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ANTITRUST ENFORCEMENT, REGULATION, AND DIGITAL PLATFORMS

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There is a growing concern over concentration and market power in a broad range of industrial sectors in the United States, particularly in markets served by digital platforms. At the same time, reports and studies around the world have called for increased competition enforcement against digital platforms, both by conventional antitrust authorities and through increased use of regulatory tools. This Article examines how, despite the challenges of implementing effective rules, regulatory approaches could help to address certain concerns about digital platforms by complementing traditional antitrust enforcement. We explain why introducing light-handed, industry-specific regulation could increase competition and reduce barriers to entry in markets served by digital platforms while better preserving the benefits they bring to consumers.

INTRODUCTION

There is widespread concern that levels of concentration and market power may be rising across economic sectors in the United States.[1] One area of particular focus has been on markets served by digital platforms. Firms in such markets can exhibit network effects and economies of scale.[2] While these characteristics may be the source of significant consumer benefits, they can also lead these markets to "tip," at least for a time, to a single provider.[3] Under

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1 *See, e.g.*, JONATHAN B. BAKER, THE ANTITRUST PARADIGM: RESTORING A COMPETITIVE ECONOMY 2-3 (2019); COUNCIL OF ECON. ADVISERS, EXEC. OFFICE OF THE PRESIDENT, ECONOMIC REPORT OF THE PRESIDENT 48-49 (2016), https://obamawhitehouse.archives.gov/sites/default/files/docs/ERP_2016_Chapter_1.pdf [https://perma.cc/UT4R-5KLL]; JAY SHAMBAUGH ET AL., THE STATE OF COMPETITION AND DYNAMISM: FACTS ABOUT CONCENTRATION, START-UPS, AND RELATED POLICIES 1-3 (2018), https://www.brookings.edu/wp-content/uploads/2018/06/ES_THP_20180611_CompetitionFacts_20180611.pdf [https://perma.cc/URZ8-3P4G]; Carl Shapiro, *Protecting Competition in the American Economy: Merger Control, Tech Titans, Labor Markets*, 33 J. ECON. PERSP., Summer 2019, at 69, 69-72.

2 JACQUES CRÉMER ET AL., EUR. COMM'N, COMPETITION POLICY FOR THE DIGITAL ERA 2 (2019), https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf [https://perma.cc/3QRP-V74L].

3 STIGLER CTR. FOR THE STUDY OF THE ECON. AND THE STATE, COMMITTEE FOR THE STUDY OF DIGITAL PLATFORMS: MARKET STRUCTURE AND ANTITRUST SUBCOMMITTEE 12 (2019), https://research.chicagobooth.edu/-/media/research/stigler/pdfs/market-structure-report.pdf?la=en&hash=E08C7C9AA7367F2D612DE24F814074BA43CAED8C [https://perma.cc/GD88-9XNM] ("[T]he platforms with which this report is most concerned demonstrate extremely strong network effects, very strong economies of scale, remarkable economies of scope due to the role of data, marginal costs close to zero, drastically lower distribution costs than brick and mortar firms,

certain conditions, market position can be quite durable once attained; the same factors that cause the market to tip to a single provider might also increase barriers to entry for potential competitors.[4] Furthermore, when a wide range of firms in the same or related industries use the services of digital platforms as inputs into their own businesses or produce complementary products for the platform, the platform's management and access policies can affect those third-party developers. Concerns over the effects of such policies have led, as examples, to advocacy to break up Amazon, government investigations and private lawsuits against Google, Facebook, and Apple.[5] While we take no position on the merits of specific cases or investigations, such actions illustrate how concerns about competition and innovation have contributed to enhanced antitrust attention to the activities of digital platforms.

This Article describes how regulation could usefully supplement general-purpose antitrust laws to address the competition policy challenges of digital platforms. Antitrust scrutiny and enforcement against digital platforms have been the subject of several prominent studies and government reports around the world, including from the United Kingdom,[6] European Commission,[7] Australian Competition and Consumer Commission (ACCC),[8] French Competition Authority,[9] and the United States.[10] In addition to calling for

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and a global reach. Markets with these combined features are prone to tipping."); JASON FURMAN ET AL., UNLOCKING DIGITAL COMPETITION 4 (2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf [https://perma.cc/XL5N-88LN]; Lina M. Khan, *The Separation of Platforms and Commerce*, 119 COLUM. L. REV. 973, 1035 (2019).

4 FURMAN ET AL., *supra* note 3, at 88; Khan, *supra* note 3, at 1035. High consumer switching costs also contribute to the durability of market power in many markets served by digital platforms. FURMAN ET AL., *supra* note 3, at 35-37; Sean Lyons, *Measuring the Effects of Mobile Number Portability on Service Prices*, 2 J. TELECOMM. MGMT. 357, 357-68 (2010).

5 *See* Khan, *supra* note 3, at 1056, 1061, 1082 (describing examples of dominant providers leveraging their platforms by engaging in anticompetitive cross-financing practices to underprice competitors and privileging owned content over rival content).

6 FURMAN ET AL., *supra* note 3.

7 CRÉMER ET AL., *supra* note 2.

8 AUSTL. COMPETITION & CONSUMER COMM'N, DIGITAL PLATFORMS INQUIRY (2019), https://www.accc.gov.au/system/files/Digital%20platforms%20inquiry%20-%20final%20report.pdf [https://perma.cc/ZK3C-ZU3G].

9 AUTORITÉ DE LA CONCURRENCE, CONTRIBUTION DE L'AUTORITÉ DE LA CONCURRENCE AU DÉBAT SUR LA POLITIQUE DE CONCURRENCE ET LES ENJEUX NUMÉRIQUES (2020), https://www.autoritedelaconcurrence.fr/sites/default/files/2020-02/2020.02.28_contribution_adlc_enjeux_num.pdf [https://perma.cc/NP7N-2WXC].

10 STIGLER CTR. FOR THE STUDY OF THE ECON. AND THE STATE, *supra* note 3; *see also* HAROLD FELD, ROOSEVELT INST., THE CASE FOR THE DIGITAL PLATFORM ACT: MARKET STRUCTURE AND REGULATION OF DIGITAL PLATFORMS (2019), https://www.publicknowledge.org/assets/uploads/documents/Case_for_the_Digital_Platform_Act_Harold_Feld_2019.pdf [https://perma.cc/9P3F-YRLJ].

stronger application within existing enforcement frameworks, these reports also consider new regulatory approaches that go beyond the existing institutional and statutory confines of antitrust enforcement. Federal Trade Commission (FTC) Commissioner Rohit Chopra, among others, has expressly advocated a more regulatory approach to antitrust enforcement in recent writings.[11] The United Kingdom has already begun to increase the regulatory authority of Ofcom over Internet-related businesses,[12] and the ACCC report expressly recommends a greater role for other Australian regulatory agencies in governing digital platforms.[13]

Both authors come to the topic of this Article with experience in regulatory agencies and with practical understanding of the difficulties and potential drawbacks of regulation. We nonetheless find three main reasons why, despite the challenges in getting regulation right, limited regulation might have advantages over traditional antitrust adjudication in the context of large-scale industries with network effects. First, and at the broadest level, the adjudicative model for antitrust enforcement and doctrinal development has been met with well-founded criticism. This does not mean that regulation is the right alternative, but it does provide a good reason to ask whether under some circumstances a different approach might lead to better outcomes. Second, traditional antitrust remedies might not effectively address the competitive challenges of digital platform markets. Neither structural remedies like break-up or divestiture, nor the limited kinds of conduct remedies that antitrust courts and agencies have been willing or able to implement, can effectively reduce barriers to competition without diminishing network benefits for consumers. In contrast, an expert agency can potentially bring the experience and resources required to make more granular, detailed decisions about the costs and benefits of certain types of commercial behavior. Third, because of network effects, conduct that courts ordinarily judge under antitrust law's general rule of reason might have different presumptive effects, and therefore be better governed by a more specific set of standards, in digital platform industries. An expert agency

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11 FED. TRADE COMM'N, FTC-2018-0074, HEARING #1 ON COMPETITION AND CONSUMER PROTECTION IN THE 21ST CENTURY, COMMENT OF FEDERAL TRADE COMMISSIONER ROHIT CHOPRA 4-9 (2018) [hereinafter CHOPRA COMMENT]; *see also* Sandeep Vaheesan, *Resurrecting "A Comprehensive Charter of Economic Liberty": The Latent Power of the Federal Trade Commission*, 19 U. PA. J. BUS. L. 645, 650 (2018) (underscoring Congress's intent in enacting the FTC Act to expand the FTC's power to police practices that "injure consumers, prevent rivals from competing on the merits, and allow large corporations to dominate our political system").

12 U.K. HOME OFFICE & DEP'T FOR DIG. CULTURE, MEDIA & SPORT, ONLINE HARMS WHITE PAPER (2020), https://www.gov.uk/government/consultations/online-harms-white-paper/public-feedback/online-harms-white-paper-initial-consultation-response#executive-summary [https://perma.cc/D4HC-FZQE].

13 AUSTL. COMPETITION & CONSUMER COMM'N, *supra* note 8, at 140-42.

might be particularly suited to determine when "outer-boundary" theories of harm that courts rightly disfavor for general application—theories of harm like predation, refusals-to-deal, or acquisition of nascent competitors—should apply in specific contexts.

Below, we discuss why certain forms of what we call "light handed pro-competitive" (LHPC) regulation could increase levels of competition in markets served by digital platforms while helping to clarify the platforms' obligations with respect to interrelated policy objectives, notably privacy and data security. Key categories of LHPC regulation could include interconnection/interoperability requirements (such as access to application programming interfaces (APIs)), limits on discrimination, both user-side and third-party-side data portability rules, and perhaps additional restrictions on certain business practices subject to rule of reason analysis under general antitrust statutes. These types of regulations would limit the ability of dominant digital platforms to leverage their market power into related markets or insulate their installed base from competition. In so doing, they would preserve incentives for innovation by firms in related markets, increase the competitive impact of existing competitors, and reduce barriers to entry for nascent firms.

The regulation we propose is "light handed" in that it largely avoids the burdens and difficulties of a regime—such as that found in public utility regulation—that regulates access terms and revenues based on firms' costs, which the regulatory agency must in turn track and monitor. Although our proposed regulatory scheme would require a dominant digital platform to provide a baseline level of access (interconnection/interoperability) that the regulator determines is necessary to promote actual and potential competition, we believe that this could avoid most of the information and oversight costs of full-blown cost-based regulation, for reasons we will discuss below.[14] The primary regulation applied to price or non-price access terms would be a nondiscrimination condition, which would require a dominant digital platform to offer the same terms to all users. Such regulation would not, like traditional rate regulation, attempt to tie the level or terms of access to a platform's underlying costs, to regulate the company's terms of service to end users, or to limit the incumbent platform's profits or lines of business. Instead of imposing monopoly controls, LHPC regulation aims to protect and promote competitive access to the marketplace as the means of governing firms' behavior. In other words, its primary goal is to increase the viability and incentives of actual and potential competitors. As we will discuss, the Federal Communication Commission's (FCC) successful use of similar sorts

14 *See infra* Part II.

of requirements on various telecommunications providers provides one model for this type of regulation.[15]

There are several possible sources for digital platform regulation. Congress could enact new legislation that creates an entirely new regulatory agency for digital platforms or could give new statutory authority to an existing agency. Alternatively, the FTC could promulgate competition rules under authority that it arguably already has under the FTC Act of 1914. Several commentators have argued that the FTC could use its existing statutory authority under the FTC Act to issue broad, antitrust rules that apply generally, to all industries.[16] A much more limited, and perhaps less controversial, manner in which the FTC could begin to use this authority would be to pass narrower rules that apply only to specific kinds of conduct and only to digital platform industries. Calls to regulate digital platforms involve several issues that do not centrally fall within the purview of antitrust, notably privacy and control over certain kinds of harmful content.[17] To the extent there could be trade-offs among regulatory goals—for example between a platform's interconnecting with rivals but limiting those rivals' access to user data, or between providing nondiscriminatory access to third-parties but blocking those that spread harmful content—there could be economies of scope to having a single agency address those issues, or at least mandating that agencies coordinate inter-related rulemaking.

Part I of this Article discusses why potential shortcomings of the evolution and application of antitrust doctrine through the courts should lead policy makers to consider supplementing the traditional adjudicative model of U.S. antitrust enforcement in limited circumstances. That Section will then set out some basic principles for the choice of regulatory tools for enforcing competition. Part II discusses the rationale for LHPC regulation in markets served by digital platforms and describes the form these regulations might take in more detail. It also explains why FCC regulation of telecommunications providers provides a useful precedent for this type of regulation. Part II furthermore addresses other areas of conduct to which regulation might govern digital platform competition and addresses in those contexts the comparative strengths and weakness of case-by-case adjudication by generalist courts and an expert agency regulatory process.

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15 Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1349-58 (1998).

16 CHOPRA COMMENT, *supra* note 11, at 4-9; Vaheesan, *supra* note 11, at 650.

17 *See, e.g.*, FELD, *supra* note 10, at 6, 8-9 (introducing a "regulatory toolkit" for Congress to consider when regulating behavior on digital platforms and discussing the specific models and methods that can be employed to moderate content on online platforms).

I. GOING BEYOND ADJUDICATION FOR ANTITRUST ENFORCEMENT

Antitrust statutes are primarily enforced in court, usually through the adjudication of specific cases or settlement against the backdrop of court-made antitrust doctrine. Indeed, despite statutory authority for the FTC to issue competition rules, and despite the technical complexity of many antitrust cases, antitrust enforcement and policy in the United States has evolved primarily through precedent developed by generalist courts, not specialized agencies.[18] To be sure, the Department of Justice and the FTC influence policy through the investigations they pursue and the consent decrees they reach with parties. The FTC itself adjudicates some cases, although it does so largely according to law developed in the federal courts, to which parties can appeal any FTC decision.[19] Academics and other commentators have also affected the evolution of antitrust in the United States, from supporting an economic, notably price-focused framework for U.S. competition policy to sparking a rethinking of that framework in contemporary debates. As the courts have absorbed such learning, antitrust doctrine has evolved over the decades through the push and pull of precedent across the United States judicial circuits, with the Supreme Court periodically stepping in to correct, clarify, or resolve differences among the lower federal courts. Commentators often cite antitrust as a rare example of "federal common law" in the U.S. system.[20]

The adjudicatory model for implementing antitrust enforcement has several key attributes, which in turn have both advantages and disadvantages. We put aside for now the question of *who* is adjudicating—whether it be an expert tribunal or a court of general jurisdiction, for example—and focus on three characteristics of antitrust adjudication itself.

A. *Case-by-Case, Fact-Specific Approach*

Complexity of underlying issues aside, adjudication is well suited to settings in which applicability of the law is contingent on case-specific facts. With the exception of the limited conduct that the antitrust laws prohibit per se, courts review most business activities through a rule of reason, under which some conduct that is illegal in one set of circumstances is allowable in

18 *See* Douglas H. Ginsburg & Joshua D. Wright, *Antitrust Courts: Specialists Versus Generalists*, 36 FORDHAM INT'L L.J. 788, 789-90 (2013) (comparing "generalist courts" in the United States with the "more specialized model[s]" found in Portugal, France, Turkey, the United Kingdom, and India).

19 *See id.* ("[T]he twelve Circuit Courts of Appeals . . . review the decisions of the Federal Trade Commission.").

20 *See, e.g.*, Justin Hurwitz, *Administrative Antitrust*, 21 GEO. MASON L. REV. 1191, 1217 (2014) ("[A]ntitrust is generally accepted as a form of federal common law.").

another.[21] The inquiry into liability goes beyond whether particular conduct in fact occurred (which is the extent of the inquiry into conduct that is illegal per se) and extends into a balancing of the conduct's likely effects on competition.[22] The more that liability is contingent on such case-specific facts, the more difficult it is to determine liability in advance of the conduct's having taken place. Adjudication typically occurs when conduct either is imminent or has already occurred, at which point the relevant facts as to the effects of the conduct are, in principle, more readily measured.[23] Such "ex post" mechanisms of enforcement can reduce the risk of over-enforcement when compared to alternative approaches, like some forms of regulation, that spell out more comprehensively in advance what conduct is illegal.[24] Reducing false positives, however, may or may not be a virtue—that calculation depends on the extent to which particular adjudicative institutions and processes under-enforce by allowing harmful conduct or transactions to slip through the liability screen.

B. *Slow, Usually Predictable Doctrinal Development*

A second attribute of the American adjudicatory process for antitrust is stability. While antitrust doctrine has occasionally swerved abruptly over the past century, the common-law process through which antitrust law has developed usually provides clear notice that a change is coming. As a recent example, the Supreme Court's shift in *Leegin Creative Leather Products, Inc. v. PSKS. Inc.*[25] from per se liability to a rule of reason for resale price maintenance likely caught few observers by surprise.[26]

Antitrust adjudication's stability, like its suitability for fact-dependent situations, is potentially double-edged. Antitrust jurisprudence can be slow to adjust to changes in economic learning or changes in the underlying economy that alter the effects of a particular kind of business conduct. For

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21 CHOPRA COMMENT, *supra* note 11, at 2; Vaheesan, *supra* note 11, at 667.

22 *See* CHOPRA COMMENT, *supra* note 11, at 2 ("The 'rule of reason' applies a broad and open-ended inquiry into the overall competitive effects of particular conduct and asks judges to weigh all of the circumstances of a case to decide whether the practice at issue violates the antitrust laws."); Vaheesan, *supra* note 11, at 667 ("For a plaintiff to establish a prima facie case under the rule of reason, it must typically show actual or likely anticompetitive effects from the conduct being challenged.").

23 *See* Jeffrey J. Rachlinski, *Rulemaking Versus Adjudication: A Psychological Perspective*, 32 FLA. ST. U. L. REV. 529, 544 (2005) ("[A]djudicative bodies act retrospectively and will thus always have injured victims or aggrieved parties before them.").

24 *See* Ashutosh Bhagwat, *Modes of Regulatory Enforcement and the Problem of Administrative Discretion*, 50 HASTINGS L.J. 1275, 1325 (1999) (discussing problems of over-enforcement in connection with the ex ante enforcement authority of the FDA).

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

26 *See* Shapiro, *supra* note 1, at 81; *infra* text accompanying notes 44–45.

example, nearly thirty years ago the Supreme Court in *Brooke Group v. Brown & Williamson Tobacco Corp.*[27] required that plaintiffs claiming predatory pricing show not only prices below some measure of incremental cost, but also that the defendant could recoup its losses.[28] No plaintiff has prevailed in a predatory pricing case in a U.S. federal court since.[29] That outcome might not be of concern were it the case that the Supreme Court's test accurately captures the incidence of predatory pricing.[30] Economic research demonstrates, however, that predatory conduct *does* occur and *does not* depend on either below-cost pricing or recoupment.[31] Predation is just one area in which court-made doctrine appears out of step with relevant economic facts and knowledge. To be sure, other forces could accelerate the common-law process of doctrinal development. For example, Congress could legislate changes to the scope, presumptions, and other parameters of antitrust law in ways that would immediately alter precedent and bind the courts going forward.[32] In practice, however, such intervention is rare and unlikely, making significant lags in doctrine a reality of antitrust adjudication in the courts.

C. *Market-Driven Case Selection*

In the United States, most adjudicative bodies do not select the cases that come before them. To be sure, courts have jurisdictional limitations that prevent them from hearing certain kinds of cases, and doctrines exist that allow courts to reject weak or poorly conceived complaints. Beyond those mechanisms, however, independent parties decide when and whether to pursue litigation as method of relief. One potential virtue of this separation between decisionmaking and case selection is that the market can drive the focus of judicial attention. Assuming the most widespread and most troublesome anticompetitive conduct will receive the greatest investment of litigation resources, that conduct will in turn receive the most adjudication and doctrinal development.

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27 Brooke Grp. v. Brown & Williamson Tobacco Corp., 509 U.S. 209 (1993).

28 *See* Shapiro, *supra* note 1, at 81.

29 Patrick Bolton et al., *Predatory Pricing: Strategic Theory and Legal Policy*, 88 GEO. L.J. 2239, 2241 (2000).

30 *See, e.g.*, *id.* at 2242-49 (collecting sources describing predatory pricing as "inherently uncertain," and "generally implausib[le]").

31 *See, e.g.*, Aaron S. Edlin, *Stopping Above-Cost Predatory Pricing*, 111 YALE L.J. 941, 943 (2002) (arguing that although below-cost pricing and recoupment "may be sufficient to make out a predatory pricing case . . . they should not be necessary").

32 *See* Hurwitz, *supra* note 20, at 1194-95 ("Congress can set other, non-economically efficient priorities that trump antitrust's normative goal. These policy choices are within the domain of Congress and its agencies.").

Unfortunately, the separation between adjudication and case selection will not necessarily lead to an efficient match between judicial attention and the most pressing antitrust violations. In practice, even conduct that is clearly prohibited can persist when offenders think detection is difficult; one only has to look at the consistently high number of civil and criminal price fixing cases that wind up in court, even though that conduct has clearly been illegal per se for nearly a century.[33] The most widespread anticompetitive conduct might not therefore be the conduct most in need of doctrinal development—it can be just the opposite, as the persistence of cartels demonstrates.[34] Moreover, if the courts develop doctrine that needs revisiting, but that deters the government or private plaintiffs from filing cases,[35] then the market for judicial attention to antitrust conduct will not work well dynamically; once doctrine is settled, there may be no mechanism outside of legislation or regulatory intervention to drive doctrinal change. We return to this issue below.

D. *Generalists versus Industry Experts*

Returning to an issue we put aside earlier, *who* is doing the adjudication can matter for substantive outcomes. In U.S. antitrust law, that adjudication has occurred, at least ultimately, in generalist federal courts. That institutional locus might well make sense given the wide variety of conduct, industries, and factual circumstances that antitrust cases present. However, as specific industries come to pose particular challenges for antitrust enforcement, the case for more specialized enforcement decisionmakers becomes stronger. Traditionally, where detailed, industry-specific knowledge is required to make sound competition policy decisions, Congress has assigned authority over those decisions, at least in part, to industry-specific regulatory agencies. Thus, the Securities and Exchange Commission has authority over competitive conduct in key financial sectors.[36] The FCC has parallel authority with the Department of Justice (DOJ) over telecommunications mergers and sole authority to establish terms for competitive entry into various telecommunications markets.[37] State

33 *See* Shapiro, *supra* note 1, at 72 (noting that the Department of Justice "has assessed roughly $10 billion in criminal fines and penalties" in price-fixing charges).

34 U.S. DEP'T OF JUSTICE, *Division Update, Spring 2019* (Mar. 26, 2019), https://www.justice.gov/atr/division-operations/division-update-spring-2019/cartels-beware [https://perma.cc/W257-JMAD] (listing pending cartel investigations, including over ninety pending grand jury investigations).

35 *See supra* Section I.B. (discussing predatory pricing).

36 *See* Credit Suisse Sec. (USA) v. Billing, 551 U.S. 264, 283-84 (2007).

37 *See, e.g.*, 47 U.S.C. §§ 214, 310, 521(6), 532, 536 (2018) (outlining statutory requirements for the extension of telecommunication lines, license ownership, and cable channels for commercial use to maintain competition in cable communications).

regulators govern entry into hospital markets through Certifications of Public Need.[38] The federal courts have increasingly safeguarded the domain of industry specific regulators over competition issues even when agency decisions might be in tension with antitrust law.[39]

As antitrust enforcement focuses on distinct challenges posed by a particular industry, whether digital platforms, pharmaceuticals, or something else, expert and specialized knowledge becomes even more essential to making good enforcement decisions. Under current law and enforcement frameworks, there is no systematic way to bring such specialization into the ultimate adjudication of antitrust cases in industries not already covered by specific, competition-related, regulatory statutes. To be sure, the FTC and DOJ have divisions that specialize in various industrial sectors in which they have considerable expertise. Those divisions bring that expertise into their review of conduct and transactions, but neither the FTC nor DOJ has ultimate adjudicative authority over the cases they choose to litigate. The DOJ must go to federal court to seek enforcement. The FTC can opt for an administrative enforcement mechanism with the Commission itself sitting in appellate review of initial adjudication by an administrative law judge. The Commission's decision is, however, subject to review by federal appellate courts, which have not hesitated to reverse the agency's decisions.[40] The result is that, even when agencies have brought specific industry expertise into antitrust enforcement, doctrinal application and resolution still proceeds through the common-law process of adjudication by generalist judges.

E. *Tradeoffs Inherent in the Adjudicatory Approach to Antitrust*

As the foregoing discussion suggests, the ex post case-by-case approach, slow doctrinal evolution, and case selection mechanism of antitrust adjudication have potential advantages and disadvantages. The tradeoffs become particularly clear through the interaction of those three characteristics.

38 *E.g.*, N.Y. PUB. HEALTH LAW § 2801-A(3) (McKinney 2019) ("The public health and health planning council shall not approve a certificate of incorporation, articles of organization, or application for establishment unless it is satisfied . . . as to (a) the public need for the existence of the institution at the time and place and under the circumstances proposed.").

39 *See* Howard A. Shelanski, *The Case for Rebalancing Antitrust and Regulation*, 109 MICH. L. REV. 683, 693-718 (2011) (discussing cases in which the U.S. Supreme Court has demonstrated that "[it] will interpret the substantive scope of antitrust liability narrowly in regulated settings even where Congress has expressly preserved the operation of antitrust law").

40 *See, e.g.*, Cal. Dental Ass'n v. FTC, 526 U.S. 756, 759 (1999) (finding the FTC's level of analysis evaluating anticompetitive advertising restrictions to be insufficient); LabMD, Inc. v. FTC, 894 F.3d 1221, 1224 (11th Cir. 2018) (vacating an FTC cease and desist order applied to a data-security program based on what the court considered an improper interpretation of Section 5(a) of the FTCA); Rambus Inc. v. FTC, 522 F.3d 456, 459 (D.C. Cir. 2008) (reversing an FTC finding of monopolization).

Adjudication may mitigate the rate of false positives or false negatives obtained through enforcement, as proceeding case-by-case is less likely to bring about those results than are general rules that impose limits on business conduct in advance, regardless of specific circumstances. Broad ex ante specifications could prohibit beneficial or harmless conduct, and narrow ex ante specifications could fail to prevent anticompetitive practices. As a decisionmaking process moves from strict ex ante prescription to pure case-by-case adjudication, particular facts and circumstances increasingly predominate over generic categorization of conduct.[41] In principle, the movement along that spectrum enables the decisionmaker to avoid under-inclusiveness or over-inclusiveness of categorical rules.[42]

The extent to which an adjudicator actually succeeds in reducing enforcement errors in either direction depends on the doctrine and precedent through which it evaluates the case-specific evidence. Doctrine and precedent will determine how a court allocates burdens, prioritizes facts, and weighs presumptions in evaluating the legality of conduct. If precedent provides mistaken guidance on those factors, case-specific adjudication might do no better a job than ex ante prohibitions in avoiding errors or bias toward either under or over-enforcement. For this reason, the evolutionary pace of doctrinal development through antitrust adjudication is very important. Where that evolution has been toward convergence with state-of-the-art analysis and evidence as to the effects of conduct, doctrinal stability is a virtue. Reasonable people disagree over the Supreme Court's movement from per se illegality to rule of reason treatment of vertical price restraints, as Justice Breyer's dissent in *Leegin* demonstrates.[43] The decision in that case nonetheless drew on a body of legal and economic analysis that, over decades, had continually narrowed the application of per se rules to vertical conduct and led logically (even if some might argue incorrectly) to the majority's conclusion.[44] Many commentators might therefore say *Leegin* is a good example of where the evolution of doctrine through adjudication worked well: stakeholders had notice and the doctrine moved in an internally consistent direction. While it is debatable whether the *per se* rule against restraints on

41 *See* Rachlinski, *supra* note 23, at 544 ("Adjudicative bodies act retrospectively and will thus always have injured victims or aggrieved parties before them.").

42 *See* Daniel T. Deacon, *Common Carrier Essentialism and the Emerging Common Law of Internet Regulation*, 67 ADMIN. L. REV. 133, 136 (2015) (noting that reliance on ex post enforcement may lead to under-enforcement).

43 *See* Leegin Creative Leather Prods., Inc. v. PSKS, Inc., 551 U.S. 877, 916 (2007) (Breyer, J., dissenting) ("How easily can courts identify instances in which the benefits are likely to outweigh potential harms? My own answer is, *not very easily*."); *see also* Vaheesan, *supra* note 11, at 669 n.144 (citing the same language from Justice Breyer's dissent in *Leegin*).

44 *See Leegin*, 551 U.S. at 900-02 (explaining how rulings in recent cases justify limiting the reach of a per se rule and promoting instead a rule of reason evaluation).

intra-brand competition has in recent years led to over-enforcement, there is a good case that it had done so in the past,[45] so that the doctrine plausibly moved in an error-reducing direction.

However, where doctrine gets on the wrong track, the application of precedent will perpetuate rather than reduce enforcement errors. In the case of predation, for example, there is a good argument that, in the light of current economic knowledge, the *Brooke Group* decision has led to under-enforcement.[46] The potential case-by-case advantages of adjudication are lost where judicial precedent renders important facts and circumstances irrelevant. In such cases, the relatively slow process of doctrinal correction through common law evolution is harmful to sound antitrust enforcement.

The discussion above shows that the error-reducing potential of a case-by-case, adjudicatory approach to antitrust enforcement depends heavily on the actual doctrine courts apply and on the process by which that doctrine evolves. Similarly, whether case selection in an adjudicatory approach in fact directs judicial attention to the conduct that most warrants oversight depends on existing doctrine and precedent. It may well be that the conduct doing the most harm is also the conduct for which the courts impose the highest burdens of proof on plaintiffs. The deterrent effect of those burdens likely leads to fewer cases than the conduct's actual effects warrant.[47] Similarly, doctrine that too readily imposes liability could have the opposite effect: lower barriers for plaintiffs would lead to too many cases and more devotion of judicial resources than the conduct deserves.[48] Like error-reduction, the distribution of antitrust cases brought for adjudication depends heavily on the state of the doctrine and on the ability of the common law process to correct course where necessary.

The potential disadvantages of antitrust adjudication by generalist courts raise the question of whether a different approach might be preferable, specifically with regard to digital platforms. Digital platforms present relatively novel challenges. Considering the tenuous fit between some

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45 *See* United States v. Topco Assocs., 405 U.S. 596, 607-12 (1972) (holding that an association engaged in a per se violation of the Sherman Act even in the absence of price fixing and even though the district court determined as a factual matter that the activity at issue had fostered competition).

46 *See* Bolton et al., *supra* note 29, at 2242-49 ("To summarize, present judicial skepticism about predatory pricing assumes that predation is extremely rare, but sound empirical and experimental studies as well as modern economic theory, do not justify this assumption.").

47 *See, e.g.*, James Langenfeld & James Morsch, *Refining the* Matsushita *Standard and the Role Economics Can Play*, 38 LOY. U. CHI. L.J. 507, 512 (2007) (noting that heightening the burden at the pleading stage in horizontal antitrust conspiracy cases "would likely discourage potential meritorious cases").

48 *See* Mark Anderson & Max Huffman, Iqbal*,* Twombly*, and the Expected Cost of False Positive Error*, 20 CORNELL J.L. & PUB. POL'Y 1, 4 (2010) (discussing the social costs of false positives where relaxed standards permit plaintiffs to proceed with non-meritorious claims).

potential theories of harm and current antitrust doctrine, the complexity of the underlying technical issues in antitrust cases, and the interrelatedness of those issues and adjacent policy goals, a more informed, comprehensive approach coordinated by an expert regulatory agency might foster more advantages than does the exclusive resort to traditional antitrust adjudication. However, before we turn to the form such regulation might take, we briefly identify some general principles for such regulation.

F. *A Regulatory Alternative*

Whether or not regulators take action against an alleged monopolist should depend on two things: first, whether the monopoly power meets criteria of economic harm, durability, and remediability; and second, whether available regulatory mechanisms are in fact likely to remedy the monopoly's harms without creating equally harmful side effects for consumers. Without satisfying those conditions, there may not be any case for regulation at all. We must take as a baseline that regulation will always carry administrative costs and create inefficient distortions. If that is the case, then even in some highly imperfect competitive conditions, allowing market forces to drive entry and innovation over time could produce higher net benefits than regulation would. However, when monopoly harms are not remediable ex post and where monopoly power is durable, the cost-benefit calculation shifts in the direction of regulatory intervention. The case for intervention then depends not on the nature of the harm (irreparable, long-term) but on the efficacy of available regulatory tools. With respect to this criterion, not all regulatory mechanisms are equal. Indeed, as we will discuss below, available approaches differ in many ways. However, three criteria provide useful comparative dimensions when considering the use of regulation to enforce competition: (1) whether the regulation fills a gap in antitrust—that is, when regulation does something antitrust law cannot, or as a practical matter does not, doctrinally or institutionally accomplish; (2) effectiveness and administrability; and (3) consistency with the pro-competitive principles of antitrust policy. With those principles in mind, we turn next to a discussion of LHPC and its potential application to digital platforms.

II. LIGHT HANDED PRO-COMPETITIVE (LHPC) REGULATION

A. *Introduction*

Traditional cost-based regulation of public utilities is widely thought to reduce firms' incentives to lower costs and, perhaps even more importantly, to reduce both the opportunity and incentive for firms to innovate.[49] We agree that analogs to cost-based regulation would not be well suited to address the competition problems in high tech digital industries, both because of the need for technological innovation and because competition is neither entirely absent nor static in these industries. However, leaving competition management entirely to adjudicative remedies might fail to address competitive concerns in digital industries, to the detriment of consumers, competitors, and the platforms themselves.

In particular, we argue that specific regulation of digital platforms could create more definite and reliable pathways for increasing competition in the markets served by these firms. As we explain below, these types of regulations would limit the extent to which dominant digital platforms are able to control competition in vertically related or complementary markets, preserve incentives for innovation in related markets, increase the competitive impact of existing competitors, and reduce barriers to entry. We will refer to this type of regulation as "light handed pro-competitive" (LHPC) regulation. As we noted in the introduction and will discuss in more detail, the regulation we propose attempts neither to base access terms on a firm's costs nor to restrain a firm's allowable returns. It therefore does not rely upon the elaborate mechanisms of public utility regulation, whether those mechanisms be directly rate-of-return based or be more incentive-based, like a price-cap regime. Instead of replacing competition with monopoly controls, LHPC regulation aims to govern firms' behavior and market power by protecting and promoting competition. Its primary goals are to provide competitive incentives and to increase the viability of actual and potential competitors. To achieve these objectives, the regulatory scheme could require a dominant digital platform to provide a baseline level of access (interconnection and interoperability), which the regulator determines is necessary to promote entry by actual and potential competitors. The primary regulation applied to access terms would take the form of prohibiting a dominant platform from discriminating among users in access prices (if any) or other terms of access.

A number of commentators have advocated expanding competition enforcement through rulemaking. For example, Tim Wu advocates more regulation that he describes as "using industry-specific statutes, rulemakings, or other tools of the regulatory state to achieve the traditional competition

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49 *See, e.g.*, Tim Wu, *Antitrust Via Rulemaking: Competition Catalysts*, 16 COLO. TECH. L.J. 33, 38-40 (2017) (noting criticism of the public utilities approach to regulation and collecting sources); *see also* Kearney & Merrill, *supra* note 15, at 1397-401 ("Nevertheless, if we confine ourselves to considering elite opinion about economic regulation of common carriers and public utilities, there can be no doubt that the perceptions of regulatory failure are in the ascendancy, while perceptions of market failure are in decline.").

goals associated with the antitrust laws."[50] Rohit Chopra contends that "[r]ulemaking would serve to advance clarity and certainty about what types of conduct constitute—or do not constitute—an 'unfair method of competition.'"[51] While the kind of regulation we suggest might fit within the frameworks of what other commentators have suggested, we propose something much more limited. We do not advocate the use of the entire toolkit of traditional utility regulation, nor do we suggest rulemaking for broader, general-purpose antitrust enforcement outside of particular contexts where agency expertise is most likely to have advantages over traditional adjudication. We focus on why regulation in the particular context of digital platforms has comparative advantages over adjudication. We focus on access rules, similar to those that regulators have used to promote competition in a variety of different industries.[52] As we will discuss, the FCC has successfully used these types of regulations in various sectors of the telecommunications industry to deal with the same general sorts of competition issues that arise in digital markets.[53]

The kinds of regulation that one might consider for application to digital platforms include (1) interconnection and interoperability requirements and common standards, (2) limits on discrimination, (3) data portability requirements, (4) line-of-business restrictions, and (5) additional restrictions on certain business practices currently subject to rule of reason analysis under general antitrust statutes. We discuss each of these categories in more detail below. However, one issue that applies to all of the categories is worth discussing at the outset: whether the regulations should apply industry-wide—namely, to all digital platforms—or only to *dominant* platforms. We think that in most cases it will only be necessary to apply these regulations to firms that the regulator determines are dominant. This means that a key part of the regulatory regime will be creating and applying standards to determine whether a firm is in fact a "dominant" digital provider. Note also that, in many cases, the obligations imposed on dominant digital providers will take the form of requiring the dominant provider to conform to various common standards, in order to reduce switching costs to users or to enable non-dominant firms to interconnect or interoperate with dominant providers. In this case, although the standards will not be mandatory for non-dominant providers, those providers will nonetheless likely conform to the standards to take advantage of the protections offered by the regulation.

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50 *Id.* at 34.

51 CHOPRA COMMENT, *supra* note 11, at 9.

52 *See* Kearney & Merrill, *supra* note 15, at 1326, 1349-58, 1364 (discussing the regulation of the railroad, trucking, telecommunication, gas and electricity industries).

53 *See infra* subsection II.B.2. (discussing limitations on discrimination designed to address competition in the telecommunications industry).

B. *Potential Types of Regulation*

1. Interconnection/Interoperability Requirements and Common Standards

Interconnection and interoperability requirements would establish obligations for dominant digital platforms to provide certain kinds of access to actual and potential rivals. These third parties consist of firms competing in the digital platform's primary line-of-business as well as a broader ecosystem of firms that produce complementary products or rely on the dominant platform's services as inputs into their own businesses. Providing such access could allow competitors to share in the network effects of the dominant provider, reduce both the incumbent's installed base advantage and consumers' switching costs, and help protect firms from exclusionary conduct through which a dominant platform might extend its market power. Requiring dominant platforms to follow certain open standards could make it easier for other firms to interoperate and interconnect with dominant firms as well as reduce switching costs.

Precisely what form these types of regulation should take will differ from industry to industry and require specific knowledge of underlying economic and technological facts. It is easy to say that competitors or complementary product developers should have platform access sufficient to overcome true barriers to entry related to scale, network effects, and installed base, but that does not mean they should necessarily have access to all technological capabilities of the incumbent platform. While complete access to dominant firms might superficially appear to increase the intensity of competition, it dampens the incentives for competitors and the regulated platform to invest and innovate in ways that could provide the most value to consumers.[54] In determining the scope of interconnection or interoperability, for example through access to application programming interfaces (APIs) on the platform, a regulatory authority will need to consider complex tradeoffs. After making such determinations, authorities might well decide that they should mandate no such access. On the other hand, if lack of interconnection is preserving incumbent market power and harming competition, some intervention could improve competitive outcomes and consumer welfare.

If intervention is the chosen solution, we must then address the question of who should make hard calls about the specific scope of interconnection and interoperability requirements. For reasons discussed above, adjudicating those questions before generalist courts has advantages and disadvantages. Regulation by expert agencies, comparatively, may be appropriate when

54 *See* CRÉMER ET AL., *supra* note 2, at 59 (describing the potential for firms that are required to coordinate to then collude, thereby limiting innovation).

intervention requires a coherent set of detailed rules involving technically complex issues. This is especially true when rules must change over time in response to evolving technical knowledge and changing circumstances.[55] The regulatory approach is worth pursuing when the alternative to carefully thought out rules provides either no solution or a piecemeal, under-considered remedy.

For three reasons, we believe that once regulators determine baseline access requirements that incumbents must meet, effectively implementing those requirements will not entail the significant burdens or information asymmetries of rules that require regulators to assess the dominant firm's costs and align interconnection terms with those costs. First, regulators can blunt a dominant firm's ability to leverage its market power to enter or extract rents from related lines of business by requiring that the firm not discriminate in providing platform access, even if regulation does not directly control the terms of such access.

Second, in many cases it seems likely to us that the marginal cost of providing interconnection would be at or near zero.[56] In these cases, a regulator could require interconnection without establishing any elaborate regulatory cost-tracking or cost-monitoring system. The key terms of access are likely to involve technical issues that have nothing to do with the platform's costs or profits. To be sure, access to certain platforms does often have a price. Apple and Android require most apps to share revenues as part of the terms for access to their user bases through their respective app stores.[57] However, in other contexts, the relevant access terms involve technical aspects of interoperability with a platform. For example, when third parties "interconnect" with a digital platform, they are essentially trying to have their machines communicate with the platform's machines.[58] Through that

55 *See* FELD, *supra* note 10, at 23, 172, 188-90, 194 ("Congress has generally created a new agency when new technology creates a new industry whose complexity requires specialization. Examples include the Federal Power Commission (now the Federal Energy Regulatory Commission) and the Federal Radio Commission (now the Federal Communications Commission).").

56 *See* Khan, *supra* note 3, at 1079 (noting that "information—once produced—can be disseminated online to large groups at negligible costs").

57 Mark Bergen, *Google is Offering App Developers the Same Revenue-Sharing Terms Apple Just Announced—With One Big Advantage*, VOX (June 8, 2016, 5:19 PM), https://www.vox.com/2016/6/8/11889298/google-apple-subscription-app-revenue-share [https://perma.cc/859L-YHER] (describing Apple and Google's moves towards an 85/15 revenue-sharing model); *see also* FURMAN ET AL., *supra* note 3, at 46 (noting that Apple took a thirty percent commission "from app developers' revenues").

58 *See* Tom Wheeler, *Did Technology Kill the Truth?*, BROOKINGS (Nov. 14, 2017), https://www.brookings.edu/research/did-technology-kill-the-truth/ [https://perma.cc/Z2EH-DJHN] (explaining that "[a]n API—an Application Programming Interface—is what allows two software programs to interact with each other," and giving as an example how Uber accesses Google

communication, third parties can provide their services to the platform's installed base of users; and in return, the third parties can receive data and information about those users that helps them to improve their products and grow their user base.[59] A platform sets the limits and policies for such communications through the application programing interfaces, or "APIs", that it provides to third parties.[60] Far more important than price—which we think in the context of digital platforms can usually be set at zero with little distortion of incentives—will be what kinds of services, data, and network functionality third-party application developers can send into, and take out of, the platform through the APIs. These latter questions will be the key focus of regulators if they establish an interoperability and interconnection regime for digital platforms.

Third, even if it turns out that there is some need to establish non-zero interconnection fees, the regulator could require parties that do not reach agreement about what these fees should be to accept binding third-party arbitration to determine a fair, reasonable, and nondiscriminatory access price as an alternative to imposing full-blown cost-based regulation. Third-party arbitration could also be an alternative to courts for settling disputes regarding access terms other than price—as is the case for addressing disputes over digital music licensing under the Digital Millennium Copyright Act,[61] for example. Arbitration is similarly an alternative to oversight of terms by the regulator—as Congress required of the FCC on access and interconnection under the Telecommunications Act of 1996.[62] Arbitration could provide a more efficient and light-handed alternative. The regulator could require parties to accept binding, third-party arbitration if parties sought to challenge the sufficiency of regulated access terms, dispute aspects of access not covered by the regulation, or disagreed over whether one side or the other was living up to the conditions of access. Such arbitration provisions were a condition of the FCC and DOJ's approval of Comcast's acquisition of NBC Universal.[63] More recently, AT&T voluntarily committed to follow a

Maps' open API and harnesses Google's mapping algorithms and location information to implement its own location-based algorithms).

59 Khan, *supra* note 3, at 1001.

60 *See id.* (describing how Facebook offers access to its APIs to other application developers, allowing those apps to access data and users from Facebook's network); Wheeler, *supra* note 58 (describing how Google allows applications like Uber to access Google Maps' API).

61 *See* 17 U.S.C. § 114(f)(1) (2018) (outlining the role of Copyright Royalty Judges in resolving rate disputes in music royalties and licensing).

62 *See* 47 U.S.C. §§ 251–252 (2018) (providing that the FCC shall establish regulations to promote interconnection and the development of competitive markets, as well as ensure that telecommunications providers are fulfilling their obligations under the statute).

63 Applications of Comcast Corp., Gen. Elec. Co. & NBC Universal, Inc., for Consent to Assign Licenses and Transfer Control of Licenses, 26 FCC Rcd. 4238, 4259 (2011) (Memorandum

similar scheme in its merger with Time Warner, and the district court cited this as one of the factors that supported its decision to allow the merger over the DOJ's objections.[64]

While a challenging enterprise, we think setting baseline standards for access and interconnection is much more manageable than traditional monopoly-control regulation. The relevant question, though, is not whether setting access terms can be difficult. Once policy makers determine that healthy competition depends on such access, the relevant question is whether an expert regulator can better determine when, and on what terms, to grant such access than can a generalist adjudicator. As already discussed, the latter institutional approach on one hand has the theoretical possibility of adjusting remedies to specific circumstances but on the other hand lacks detailed industry knowledge and faces doctrinal constraints against imposing access remedies in the first place.[65] If the outcome from traditional adjudication will be under-enforcement or less well-informed remedies, then regulation could have considerable advantages despite its challenges.

2. Limits on Discrimination

If regulation imposes access to, or interoperability with, an incumbent platform, a regulation prohibiting discrimination would require the platform to offer such access or interconnection on the same terms to all relevant third parties, including partially or wholly owned affiliates. While a regulation that limits discrimination requires a firm to charge the same price to all users, it need not attempt to set the absolute level of the price that the firm charges. Therefore, regulation prohibiting discrimination can be much less intrusive and more light-handed than full-blown cost-based regulation.

A nondiscrimination requirement can help achieve two desirable outcomes. First, a nondiscrimination rule can prevent a dominant platform from leveraging its market power into industries that rely on the platform,

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Opinion and Order) (describing the "baseball-style" arbitration that Comcast adopted); Press Release, Office of Pub. Affairs, U.S. Dep't of Justice, Justice Department Allows Comcast-NBCU Joint Venture to Proceed with Conditions (Jan. 18, 2011), https://www.justice.gov/opa/pr/justice-department-allows-comcast-nbcu-joint-venture-proceed-conditions [https://perma.cc/YKW2-FNUW] ("The FCC order also . . . includes an arbitration mechanism for resolving disputes. . . . The FCC order also allows Comcast's traditional competitors . . . to invoke arbitration at the FCC to resolve program access and retransmission consent disputes.").

64 Specifically, defendants offered empirical evidence to show that the Comcast/NBCU transaction had not resulted in significant price increases of the sort predicted by the government's theory of harm. The district court concluded that this evidence could "be afforded probative weight in predicting the potential pricing effects of the [AT&T/Time Warner] merger" because AT&T had voluntarily committed to abide by a similar third-party binding arbitration provision to that imposed on Comcast/NBCU as a merger condition. United States v. AT&T Inc., 310 F. Supp. 3d 161, 217 (D.D.C. 2018).

65 *See supra* Sections I.A., I.E.

because a nondiscrimination rule requires the dominant platform to offer the same terms of access to independent third-party businesses that it offers to itself or to affiliated businesses. Therefore, a dominant platform would be unable to advantage itself or its own affiliates,[66] protecting the ability of dependent third parties to compete. Furthermore, and perhaps even more importantly, firms that initially complement the platform might ultimately create new products that substitute for the incumbent.[67] Preventing the incumbent platform from leveraging market power in its primary line of business into related product lines preserves those related sectors as a source of potential entrants and innovators.

Second, a nondiscrimination rule can prevent a dominant platform from extracting excessive rents[68] from dependent industries, which preserves incentives for innovation for firms in those dependent industries. The reasoning here is slightly more subtle. The ability of a dominant platform to extract all rents from a dependent industry requires the platform to discriminate among its different potential users based not upon what services the users require, but upon how valuable the services are to the user.[69] Requiring a platform to make the same service available to all users on the same terms will restrict the ability of a dominant platform to extract rents from developers with particularly profitable applications, either by charging higher prices to those users or extracting more onerous terms.[70] What this

66 *See, e.g.*, Applications of Comcast Corp., Gen. Elec. Co. & NBC Universal, Inc., for Consent to Assign Licenses and Transfer Control of Licenses, 26 FCC Rcd. 4238, 4240-41 (2011) (describing nondiscrimination provisions, including that Comcast-NBCU take measures to ensure comparable access to its affiliated content and video programming and limit its ability to make agreements that would restrict the online distribution of such materials).

67 *See, e.g.*, AUSTL. COMPETITION & CONSUMER COMM'N, *supra* note 8, at 134 ("The search engine, DuckDuckGo has made public complaints that each time it updates its Chrome browser extension, all of its users are presented with a dialogue box asking them if they'd like to revert their search settings back to Google Search and disable the entire extension."); *see also* Khan, *supra* note 3, at 981 ("[D]iscrimination, moreover, is especially harmful in digital platform markets, given the important role platforms play as innovation catalysts.").

68 Joseph T. Mahoney & J. Rahendran Pandian, *The Resource-Based View Within the Conversation of Strategic Management*, 13 STRATEGIC MGMT. J. 363, 364 (citations omitted) ("Strategy can be viewed as a 'continuing search for rent,' where rent is defined as return in excess of a resource owner's opportunity costs. . . . The generation of above-normal rates of return (i.e. rents) is the focus of analysis for competitive advantage.").

69 *See id.*, (citations omitted) ("The existence and maintenance of rents depend upon a lack of competition in either acquiring or developing complementary resources. Rents derived from services of durable resources that are relatively important to customers and are simultaneously superior, imperfectly imitable, and imperfectly substitutable, will not be appropriated if they are nontradeable or traded in imperfect factor-markets."); *see also* FURMAN ET AL., *supra* note 3, at 111 ("At the extreme, personalised pricing could lead to each customer being offered an individual price based on what the business infers they are willing to pay.").

70 *See* FURMAN ET AL., *supra* note 3, at 111 (noting that a U.S. Council of Economic Advisers report found that personalized pricing practices may be remedied by antidiscrimination laws); *see*

"price" might be in a non-price environment will depend on the particular context, but the concept would remain applicable. Since high value users of platform access will include innovators that discover unusually good ways to use the services of the dominant platform, such a rule will automatically provide some protection to innovators with particularly good ideas. While such protection is only partial, it is also light-handed compared to directly regulating the terms of access.

The FCC's nondiscrimination rules for the video programming and distribution industries provide an example of successful regulation to prevent a dominant firm from leveraging its market power into adjacent markets.[71] The video programming and distribution industry consists of upstream video programmers that produce TV channels and downstream pay-TV providers that distribute this programming to subscribers.[72] The FCC's so-called program access regulations require vertically integrated programmers to make their programming available to pay-TV providers at nondiscriminatory rates, but place no restriction on the overall level of rates.[73] Similarly, so-called program carriage regulations require vertically integrated pay-TV providers to offer nondiscriminatory carriage terms to all video programmers, but place no restriction on carriage terms other than requiring that they be nondiscriminatory.[74] Both regimes are widely thought to have prevented large firms with dominant positions in one of the two levels of the industry from leveraging their market power into another level. For example, in the 1970s cable operators were the only pay-TV providers and produced a number of the most important cable networks. Program access rules enabled the entry of Direct Broadcast Satellite providers and telephone companies into the pay-

also Khan, *supra* note 3, at 979-80 (noting that requirements of "equal access on equal terms" "respond . . . to problems of discrimination").

71 For an overview and history of these rules, see Jennifer Scullion, *Program Access and Program Carriage: Nearly 25 Years In, Where Do the Fraternal Twins of Video Programming Distribution Stand?* (pt. 1), ENT. & SPORTS L., Winter 2016, at 2 [*hereinafter* Scullion, *Program Access and Program Carriage (Part 1)*], and Jennifer Scullion, *Program Access and Program Carriage: Nearly 25 Years In, Where Do the Fraternal Twins of Video Programming Stand?* (pt. 2), ENT. & SPORTS L., Summer 2016, at 3 [*hereinafter* Scullion, *Program Access and Program Carriage (Part 2)*].

72 *See* Scullion, *Program Access and Program Carriage (Part 1)*, *supra* note 71, at 2-3 (noting the complexity of this system and the breadth of authority given to the FCC to oversee the effects of vertical integration).

73 *Id.* at 4-5 (describing the prohibition against discrimination under the Communications Act of 1934, 47 U.S.C. § 548, and explaining the methods the FCC uses to determine whether discrimination has occurred).

74 *See* Scullion, *Program Access and Program Carriage (Part 2)*, *supra* note 71, at 3-4 (describing the program carriage regime, including the FCC's implementing regulations).

TV industry by requiring cable operators to make their programming available to rival providers at reasonable rates.[75]

3. Data Portability

Data portability regulation might require a dominant digital platform to allow its users to take data with them if they switch providers or allow competitive application providers to obtain some of the incumbent's customer data. The question of when data portability should be required, and of what data and information should be portable, are beyond the scope of this Article. Those questions aside, however, under the right circumstances data portability could have competitive benefits. In addition to helping reduce consumers' switching costs, data portability could enable increased reach and traction by third-party providers, thus increasing the commercial viability of existing firms who provide competing and complementary services while reducing barriers to entry for new firms.[76]

Regulations designed to increase competition by reducing switching costs have had notable success in the telecommunications industry. In particular, in 2003 the FCC introduced regulations that allowed mobile telephone subscribers to take their telephone number with them when they switched mobile telephone providers, thereby significantly reducing the costs of switching providers. This is widely thought to have increased levels of competition in mobile telephony.[77]

When it comes to large digital platforms, however, it bears noting that data portability raises difficult questions. For example, if consumers can port their personal profiles to a rival platform, should those profiles contain consumers' contact lists? Or, should each of the people on a contact list have a right separately to withhold their information from portability? The questions of who owns what data and of who can consent to having certain data ported and shared are very difficult ones. While mere invocation of "privacy" should not insulate a platform from providing some data portability, the question of what degree of data portability is reasonable and consistent

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75 *See* Review of the Commission's Program Access Rules and Examination of Programming Tying Arrangements, 25 FCC Rcd. 746, 749 (2010) (First Report and Order) ("[Program access] rules are a success. While competitors to incumbent cable operators served less than five percent of video subscribers nationwide when the program access provision of the 1992 Cable Act was passed . . . that percentage has increased to over 30 percent today. Competitors to incumbent cable operators widely credit the program access rules for this increase in competition.").

76 *See, e.g.*, FURMAN ET AL., *supra* note 3, at 64-66 (describing the "pro-competitive, pro-entry" nature and consumer benefits of personal data mobility).

77 *See generally* Minjung Park, *The Economic Impact of Wireless Number Portability*, 59 J. INDUS. ECON. 714, 715 (2011) (arguing that wireless number portability reduced wireless prices in the United States); Lyons, *supra* note 4 (presenting similar evidence for a number of other countries).

with privacy policies is a challenging one. Competition enforcement should not leave platforms stuck between conflicting policy objectives. One benefit of a regulatory approach to data portability is, therefore, that it could provide guidelines for platforms about how to comply with different, and sometimes inconsistent, legal or public-policy objectives.

4. Line-of-Business Restrictions

As discussed above, there are good reasons to consider regulations that limit the extent to which a dominant digital provider can leverage its market power into the related ecosystem of industries that rely on its services or produce complements. The first reason is to preserve the benefits of increased competition in these markets. The second reason is to preserve and nurture a source of potential entrants and innovators that might eventually challenge the dominant provider in its primary industry.

An alternative, or supplemental, approach might be to establish line-of-business restrictions for the dominant provider that prohibit the dominant firm from expanding into certain related lines of business. One problem with such regulation is that it may eliminate opportunities to create efficiencies by combining lines of business in a single firm. In addition to operational efficiencies, innovation can require coordination across both lines of business that occurs most effectively within a single firm.[78] Additional problems will arise if the line between the primary product and related products is somewhat blurred. The line between the monopoly service and complements is not always crisp; the monopolist might innovate in ways that add capabilities to its core product or service, some of which might begin to cross the line into forbidden territory. Not only is policing that line burdensome, but policing it too strictly would limit development of the monopoly service in ways that could harm consumers.[79] When it is hard to determine if an innovative new product or service is part of the dominant firm's primary line of business (that it is allowed to produce), or is a related product (that it is prohibited from producing), line-of-business restrictions can limit the ability of the regulated firm to create value for its customers.[80] At a minimum, determining precisely which sorts of product improvements and extensions

78 *See, e.g.*, FURMAN ET AL., *supra* note 3, at 40 ("[M]ost acquisitions made by digital companies are likely to be benign or beneficial to consumers due to efficiencies, and the potential for innovative products and services to be brought more quickly to market.").

79 *See* Khan, *supra* note 3, at 1085 (noting that "it is possible that limiting a network monopolist's ability to compete on its own network would sacrifice certain cost savings, resulting in higher prices").

80 *See id.* at 1085-88 (noting additional costs posed by separation such as limiting platform innovation and discouraging "entrepreneurial investment").

qualify as permissible for the dominant firm to offer would entail ongoing administrative costs.

To make the problem of policing the line between allowable and prohibited lines of business more complicated, a regulated platform might not itself enter into a line of business but might have agreements or joint projects with a firm that is in that business. If such arrangements could lead to joint investments or tailoring of technology that make the monopolist's product and the complementary product work better together, disallowing all such cooperation between the monopolist and firms in the prohibited line of business might reduce opportunities to provide benefits to consumers.[81] Regulators therefore must choose between a hardline rule with some inevitable costs from foregone product improvement or incurring the increased costs of an administrative process for granting exceptions. Such administrative processes can become unwieldy: from 1984 to 1996, a single United States district court ruled on hundreds of petitions over implementation of the AT&T consent decree's provisions.[82]

Another problem with line-of-business restrictions is that they are in tension with core principles of competition policy. As a general matter, competition policy favors entry into new markets. Such entry can benefit consumers even if the entrant is large or dominant in a different market.[83] Competition enforcers typically address any unwanted spillovers of market power not through entry

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81 *See id.* at 1085-86 ("Prohibiting dominant platforms from competing in markets that the platform operates would reduce platform investment in certain platform-adjacent markets. Insofar as directly competing with complementors can generate for a dominant platform additional profits, uniquely valuable business intelligence, and greater leverage over complementors, closing off this avenue of business could reduce platform profits, diminishing the platform's incentive to invest.").

82 Joseph D. Kearney, *From the Fall of the Bell System to the Telecommunications Act: Regulation of Telecommunications Under Judge Greene*, 50 HASTINGS L.J. 1395, 1399 n.11 (1999).

83 As noted by the Report of the Digital Competition Expert Panel,

> Competition policy promotes the economic benefits that competition between different businesses can bring for consumers, businesses and markets. This means ensuring that prices stay low, goods and services are high quality, and consumers have a good range of choices and innovation thrives. Competition also drives productivity, compelling firms to use their resources efficiently, allocating market share and resources to the most productive firms, incentivising firms to invest and innovate over time, and enabling productive new entrants to emerge and grow.
>
> . . . .
>
> Competition policy does not act against organic growth by a successful company that takes a larger share of the market because, all else equal, this is positive, reflecting greater efficiencies that benefit consumers. Holding a dominant position is therefore not illegal, but certain actions which create or abuse dominance can be.

FURMAN ET AL., *supra* note 3, at 85.

prohibitions but through enforcement against tying, bundling, predatory pricing, and other mechanisms of anticompetitive conduct.[84]

We think it a fair generalization that contemporary competition policy rightfully prefers entry, even with the risk of spillover effects, over entry prohibitions that reduce competition altogether. For this reason, if regulators use line-of-business restrictions at all, they should do so only where the competitive benefits from the monopolist's entry would be low, the risk that such entry will harm competition is high, and the likely efficiency gains from coordination between the monopoly and complementary products are small compared to the expected costs of anticompetitive discrimination. We think that these criteria leave, at best, very limited room to apply line-of-business restrictions to digital platforms without risking significant additional problems of the sort described above. In the dynamic technological environment of digital platforms, where the nature of products and services is constantly changing, restrictions on what sorts of goods and services a dominant digital provider can produce would be hard to administer and would likely interfere with the pace and direction of innovation that would benefit consumers.[85]

5. Additional Restrictions on Business Practices Currently Subject to Rule of Reason Analysis under Antitrust Statutes

This last category of restrictions involves other forms of conduct that antitrust law recognizes as double-edged: they could increase or maintain monopoly power, but also create efficiencies that benefit consumers. Antitrust law applies rule of reason analysis to such behaviors by attempting to weigh the potentially negative effects of the behavior against the positive effects, then prohibiting the behavior only if the net effect is likely to be negative.[86] Of course, any quantitative measure of the net effect of a practice is uncertain, and therefore standards of proof and evidentiary burdens play a large role in determining the actual outcomes of cases.

The general point we wish to make in this Section is that, where digital platform markets are prone to tip to durable monopoly, the presumptions and burdens that courts ordinarily apply under antitrust law's general rule of reason might fail to prevent anticompetitive harms or to provide useful

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84 *See id.* (noting that cartel behavior and certain anticompetitive vertical agreements may be illegal).

85 For a more positive assessment of line-of-business restrictions, see Khan, *supra* note 3, at 1065-90, where Lina Khan claims "[a]pplying a separations regime . . . will involve unavoidable uncertainties. But this uncertainty is not a compelling argument for inaction."

86 *See* CHOPRA COMMENT, *supra* note 11, at 2 (criticizing the rule of reason standard); Vaheesan, *supra* note 11, at 667 (contrasting standard-oriented analysis used for the rule of reason with the rule-oriented analysis used for presumptive illegality).

industry guidance. Such settings could be better governed by a more specific and definitive set of standards implemented through an agency better able to understand and account for relevant industry details. To the extent such regulation could lead to fewer errors of either over- or under-enforcement against digital platforms, it could be welfare enhancing compared to traditional antitrust adjudication. For example, regulation might prohibit certain conduct under specified conditions where it will be predictably harmful, establish stronger presumptions about the harms from particular conduct when undertaken by digital platforms, or implement stricter requirements for the review of specific business activities.

One area of activity where regulation might have advantages over adjudication is acquisition of nascent competitors. Several commentators have advocated stricter prohibitions against such deals on grounds that large firms might, through acquisitions, buy up the very start-ups that today look so insignificant as to escape merger review but would later prove to be serious competitors.[87] It is beyond the scope of this article to address the emerging work on acquisitions of start-ups. We note, however, that the question of nascent acquisitions poses a serious challenge for antitrust enforcement. Generalist courts seem poorly suited to deciding, case-by-case, whether a particular firm that might today have little market presence or infrastructure might later emerge as a competitor to its buyer, especially if the nascent firm is currently more of a complement than competitor to the acquiring firm. The technical, economic, and industry factors that make competitive-effect determinations difficult in any merger case are particularly important in a technologically dynamic industry where one of the merging firms is new and evolving. Moreover, the alternative of waiting to see the results of a particular merger so that courts have a record on which to review the transaction creates very substantial incentive and evidentiary problems. A successful merger is one in which the parties integrate in such a way that creates commercial growth,[88] and therefore it will be very difficult to distinguish commercial success due to the merger from the counterfactual of success that would have resulted had the parties remained separate. Additionally, the prospect of post-

87 *See, e.g.*, C. Scott Hemphill, *Disruptive Incumbents: Platform Competition in an Age of Machine Learning*, 119 COLUM. L. REV. 1973, 1974 (2019) (arguing that the acquisition of "nascent competitors" is monopolization in violation of the Sherman Act); Colleen Cunningham, Florian Ederer & Song Ma, Killer Acquisitions 1-7 (Apr. 19, 2020) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3241707 [https://perma.cc/8HPN-BK26] (finding that "killer acquisitions"—the acquisition of a nascent competitor—are both "strategic and intentional").

88 *See* William J. Kolasky & Andrew R. Dick, *The Merger Guidelines and the Integration of Efficiencies into Antitrust Review of Horizontal Mergers*, 71 ANTITRUST L.J. 207, 243 (2003) ("If the integrated firm produces as efficiently as the separate firms, then integration makes both producers and consumers better off.").

consummation review of a merger, with retroactive remedies or prohibitions, could deter the very investment in integration that helps ensure a successful merger.[89] These concerns lead us to suggest that the process and criteria through which antitrust law applies to acquisitions of nascent competitors by large industry players might better lend itself to guidance and administration through a regulatory entity as opposed to the generalist adjudicatory process. While we do not think banning such acquisitions is a good idea, rules that specify which transactions the agency will review, what criteria and presumptions it will apply in a particular industry, and what kind of evidence it will find relevant could provide more certainty for businesses and better protections for consumers.

Regulation might address two other types of anticompetitive behavior that cause concerns about digital platforms. The first type is the use of exclusive dealing provisions or loyalty rebates that require or incentivize users to adhere to the dominant platform. It is widely recognized that any practice that requires or encourages users to single-home instead of multi-home will reduce competition.[90] The second type of behavior is the use of most favored nation clauses (MFN) that make it more difficult for potential competitors to challenge the dominant provider. For example, in the case of platforms that help businesses reach customers (such as a travel site that lists hotel accommodations), a MFN by a dominant platform that prohibits businesses from offering better terms on other platforms can limit the ability of potential competitors to challenge the incumbent.[91]

Some commentators have argued that general antitrust law should place tighter restrictions on the aforementioned conduct in all markets.[92] Even if

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89 *See* CRÉMER ET AL., *supra* note 2, at 10 ("While it is important to ensure that potentially anticompetitive transactions are duly scrutinised by competition authorities, one also has to consider the market need for legal certainty, as well as the need to minimise the additional administrative burden and transaction costs which an extension of jurisdiction would trigger.").

90 *See, e.g.*, Giulio Federico, Fiona Scott Morton & Carl Shapiro, *Antitrust and Innovation: Welcoming and Protecting Disruption*, *in* 20 INNOVATION POLICY AND THE ECONOMY 125, 158 (Josh Lerner & Scott Stern eds., 2020) ("In platform markets, conduct aimed at hindering multihoming on one side of the market may be a particularly effective exclusionary strategy. Multihoming is a strategy that encourages innovation competition because it raises contestability: consumers operating on more than one platform can more easily shift share to a more innovative product."); FURMAN ET AL., *supra* note 3, at 37 ("Switching and multi-homing by users of platforms can be the antidote to strong network effects.").

91 *See* Jonathan B. Baker & Fiona Scott Morton, *Antitrust Enforcement Against Platform MFNs*, 127 YALE L.J. 2176, 2180 (2018) (noting that the result of this restraint on potential competitors could be lower prices). For an additional discussion of the competition effects of platform MFNs, see BAKER, *supra* note 1, at 136-37, and Ariel Ezrachi, *The Competitive Effects of Parity Clauses on Online Commerce*, 11 EUR. COMPETITION L.J. 488, 488-90 (2015).

92 *See, e.g.*, Baker & Scott Morton, *supra* note 91, at 2195-201 (describing restrictions on MFNs in the United States); Federico, Scott Morton & Shapiro, *supra* note 90, at 158-59 (describing restrictions on conduct designed to induce users to adhere to a dominant platform).

this were the case, change in general purpose antitrust statutes has historically been a slow process. A more narrowly targeted regulatory process would apply greater scrutiny to such conduct in particular industry contexts where it is most likely to have harmful effects. With a sufficient administrative record to survive judicial review under the Administrative Procedure Act, this regulatory process could potentially proceed more quickly than changing general purpose antitrust laws. Moreover, specific regulation might have the beneficial consequence of providing a good laboratory for understanding the costs and benefits of broader statutory changes to antitrust law. If a regulatory authority were to introduce regulations placing greater restrictions on certain practices, and if this new regime created sensible coherent rules that received broad approval, the regulatory regime could influence both legislative efforts and the evolution of common-law standards that determine the general antitrust treatment of these practices.

C. *Applying General Antitrust Statutes with a "Sliding Scale" vs. Creating Stricter Industry Specific Standards*

One might argue that, even if we accept the conclusions that market power is more durable in digital platform industries and that there is a need for stricter limits on certain types of business practices in these industries, there is still no need for industry specific rules and standards. Rather, one could argue that because rule of reason analysis under general antitrust statutes should always consider industry-specific factors when evaluating the competitive effects of business practices, there is no need for industry-specific standards.

Giulio Federico, Fiona Scott Morton, and Carl Shapiro refer to this as applying a "sliding scale" to the evaluation of business practices and suggest that this could be at least part of the solution to problems raised by the potential durability of market power in digital platform industries.

> Because the nascent competitor's success can be highly uncertain, for its exclusion to have a large effect on expected consumer welfare, the value of the increased competition in the event of its success must be large. This is most likely to be the case when the incumbent has substantial and durable market power. . . . This observation suggests the use of a sliding scale to assess the impact of challenged business practices on competition: the greater and more durable the incumbent's market power is, the lower the chance of success by the entrant required for that entrant to warrant protection from exclusionary conduct.[93]

[93] Federico, Scott Morton & Shapiro, *supra* note 90, at 159.

We agree that courts both can and should take relevant industry-specific differences into account when applying general purpose antitrust statutes. We also agree that part of antitrust enforcement in digital industries should be to encourage courts more fully to take into account specific industry characteristics when applying general antitrust statutes. However, questions of under what conditions, if any, stricter enforcement is warranted, as well as what remedies are appropriate and effective, might be better answered with more comprehensive study and review than a court can take in the context of a particular adjudication. The slow evolution of the antitrust common law could leave cases poorly decided in the absence of a more comprehensive, industry-specific process. In the end, stricter enforcement in itself is not the objective. We therefore conclude that the regulatory process for developing industry-specific approaches to certain types of business practices remains an appropriate solution to consider in some cases, and that digital platforms are such a case.

CONCLUSION

Digital platforms pose a particular challenge for antitrust enforcement. Those challenges arise technically and economically from the potential for such platforms to rise to dominance, and for that dominance to remain durable through the operation of network effects and the dependence of competitors and complementary product providers on access to users on the incumbent platform. Moreover, particular conduct by the platform might affect different kinds of users (for example, advertisers versus end users) in different ways, rendering the assessment of net competitive effects more complicated than in other settings. The challenges for antitrust arise doctrinally from the fact that the theories of harm that might address the special features of platform markets, notably obligations to deal with third parties, are at the outer boundary of antitrust law and only available in the most limited of circumstances that might often not exist in platform markets.

For these reasons, traditional antitrust adjudication is unlikely to remedy the problems of platform markets, or to do so in a blunt way that does not apply technical expertise to ensure that remedies are effective and beneficial. In this Article, we identify forms of regulation we think could, in the specific context of dominant digital platforms, improve on the adjudicative model of antitrust enforcement while avoiding the most significant costs and burdens of traditional public utility regulation. Through limited and nondiscriminatory access and interconnection, digital platforms could continue to innovate, compete, and provide network benefits to their users while at the same time ensuring that actual and potential competitors can enter, gain traction, and expand their appeal to consumers.