familiar enforcement mechanism in U.S. antitrust law, it should be kept in mind that the DMA relieves plaintiffs from demonstrating market power or competitive harm and prevents defendants from raising efficiency defenses. In the class-action context, a low standard of proof is a clear invitation to bring non-meritorious suits that impose costs on firms that may not have engaged in practices that pose any material risk to competitive conditions. Ultimately, all of these costs are passed on to consumers in the form of some combination of higher prices, lower quality, and reduced innovation.

Given these considerations, there is no reason to believe that shifting toward a regulatory regime anchored in per se rules would reduce costs or legal uncertainty compared to a litigation-based regime governed principally by balancing tests. Precisely the opposite outcome is just as likely to be the case.

⁹⁰ Id., at Art. 12(1).

⁹¹ Id., at Art. 8(2).

⁹² Id., at Art. 19(1).

⁹³ Id., at Arts. 9, 10.

⁹⁴ Id., at Art. 45.

⁹⁵ This is not stated explicitly in the statute but appears to be contemplated by DMA Art. 42, which provides that "Directive (EU) 2020/1828 shall apply to the representative actions brought against infringements by gatekeepers of provisions of this Regulation . . .". On this point, see Guilia Rurali and Martin Seegers, Private Enforcement of the EU Digital Market Act: The Way Ahead After Going Live, Kluwer Competition Law Blog, June 20, 2023, https://competitionlawblog.kluwercompetitonlaw.com/2023/06/20/private-enforcement-of-the-eu-digital-market-act-the-way-ahead-after-going-live/

Chapter Summary

The DMA stands in stark contrast to the antitrust law regime that governs U.S. technology markets. That regime relies on case-specific litigation grounded principally in various forms of the rule of reason that weigh evidence of harms to competition against evidence of benefits to competition attributable to a contested business practice. By contrast, the DMA sets in place an antitrust regime that targets up to 22 different types of services provided by large technology companies designated as gatekeepers (three of which are based in California), which must then conform to an extensive list of prohibited practices and obligatory practices. Administering and implementing this complex structure will entail significant costs for regulators and regulated entities. Yet the DMA's greatest cost is likely to arise from the inherently increased risk of overenforcement. Unlike conventional antitrust law, the DMA does not allow any inquiry into market power, competitive harm, or competitive benefits; rather, it simply prohibits certain practices outright. Given that those practices do not fall into the small category of practices that almost always result in net competitive harm, the DMA's approach will almost certainly penalize firms for engaging in practices that either pose no competitive risk or enhance competitive conditions. The result is likely to be a market-wide chilling effect that impedes the competitive process as a result of unnecessarily increased compliance risk and litigation exposure.

PART 5. HOW CALIFORNIA'S INNOVATION ECOSYSTEM HAS THRIVED UNDER A "RULE OF REASON PLUS" ANTITRUST REGIME

California's innovation ecosystem is the envy of the world. It boasts some of the world's largest technology companies, a world-class higher-education system, and a strong pipeline of startups fueled by the funding provided by a robust venture-capital community. That ecosystem relies on supportive legal institutions and norms, including a commitment to free-market competition, which drives the risk-taking and "creative destruction" that challenges incumbents and sustains the innovation process. Inventors, entrepreneurs, and investors from around the world are drawn to this environment in which capital, ideas, and talent can move freely from one opportunity to another.

Since approximately the early 1970s, California (and in particular, Silicon Valley) has been widely recognized as the world's preeminent leader in computing, communications and other digital technologies and has supported continuous waves of innovation in these industries. California also exhibits robust innovation clusters in the life sciences in the San Diego and San Francisco Bay areas. This intensive period of technological and business-model innovation (encompassing the launch of the personal computer industry, the emergence of the biotech industry, the "dot com" boom, and the growth of the internet and social media) has largely coincided with a period in U.S. antitrust history during which courts and agencies have tended to favor use of the rule of reason framework to assess antitrust liability, excluding the clearest cases of collusion among competitors that are addressed under per se rules of illegality. Additionally, U.S. courts have emphasized during this period that plaintiffs must show injury to competition, rather than only injury to a particular competitor, a requirement that provides an important safeguard against the strategic misuse of antitrust law to shelter lagging performers or to deter entry by potential challengers to declining incumbents. California's state antitrust statutes largely follow these same foundational principles, complemented by additional tools that enable California courts to go incrementally beyond federal antitrust law when appropriate or to develop different applications of the rule of reason to safeguard competitive conditions in particular circumstances.

This measured approach to antitrust law, which demands evidence of competitive harm and typically takes into account the efficiencies reasonably attributable to a contested practice, is implemented through litigations brought by multiple enforcers, including principally federal agencies, state attorneys general, and the class-action plaintiffs' bar. This legal infrastructure has provided an institutional environment that discourages anticompetitive conduct while taking precautions to avoid imposing antitrust liability without a sufficient factual basis. While many factors contributed to the success of California's and the U.S.'s innovation economy, this prudential approach to the enforcement of antitrust law grounded in economic principles and factual inquiry may have played a role in preserving the competitive forces that drive a robust innovation ecosystem.

5.1 The California Antitrust Toolbox: "Rule of Reason Plus"

It is sometimes asserted that the current antitrust regime has an inadequate deterrent effect against anticompetitive business practices and therefore antitrust enforcers require additional enforcement tools—and specifically, the use of per se "ex ante" categories to prohibit certain practices by the largest firms without having to satisfy the probative burden inherent to the rule of reason. To assess this argument, it is important to observe that any business that participates in California's technology ecosystem is already subject to scrutiny and potential litigation under federal antitrust law and state antitrust and unfair competition laws. This is not merely a theoretical observation: currently all of the firms that would be captured by the DMA are already facing an intensive level of antitrust litigation brought by federal agencies, state attorneys general, and private plaintiffs. Moreover, California antitrust and unfair competition laws provide courts with latitude to apply the rule of a reason in a manner that captures practices that violate the "spirit" of the antitrust laws or constitute incipient threats to competitive markets that may not be encompassed by federal antitrust law. Hence, California's antitrust regime might be understood as a "rule of reason plus" approach toward potentially anticompetitive practices.

5.1.a Federal Antitrust Enforcement

Multiple actors regularly bring antitrust lawsuits and, in the process, can deter anticompetitive conduct. Unlike the European competition law system, antitrust enforcement by federal or state agencies or attorneys general is regularly supplemented (and, in terms of volume, exceeded by) litigation brought by the class-action bar on behalf of representative plaintiffs (typically, consumers) or by competitors or other private plaintiffs.⁹⁶ Plaintiffs in antitrust litigation can discipline firms through potent remedies in the event a court finds liability, including treble monetary damages in the case of suits brought by private plaintiffs or state attorneys general, criminal penalties in the case of suits brought by the Department of Justice (typically reserved for cartel activity), and injunctive relief (including structural remedies such as divestiture or dissolution) in the case of suits brought by all plaintiffs. Given the unpredictable threat of significant monetary penalties or far-reaching injunctions, government enforcers can sometimes reach settlements that involve significant behavioral or structural remedies and class-action plaintiffs regularly reach settlements with significant dollar values.

The robust level of antitrust litigation can be observed currently in digital platform markets. Federal and state enforcers, as well as private plaintiffs, have brought multiple actions under federal and state antitrust law against the largest technology platforms, including Alphabet, Amazon, Microsoft, and Meta, all of which are currently pending in federal or state courts. These actions are described in full in Appendix B. Below is a summary of the current antitrust litigation landscape faced by these entities (all of which are designated gatekeepers under the DMA), excluding suits brought by private plaintiffs.

⁹⁶ Herbert Hovenkamp, Federal Antitrust Policy: The Law of Competition and Its Practices § 16.1 n.7 (4th ed. 2011).

Year Filed	Defendant	Plaintiff	Relevant market	Status
2020	Google	DOJ, state AGs	Search and search ads	Pending.
2020	Google	State AGs	Display ad exchange.	Pending.
2023	Google	DOJ, state AGs	Digital ad sales	Pending.
2021	Amazon	DC state AG	Most-favored nations requirement.	Dismissed.
2021	Amazon	Wash. state AG	Alleged price-fixing and self-preferencing	Settled.
2022	Amazon	California state AG	Most-favored nations requirement.	Pending.
2023	Amazon	FTC, state AGs	Bundling, most-favored- nations requirement, self-preferencing and other practices.	Pending.
2020	Facebook	FTC	Acquisitions of WhatsApp, Instagram	Pending.
2020	Facebook	State AGs.	Same.	Dismissed.
2020	Meta	FTC	Acquisition of Within Unlimited.	Dismissed.
2021	Microsoft	FTC	Acquisition of Blizzard/Activision.	Injunction denied. Administrative proceeding pending.

Table 3: Antitrust Litigations by Federal and State Regulators Against U.S.-Based Entities Designated as Gatekeepers under the Digital Markets Act (2020-2023)

Most of these litigations allege causes of action that will be adjudicated, or have been adjudicated, under some form of the rule of reason, which will enable courts to weigh the procompetitive and anticompetitive effects reasonably attributable to the practices being contested. The challenges brought by the FTC to certain acquisitions by Facebook and Microsoft are adjudicated under a "may [] substantially lessen concentration" or "tend to create a monopoly" standard, which bears considerable resemblance to a rule-of-reason analysis insofar as it typically takes into account procompetitive efficiencies attributable to an acquisition transaction. Given this level of litigation activity, there is little indication that the rule-of-reason standard, or is close variants, is impeding federal and state enforcers from bringing antitrust litigations against some of the largest firms in platform technology markets.

5.1.b California State Antitrust Enforcement

To fully appreciate the antitrust regime under which firms currently operate when doing business in California, it should be observed that California has three antitrust-related bodies of law—the Cartwright Act, the Unfair Practices Act, and the Unfair Competition Law—under which courts assess the effects on competition of a contested business practice. These statutes provide courts with somewhat more latitude to find liability as compared to federal antitrust law or to apply the rule-of-reason standard in a manner that departs from federal case law in particular circumstances. As shown in the Table above (with further details in Appendix B), the California state attorney general is currently litigating an antitrust claim against Amazon under the Cartwright Act and the Unfair Competition Act. In another example of the supplemental function played by California's state antitrust law, the widely-publicized antitrust litigation brought by Epic Games against Apple resulted in a win for Apple on all federal antitrust claims, but a win for the plaintiff on claims brought under the Unfair Competition Act. The ruling was upheld on appeal (and has been further appealed to the Supreme Court).⁹⁷

Cartwright Act

The Cartwright Act, California's equivalent of the Sherman Act, generally follows analogous principles as compared to federal antitrust law (except that it lacks a specific cause of action for single-firm monopolization). Like the Sherman Act, the Cartwright Act has been understood only to prohibit "unreasonable" restraints of trade, with the exception of limited categories of conduct deemed to be illegal per se (such as price fixing and market division).⁹⁸ Some California courts have specifically recognized that vertical restraints in particular raise complex interpretive issues and therefore require a balancing of anticompetitive and procompetitive effects.⁹⁹ Additionally, in language that mimics Section 3 of the Clayton Act, the Cartwright Act also prohibits certain exclusive dealing and tying arrangements "where the effect . . . may be to substantially lessen competition or tend to create a monopoly in any line of trade or commerce."¹⁰⁰ This too implies application of some form of the rule of reason, akin to the flexible standard that federal courts have developed in applying the provisions of the Clayton Act on which that Carwright Act provision is modeled.

However, the Cartwright Act is not a mere replica of the Sherman Act; rather, its language has been interpreted to enable courts to go beyond the scope of the Sherman Act in appropriate circumstances. Specifically, the California Supreme Court has held that the Cartwright Act has a broader purpose than the Sherman Act and therefore, when courts apply the statute under the reasonableness principle, federal antitrust case law is "instructive, not conclusive."¹⁰¹ Critically, unlike federal antitrust case law, the Cartwright Act enables suits by indirect purchasers¹⁰², which permits consumers (or, more typically, classes of consumers

⁹⁷ Epic Games, Inc. v. Apple, Inc., No. 21-16506 (9th Cir. 2023).

⁹⁸ People v. Building Maintenance Contractors Ass'n, Inc. et al., 41 Cal.2d 719, 727 (Cal. 1953).

⁹⁹ Exxon Corp. v. Superior Court, 51 Cal. App. 4th 1672, 1680 (1997) ("vertical non-price restraints are tested under the rule of reason").

 ¹⁰⁰ Cal. Bus. & Prof. Code § 16727 (prohibiting exclusive dealing and tying arrangements "where the effect . . . may be to substantially lessen competition or tend to create a monopoly in any line of trade or commerce").
¹⁰¹ Aryeh v. Canon Business Solutions, Inc., 292 P.3d 871, 1195 (Cal. 2013).

¹⁰² Cal. Bus. & Prof. Code § 16750(a) ("any person" may bring an action under the Cartwright Act, "regardless of whether such injured person dealt directly or indirectly with the defendant").

in the class-action context) to bring antitrust suits against producers (who typically distribute through wholesalers or other intermediaries and are therefore shielded from consumer class-action lawsuits under federal antitrust law by the indirect purchaser doctrine).

Unfair Competition Law and Unfair Practices Act

The Unfair Competition Law (UCL), which is analogous to the Federal Trade Commission Act, generally follows antitrust principles as found in federal antitrust law; however, the concept of "unfairness" has been understood to enable claims against practices that may not necessarily fall within the scope of federal antitrust law. To provide a structure for the application of this loosely defined principle, the California Supreme Court has held that "unfairness" in the UCL refers to business practices that "threaten[] an incipient violation of an antitrust law, or violate[] the policy or spirit of one of those laws because its effects are comparable to or the same as a violation of the law, or otherwise significantly threatens or harms competition."¹⁰³ Hence, the UCL shares with the antitrust laws the policy objective of preserving competitive conditions; however, it enables claims against practices that may not yet show sufficient indication of competitive harm to support a claim under federal antitrust law. The Unfair Practices Act targets (among other things) below-cost pricing when such pricing is undertaken "for the purpose of injuring competitors or destroying competition."¹⁰⁴ Courts have interpreted this language to imply that plaintiffs must show that the defendant set prices below cost¹⁰⁵; however, unlike federal case law, California courts do not require that plaintiffs also show that the defendant has a reasonable expectation of subsequently recouping those costs through sustained supracompetitive pricing.

5.1.c Illustration: In re Cipro Litigation

The discretion provided to courts under California's state-level antitrust and unfair competition statutes can be used by courts to fill perceived "gaps in coverage" under the federal antitrust laws or to depart from the federal antitrust model when a court determines that another approach is more suitable (although generally California courts have assessed anticompetitive practices within a rule-of-reason standard analogous to the standard applied under federal antitrust case law).

This point can be illustrated by the *In re Cipro* litigations, which consolidated nine litigations concerning "reverse payment" (also sometimes known as "pay for delay") settlements between pharmaceutical manufacturers and generic entrants.¹⁰⁶ These settlements involve a payment made by the incumbent to the entrant, which agrees to withdraw its challenge to the incumbent's patent under the Hatch-Waxman Act and to delay entry into the market for a certain period of time. During that period, the settlement with the generic entrant shields the patentee from a challenge to the validity of its patent, due to certain technical elements of the Hatch-Waxman Act. While this practice may save on litigation costs by promoting settlement (an outcome that is generally encouraged in civil litigation), it may have anticompetitive effects for the market as a whole (and consumers in particular) by extending the life of a patent that might have been invalidated if the entrant had not withdrawn its challenge.

¹⁰³ Cel-Tech Communications v. LA Cellular Telephone Co., 973 P.2d 527, 543 (Cal. 1999).

¹⁰⁴ Cal. Bus. & Prof. Code § 17043.

¹⁰⁵ See, e.g., G.H.I.I. v. MTŠ, Inc., 147 Cal.App.3d 256, 275 (1983).

¹⁰⁶ In re Cipro Cases I & II, 61 Cal. 4th 116 (Cal. 2015).

Addressing this practice, the U.S. Supreme Court had held in *FTC v. Actavis*¹⁰⁷ that a reverse payment settlement should be addressed under a rule of reason analysis and specified certain factors that courts should weigh in making that analysis, including most importantly the size of the settlement payout relative to the parties' litigation costs. In *In re Cipro*, the California Supreme Court addressed the same practice under the Cartwright Act. The California court's decision elaborated upon the holding in *Actavis* to develop a somewhat truncated and more objective form of the rule-of-reason test. In particular, the court held that, in a challenge to a reverse payment settlement under the Cartwright Act, the plaintiff must show that the consideration paid by the incumbent to the entrant exceeds the patentee's expected litigation costs and the value of other goods and services provided by the entrant. If that test is satisfied, then the settlement is deemed to be anticompetitive without further inquiry.¹⁰⁸ The court's ruling shows how the Cartwright Act provides latitude to California courts to build upon and adapt the legal principles derived from federal antitrust statutes and associated case law.

5.2 Bad Fit: The DMA and California's Existing Antitrust Toolbox

Firms that do business in California operate under multiple layers of antitrust scrutiny grounded in various federal and state statutes, which are in turn enforced actively by federal agencies, state attorneys general, and the plaintiffs' bar that represents class-action plaintiffs and other private parties. There should be both substantive and operational concerns about adding the DMA to the existing antitrust enforcement toolkit. This is not simply a matter of additional compliance and transaction costs; rather, most critically, these concerns reflect the fact that the DMA embodies an approach to competition policy that diverges dramatically from the substantive principles and institutional mechanisms behind the current suite of federal and state antitrust statutes that govern business practices in California.

The DMA's use of per se categories of illegal practices departs from the rule of reason approach that generally governs antitrust enforcement in California, whether carried out under federal antitrust statutes or California's antitrust and unfair competition statutes. In 1953, the California Supreme Court held: "[I]t may be assumed that the broad prohibitions of the Cartwright Act are subject to an implied exception similar to the one that validates reasonable restraints of trade under the federal Sherman Antitrust Act."¹⁰⁹ As discussed extensively in this report, this commitment to the rule of reason outside the clearest cases of anticompetitive conduct reflects the view that much of antitrust enforcement involves practices that are not anticompetitive across-the-board but rather, give rise to some mix of anticompetitive and procompetitive effects depending on factual circumstances. As such, a case-specific approach that weighs the evidence concerning the procompetitive or anticompetitive effects of a particular practice is generally appropriate. In a limited set of cases, both federal and California antitrust law apply per se rules of illegality because certain practices (mostly involving various forms of horizontal collusion) are so clearly anticompetitive that fact-intensive analysis is not necessary.

The DMA abandons this prudential approach by establishing per se categories of illegal conduct for certain business practices when undertaken by certain large technology platforms.

¹⁰⁷ 133 S. Ct. 2223 (2013).

¹⁰⁸ 61 Cal. 4th, at 151-54.

¹⁰⁹ People v. Building Maintenance Contractors Ass'n, Inc. et al., 41 Cal.2d 719, 727 (Cal. 1953).

This approach only makes sense if there were firm grounds to believe that platform technology markets, and these specific practices when undertaken by large technology platforms, are inherently prone to a dramatically higher level of antitrust risk, as compared to other markets in which those practices are undertaken.

As discussed previously in Part 3.1 of this report, closer examination of technology history and the economics of platform markets shows that those markets are only likely to converge upon entrenched monopoly outcomes under particular circumstances. Whether those circumstances are satisfied in any specific market demands precisely the type of factintensive analysis that is undertaken through a rule-of-reason analysis. If that is the case, then adding the DMA to the antitrust enforcement toolkit, and effectively overriding decades of federal and state antitrust case law that have applied the rule of reason to most business practices, would inevitably result in a higher incidence of overenforcement outcomes, resulting in the suppression (and, by anticipation, discouragement) of practices that either cause no harm to consumers or would benefit them.

Not only is the DMA unlikely to improve competitive conditions (and could degrade them depending on the incidence of false-positive errors that suppress efficient practices) relative to the current antitrust enforcement toolkit, but it would achieve this result while imposing significant new costs on both the government and the market. Based on the costs being incurred by EU regulators to implement the DMA (as discussed previously in Part 4.4 of this report), which requires assembling an extensive administrative infrastructure, implementing the California equivalent of the DMA would require diverting significant state resources from other uses. In addition, firms that are designated as gatekeepers would be compelled to invest significant resources in taking measures to comply with the statute (or taking positions to contest regulatory determinations), including expected interactions on a regular basis with regulators given the uncertainties in the scope and understanding of the DMA. Even during the short time that has passed since enactment of the DMA in the EU, it has already prompted litigation and disputes over gatekeeper and CPS designations (as discussed in Part 4.4). Some portion of those compliance and litigation costs may be passed on to consumers in the form of higher prices or reduced quality and to employees in the form of lower wages.

The DMA's requirements are so extensive that it is best understood as a type of sectorspecific regulation for large firms in platform technology markets, which more closely resembles the regulatory structure for a market such as utilities or telecommunications, rather than an antitrust statute that is the basis for periodic intervention following generally applicable principles that can be used to identify potentially anticompetitive practices irrespective of any particular industry. This shift from an ex post, generally applicable, and litigation-based regime to an ex ante, industry-specific, and regulatory-based regime would risk impeding California's innovation economy by compelling firms to conform to rigid behavioral requirements in order to avoid the potential imposition of disruptive structural remedies or punitive fines. This type of "top-down" governance structure, which requires firms to continuously seek guidance, clearance, and waivers from a regulatory agency, is difficult to reconcile with the "bottom-up" entrepreneurial environment that characterizes innovation in technology markets and, especially, the fast-moving dynamics that have characterized California's innovation economy in particular. The shift from an antitrust regime grounded in the adaptive rule-of-reason standard to an antitrust regime grounded in an expanding list of per se prohibitions would threaten to stifle the process of "creative destruction" that sustains the most robust innovation environments.

Chapter Summary

During approximately the past four decades, California's innovation economy has set the "gold standard" for technological advancement, especially in the computing, communications, and internet-based industries. During this period, California-based companies have operated in the U.S. market under a mix of federal antitrust, state antitrust, and state unfair competition laws. Federal and state laws share a common commitment to deterring practices that pose a risk to competitive markets and, for the most part, a common commitment to using some form of the rule of reason to implement that objective in most cases. This legal infrastructure has supported litigation activity from public and private plaintiffs and currently supports an especially intensive period of litigation directed at some of the country's largest technology platforms. Given this sound legal infrastructure for safeguarding competitive conditions, robust enforcement through litigation by governmental and private plaintiffs, and the unparalleled success of California's innovation ecosystem in this legal environment, there does not appear to be a compelling case for departing from this proven framework and adopting the DMA as a model for competition policy.

CONCLUSION

This report has examined the legal and economic considerations implicated by proposals to adopt some version of the European Union's DMA as part of California's antitrust and competition policy infrastructure. There are strong grounds to believe that any such initiative would have adverse impacts on California's innovation economy and would suppress business practices that promote competitive conditions. There are three principal reasons.

- The DMA would imprudently substitute per se prohibitions for the proven rule-ofreason standard in substantial portions of the technology economy. There is little economic basis for this dramatic reduction in the probative burden required to demonstrate anticompetitive effect, especially since the DMA targets business practices that in general give rise to a mix of procompetitive and anticompetitive effects. Adoption of per se prohibitions will almost certainly result in overenforcement outcomes that may suppress business practices that enhance competitive conditions and benefit consumers in the form of lower prices, higher quality, or new products and services.
- 2. The DMA relies on two false assumptions. First, the DMA assumes that technology platform markets are inherently prone to entrenched monopoly outcomes and therefore per se prohibitions should be adopted to impose liability even in the absence of any evidence of competitive harm. Yet historical experience shows that technology platforms are often disciplined by more innovative entrants, which suggests that case-specific analysis through ex post litigation is the most appropriate enforcement approach, rather than across-the-board prohibitions directly specifically at the largest platforms. Second, the DMA assumes that substituting per se rules for the rule-of-reason standard will lower compliance costs. Just the opposite may ensue since the DMA requires a standing regulatory infrastructure to interpret, administer, and enforce the statute's various prohibitions and obligations, which in turn will require regulated firms to maintain standing compliance teams, generating costs that will be borne ultimately by those firms' consumers.
- 3. California-based firms already operate under significant scrutiny for anticompetitive practices through federal antitrust, state antitrust, and state unfair competition laws. This legal infrastructure supports robust litigation activity from federal agencies, state attorneys general, and the class-action plaintiffs' bar, as illustrated by the multiple antitrust litigations currently pending against some of the country's largest technology firms. This legal infrastructure reflects a common commitment to preserving competitive markets, rather than any individual competitor, and largely pursues that objective through some form of the rule of reason. The DMA's per se approach represents a dramatic departure from this regime by adopting a regulatory structure characterized by rigid rules that pose a risk of impeding the fluid competitive process.

California's innovation economy has thrived under a multi-component antitrust regime of federal and state antitrust and related law and a conceptual commitment to an innovation economy in which firms have latitude to develop new technologies and business models. The DMA reflects an entirely different vision of an innovation economy in which the largest firms operate under a regulatory regime that is more akin to a utility or telecommunications market,

rather than fast-moving computing, software, and social media markets. This shift in competition policy has little grounding in the history or economics of technology markets and would mark a dramatic departure from core principles and methods of U.S. antitrust law. Over at least the past four decades, that body of law has pursued a policy of incremental change through which courts constantly adjust the applications of the rule of reason standard (or close variants of that standard) in response to changing economic and technological conditions. This legal "scalpel," rather than the blunt regime of per se prohibitions set forth in the DMA, is most likely the preferred approach to maintaining and enhancing competitive conditions in California's innovation economy.

DMA Provision	Item	Details
Arts. 3(1), 3(2)	Definition of Gatekeeper	<i>Qualitative criteria:</i> Any entity that has (1) a "significant impact" on the EU's internal market, (2) provides a "core platform service which is an important gateway" for companies to reach end users, and (3) has an "entrenched and durable" position.
		Quantitative criteria (which support a presumption that the qualitative criteria are met): (1) turnover equal to at least \notin 7.5 (approximately \$7.96) billion in each of the previous three years, or market capitalization equal to at least \notin 75 (approximately \$79.6) billion in the previous year, and (2) at least 45 million monthly active end-users and 10,000 yearly active business users during each of the previous three years.
Art. 2(2)	Definition of Covered Platform Service (CPS)	Online intermediation services, online search engines, online social networking services, video-sharing platform services, number- independent interpersonal communications services, operating systems, web browsers, cloud computing services, and online advertising services offered together with any of the other core platform services.
Art. 5: Core	Obligations	
Art. 5(2)	Prohibition of data-mixing without consent	Gatekeeper may not combine personal data from a CPS with personal data from its other services, and may not process, for the purpose of providing online advertising services, personal data of users collected from third-party business users of the CPS (unless the user grants valid consent, which the gatekeeper can only request once per year).
Art. 5(3)	Prohibition of most-favored nation clauses	Gatekeeper may not prevent business users from offering, outside of its online intermediation services, the same products or services at different prices or conditions than on the gatekeeper's platform.
Art. 5(4)	Obligation to allow off- platform dealings	Gatekeeper must allow business users (free of charge) to promote their offers, receive payments, and enter into contracts with users outside the gatekeeper's CPS.
Art. 5(5)	Obligation to allow on- platform use	Gatekeeper must allow users to access and use, through its CPS, content, subscriptions, or other items "by using the software application of a business user."

APPENDIX A: Major Provisions of the Digital Markets Act

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DMA Provision	Item	Details
Art. 5(6)	Prohibition of hindering legal challenges to gatekeepers' practices	Gatekeeper may not restrict business users or end users from raising with public authorities "any issue of non-compliance" by the gatekeeper with relevant EU or national laws.
Art. 5(7)	Prohibition of tying a CPS with ancillary services	Gatekeeper may not require business users or end users of a CPS to use, offer, or interoperate with a gatekeeper's identification service, web browser engine, or payment service in the context of services offered by a business user through the gatekeeper's CPS.
Art. 5(8)	Prohibition of tying different types of CPS	Gatekeeper may not require business users or end users of a CPS to use, or register with, another designated CPS (which therefore is subject to the DMA) or a CPS that meets the quantitative presumption for being deemed a gatekeeper under the DMA.
Arts. 5(9), (10)	Obligation of transparency towards advertisers	Gatekeeper must provide, free of charge and on a daily basis, advertisers (or their authorized third parties) who are customers of its online advertising services with a range of detailed information on (among other things) the use of its advertising services and payments from publishers and advertisers.

Art. 6: Additional Obligations "to be specified"

Art. 6(2)	Prohibition of using business user data to compete with business users	Gatekeeper may not use in competition with business users any data that is not publicly available and is generated or provided by those business users in the context of their use of the relevant CPS, "including data generated or provided by the business users' customers."
Art. 6(3)	Obligation to offer configuration choices	Gatekeeper must "allow and technically enable end users to easily un-install" software applications on its operating system, to change default settings on its operating system, virtual assistant and web browser that "direct or steer end users to products or services provided by the gatekeeper," and to provide end users choice screens, at first use, regarding the online search engine, virtual assistant or web browser that will be used by default.
Art. 6(4)	Obligation to open operating systems to third–party apps and app stores	Gatekeeper must allow and "technically enable the installation and effective use" of third-party software applications or software application stores on its operating system.

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DMA Provision	Item	Details
Art. 6(5)	Prohibition of self- preferencing in rankings	Gatekeeper may not treat more favorably, in "ranking and related indexing," its own services and products compared to similar services or products offered by third parties on its platform.
Art. 6(6)	Prohibition of blocking access from a platform to third-party apps and services	Gatekeeper may not restrict the ability of end users "to switch between, or subscribe to, different software applications and services that are accessed" using the gatekeeper's CPS.
Art. 6(7)	Obligation to offer interoperability with operating systems and virtual assistants	Gatekeeper must allow providers of services and hardware effective interoperability with, and access to, the "hardware and software features accessed or controlled" via its operating system or virtual assistant that fall within the scope of a designated CPS.
Art. 6(8)	Obligation to offer advertising performance measuring tools and data	Gatekeeper must provide advertisers and publishers, and third parties authorized by them, upon their request and free of charge, with "access to the performance measuring tools of the gatekeeper" and sufficient data for advertisers and publishers to carry out their own verification of ad inventory.
Art. 6(9)	Obligation to enable end user data portability	Gatekeeper must provide end users and third parties authorized by them, upon their request and free of charge, with "effective portability of data provided by the end user or generated through" the end user's activity on the CPS, including by the provision of continuous and real-time access to such data.
Art. 6(10)	Obligation to grant business users access to data resulting from their activity on the platform	Gatekeeper must provide business users and third parties authorized by them, upon their request and free of charge. with "effective, high-quality, continuous and real-time access to," and use of, data that is provided for or generated in the context of the use of the relevant CPS (or related services) by those business users and the end users of their products or services.

DMA Provision	Item	Details
Art. 6(11)	Obligation to grant competitors FRAND access to online search data	Gatekeeper must provide, on fair, reasonable, and nondiscriminatory terms, competing online search engines with access to the gatekeeper's "ranking, query, click and view data" relating to searches generated by end users on its online search engine.
Art. 6(12)	Obligation for app stores, search engines and social networks to deal with business users on FRAND general conditions of access	Gatekeeper must apply fair, reasonable, and nondiscriminatory conditions for access to the gatekeeper's software application stores, online search engines and online social networking services designated as CPSs.
Art. 6(13)	Prohibition of frustrating the termination of services	Gatekeeper may not use disproportionate "general conditions" for terminating a CPS.

APPENDIX B: Antitrust Litigations by Federal and State Regulators Against U.S.-Based Entities Designated as Gatekeepers under the Digital Markets Act (2020-2023)

Year Filed	Defendant	Plaintiffs	Contested Practice	Governing statute	Current status
2020	Google	DOJ, state AGs	Certain practices relating to general search services, general search text advertising, and general search advertising.	Federal antitrust	Trial ongoing.
2020	Google	State AGs	Certain practices relating to display advertising exchange market.	Federal antitrust	Dismissal on summary judgment denied on most claims.
2020	Google	State AGs	Certain practices relating to general search services, general search text advertising, and general search advertising.	Federal antitrust	Case consolidated with U.S. v. Google litigation brought by the DOJ.
2023	Google	DOJ, state AGs	Certain practices relating to digital advertising sales.	Federal antitrust	Motion to dismiss denied.
2021	Amazon	State AG (DC)	Most-favored-nations provisions on Amazon website.	State antitrust statute	Dismissed on summary judgment. Appeal pending.
2023	Amazon	FTC, State AGs	Bundling practices relating to Amazon Prime and other business practices	Federal antitrust	Trial ongoing.
2022	Amazon	State AG (Wash.)	Certain alleged price- fixing practices and self-preferencing practices.	State consumer protection	Consent decree issued requiring Amazon to pay fine and stop anticompetitive practices.

Legend: AG = Attorney general; DOJ = Department of Justice; FTC = Federal Trade Commission.

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Year Filed	Defendant	Plaintiffs	Contested Practice	Governing statute	Current status
2022	Amazon	California AG	Most-favored-nations provisions on Amazon website.	State antitrust and unfair competition	Pending.
2020	Facebook	FTC	Acquisitions of Instagram, WhatsApp	Federal antitrust	Dismissal on summary judgment denied.
2020	Facebook	State AGs	Same; practices relating to access to application programming interfaces (APIs).	Federal antitrust	Dismissed for <i>laches</i> (waiting too long to file) concerning acquisitions and failure to state a claim concerning API practices.
2022	Meta	FTC	Acquisition of Within Unlimited	Federal antitrust	Suit dismissed on summary judgment.
2021	Microsoft	FTC	Acquisition of Blizzard Inc. (Activision)	Federal antitrust	Injunction against merger denied by federal court; appealed by agency. Matter pending in administrative tribunal.

Sources: District of Columbia v. Amazon.com, Inc., No. 2021 CA 001775 B (D. D.C. 2021); State v. Amazon.com, Inc., No. 22-2-01281-1 SEA (Wash. Super. Ct. King Cty. 2022); People v. Amazon.com, Inc., No. CGC-22-601826 (Cal. 2022); FTC v. Amazon (D.D.C. 2023); FTC v. Meta Platforms, Inc., F.T.C Matter No: 221 0040 (N.D. Cal. 2022); New York et al. v. Facebook, Inc., No. 1:20-cv-03589-JEB (D.D.C. 2020); United States v. Google LLC, 1:20-cv-03010 (D.D.C. 2020); United States v. Google LLC, 1:23-cv-00108 (N.D. Va. 2023); Texas et al. v. Google LLC (E.D. Tex. 2020); Colorado et al. v. Google LLC, No. 1:20-cv-03715-APM (D.D.C. 2020); In the Matter of Microsoft Corp. & Activision Blizzard, Inc., FTC Matter No: 221 0077 (2022); FTC v. Microsoft Corp. (N.D. Cal. 2023).