Michael Kades

Director, Markets and Competition Policy

Washington Center for Equitable Growth

“Proposals to Strengthen the Antitrust Laws and Restore Competition Online”

Subcommittee on Antitrust, Commercial, and Administrative Law

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Thank you Chairman Cicilline and Ranking Member Sensenbrenner and full committee Chairman Nadler and full committee Ranking Member Jordan for the honor of testifying before this Subcommittee on competition and digital markets.

I am the Director of Markets and Competition Policy at the Washington Center for Equitable Growth. We seek to advance evidence-backed ideas and policies that promote strong, stable, and broad-based economic growth. The exploitation of monopoly power across the U.S. economy threatens innovation, stifles growth, and exacerbates inequality.

Digital marketplaces play an increasingly important role in the economic life of every American. The novel coronavirus pandemic has only increased their significance. The Judiciary Committee should be commended for conducting a bipartisan investigation into the state of competition in online markets and issuing its report.

I encourage the Committee not to stop with the report. The challenges we face are not limited to one or two companies. The filing of one or two cases will not solve our problems. The committee has an important role to play in promoting competition in digital markets. There are three issues, I urge you to consider as you move forward.

**Legislative Reforms**

First, we need legislation, not just enforcement actions. This may sound obvious, but legal requirements should efficiently distinguish procompetitive conduct from anticompetitive conduct. Over the past 40 years, however, the federal courts, showing an almost neurotic fear of overenforcement, have increased burdens on plaintiffs in antitrust cases and narrowed the scope of antitrust law.

One example underscores this point. Arguably, the most significant monopolization case in U.S. history was the government’s successful break-up of the American Telegraph and Telephone Company in the 1980s. Under current case law, it is questionable that the government could pursue its claim under today’s standards. This development should shock every member of Congress. But it is of particular concern because the central issue in AT&T was its refusal to connect its long-distance competitor MCI to local phone exchanges—in other words, freezing out competitors—one of the major concerns raised in the course of the Committee’s investigation. My written testimony includes a letter I signed with 11 other economists and lawyers. (see Appendix A). All of them have served in the
government. Many of them have defended companies in antitrust investigations. And all of them agree that:

the antitrust laws, as interpreted and enforced today, are inadequate to confront and deter growing market power in the U.S. economy and unnecessarily limit the ability of antitrust enforcers to address anticompetitive conduct in the digital markets that the Committee is investigating.

That letter I signed provides a number of suggested reforms to restore the vitality of the antitrust laws, which

- Nullify existing precedent that limits antitrust actions,
- Clarify that the antitrust laws protect potential competition,
- Establish legal rules that, in appropriate cases, require defendants to prove their conduct does not harm competition, and
- Increase penalties and enforcement resources

The courts have made it abundantly clear that they believe the antitrust laws have little role to play in promoting competition because the market can fix itself. And, therefore, do no harm is the prevailing approach. Unless Congress takes a different view by passing legislation, dominant firms will have little concern about the antitrust laws limiting their conduct.

**Remedies that address entry barriers: Interoperability**

None of this is to suggest that the government should shy away from prosecuting antitrust violations against digital platforms. To the contrary, the antitrust enforcement agencies have a duty to attack monopoly power where they find it and to advocate for courts to update and modify their doctrines to conform to modern economic theory.

This leads me to my second point. Remediying antitrust violations in digital markets will be challenging. As this committee has heard consistently, whether it be a social network such as Facebook, an online marketplace such as Amazon, an App Store, or Google’s search product and online advertising eco-system, network effects are a fact of life. The more people using a digital platform, the more valuable it is. In turn, the markets tend to tip toward a single firm.
These dynamics make anticompetitive conduct more likely to be successful and it will often target small, nascent, or potential competitors. This makes it harder to challenge conduct and to develop remedies that will restore competition. Moreover, once an antitrust violation has occurred—once a company has obtained or maintained a dominant position through exclusionary conduct—restoring competition and preventing future violations requires a remedy that diminishes those entry barriers. As result, simply banning conduct, financially penalizing a company, or even breaking up a company may not be sufficient.

Interoperability, which broadly defined means requiring connections between platforms can be an effective tool to diminish entry barriers. (See Appendix B). For a social network, interoperability is likely a necessary, but not necessarily a sufficient, condition for an effective remedy to an antitrust violation. Users will not switch to a new social network until their friends and families have switched.

Interoperability causes network effects to occur at the market level – where they are available to nascent and potential competitors – instead of the firm level where they only advantage the incumbent. Interoperability allows someone who is not a member of the dominant social network to continue to communicate with friends or families on that platform. Just like a person with Verizon can text a person with T-Mobile, interoperability would allow a person on one social network to share posts and pictures) with a friend on another social network. This remedy could be ordered in addition to other relief such as a divestiture, and indeed could be complementary to it, or stand on its own.

Without interoperability, it would be difficult to undo the damage done by excluding competition, and the dominant firm has the same incentives to find new way to prevent competition.

**Regulations that Promote Competition**

Third, the Committee should focus broadly on the goals of promoting competition and not narrowly on specific tools. Strong antitrust enforcement is an important tool, but it is not the only tool. Laws and regulations can also promote competition. Reports from the U. K.’s Competition and Markets Authority, the Stigler Center, the European Union, and the Shorenstein Center all conclude that the solutions are not a choice between antitrust enforcement and regulation but rather both. Regulations, broadly understood, can establish marketplace rules that promote competition and ensure that competition occurs on dimensions that consumers value, such as quality, rather than deceiving or steering consumers into
making poor choices. Regulations can also limit the harms that fall outside of traditional competition concerns such as labor, the environment, and speech issues.

I do not mean old-fashioned, utility-style regulation but regulations that level the playing field, promote entry, and increase competition. The Carterfone rule created competition in the sale of phones, fax machines, and modems. The Hatch-Waxman Act created vibrant price competition in pharmaceutical markets that saves consumers tens of billions of dollars every year.

Focused regulation can often reach important issues, such as privacy and protecting consumers’ data, more efficiently and quickly than litigation-based antitrust enforcement. As the committee considers how to promote and protect competition in digital markets, it is good to remember that the greatest successes in competition policy have typically come when antitrust enforcement and regulation complement each other as they did in eliminating AT&T’s phone service monopoly. That approach is likely to apply with equal force to today’s challenges in digital markets.

Protecting competition in digital markets requires laws that efficiently distinguish pro and anticompetitive conduct, remedies that address the underlying network dynamics, and a combination of antitrust enforcement and regulation so that markets the deliver the results that benefit us all.

Thank You, and I look forward to answering your questions.
Appendix A

Joint response to the house judiciary committee on the state of antitrust law and implications for protecting competition in digital markets
Joint Response to the House Judiciary Committee on the State of Antitrust Law and
Implications for Protecting Competition in Digital Markets

April 30, 2020

Introduction and Summary

We appreciate the opportunity to comment on the state of antitrust law and commend the Committee for its bipartisan investigation into digital markets. This important investigation promises to help us better understand, protect, and promote competition in digital markets.

We are concerned that market power is on the rise in the U.S. economy generally, including in the digital markets that are the Committee’s focus. Growing market power harms consumers and workers, slows innovation, and limits productivity growth. Courts have contributed to increased monopoly power through decisions that have weakened the prohibitions against anticompetitive exclusionary conduct and anticompetitive mergers. The circumscribed state of the law and insufficient resources have resulted in insufficiently aggressive government enforcement. And when enforcers do bring meritorious cases, their success has been hampered by serious deficiencies in the contemporary judicial interpretation of the antitrust statutes.

In short, economic research establishes that market power is now a serious problem, and that current antitrust doctrines are too limited to protect competition adequately, making it needlessly difficult to stop anticompetitive conduct in digital markets.

The antitrust laws, as interpreted and enforced today, are inadequate to confront and deter growing market power in the U.S. economy and unnecessarily limit the ability of antitrust enforcers to address anticompetitive conduct in the digital markets that the Committee is investigating. For the reasons set forth below, we believe than any conclusion to the contrary reflects either an incomplete or incorrect understanding of economics and the economic literature from the last several decades.

On similar occasions in the past, most notably in 1914 and 1950, Congress acted to correct the direction that the courts had taken by strengthening the antitrust laws. It is once again time for Congress to step in. In broad overview, Congress should update the antitrust laws to:

- Correct flawed judicial rules that reflect unsound economic theories or unsupported empirical claims
- Clarify that the antitrust laws protect against competitive harms from the loss of potential and nascent competition, especially harms to innovation
- Incorporate presumptions that better reflect the likelihood that certain practices harm competition
- Recognize that under some circumstances conduct that creates a risk of substantial harm should be unlawful even if the harm cannot be shown to be more likely than not
- Alter substantive legal standards and the allocation of pleading, production, and proof burdens to reduce barriers to demonstrating meritorious cases
Congress also should improve the effectiveness of antitrust enforcement by increasing the resources available to the federal antitrust enforcement agencies and increasing penalties.

Our discussion below identifies the problems and proposals for correcting them. The signatories to this letter strongly believe that antitrust enforcement has become too lax, in large part because of the courts, and that Congress must act to correct this problem. Specific variations on this theme are described below, although not all of the signatories agree on all the variations. We hope the Committee will respond to these concerns with appropriate legislation, and we would be happy to work with the Committee to help develop legislative language.

**Background on Growing Market Power**

Effective antitrust enforcement helps protect and foster competitive markets, and thus helps ensure competitive prices for products and services, spurs innovation, and provides a business environment conducive to entrepreneurial activity. Notwithstanding our well-developed antitrust laws and extensive enforcement institutions, today’s U.S. economy suffers from growing market power, in both product markets and labor markets. The direct victims include consumers and other exploited buyers, and workers, farmers and other exploited suppliers. In addition, growing market power slows the rate of innovation and productivity growth in the economy as a whole.

Overly lenient antitrust rules in the areas of primary concern to the Committee—mergers and monopolization (which usually involves exclusionary conduct)—have likely contributed substantially to our market power problem. Market power is on the rise in a number of major areas.

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1 By signing this statement, a signatory does not necessarily endorse every specific conclusion reached in the statement or stated in a document referenced in the statement.


4 Because the Committee’s request focused on exclusionary conducts and mergers, we do not discuss problems with antitrust enforcement involving collusive conduct, such as horizontal agreements, other than as facilitated by merger.
industries, including, for example, airlines,5 brewing,6 and hospitals,7 where multiple horizontal mergers that were allowed to proceed without antitrust challenge have markedly increased concentration in important markets and facilitated the exercise of market power.8 Exclusionary conduct by dominant companies that stifles competition from actual and potential rivals—including nascent rivals with capabilities for challenging a dominant firm’s market power and firms with competing R&D efforts—impairs what is often the most important economic force creating competitive pressure for dominant firms.9 Although government monopolization cases have never been common in the modern era,10 they have become even less common in recent years, even though market power has been on the rise.11 According to its workload reports, the

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6 E.g., Nathan H. Miller & Matthew C. Weinberg, Understanding the Price Effects of the MillerCoors Joint Venture, 85 ECONOMETRICA 1763 (2017); Nathan H. Miller, Gloria Sheu & Matthew C. Weinberg, Oligopolistic Price Leadership and Mergers: The United States Beer Industry (Working Paper 2019), available at https://ssrn.com/abstract=3239248. Although a large number of craft brewers have entered in recent years, they cannot easily and inexpensively expand output, so the craft brewing sector remains too small to undermine the market power of the large brewers that account for most of the beer sold.


8 The economic literature, including the studies referenced supra notes 5-7 establishes that firms are exercising market power in these and other industries through evidence independent of concentration trends in those industries. Put differently, the evidence that market power is on the rise is neither based exclusively nor primarily on evidence about trends in market concentration. We do not rely on evidence about concentration trends in the economy as a whole, which is less reliable than evidence about trends in concentration in particular markets.


10 By one count, the two federal enforcement agencies collectively brought 20 monopolization or attempt to monopolize cases between 1977 and 2000, or less than one per year. By contrast, between 1961 and 1976 the agencies brought 48 cases, or 3 per year. William E. Kovacic, The Modern Evolution of U.S. Competition Policy Enforcement Norms, 71 ANTITRUST L.J. 377, 449 tbl. 4 (2003).

11 The number of civil non-merger cases brought by the federal enforcement agencies has been declining. One study finds that the annual average fell from 10.8 cases between 1999 and 2008 to 7.5 cases between 2009 and 2018 — and that most of these cases challenge collusive agreements, not exclusionary conduct. Michael Kades, State of Federal Antitrust Enforcement Fig. 10 (Washington Center for Equitable Growth 2019), https://equitablegrowth.org/research-paper/the-state-of-u-s-federal-antitrust-enforcement/?longform=true. Although trends in the number of cases may have multiple interpretations in the abstract, declining case counts in an
Antitrust Division of the U.S. Department of Justice has brought just a single case under Section 2 of the Sherman Act during this century.12

Growing market power is a concern in the digital marketplaces that are the focus of the Committee’s investigation.13 Platforms are often insulated from platform competition to a substantial extent by substantial scale economies in supply and demand (network effects) combined with customer switching costs.14 The financial markets appear to value many large platforms at levels reflecting an expectation that they will earn substantial rents from the exercise of market power for an extended period of time. Moreover, the economic studies indicating that market power has grown over time suggest that it has increased particularly among firms that extensively employ information technology, both in information technology industries themselves and elsewhere in the economy.15

Large online platforms often exist in winner-take-all and winner-take-most markets. In those markets, there are likely to be long periods where a firm has a monopoly or dominant position, which makes anticompetitive conduct more dangerous.16 Exclusionary conduct and mergers involving online platforms, particularly dominant ones, can harm competition among platforms and harm competition among users on platforms. Large online platforms are often prolific acquirers of other firms, including firms that might otherwise have become platform rivals or could facilitate the entry of such rivals.17

Antitrust law and enforcement have failed to respond to growing market power in substantial part because many key antitrust precedents—particularly those precedents governing exclusionary conduct—rely on unsound economic theories or unsupported empirical claims about the competitive effects of certain practices. In part for this reason, the antitrust rules constructed by the courts reflect a systematically skewed error cost balance: they are too

environment of rising market power indicate that enforcement has not stepped up to address the market power problem.

12 Scott Morton, supra note 9 at Fig. 1. Although some exclusionary conduct cases may be brought under Section 1 of the Sherman Act, which bars unreasonable restraints of trade, the vast majority involve agreements between competitors and not exclusionary conduct. Moreover, the number of Justice Department civil Section 1 cases has been falling as well. See Kades, supra note 11.

13 Our reasons for concern about the conduct of digital platforms and their exercise of market power, set forth in this paragraph and the next, do not include their mere size.


15 Baker, supra note 2 at 18-20.

16 See generally Stigler Center, supra note 14.

17 See Stigler Center, supra note 14 at 53 n.110, 66-67.
concerned to avoid both chilling procompetitive conduct and the high costs of litigation, and too
dismissive of the costs of failing to deter harmful conduct. Excessively permissive precedents
and unsound or unsupported economic claims have, in turn, encouraged overly cautious
enforcement policies and overly demanding proof requirements and have discouraged
government enforcers and private plaintiffs from bringing meritorious exclusionary conduct
cases. These developments have likely contributed to an increased incidence and exercise of
market power across the U.S. economy.

Overly lenient antitrust rules have been defended with reference to mistaken and unjustified
assumptions—including erroneous claims that markets self-correct quickly, monopolies best
promote innovation, firms with monopoly power can obtain only a single monopoly profit,
vertical restraints and mergers almost invariably benefit competition even in oligopoly markets,
courts and enforcers are manipulated by complaining competitors, and courts cannot tell whether
exclusionary conduct harms competition or benefits it. Each of those mistaken assumptions leads
courts to underestimate the likelihood antitrust violations and the resulting harm. The evidence
shows, in contrast to these mistaken assumptions, that:

- Without legal intervention, markets often take a long time to correct
  anticompetitive activity
- Monopolies can and often do stifle innovation
- A monopolist can often earn additional profits by extending its monopoly into
  related markets, or by using exclusionary conduct to preserve market power in its
  primary market
- Vertical restraints and mergers, particularly in oligopoly markets, deserve no
  presumption that they improve competition—in many cases they can harm
  competition
- Both the enforcement agencies and the courts understand that competitors may
  have ulterior motives, and they can judge them; the more likely danger is that
  generalist judges with limited antitrust experience or expertise are too willing to
  accept the self-serving testimony of defendants over documents and economic
  reasoning

18 Moreover, the adoption of more lenient antitrust rules has not simplified antitrust litigation.
19 For an example, see Michael Kades, Underestimating the cost of underenforcing U.S. antitrust laws (Washington
Center for Equitable Growth 2019) (discussing history of antitrust litigation challenging reverse-payments
settlements), https://equitablegrowth.org/competitive-edge-underestimating-the-cost-of-underenforcing-u-s-antitrust-
laws/.
20 Jonathan B. Baker, Taking the Error Out of “Error Cost” Analysis: What’s Wrong with Antitrust’s Right, 80
21 Marissa Beck & Fiona M. Scott Morton, Evaluating the Evidence on Vertical Mergers (2020),
https://ssrn.com/abstract=3554073, survey the literature on vertical mergers and explain why the older studies of the
consequences of vertical conduct surveyed in Francine Lafontaine & Margaret Slade, Vertical Integration and Firm
Boundaries: The Evidence, 45 J. ECON. LIT. 629 (2007), do not support a claim that vertical integration should be
presumed to benefit competition.
22 United States v. AT&T, Inc., 310 F. Supp. 3d 166, 204 (dismissing companies’ internal documents) (D.D.C.
2018), aff’d 916 F.3d 1029 (D.C. Cir. 2019); id. at 211 (accepting credibility of defendants’ witnesses); New York v.
In the next two sections, we identify specific problems with antitrust statutes and precedents involving monopolization and mergers that Congress could usefully address. We also point out ways the institutional structure of antitrust enforcement could be improved to enhance enforcement.

**Legal Rules**

The antitrust case law recognizes that anticompetitive exclusion, by a dominant firm or otherwise, is a serious problem when demonstrated. The prohibitions against anticompetitive mergers are also well-established.

The courts nonetheless have thrown up inappropriate hurdles that limit the practical scope of the antitrust laws’ application to anticompetitive exclusionary conduct, including monopolization, and to anticompetitive mergers. As Howard Law Professor Andrew Gavil explains with respect to the monopolization statute, “Section 2 [of the Sherman Act] has been largely circumscribed to the point where major government prosecutions are rare, and few private challenges succeed.”

Over time, the courts have become hospitable to horizontal mergers in all but the most concentrated oligopoly markets, leading government enforcers to do the same. Over the past two decades, the courts have generally decided litigated merger cases in favor of government enforcers, but troubling aspects of the reasoning in four very recent government merger

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23 Baker, supra note 9 at 535-43.


26 This success rate may reflect overly cautious case selection by enforcers too concerned with litigation risk and is unlikely to reflect a change in the judicial attitude toward mergers generally. An unsuccessful Justice Department merger challenge on a unilateral effects theory in 2004 likely discouraged that agency from litigating again under
losses—three of which involve digital markets—call into question whether the courts can be relied upon to evaluate mergers appropriately to protect competition, both generally and in the digital markets of particular concern to the Committee.

We divide the legal hurdles into three categories: those mainly restricting exclusionary conduct cases, those mainly restricting merger cases, and those importantly restricting both. Although this list is not exhaustive (there are other legal hurdles we have not mentioned) we see these errors as particularly important.

**Exclusionary Conduct**

Several legal developments limit meritorious cases challenging exclusionary conduct that harms competition.

- Courts have nearly eliminated challenges to unilateral refusals to deal and predatory pricing claims.
- The courts have created a gap between Sections 1 and 2 of the Sherman Act that insulates anticompetitive single-firm, exclusionary-conduct from condemnation when the excluding firms do not satisfy the high market share threshold that

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28 The Anticompetitive Exclusionary Conduct Prevention Act of 2020, S.3426, 116th Cong. addresses some of these problems. This statement focuses on the adequacy of legal rules and institutions, and not specific legislative proposals for reform.

29 *Trinko*, 540 U.S. 398 at 407-08 (explaining that the Court is “very cautious” in recognizing exceptions to a firm’s unilateral right to refuse to deal with rivals, and terming the holding in *Aspen Skiing* as a “limited exception” that is “at or near the outer boundary” of Section 2 enforcement). See also *Pacific Bell Telephone Co. v. linkLine Communications, Inc.*, 555 U.S. 438, 448-51 (2009); *Novell, Inc. v. Microsoft Corp.*, 731 F.3d 1064, 1072-73 (10th Cir. 2013) (Gorsuch, J.) (indicating that “today a monopolist is much more likely to be held liable for failing to leave its rivals alone than for failing to come to their aid” and defending a “presumption of legality” for unilateral conduct). Under today’s standards, it is at least questionable whether the government would have been successful in breaking-up AT&T’s phone monopoly in the 1980s. Howard Shelanski, *The Case for Rebalancing Antitrust and Regulation*, 109 MICH. L. REV. 683, 684 (2011).

30 *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 223 (1993) (asserting that permitting predatory pricing enforcement based on above cost prices would create “intolerable risks of chilling legitimate price-cutting”); *id.* at 227 (expressing skepticism about the difficulty of establishing below-cost pricing and recoupment); *id.* at 227 (rejecting a finding of likelihood of recoupment on the facts, colored by the “general implausibility” of predatory pricing, without considering the possibility recognized in the economics literature that predators could recoup in multiple markets other than the one where predation occurred). See C. Scott Hemphill & Philip J. Weiser, *Beyond Brooke Group: Bringing Reality to the Law of Predatory Pricing*, 127 YALE L. J. 2048, 2049 (2018) (describing “serious criticism” of both the below-cost pricing requirement and recoupment requirement for predatory pricing).
courts usually employ for establishing monopoly power in a monopolization case or establishing dangerous probability of success for attempted monopolization (including monopoly leveraging).\textsuperscript{31}

- The U.S. Supreme Court has been too willing to presume that monopolies promote innovation, failing to recognize that because monopolies gained or maintained through exclusionary conduct push other innovators out of the market, those monopolies are much more likely to diminish than to increase innovation overall.\textsuperscript{32}

Multiple legal developments have unnecessarily and without adequate economic justification increased the burden on plaintiffs to prove meritorious exclusionary conduct cases.

- Plaintiffs challenging the conduct of transaction platforms face unnecessary demands in proving their cases, and when creating this problem, the Supreme Court exacerbated it by not clearly specifying the limits of the transaction platform category.\textsuperscript{33}
- The Supreme Court has suggested that proof of anticompetitive effects requires the demonstration of a reduction in output, even though a reduction in output may be more difficult to prove than an increase in price, and even though it is not necessary for conduct to harm competition among platforms.\textsuperscript{34}
- Courts have treated exclusionary vertical conduct as presumptively procompetitive, even in settings such as oligopoly markets and markets with dominant firms where it is well-established that vertical restraints can harm competition, with the practical effect of raising the plaintiff’s burden.\textsuperscript{35}


\textsuperscript{32} See Trinko, 540 U.S. 398 at 407 (construing the Sherman Act to “safeguard the incentive to innovate” by firms exercising monopoly power). The Court does not appear to recognize, as discussed supra note 3 and accompanying text, that competition generally spurs innovation and productivity while market power gained through exclusionary conduct inhibits it.

\textsuperscript{33} Ohio v. American Express Co., 138 S.Ct. 2274, 2285 n.7, 2287 (2018) (requiring plaintiffs to prove that a vertical restraint imposed by a transaction platform harms competition in a market encompassing both sides of the platform, and rejecting proof by direct evidence by requiring market definition to evaluate defendant market power). See Michael L. Katz, Ohio v. American Express: Assessing the Threat to Antitrust Enforcement, 3:2 CPI ANTITRUST CHRONICLE (June 2019) (describing adverse consequence threatened by the Court’s vague definition of transaction platform).

\textsuperscript{34} American Express, 138 S.Ct. at 2288. See generally, Michael L. Katz & A. Douglas Melamed, Competition Law as Common Law: American Express and the Evolution of Antitrust (U. Penn. L. Rev, forthcoming) (explaining why output is a poor proxy for economic welfare in platform antitrust cases). The discussion of this point in American Express does not appear to be limited to evaluating the conduct of transaction platforms.

\textsuperscript{35} See Gavil et al., supra note 31, at 913-15. Cf. American Express, 138 S. Ct. at 2297 (Breyer, J., dissenting) (indicating that the majority “seems categorically to exempt vertical restraints from the ordinary “rule of reason” analysis that has applied to them since the Sherman Act’s enactment in 1890”).
• In some cases, courts decline to condemn exclusionary conduct that harms competition on balance if the conduct benefits competition in any way, or plausibly could do so, regardless of the magnitude of the competitive benefit, either on the ground that any justification is sufficient or by applying analytical approaches for evaluating reasonableness in ways that have the same practical effect.

**Mergers**

Various legal developments limit the success of meritorious merger challenges and the willingness of plaintiffs to bring such cases.

• Plaintiffs face a higher practical burden when challenging anticompetitive horizontal mergers because the structural presumption has been eroded by the courts, effectively insulating horizontal mergers from challenge in markets with more than a handful of rivals.

• Courts have, in some cases, been wary of finding anticompetitive effects that are (and perhaps must be) demonstrated primarily or entirely with qualitative evidence, such as a reduction in potential competition or innovation.

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36 See American Express, 138 S. Ct. at 2284 (explaining that under the rule of reason, if defendant successfully demonstrates a procompetitive rationale for a restraint, defendant prevails (without comparing harms and benefits) unless plaintiff can show that the efficiencies can reasonably be achieved through less anticompetitive means); Novell, 731 F.3d at 1072 (defining anticompetitive conduct in a monopolization case by asking “whether, based on the evidence and experience derived from past cases, the conduct at issue before us has little or no value beyond the capacity to protect the monopolist’s market power”); id. at 1075 (explaining that in a monopolization case based on a unilateral refusal to deal with a competitor, “the monopolist’s conduct must be irrational but for its anticompetitive effect”).


38 When courts presume that a horizontal merger harms competition from a significant increase in concentration in a highly concentrated market, they are applying the “structural presumption.”

39 E.g., United States v. Baker Hughes, Inc., 908 F. 2d 981, 984 (D.C. Cir. 1990) (describing concentration as simply “a convenient starting point” for a “totality-of-the-circumstances” analysis); id. at 991-92 (explicitly disclaiming a requirement that defendants make a “clear showing” to rebut the inference of competitive harm).

40 See supra note 25 and accompanying text.

41 E.g., United States v. AT&T Inc., 310 F. Supp. 3d 161, 242-49 (D.D.C. 2018), aff’d 916 F.3d 1029 (D.C. Cir. 2019) (rejecting theory that merger would stifle innovation from virtual cable providers); Federal Trade Commission v. Steris, 133 F. Supp.3d 962, 978 (N.D. Ohio 2015) (requiring government to prove that, absent the merger, the potential competitor “probably would have entered” the market).
• Courts have, in some cases, raised the practical burden on plaintiffs challenging anticompetitive mergers by accepting self-interested testimony of defendants’ executives inconsistent with economic reasoning and documentary evidence.  

• Courts have insulated acquisitions of potential rivals by dominant firms from challenge by limiting such cases to acquisitions of firms that demonstrably plan to enter the market in which the acquiring firm competes within a relatively short period of time.  

• Courts have further insulated acquisitions of potential rivals by dominant firms from challenge by interpreting the Clayton Act not to reach acquisitions when the likelihood of competitive success for the acquired firm is less than 50 percent, regardless of the size of the potential competitive benefit from that success.  

• The market definition rules governing transaction platforms in the wake of a recent Supreme Court decision involving vertical restraints have been interpreted to bar a challenge to a transaction platform’s acquisition of a non-platform rival.

Exclusionary Conduct and Mergers

Other legal developments limit both meritorious exclusionary conduct and merger cases.

• Courts have discouraged meritorious challenges to exclusionary vertical conduct, including vertical mergers, by systematically favoring defendants in vertical restraints litigation.  

• The Supreme Court has suggested that market definition is required, and direct evidence is insufficient for proving market power, in exclusionary vertical restraints cases.

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42 See, e.g., Brief for 27 Antitrust Scholars as Amici Curiae in Support of Neither Party, United States v. AT&T, 916 F.3d 1029 (D.C. Cir. 2019) (No. 18-5214). See also supra note 22.


48 Supra note 33.
• Courts have expanded their ability to grant defendants immunity from the antitrust laws.\footnote{Credit Suisse Secs. (USA) LLC v. Billing, 551 U.S. 264 (2007) (upholding dismissal of proposed class action because the securities laws implicitly precluded the application of the antitrust laws to the alleged conduct). See Howard Shelanski, Antitrust and Deregulation, 127 YALE L. J. 1922, 1943 (2018) (explaining that Credit Suisse “went beyond prior implied immunity cases to establish a rule that blocks some claims even when they rely on legitimate antitrust principles, are consistent with securities laws, and, correctly read, would not interfere with the applicable regulatory scheme”).}

• Courts increasingly view an industry’s technological progress, with products improving and output increasing over time, as justification for declining to find an antitrust violation,\footnote{See New York v. Deutsche Telekom AG, 2020 WL 635499 at *46 (D.D.C. 2018) (observing that “[s]everal federal courts have recognized that certain markets should be characterized as dynamic by reason of constant innovation and other rapid changes, and that analysis of antitrust effects of specific transactions in such markets warrants more particularized consideration than courts accord under traditional economic analysis, to that extent counseling greater caution in judicial intervention”).} without always asking whether the industry would perform even better were competition not impeded by the challenged conduct.\footnote{Cf. Giulio Federico, Fiona Scott Morton & Carl Shapiro, Antitrust and Innovation: Welcoming and Protecting Disruption, in 20 INNOVATION POLICY AND THE ECONOMY 125, 155-56 (Josh Lerner & Scott Stern, eds. 2020) (discussing the “fallacy” of inferring the absence of exclusionary conduct from the presence of market improvements).}

**Consequences for Competition and Antitrust in Digital Markets**

While these troubling judicial rules and decisions impede effective antitrust enforcement generally, they do so particularly with respect to protecting competition in the digital marketplace. Anticompetitive harm in these markets will often involve eliminating nascent or potential competitors, diminishing quality, or suppressing innovation—all of which are precisely the areas where courts have expressed skepticism. In many cases, current legal doctrine will give dominant platforms the effective license to harm competition by engaging in unilateral refusals to deal, predatory pricing, and exclusionary vertical conduct.

Beyond the specific hurdles that limit refusal-to-deal and predatory pricing claims,\footnote{Supra notes 29 & 32 and accompanying text.} some courts require the plaintiff to prove that the exclusionary conduct has literally no actual or plausible benefit to competition. And the Supreme Court has at least suggested that a plaintiff must demonstrate an output reduction to prove anticompetitive effects and cannot rely exclusively on direct evidence to prove market power. Collectively these rules promise to raise substantially the practical burden faced by plaintiffs seeking to challenge anticompetitive exclusionary conduct by platforms, thereby diminishing deterrence of anticompetitive conduct.\footnote{In addition, platforms may use arbitration provisions in their contracts with users to insulate themselves from meritorious antitrust cases.}

In addition, platforms may acquire nascent rivals with only limited concern for antitrust challenge. These acquisitions eliminate firms that could someday offer products or services in direct competition with those sold by incumbent firms. The acquired firms might, for example,
already have such products under development, have R&D efforts underway to create such products, have the capability to do so, or know the market well through the production of complementary products. But all such acquisitions would be difficult to challenge under current legal doctrine, even where the nascent rival would dramatically disrupt the market and enhance competition substantially if it succeeded.\textsuperscript{54}

**Resources and Institutions**

Our antitrust enforcement institutions, like the courts, need to do more to address the challenge of growing market power in the U.S. economy. One challenge is resources. Between 2008 and 2019, the economy has grown twice as fast as resources provided to the Antitrust Division and the Federal Trade Commission,\textsuperscript{55} even as the market power problem has been on the rise. Other enforcers cannot be expected to pick up the slack because most state enforcement agencies are small, and private enforcement has been constrained by Congress and the courts.\textsuperscript{56} Limited federal agency resources pose a particular problem for merger enforcement because private plaintiffs and the states rarely find it cost effective to challenge anticompetitive mergers.

At times, moreover, the Department of Justice has abetted a judicial retrenchment in antitrust law governing exclusionary conduct by dominant firms through its guidance and advocacy. One example is the Section 2 report, issued by DOJ near the end of the George W. Bush administration.\textsuperscript{57} Among other things, the report suggested that unilateral refusals to deal by dominant firms should be treated as virtually legal per se—thereby encouraging firms to undertake such conduct and courts to permit it, even when competition is harmed.

During the current administration, moreover, the Justice Department has filed amicus briefs advocating a standard for evaluating exclusionary conduct cases that courts have interpreted as insulating that conduct unless plaintiff can prove it has literally no actual or plausible benefit to competition.\textsuperscript{58} And DOJ has, through another amicus brief, come close to denying any role for

\textsuperscript{54} Supra note 44 and accompanying text.

\textsuperscript{55} Kades, supra note 11. Alternatively, in real terms, “[t]he antitrust enforcement agencies had slightly fewer resources in 2018 ($471 million) as they did nearly 20 years earlier, in 2001 ($491 million). Id. at Fig. 11. Congress, at the request of this committee, did increase FTC appropriations by $40 million dollar for fiscal year 2020.

\textsuperscript{56} One constraint on private enforcement is a Supreme Court decision allowing firms to require by contract separate arbitration for each individual plaintiff. *Am. Express Co. v. Italian Colors Rest.* 570 U.S. 228 (2013). They also include decisions raising barriers to class actions. *E.g., Comcast Corp. v. Behrend,* 569 U.S. 27 (2013).


\textsuperscript{58} *E.g.,* Brief for the United States as Amicus Curiae in Support of Neither Party at 15, *Viamedia, Inc. v. Comcast Corp.* 951 F.3d 429, 461-62 (7th Cir. 2020), https://www.justice.gov/atr/case/viamedia-inc-v-comcast-corp-et-al (advocating that the court “follow Novell and hold that satisfying the “no economic sense” test is necessary to bring a Section 2 refusal-to-deal case” because that test “helps ensure that a refusal to deal with a competitor does not violate Section 2 if ‘valid business reasons exist for that refusal.’”).
antitrust enforcement when firms contributing patents to industry standards are found to monopolize markets by evading a commitment to license on reasonable terms.\(^5\)

In both settings, DOJ’s amicus briefs encouraged courts to adopt legal rules that would raise barriers to plaintiffs seeking to prove meritorious cases. To take its position in the case involving maintenance of monopoly by evading a licensing commitment and excluding rivals, the Justice Department undertook an unusual and un compelled intervention in an appeal of an FTC enforcement action after the Federal Trade Commission had prevailed in the district court.

Both the Federal Trade Commission and the Justice Department have at times abetted the judicial retrenchment in antitrust law, particularly as it applies to the conduct of high-tech platforms, by declining to challenge (or in some cases even investigate) nearly all of the large number of platform acquisitions of arguably nascent competitors,\(^6\) and declining to challenge platform conduct that has been the subject of enforcement actions by sophisticated competition agencies abroad. Without regard to the merits of any individual decision, this systematic pattern of enforcement avoidance suggests that until now, the agencies have been too cautious in their enforcement posture toward Internet platforms. We hope that recent agency institutional commitments, such as the FTC’s creation of the Technology Division and the agencies’ public acknowledgement of investigations, presage an increased enforcement effort.

The Role of Congress

To address growing market power, remedy existing competitive problems, and deter new competitive harms, action is required. For the past 40 years, the courts have imposed a policy judgment that is too accommodating to anticompetitive conduct and too dismissive of the harm that conduct can cause. But Congress need not be a silent partner in protecting competition. It can and should revise the antitrust laws so they are no longer inconsistent with modern economic thinking, correct the skewed error cost balance in existing judicial interpretations, and ensure that our antitrust enforcement institutions are properly funded and designed to succeed.

Congress has corrected the trajectory of court decisions in the past. In 1914, amid concerns about the limitations of Sherman Act interpretation and enforcement, Congress strengthened the antitrust laws by enacting the Clayton and Federal Trade Commission Acts. In 1950, through the Cellar-Kefauver Act, Congress closed loopholes in the primary merger control statute, Section 7 of the Clayton Act, and encouraged courts and enforcers to view mergers more skeptically.\(^6\)


\(^{61}\) In addition, in 1936 Congress sought to protect rivals and suppliers from the exclusionary consequences of the exercise of market power by supermarkets and other retail chains by enacting the Robinson-Patman Act. Cf. Daniel
Once again, Congress has an historic opportunity to identify adverse trends in judicial interpretation of the antitrust and correct problems—not just by overriding damaging precedents, but also by reshaping the antitrust laws more broadly to enhance deterrence of anticompetitive conduct.

With respect to the Committee’s particular interest in protecting and fostering competition among online platforms, a number of reforms could be considered. We do not collectively or unanimously endorse any of these, though some of us have done so in other contexts.

Congress could correct various flawed judicial rules, including those noted above, that inappropriately circumscribe antitrust enforcement. Congress also could act affirmatively to enhance deterrence of anticompetitive conduct, either by amending the existing antitrust statutes or enacting new ones. For instance, Congress could codify that, in an antitrust case, direct proof of anticompetitive effects can satisfy the plaintiff’s initial burden, without need for circumstantial proof such as inferences made by defining markets and calculating market shares.

Congress also could clarify that the antitrust laws protect potential and nascent competition. In addition, Congress might consider legislation allowing plaintiffs to prevail in exclusionary conduct or merger cases by showing that the challenged conduct increases the risk of competitive harm, instead of the current legal standards, which require, in general, a showing that competitive harm is more likely than not. Or Congress could specify presumptions of competitive harm that, for example, would apply in evaluating a dominant firm’s exclusionary conduct or acquisitions.

Congress also can enhance the deterrence of anticompetitive exclusion and mergers by increasing enforcement resources, through appropriations, and by increasing penalties. Some of us have proposed still other institutional reforms that Congress might consider, including lowering the threshold for pre-merger notifications to help address insufficient deterrence of anticompetitive acquisitions, particularly by dominant firms acquiring nascent rivals, and creating a specialized trial court for antitrust litigation.

A. Crane, Antitrust Antitextualism, Notre Dame L. Rev. (forthcoming), working paper available at https://ssrn.com/abstract=3561870 (explaining that when the courts have departed from the text and original meaning of the antitrust statutes, they have done so consistently in the direction of reading the antitrust statutes in favor of big business).

62 See supra notes 29-51 and accompanying text.

63 For further discussion, see Andrew I. Gavil & Steven C. Salop, Probability, Presumptions and Evidentiary Burdens in Antitrust Analysis: Revitalizing the Rule of Reason for Exclusionary Conduct (U. Penn. L. Rev., forthcoming), working paper available at https://scholarship.law.georgetown.edu/facpub/2218/.

64 For further discussion of possible presumptions of competitive harm Congress might consider, see Baker, supra note 2; Jonathan B. Baker, Nancy L. Rose, Steven C. Salop & Fiona Scott Morton, Five Principles for Vertical Merger Enforcement Policy, 33 ANTITRUST 12 (2019); Gavil & Salop, supra, note 63.

We are grateful that the Committee has joined the conversation about how to protect competition in today’s U.S. economy, and particularly competition among or on digital platforms. We would be happy to assist the Committee in developing detailed legislative proposals or other initiatives to strengthen the antitrust laws and antitrust enforcement.

Respectfully submitted:

Jonathan B. Baker  
Research Professor of Law  
American University Washington  
College of Law

Joseph Farrell  
Professor of Economics, Emeritus  
University of California, Berkeley

Andrew I. Gavil  
Professor of Law  
Howard University School of Law

Martin S. Gaynor  
E.J. Barone University Professor of  
Economics and Public Policy  
Carnegie Mellon University

Michael Kades  
Director, Markets and  
Competition Policy  
Washington Center for Equitable Growth

Michael L. Katz  
Sarin Chair Emeritus in Strategy and  
Leadership, Haas School of Business  
Professor Emeritus, Dept of Economics  
University of California, Berkeley

Gene Kimmelman  
Senior Advisor  
Public Knowledge

A. Douglas Melamed  
Professor of the Practice of Law  
Stanford Law School

Nancy L. Rose  
Charles P. Kindleberger Professor of  
Applied Economics  
Massachusetts Institute of Technology

Steven C. Salop  
Professor of Economics and Law  
Georgetown University Law Center

Fiona M. Scott Morton  
Theodore Nierenberg Professor of  
Economics  
Yale School of Management

Carl Shapiro  
Professor of the Graduate School  
Transamerica Chair in Business  
Strategy Emeritus  
University of California, Berkeley

66 We are each joining this statement in our individual capacities and have identified our institutional affiliations for identification purposes only.
Appendix B

Interoperability as a competition remedy for digital networks
Interoperability as a competition remedy for digital networks

Michael Kades

Fiona Scott Morton¹

September 2020

¹ Washington Center for Equitable Growth and Yale School of Management, respectively. Corresponding author: mkades@equitablegrowth.org. Fiona Scott Morton consults for a range of corporations including Apple and Amazon on antitrust litigation issues. No support for this paper was provided by any parties other than the authors’ home institutions. We owe thanks for generous and helpful comments to Andrew Gavil, Gene Kimmelman, Mary Giovagnoli, Doug Melamed, Philip Verveer, and Tim Wu. Simon Mutungi provided outstanding research assistance.
Introduction

Today in the United States, antitrust enforcers, academics, policy makers, and the press are focused on large technology companies, such as Google, Facebook, Amazon, and Apple. There is vigorous discussion and speculation over whether these platforms have become monopolies and whether they have violated, or are violating, the antitrust laws. Voices in the media have called for a wide variety of remedies for big tech harms running from break ups to bright-line rules for mergers to eliminating certain kinds of contracts to regulators with various powers. Experience with even the most successful monopoly prosecutions such as AT&T and Microsoft, however, teaches us that developing an effective remedy is difficult; courts, for a variety of reasons, are poorly suited for the task. A break-up requires balancing competing interests, overseeing commercial relationships, and being flexible enough to respond to unforeseen market circumstances. And, in most cases, a court must design a case-specific remedy from the ground up.

For antitrust enforcement to be effective at protecting competition, it is not enough to be successful on liability. Before embarking on what Professor Wu calls battleship cases, we need to maximize the chances that the remedy being sought would be effective. This approach may seem like putting the cart before the horse but think of it as saying we should have a design for the cart before we decide what horses to use. An effective remedy starts with understanding why the anticompetitive conduct occurred and was effective. In digital platform markets we see a common pattern. The monopolist operates in a market with significant network effects, scale and scope economies, and low distribution costs. Therefore, the competition that matters most is often for the market not within the market. Anticompetitive conduct is more likely to succeed. And, the harm to consumers is greater because the market tends to be winner-take-all, or most, (it “tips”).

The tipping caused by network effects need not be permanent. Repeated periods of competition for the market provide significant benefits to consumers and therefore should be a focus of antitrust enforcement. Often by the time the pattern becomes evident, however, the market has tipped, meaning all or most customers and other “sides” of the platform use it

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exclusively, rivals exit or become niche providers, and market power is established. These network effects become high barriers to entry so that it is harder for subsequent entrants to succeed, and therefore fewer of them will try. In these conditions, it may be challenging for an antitrust authority to devise a remedy that will restore the lost competition. A successful remedy will neutralize or significantly reduce the barrier to entry caused by network effects that the incumbent employed to protect its monopoly.

In this article we argue addressing entry barriers created by network effects is critical to remedying a monopolization violation in a social network market (e.g. Facebook). For a social network, interoperability is likely a necessary, but not necessarily a sufficient, condition for an effective remedy. Mandatory interoperability based on robust and effective rules could overcome the network effects that protect the incumbent from entry, maximizing the potential for new entrants to enter at minimal cost, compete in the market, and take share from the incumbent. This remedy could be ordered in addition to other relief such as a divestiture, and indeed could be complementary to it, or stand on its own. In today’s internet-based network markets, interoperability carries no incremental costs such as dedicated wires and machines that were true of the telecom interoperability of past decades. Its main cost is the establishment of an open standard to exchange commonly used functionalities (e.g. text, images) of social networks.

Interoperability could be a remedy in a case where the defendant’s refusal to interconnect with a rival was illegal. But interoperability could be an appropriate remedy in any situation in which the dominant firm has exploited network effects by violating the antitrust laws. For example, if a firm illegally protected its monopoly through serial acquisitions, network effects and susceptibility towards tipping made the serial acquisition strategy effective. Interoperability will make the serial acquisition strategy less effective, should it be tried again. New entry is more likely because the network effect would not be a barrier to entry.

Although interoperability as concept is straightforward, effectively implementing it raises challenges for the adjudicative process. A successful interoperability remedy requires more than the technical capability for users to communicate across platforms; it must balance the needs of multiple actors, promote entry, enhance the user experience (including protecting privacy) and not be manipulated by the defendant. The remedy must include provisions that will deter the defendant from violating the order, require standards that many entrants can meet, and not favor
large incumbents. The process for determining whether the defendant has violated the order must be fast enough to provide relief to a harmed competitor before it fails, and the penalties must be significant enough that the defendant will be worse off for having violated the remedy order.

Creating a technical committee overseen by the antitrust enforcer is the most promising option to solve these implementation challenges. Such a committee could adopt workable standards, revise them on a regular basis, and adapt to changes in technology or deal with technical challenges. It would include representatives of all relevant industry segments, but the antitrust enforcer would control the decision-making to prevent capture by the defendant. Parties could appeal those decisions to the courts, but those appeals would likely be less frequent and burdensome than if a court had to resolve every issue.

Developing an effective interoperability scheme from scratch will be challenging in the context of adjudication. Remedy details will be technical, but important, and time will be short. Moreover, interoperability affects multiple parties, not simply the litigants, which the court will want to consider. The adversarial process is poorly suited to addressing these tasks. The two sides may not adequately represent the full range of interests. And, the defendant platform has incentives to push for standards that protect its monopoly position. The government or plaintiff is likely to be focused on the broadest order, while the defendant has incentives to fight a war of attrition on every detail. The court has other matters to turn to and is not fundamentally constituted to engage in ongoing regulation. Judge Greene’s oversight of the AT&T break-up, although admirable, reveals the challenges facing a court tasked with implementing a significant remedy.

A Federal Trade Commission rulemaking can address these limitations and improve the remedy process. By developing a default order on interoperability, a rulemaking could provide the foundation for a remedy in monopolization cases involving strong network effects. Although each case is different, certain remedy principles are particularly effective for harm caused by a platform that is dominant and protected by strong network effects. An FTC default relief order can be designed around these similarities to take advantage of basic principles and avoid re-inventing the

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4 Because we address rulemaking, for simplicity, we focus on the FTC as the enforcer as a remedy in administrative legislation. As we discuss later, however, a court could rely on the rule as a basis for remedy in a federal action. In that case, the DOJ would have oversight of the technical committee, see infra at page 35.
wheel when these cases arise. The FTC could require the order be the starting point in administrative cases, and courts could adopt it when they believed it facilitated effective remedies.

The adjudicator would modify the default order to suit the situation presented by that particular case. In this way the order provides a useful base that can be adjusted as necessary, saving the court time and effort and improving the likelihood that the relief would be effective. Of course, a federal court could ignore the default order if it thought a different remedy would be more effective at restoring competition. Nevertheless, especially given the complexity of the issues, in appropriate cases, the government’s request to use the default order would likely help focus remedy issues and give the factfinder (whether the Commission or a federal court) comfort that its remedy is based on reasoned principles. As a result, courts and the Commission would be more efficient in deciding remedies in individual cases and more likely to undertake the task. And, the existence of such an order might make a court more willing to order preliminary relief.

The proposed rule would avoid many of the objections raised to FTC competition rulemaking because it is procedural and would apply only after a finding of liability.

Facebook provides an example that lets us explore the challenges of designing an effective remedy. The alleged anticompetitive conduct includes exclusion of social network rivals, acquisition of multiple potential and nascent competitors, and misleading and deceptive privacy policies that raised rivals’ costs. According to critics of Facebook, the purpose of the anticompetitive acquisition strategy was to remove those nascent competitors just as they were about to create competition for the market.

A rule would offer a default structure for remedying a monopolization or attempted monopolization (or, technically, conspiracy to monopolize) violation found by the FTC when the defendant benefits from strong network effects that impede entry, it could also be adopted by a court in litigation brought by the FTC, DOJ, or state enforcers. It could also provide guidance in any case in which interoperability could address network-created entry effects. And, it provides a model that regulators might consider as well.

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5 Conceivably, the Commission could issue guidelines to try to achieve the same goals. Rulemaking, however, has at least two advantages. A rule would apply as the mandatory starting point in administrative litigation. And, a rule would likely receive more weight from courts.

The article assumes that Facebook has been found liable in a monopolization case in order to explore these remedy issues. Suppose the FTC brings an antitrust case against Facebook in the near future. Further suppose that it successfully proves that Facebook engaged in illegal monopolization in violation of Section 5 of the FTC Act. The elements of such a case have been explained elsewhere, but we briefly review the type of facts the government might show here. Facebook acquired a series of rivals that threatened its monopoly in social networks, for example Instagram and WhatsApp. In addition, Facebook engaged in exclusionary conduct by denying interoperability to potential social network competitors that began as applications (complements) on its platform but which Facebook judged carried the risk of becoming substitutes. Lastly, Facebook foreclosed its rivals in digital display advertising, the publishers. It did this by misleading and deceiving both users and publishers about the extent of its data harvesting, which it carried out in a way that raised the costs of its rivals, independent publishers, and drove advertisers away from them to Facebook. Assume the evidence shows that these actions were carried out and formed an active strategy to exclude or acquire rivals. In carrying out these anticompetitive actions, Facebook created and maintained its monopoly power and reduced competition in social networks and in display advertising. The harms from the conduct include higher prices paid by advertisers (and passed through to consumers), fewer publisher users and lower ad prices leading to less publisher content, and lower quality and less innovation in social networks. We assume going forward that

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7 Any violation of the Sherman Act is a violation of Section 5 of the FTC Act, which prohibits unfair methods of competition. In this article, violation of Section 5 means conduct that violates Section Two of the Sherman Act. It does not refer to a “stand alone Section 5 violation,” conduct that escapes condemnation under Section 2 of the Sherman Act but violates Section 5 of the Federal Trade Commission Act. Maureen Ohlhausen. “Section 5 of the FTC Act: principles of navigation.” Journal of Antitrust Enforcement 2.1 at 1-24 (2013).


10 CMA Interim Report id at 104. ‘Twitter axes Vine video service’ BBC (October 27, 2016). See section 3.c. of this paper for further discussion.

11 Dinelli and Scott Morton, supra n. 6 at 20-21.

12 For a comprehensive discussion of harms caused by big tech companies, see Fiona Scott Morton and David C. Dinelli, supra n 6, at 31.
the FTC demonstrates these points to the satisfaction of the court and Facebook is found to have violated Section 5 of the Federal Trade Commission Act.

If the FTC were to establish that Facebook’s acquisitions and exclusion of nascent competitors allowed it to maintain an illegal monopoly, would interoperability be part of an effective remedy? And how could an administrative rule lay the groundwork for that effective remedy? Looking forward, a successful remedy restores that lost competition; it creates the greatest opportunity for new competitors to quickly enter the market and provide alternatives for users. But network effects make entry harder because users are unlikely to leave Facebook until a critical mass of their friends leave. Interoperability eliminates that barrier; the network effects would no longer be firm-specific but apply at the market level. As a result, the past exclusion would be less protective, and competition would more likely be restored through entry. And Facebook would be less likely to try to exclude competitors in the future because the entry barriers will have fallen. For the purposes of discussing the remedy, we use the example of acquisition of nascent competitors. But, interoperability, and, therefore, the benefits of the rulemaking, would also apply whenever a digital platform employed exclusionary conduct more generally to illegally monopolize the market.

The remainder of the article describes the general competitive concerns that arise in digital platform markets with strong network effects, explains how requiring interoperability can remedy illegal monopolization by creating the potential for disruptive competition to arise and thrive, addresses how to make an interoperability requirement effective, discusses the problems or dangers of relying solely on adjudication for developing remedies for complex monopolization violations, and explores how rulemaking could ameliorate this challenges, including a proposed draft rule.
1. **Lowering entry barriers: the challenge for remedies in digital platform markets.**

There is little doubt that society has benefited greatly from digital platforms: “The speed, scale, and scope of the internet, and of the ever-more powerful technologies it has spawned, have been of unprecedented value to human society.”\(^\text{13}\) Digital markets, however, also pose challenges for antitrust enforcement. They combine economies of scale, economies of scope, and network effects.\(^\text{14}\) As a result, they have high barriers to entry and are susceptible to a winner-take-all (or most) dynamic.

Anticompetitive conduct is more likely to be profitable in digital markets. Because of the high entry barriers, a dominant firm faces fewer threats, and the potential for tipping increases the rewards for successful exclusionary conduct. Moreover, there may be long periods of time between competitive threats. The remedy must both “prevent a recurrence of the violation” and “eliminate its consequences.”\(^\text{15}\) Those dynamics have implications for remedy as well. Unless the remedy lowers the entry barriers, the remedy will not restore competition or prevent future anticompetitive conduct. The dominant firm will have the same incentives and ability to create and protect a monopoly. Traditional remedies, including penalties or prohibitions on the specific conduct are unlikely to remedy a violation. Even divestiture, alone, may not be sufficient to fully restore the lost competition.

a. **Network effects and potential for tipping markets and creating entry barriers.**

Although economies of scale, economies of scope, and network effects can lower prices and raise quality, they also make it easier to harm competition and erect entry barriers.\(^\text{16}\) Strong network effects are of particular concern due to the market power they create.\(^\text{17}\) Network effects

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\(^{13}\) Center for the study of the Economy and that State, Committee for the Study of Digital Platforms, “Market Structure and Antitrust Subcommittee” Stigler Center July, 2019),
[https://research.chicagobooth.edu/-/media/research/stigler/pdfs/market-structure-report.pdf](https://research.chicagobooth.edu/-/media/research/stigler/pdfs/market-structure-report.pdf) (hereinafter *Stigler Report*).

\(^{14}\) For a comprehensive discussion on how digital platforms leverage these characteristics to propagate and maintain their monopoly, see *Stigler Report*, id. Although many industries have some of these characteristics, digital marketplaces are unique in the degree of the characteristics and their combination.

\(^{15}\) *National Soc. Of Professional Engineers v. United States*, 435 U.S. 679 (1978); *see also Ford Motor Company v. United States*, 405 U.S. 562, 573 (1972) (“The remedy should "so far as practicable, cure the ill effects of the illegal conduct, and assure the public freedom from its continuance."”); The other two are stop the illegal conduct and end the illegal monopoly. *See United States v. Microsoft*, 263 F.3d 34, 103 (2001).

\(^{16}\) *Stigler Report*, supra n. 13 at 13-17.

\(^{17}\) *United States v. Microsoft Corporation*, 253 F.3d 34 (D.C. Cir. 2001).
occur when the more people use a platform, the more valuable the platform’s services become.\(^\text{18}\) The entry barriers created by network effects make it more difficult for an entrant to come along and attract consumers and advertisers with higher quality and/or lower prices.

Digital platform markets are often susceptible to “tipping” or winner-take-most scenarios.\(^\text{19}\) As one platform gains a slight advantage, that advantage reinforces itself and leads to dominance. Take the example of a social networking site. The more people who use it, the more friends a new user finds on it, which makes it more valuable to her. New users therefore tend to join the largest network. Even if there are multiple competitors initially, this dynamic makes it likely that the market will “tip” so that a large fraction of users is on one platform. It is easy to see that anticompetitive conduct at the right time in such a market can have a very high payoff. Not only is the entrant excluded, but it faces higher entry barriers to returning or growing later.

“Instead of the day-to-day competition in a market (such as Ford, General Motors, Honda, Volkswagen, and Toyota all competing to win each customer) the meaningful competition is for the market (such as more than a decade ago when Google.com dethroned AltaVista.com or Facebook.com overtook Myspace.com).”\(^\text{20}\) When network effects are strong, anticompetitive conduct by a dominant firm is more likely to feature conduct (including acquisitions) that eliminates or limits existing or potential competitors. Although the elimination of potential or nascent threats that might not raise issues in traditional markets, it can be far more concerning in a market with strong network effects. If General Motors acquires a small start-up that designs and manufacturers transmissions, it may be unlikely to affect competition between GM, Toyota, Ford,
and other manufacturers. In contrast, if Myspace had acquired Facebook in 2004 (when Myspace had 5 million users and Facebook had 70k), social networking would look far different today.  

In a digital market with strong network effects, nascent or potential competitors “may be the most important source of competition faced by the incumbent firm.” These companies enter because they have a product that is sufficiently attractive to consumers that they can overcome the incumbent’s network effects and create their own successful network. Such an entrant, whether it succeeds or fails, puts competitive pressure on the incumbent to improve its product. That pressure will be stronger the more likely the entrant is to succeed. Therefore, acquisition of such companies poses a threat to competition.

In this situation, the incumbent’s deployment of the underlying network effects as a barrier to entry creates a challenge for an effective remedy. Ideally, the remedy will allow future innovator or disruptive competitors to succeed or fail on the competitive merits of their technology, business model, and user experience, and not because of the incumbent’s conduct. Is the new technology superior or the new platform more attractive? If so, it will enter because it expects consumers to adopt its platform – rather than being kept out by the entry barrier. Restoring competition requires that nascent or potential competitors not fail simply because they could not break-through the incumbent’s network advantage, and thereby not reach viable scale, despite having an attractive product.

As long as the entry barriers remain high, exclusionary conduct is likely to recur, and it will be a challenge to create potential competition. Because entry barriers and the potential for tipping made the anticompetitive conduct attractive and successful, lowering the entry barriers are critical for a successful remedy. It will make it easier for potential competition to thrive and develop and reduces the value of excluding competition.

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22 Stigler Report, supra n. 13, at 67.
b. Traditional remedies alone may not fully restore the lost competition or prevent future violations

The courts have “large discretion to model their judgments to fit the exigencies of the particular case.” Many traditional remedies, however, are unlikely to achieve those goals. Remedial action will often come too late for the targets of the anticompetitive conduct. Stopping the particular anticompetitive behavior may accomplish little if the monopolist already has successfully eliminated the threat and is protected from all but the most unusual entrants by entry barriers, nor will it necessarily be obvious where the next competitive threat will arise. A monopolist that eliminated potential competitors by serial acquisition today may employ a different strategy in the future. Given the existing market power, excluding or limiting competition by different means will still be an attractive strategy.

Divestitures are an obvious option and may be fairly straightforward and administrable. For example, the court could order divestiture of a social network that operates its own interface with its own network effects. Alternatively, the court could restrict the defendant platform from additional acquisitions or require prior approval of any future acquisition unless the acquired company is not a potential or nascent threat to the platform. The AT&T consent went even further and imposed a line of business restriction that limited the regional Bell companies’ activities. This is another option in the Facebook case. Yet in the AT&T case, the court devoted substantial time and effort enforcing the restriction, and today’s high-tech industries are arguably just as complicated, if not more. More importantly, line of business remedies or restrictions on further acquisitions may not diminish the defendant’s existing market power. A divestiture may reduce the existing market power of the dominant network but not eliminate the market power due to network effects that was achieved through anticompetitive conduct. And, alone, divestiture may not prevent future tipping. Thus, divestitures, on their own, risk being insufficient to fully restore the lost competition.

23 *Ford Motor Company, supra* n. 14. At 64 (*quotations omitted*); *see also* *Chicago Bridge & Iron Co. v. Federal Trade Commission*, 534 F.3d 410, 441 (*quoting Federal Trade Commission v. National Lead Co.*, 352 U.S. 419, 428 (1961)) (“The Commission is ‘clothed with wide discretion in determining the type of order that is necessary to bring an end to the unfair practices found to exist.’”).

In the case of Facebook, the most intuitive remedy is to directly undo the illegal conduct by requiring a divestiture of Instagram, WhatsApp, and any other anticompetitive acquisitions. A court must be convinced that such a remedy would restore the lost competition, which means that the divested businesses can operate effectively at a reasonable level of quality. For example, for some years after the Instagram and WhatsApp acquisitions, those companies were held and operated separately, which would likely have enabled a clean divestiture during that period.\(^{25}\) When the news came that the FTC would/might open an investigation into the company concerning these acquisitions, however, Mark Zuckerberg ordered employees to integrate the functions of all three platforms within a year.\(^{26}\) If Facebook employees began “scrambling the eggs,” as it is known, in January 2019, then by the time any current government case is resolved, one should expect the backend functions of the three platforms to be fully integrated, making a breakup messier and costlier. A possible solution to this problem is to give the current version of the backend software and data to all divested businesses (because software and data can be duplicated cheaply). A second problem is the underlying ad monetization function that generates the advertising revenue for two of the three social networks (the third network appears to be cross-subsidized by the others).\(^{27}\) This functionality must be deployed for each divested platform in order for it to have a revenue source and viability. And in general, the divested platforms must not only be viable competitors but put real competitive pressure on Facebook. A court would need to wrestle with all of these issues if it required divestiture.

2. Interoperability as a Remedy

Lowering entry barriers is likely to be critical to remedy monopolization violations in any digital market, but the approach may be different for a social network, control of an app store, a marketplace, or digital advertising. Interoperability eliminates or lowers the entry barrier, which is the anticompetitive advantage the platform has maintained and exploited. Users will not switch to a new social network until their friends and families have switched. It allows someone who is not a member of the dominant social network to continue to communicate with friends or families on


\(^{26}\) Id.

that platform. Therefore, people could switch to new social networks without losing their connections. Using Facebook.com as an example, because Facebook.com would be required to interoperate with other platforms, consumers who would rather not be a Facebook.com user can easily leave to join a rival. Facebook.com would have lost the benefit of its anticompetitive conduct.

Interoperability causes network effects to occur at the market level – where they are available to nascent and potential competitors – instead of the firm level where they only advantage the incumbent. An example that helps build intuition is the phone system. Imagine if an entering phone company, e.g. DISH, was not permitted to interconnect with Verizon, AT&T, and T-Mobile. Obviously, a DISH phone would be much less useful than a Verizon phone under those conditions and DISH would have a difficult time attracting customers. A requirement that the existing phone companies interoperate with DISH would significantly lower entry barriers for the entrant. Such interoperability requires an incumbent network to share its illegally acquired monopoly advantage to help the entry and growth of competitors.

a. The Telephone as an Example of Successful Interoperability

We continue with the telephone analogy to expand our argument. In its early days, AT&T built its monopoly by refusing to connect independent local phone companies. Smaller rival phone networks had low value if they could not connect their users to the large network, and this handicap forced those independent competitors to sell themselves to AT&T – which generated one large monopoly.\(^\text{28}\) Another setting where a dominant network may engage in exclusion by refusing to interoperate is when a popular complement arrives and threatens to grow into a substitute. AT&T’s refusal to connect MCI to its exchanges over a half-century later was a central allegation in the government’s case that led to the break-up of AT&T.\(^\text{29}\) Often its claimed reasons for refusing to connect were clearly pretextual, as in the famous Hush-A-Phone case where the product was a simple rubber attachment placed on the handset.\(^\text{30}\) Facebook’s treatment of Vine

\(^{28}\) Steve Coll, The Deal of the Century: The Break-Up of AT&T, 58 (Anthem 1986). This pattern of behavior matches Facebook conduct described in the CMA Interim report, supra n. 9.

\(^{29}\) Coll, id., at 264.

\(^{30}\) Hush a phone v. AT&T case about third party’s right to attach devices to the Bell system. AT&T argued: “It would be extremely difficult to furnish ‘good’ telephone service if telephone users were free to attach to the equipment, or use with it, all of the numerous kinds of foreign attachments that are marketed by persons who have no responsibility for the quality of telephone service but are primarily interested in exploiting their products.”
Twitter bought Vine in 2013 when it was an application that ran on top of Facebook. Vine allowed users to post six-second videos and share them with their Facebook friends—until Facebook cut off Vine’s access, with Mark Zuckerberg’s express approval. Vine eventually failed. The concern is that Facebook cut off Vine, as opposed to other apps, because it saw Vine as a nascent competitor and knew that without access to Facebook’s large network, Vine would lose customers and users. Facebook’s justification for cutting off Vine— that it was duplicative of what Facebook offered—echoes the argument that AT&T used to oppose MCI’s interconnection efforts on the ground (among others) that its additional microwave systems would be “wasteful duplication” of telecommunication services. AT&T refused to interconnect MCI’s long distance service with AT&T local phone exchanges.

Now consider a hypothetical example. Suppose that Verizon, AT&T, T-Mobile, and Sprint each ran incompatible wireless services: Verizon customers could only phone other Verizon users and not T-Mobile or AT&T users. Note that these services are horizontal competitors and direct substitutes. In this world the wireless industry would have very different competitive dynamics. Users would want to connect with work, family, and friends that might be spread across other wireless networks. Users would therefore tend to find the smallest network worse than larger ones. High income users might carry two phones, but most people would not want to do that. New users would tend to buy a phone from the largest network, making it larger still. The market could very well tip to an effective monopoly of one firm - primarily because of this network effect. Instead of having four national wireless services, without interoperability we might well have ended up with only one.

Luckily, the US does not regulate phones as we do social media networks, but rather requires interoperability among carriers. Standards of interoperability allow each carrier’s customers to interconnect with all other carriers. This interoperability breaks the power of network

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31 CMA Interim Report, supra n. 9.
33 See CMA Interim Report, supra n. 9, at 104 ¶¶ 3.153-3.155.
34 [https://developers.facebook.com/blog/post/2013/01/25/clarifying-our-platform-policies/](https://developers.facebook.com/blog/post/2013/01/25/clarifying-our-platform-policies/)
35 *MCI Communications Corp. v. American Tel. & Tel. Co.*, 708 F.2d 1081 (7th Cir. 1983).
36 *Id.*
effects. A Verizon user does not care *per se* how many other Verizon users there are because she can phone Sprint and AT&T users just as easily as other Verizon users. Rather, the network effects occur at the level of the market; she cares how many other users have *phones* because she can call them all and therefore benefits from the total number of people on the system. A new phone entrant takes advantage of network effects established at the level of the market, not the level of the company.

b. **Email as an example of successful interoperability**

When interoperability works, it is seamless. Everybody uses email. We send and receive messages all over the world. An email can be sent successfully from a desktop computer, a laptop, a phone, or even a watch without regard to the receiver’s device or ISP. An email message crosses any number of networks and computers, different countries, and languages. Interoperability is what allows this communication to occur.37

> “Email is an open, interoperable protocol. Someone can use Google's service, spin up a server of her own, or send messages through Microsoft’s enterprise software. And yet all of these people can communicate seamlessly.”38

Interoperability existed for email before the internet or the web was a commercial success, which is fortunate. Entrants that wanted to compete with America Online (remember them?) would have had a much greater challenge if AOL members could only have received email from each other and not from the entrant. The standards enabling this interoperability are created by the Internet Engineering Task Force, an SSO, and updated regularly in order to incorporate technological change while maintaining the ability of any interested party to interconnect with any of the vast number of email users. Those users are free to change email providers according to the monetary price (formerly positive but now often zero) and quality (data harvesting, storage, spam filters, etc.) those providers offer, which encourages providers to compete for users.


c. The costs of an interoperability requirement are likely to be low

One might worry that the required standards for interoperability among social networks would cause reduced innovation. We believe the opposite is more likely. The ability of the consumer to easily leave a social network, provides a strong financial incentive for that platform to improve its user experience in ways that do not involve the standard. Participating social networks would be free to innovate in any way on their own platforms. A post could have functionality specific to the platform on which it was created that goes beyond the standard. Such incremental functionality (e.g. location tags, emojis, stickers, polls, music + lyrics, animations including GIFs, etc.) would not be passed outside the network, so it would be one way for platforms to differentiate and attract users.\(^\text{39}\) Users who cared greatly about these features would choose a platform on that basis. They would be free to make this choice because they could communicate at a basic level with all their friends on other participating social networks. Under the remedy we propose, no rival social network would be required to interoperate with Facebook.com. An entrant with amazing innovations that judged it could succeed without interoperability could choose that path and simply compete as a stand-alone entity.

Unlike the familiar AT&T example, there would be no cost to interconnection in the digital platform context. The standard is simply a way to present and transfer information that is already being presented and transferred. No wire needs to be connected to achieve it, nor do machines need to be co-located, or special workers employed. Transferring digital files has almost zero cost, but regardless of that cost, Facebook would be transferring those files to serve its users in any case. Facebook might need to pay some costs to redesign the format in which it transfers text and images, but if it has been found liable for monopolization by a court, it is expected that a remedy will have costs. The real cost of ongoing interoperability to Facebook.com is the possibility that it loses customers once the barriers to entry fall. But that risk is what every firm faces in a competitive market and represents a benefit to consumers.

\(^{39}\) For example, Twitter uses hashtags to allow people to follow topics of interest. Under an interoperability standard, Facebook.com would have to allow a twitter user to make a friend request of a Facebook user, even if the Twitter user is not on Facebook.com. If the request is accepted, the tweets would appear on the Facebook user’s news feed, but Twitter would not have to share the functionality of hashtags, and Facebook would not have to share the functionality of Facebook.com’s marketplace or stories.
Interoperability would be far less costly for Facebook to implement up front than a breakup because no change would be needed in the way Facebook runs internally. Interoperability could only benefit consumers because the main change it makes is to increase choice. For this reason, interoperability is not very risky for consumers. Facebook would join the group of industry participants, consumer representatives, technology experts, and potential entrants developing the standard. After implementation, when a user posted content, Facebook would deliver it both internally and to the external platforms on which its users had already identified friends. (The receiving platforms would deliver the content to the individual accounts.) Facebook.com would accept incoming messages that adhered to the technical standard and would deliver them to the correct accounts. Interoperability could also be combined with divestiture, allowing Instagram and WhatsApp to participate in the standard as independent companies. Indeed, a divestiture would benefit consumers more with such interoperability. If a divestiture caused the failure of one or more of the social media sites, but interoperability was present, other entering sites would create competition, making divestiture a less risky solution.

Interoperability is particularly attractive as a policy solution because its cost to Facebook will scale to the level of Facebook’s (poor) performance. Facebook will no doubt argue during litigation that it does not have a monopoly position because it engaged in anticompetitive conduct, but rather because it has a superior product. Interoperability will give it a chance to prove that. To the extent that Facebook.com has many users because those users love the interface and the privacy protections, entry by competing sites will not succeed in attracting many users. To the extent that users are unhappy with Facebook.com’s services but stay on the site because of network effects, then entering sites will experience strong demand and Facebook.com will lose many customers. Therefore, the extent to which interoperability punishes Facebook financially will be scaled to the harm Facebook imposed on users.

d. Interoperability is a long-established remedy

The history of AT&T is again instructive about how interoperability can be managed to benefit consumers. In 1913, the government’s settlement with AT&T required AT&T to connect its long distance service with the remaining, independent local telephone companies. 40 The Federal

Communications Commission later developed the Part 68 Rules that required AT&T to interconnect any device that satisfied the rule’s technical specifications.\textsuperscript{41} Interconnection caused innovation by leading to the development of new technologies such as modems and fax machines.\textsuperscript{43} The AT&T consent decree in 1982 forbade the regional Bell companies from favoring AT&T in the access to local exchanges; each regional Bell had to interoperate with long distance carriers without discrimination.\textsuperscript{44}

And, regional Bell companies, initially, could not offer mobile or cellular services outside their local regions. Because no single carrier could create its own national network, they had to interoperate to create a national network. In the AT&T court’s view, limiting the reach of the regional Bell companies was critical to creating a national telecommunication network.\textsuperscript{45} If a regional Bell company could enter and obtain control over a neighboring local exchange, it would have an incentive to undermine the national network and develop an alternative that it controlled.\textsuperscript{46} Interoperability is such a central feature of phone service that we do not think about it. But it exists in large part due to regulatory and judicial decisions that protected and promoted it.

3. **A successful interoperability order requires both strong substantive requirements and effective procedures.**

As a principle, the role of interoperability in lowering entry barriers and restoring potential competition is straightforward. Implementing interoperability raises a number of issues, both substantively—what the scope of the requirements should be—and procedurally—how to make sure the remedy is flexible enough to accommodate changes and effective enough to deter obstructionist conduct. This section explores existing interoperability among social network

\textsuperscript{41} See Id. at 43.
\textsuperscript{42} Id.
\textsuperscript{43} In 1968, the Federal Communications Commission, in what was known as the “Carterfone rules”, made an order that non-Bell equipment could be attached to AT&T’s telephone system. See In re Use of the Carterfone Device in Message Toll Tel. Serv., 13 F.C.C.2d 420, Federal Communications Commission, 1968. This case was a progeny of the 1956 D.C. Circuit order that allowed noise reduction systems developed at firms other than Bell to attach to the Bell telephone system. See Hush-A-Phone Corp. v. U.S., 238 F.2d 266, D.C. Circuit, 1956 See Wu, supra n. 40, at 189-90.
\textsuperscript{44} 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, 1412 (1999).
\textsuperscript{46} Id.
platforms, describes the contours of what functions should be interoperable as a remedy, and concludes by addressing how to make the remedy effective.

a. Existing Interoperability

The current situation in social media is the opposite of what we enjoy today in email and mobile phones. Social networks have a similar importance to society as phones did in the last century. Unlike AT&T, which was heavily regulated, Facebook sets its own prices, amplifies users’ posts if that benefits Facebook, and controls the amount and type of advertising. There has generally been very little interoperability in social media over the last two decades. By this, we mean that a user of Myspace would post on that platform, and only other users of Myspace would see the content. Likewise, a post of a Facebook.com user who was an offline friend of the Myspace user would not be delivered to the account of the Myspace user, but only to online “friends” on Facebook.com. Unlike Verizon and T-Mobile, the networks could not connect their users. Other networks such as Google+, Orkut, Hi5, Tumblr, Friendster, Bebo, and Foursquare show vanishingly little interoperability. A near zero level of interoperability is likely inefficient. Users would gain from being able to communicate with all their (chosen) friends by sending a message through whatever network those friends are using, just as they do with email today.

Interestingly, however, such interoperability has existed for some pairs of networks during some time periods, so we know it is both technologically possible and not costly. We can also infer that consumers value such interoperability. Indeed, Facebook.com itself (and some other social networks) has, at times, allowed consumers to post content from other social media platforms onto its own. In the case of Facebook.com, this functionality was enabled through the ‘Public Actions’ API which, tellingly, did not enable Facebook users to post content from Facebook.com out onto other social media platforms. This asymmetry probably led to greater

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and more varied content being shared on Facebook.com compared to the social media platforms from which content is shared, according to the UK’s Competition and Markets Authority.\(^49\)

The lack of interoperability between networks is likely to be one cause of consumer multi-homing, the practice of one person using multiple social networks. For instance, 97% of Instagram’s audience also visited Facebook.com, as did 95% of Snapchat’s audience. In contrast, only 66% of Facebook.com’s audience also used Instagram while 68% used Snapchat.\(^50\) This asymmetric level of interoperability between Facebook.com and other social networks persists in current interactions Facebook has with other platforms. For instance while TikTok and LinkedIn users can cross-post material onto Facebook.com, it is impossible, without the use of third party Apps, for Facebook.com users to share their material on TikTok or LinkedIn.\(^51\)

We see from the fact that Facebook.com and other social networks can interoperate with other sites when it is in their individual interest that an interoperability requirement is technologically feasible. Another current example of interoperability is Shazam, which interoperates with multiple other apps including SnapChat.\(^52\) Zoom interoperates with Microsoft Outlook.\(^53\) Password lockboxes like LastPass interoperate with all the browsers (even those browsers have integrated a similar feature). The barrier to interoperability in social media is not fundamentally technological, it is commercial.

b. The Idea

The interoperability we propose is basic, which means it applies to functionalities that are well-enough established to permit a useful and popular standard to be developed. Keeping interoperability simple allows social networks to innovate on dimensions of their service that they think will attract users. We give an example to motivate the discussion below. Suppose the technical committee developed a standard for transferring text, calendars, images, and video. Network A might have a feature that allows users to make text bold and flashing, but these features

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49 CMA Interim Report, *supra* n. 9, at 104-105.
50 CMA Interim Report, *supra* n. 9, at 93 (Quantifying the traffic effect of FB’s asymmetric interoperability).
51 CMA Interim Report, *supra* n. 9, at 105.
52 https://support.apple.com/en-us/HT210237
53 Sometimes interoperability is used to drive users to the rival service. For example, when Zoom interoperates with Google Calendar, the Google Calendar automatically displays the link for its own Google Meet application at the top of the entry, even when the organizer is setting up the meeting in Zoom.
are not in the standard, which is plain text. When a message in flashing bold is sent by a user on A
to her friends, those on network A will see the full effect; those on networks B and C will see plain
text. Users of networks B and C, however, would receive A’s posts such as a photo and plain text
saying, “Lee’s wedding was beautiful.” Network A might have a feature that alerts a user’s friends
on her birthday. If that feature is not in the standard, friends on Networks B and C will not receive
those alerts about birthdays of friends on network A. Senders who wanted to serve followers across
all networks could take care to design their posts to stay within the standard. For example,
institutions like schools could design their notifications (e.g. field trip forms, snow day alerts) to
conform to the standard so that parents would all receive the same information no matter their
home networks. Thus, the standard would allow all users to receive useful information about their
friends on other networks through the most common functionalities. The technical committee
would update the standard regularly and could add more features as desired.

With interoperability of this kind, a user could choose the social network she preferred to
join according to its features, user interface, privacy policies and more. In addition, the technical
standard would be supplemented with further conduct conditions. Under interoperability, a user
would be entitled to send and receive friend requests from outside her network. She could accept
or deny each friend request. Subsequently, her own social network would be required to pass her
posts to her friends’ networks, and their networks would display her posts to her previously-
designated friends. Similarly, her home social network would be required to pass through posts
from off-network friends to her as it would for posts from her friends on her home network. Social
networks would not be permitted to discriminate against content from off-network friends. For
example, suppose an incoming post violated the terms of service of the social network (e.g. it was
an incitement to violence). If the policy of the home network is to remove all such posts, it should
remove the incoming as well as local posts of that sort. Under the standard, social networks would
be free to have their own different terms of service, but would not be permitted to remove,

54 We do not see a First Amendment issue. Interoperability requires a platform to deliver a post to a
member of its social network, which the member previously agreed to accept. Interoperability would not
require the social network to allow the post to spread across its network, so it does not infringe on the
First Amendment rights of the social network. The network could apply whatever terms of service to what
can be shared as long it does not discriminate against competitors.
promote, suppress, or otherwise handle content from other networks any differently than posts originating on their own networks.\textsuperscript{55}

We provide an illustrative example of how an interoperability remedy would function should the government prevail in a case against Facebook. Suppose a new platform entered that was run by Consumers’ Union (publisher of the well-known Consumer Reports service), charged a monthly subscription fee, collected no data about its users, and showed no advertising. A user of the Consumers’ Union site could make “friend requests” of their relatives, friends, schools, and so forth who are users of Facebook.com.\textsuperscript{56} Facebook would be required to pass on those friend requests, explain that the potential friend is located outside of Facebook.com on the Consumers’ Union site, and allow the Facebook.com user to agree to be friends if they so choose. After that point, when either friend posted content consistent with the standard, those posts would flow to the other platform and be delivered to (all) the user’s designated friends on that platform according to the algorithm employed by the home network. Users would gain from the ability to communicate with all friends regardless of platform, making interoperability, as with the telephone, a consumer benefit.

In this way a user could belong to a non-Facebook.com social network, and if her child’s school maintained a Facebook.com page, she could still receive notifications, photos, calendars, etc., from the school. Facebook would have to compete to gain or keep that parent as a user of Facebook.com based on the quality of the user interface, privacy protections, advertising policies, quality of news, and so forth. Facebook could not keep the parent by effectively denying her access to the school calendar if she left the platform. If she did not like Facebook’s policy concerning lies in political ads, for example, she could move her account to a rival social network without losing touch with the school.

We imagine that a popular type of entering social network would be those geared to parents choosing a site for their children. Parents might be very interested in a platform that was

\textsuperscript{55} The rule would provide the agency overseeing interoperability with the power to stop the defendant from, for example, using an “algorithm” to promote content that has the differentiated features of its own platform, thereby downgrading all content from rival platforms. Regulating this type of attempted evasion of interoperability would be an ongoing activity for the agency, one that a court would likely prefer to outsource.

\textsuperscript{56} To make such a request, the user would need to have a personal identifier (email or phone number) and a network identifier (perhaps a name). Or the requester could be required only to have a personal identifier. The former would be more secure; the latter would make interoperability easier to achieve.
especially strict about the types of content, ads, and news that could be circulated among users. While a social network with no ads would likely require a subscription as an alternate revenue source, an ad-supported platform for children could differentiate itself by showing ads that met certain suitability criteria. One could imagine a company like Walt Disney Corporation entering with a social networking site of this type and using their existing entertainment content as a feature.

Successful interoperability would turn this sector from a monopoly into a vibrantly competitive market, with social media sites for all types of users. Sites might specialize in particular types of content moderation desired by users. For example, a site might market to Christian conservatives and both show content attractive to that group as well as remove content its members find unacceptable. Another site might partner with the Washington Post and only show news from that source along with ads. Some sites might be very strict about dangerous or hateful content and market themselves to families. Affinity groups of all kinds might want to run social media networks and include in them the kinds of features and content those users most value. Rather than complaining that Facebook.com does not show the type of content they want, users could simply leave the social network for one they like better. In this setting each user would choose a social network in part based on its rules about their own speech as well as on the basis of how well the platform shields them from, or exposes them to, speech of others. Interoperability directly increases consumer choice and therefore consumer welfare for these reasons.

c. What a successful Interoperability Order requires

A successful Interoperability Order (IO) will require strong procedures and conditions in order to prevent the (liable) dominant defendant from continuing to exclude potential competitors. The rule we set forth below is designed for an environment where the dominant firm has market power and profit, interoperability will reduce that market power and profit, and so the agency must expect the dominant firm to be working in every way it can to obstruct the standard and the conduct rules.

The standard would be created and imposed on Facebook as part of the remedy for its violation of the antitrust laws. However, interoperability necessarily involves another party. We

57 E.g. AARP, the NRA, the Sierra Club, music fan groups, universities, etc.
envision the standard embodied in a royalty free license offered - under the rule - to compliant platforms who wish to participate. We describe the conditions for both parts of the remedy below.

The technical standard for the interoperability of networks would need to be established so that platforms could carry out basic functions such as sharing text, calendar, photos, and videos. As in the case of the telephone, a standards body of industry participants, consumer representatives, technical experts, and government representatives can be created to design it. Facebook and potential competitors would be invited to participate. The standard would need to be updated regularly to handle new features in the market that had become common enough to deserve inclusion in the standard. For example, if such a standard existed today, perhaps such a committee would meet to consider whether GIFs should be included. Because only a small set of functionalities are controlled by the standard, every other aspect of the platform could be designed in any way the platform thought would benefit it, thereby allowing differentiation that appeals to users as described above. These could include better layout of the page, better suggestions for people you might know, stricter privacy protections, etc. Such differentiation and innovation by platforms would let them compete for share within the market. But participating licensed platforms would be required to use the standard technology to transfer covered content.

Beyond technical standards, the government and the interoperability committee would set the conduct requirements rival platforms must satisfy to participate in the standard. For example, a platform that wanted to license the standard would have to demonstrate it was in compliance with all relevant laws, especially laws controlling privacy and data access, had appropriate governance and training, and might need to submit some element of its code for review before it could obtain a license from the FTC. Once a platform obtained a license, it would be required to interoperate using the standards in the license with all other license holders and the defendant platform and not evade this interoperability requirement. The license terms would require non-discrimination as between content originating on rival platforms versus the home platform. Rival platforms would be free to leave the standard at any time.

Privacy protection on a social network would work as it does now. Each platform would set a policy and each user would need to agree to that policy if she wanted to open an account. A key aspect of privacy protection concerns the exposure users have to users on the networks their friends belong to. We are particularly concerned about a user who values privacy but has friends
on networks with more lax privacy rules that aggressively monetize users. A user of a strict social network might be concerned about her privacy should she send a post for display on a lax social network. Under the license, social networks would not be permitted to store information contained in incoming posts on their users’ friends, learn from that data in any way, or monetize those friends in any way. A network would simply deliver the information to the friend only. Only the receiving person could decide to share the content further on her own social network.

While participation in the interoperability standard would be mandatory for Facebook, it would be optional for all other platforms. Existing platforms, e.g. LinkedIn or Twitter, would not be required to participate, nor would we necessarily expect them to want to.\textsuperscript{58} Their existence, despite Facebook’s dominance, indicates that they are not dependent on interconnection with Facebook for success. If an existing platform wishes to license the standard, it is welcome to do that of course. A new entering platform would likely want to interoperate with Facebook in order to attract users by offering them the types of features mentioned above. Critically, such a participating platform would be required to interoperate with any other platform complying with the standard. If this condition is not in place, then entering platforms would each have a bridge to Facebook.com, but not to each other, which would make for a dysfunctional market.

Interoperability is therefore designed to be symmetric under the license; a network that benefits from its users’ posts flowing to and from the dominant social network also must provide interoperability to all other licensees. Thus, if there were an entering platform run by AARP and another by the NBA and another by Disney, and all three of those entrants chose to operate under the standard, their users could not only connect to friends on Facebook.com, but the AARP users could “friend” users of the Disney and the NBA platform as well as users on Facebook.com, and vice versa. Reciprocity will help new networks launch and flourish. Users will be able to freely move across social networks without losing connections (access to friends) on other platforms. Consumers can choose networks in response to the features and policies they like best, thus stimulating competition that benefits them.

As mentioned above, some have raised concerns that too much interoperability could undermine innovation. In their recent report, the Competition and Markets Authority recognized

\textsuperscript{58} The CMA notes that the social media platforms it surveyed did not want interoperability. However, as we explain above, this is not a surprise as we would expect the social media that has survived today to have a different strategy than a new entrant responding to interoperability. CMA Interim Report, ¶ 8.65.
both the benefits and costs of interoperability.” On the one hand, interoperability reduces network effects as an entry barrier. But, as we described above, standardization can promote innovation “in the non-standardized functionality.” On the other hand, there could be less innovation on the functionality that is incorporated into the standard. This latter concern is theoretically correct, but we judge its magnitude to be far outweighed by the innovation generated by entrants competing for users in the market. For incumbents, stoking fears of interoperability provides an easy way to oppose rules that could increase competition. AT&T’s statements to this effect provide an instructive comparison. In telephones, the AT&T order spurred, rather than limited, innovation. Similarly, in the EU’s case, Microsoft’s competitors argued that Microsoft should have to provide detailed technical information on its interfaces, which would help competitors design code to interoperate with Windows. In response, Microsoft argued that releasing such information would discourage it from innovating. The EU weighed the requirements impact on the whole industry to innovate against the impact on Microsoft’s own incentives and rejected Microsoft’s argument:

“a detailed examination of the scope of the disclosure at stake leads to the conclusion that, on balance, the possible negative impact on Microsoft’s incentives to innovate is outweighed by its positive impact on the level of innovation of the whole industry (including MS)”

The Commission’s parenthetical mention of Microsoft is insightful. Even as to the dominant firm, interoperability has ambiguous effects. Mandatory interoperability may decrease the dominant platform’s incentive to innovate. Innovations on functions that are part of the interoperability rule have to be shared with competitors. The dominant firm could worry that if it innovates on functions not part of the standard, those technical committee could sweep them into the

59 CMA Interim Report, supra n 9, at 247-25 ¶¶ 6.76-6.88 and Appendix K.
60 Id., “Appendix W: assessment of pro-competition interventions in social media,” at W5 ¶ 27. https://assets.publishing.service.gov.uk/media/5efb5fcb3bf7f76b4e776b/Appendix_W_-_Interventions_in_Social_Media_v3.pdf
61 These are the types of features that can be substantial and disruptive or more modest. For some examples, see, supra, pp. 20-23.
62 Id.
63 In the 1940’s, AT&T ran advertisements stipulating that, “it takes a totally unified system to make it all work. One system. AT&T.” AT&T would later argue in the Caterfone case that its absolute control over all equipment on the network was necessary for the efficient functioning of its telephone system (a familiar stance it had taken in the Hush-a-phone case, two decades earlier). Fortunately, the FCC rejected AT&T’s rules and arguments as “unduly discriminatory.”
interoperability rule, allowing competitors to free ride on the dominant firm’s innovation. At the
same, even if it knows that innovations could become part of the interoperability rule, the
dominant firm still has incentive to innovate. Because interoperability minimizes network-created
entry barriers, the dominant firm faces increased competitive pressure. If it does not innovate,
someone else might. Innovating quickly allows the social network to reap the greatest benefits
before such innovations might be included in revisions to the standard.

Regardless, interoperability as a remedy to an antitrust violation is particularly unlikely to
deter innovation. The remedy is being applied in a setting where the incumbent platform has been
found to have anticompetitively stifled competition, which likely means innovation has also been
retarded. As discussed below, the process for developing the interoperability standard involves all
affected parties, with a particular emphasis on entrants. A competitor worried about losing its
innovative edge is always free to choose not to participate in the standard.

4. **Adjudication alone is poorly suited for developing an interoperability remedy**

Although the concept of interoperability is straightforward, implementation requires careful
attention to detail. The dominant platform could intentionally make interconnection difficult.
When its competitors complained, the platform would claim it was a technical, not competitive,
issue. Microsoft took such an approach in defending its conduct, claiming it would be nearly
technologically impossible to separate its browser from its operating system. As one government
enforcer characterized AT&T’s defense, it warned a break-up of the Bell system would “silence the
dial tone across America.” As in those cases, sometimes (maybe often) such arguments will be
pretextual, but other times they may be legitimate. A process involving experts and a government
agency with discretion will expedite review of these issues.

In the social network context, there will likely be ample disputes. For example, the
defendant platform rejects interoperability with an entrant because it claims the entrant traffics in
hateful and deceptive information, which the defendant’s platform forbids (leaving aside that this is
the opposite of the current Facebook situation). The entrant responds that it does not allow such
information to be posted and retorts that the defendant discriminates against the posts of the

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66 Interview by Michael Kades with Phil Verveer, former prosecutor in United States v. AT&T, United
States Department of Justice, Antitrust Division (May 29, 2020).
entrant’s members. Or, the defendant platform cuts off a competitor platform because the defendant claims the competitor keeps violating privacy protections or other standards. The competitor disagrees and says it is being cut off because it is gaining users and is a threat to the defendant’s profit. Those are simply examples of the types of disputes one would expect to see. In all likelihood, there will be unforeseen issues that will arise as market conditions change.

The point is not that those issues make a remedy impossible. Rather, they foreshadow the issues with which a court overseeing a remedy will grapple. Interoperability will affect competitors, content suppliers, and users, while the relief must be flexible enough to address unknown future developments. For example, although the AT&T consent directly addressed mobile phone service, it is doubtful anyone understood that mobile phones would eventually replace landlines or the full scope of the coming digitization of telecommunications. These types of issues are the very ones with which adversarial adjudication process struggles.

a. Challenges of Antitrust Litigation Generally

Antitrust cases are difficult, complicated, and time consuming, particularly when the focus is on exclusionary conduct and monopolization theories. Moreover, a victory on liability does not help the harmed consumers in a monopolization case if the remedy fails. But liability is a necessary precondition for seeking a remedy. Unsurprisingly, litigators and courts focus on liability first and foremost, and remedy can become an afterthought during litigation. As a result, having spent years on liability, the process begins all over again. And, when a court tries to circumvent that process, as in *Microsoft*, by streamlining the process by not having an additional evidentiary hearing, it may find its relief overturned.  

Remedies fail frequently in antitrust cases even in more straightforward situations than a monopolization case presents. In merger cases, the government has a well-defined goal: restore the competition that otherwise would be lost. In theory, a divestiture should remedy an otherwise anticompetitive merger if the divested assets are an ongoing business and the buyer is financially sound and competent. But the execution is more challenging. In a number of recent cases, a

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67 *United States v. Microsoft*, 253 F.3d 34, 183 (DC Cir. 2001) (“In sum, the District Court erred when it resolved the parties’ remedies-phase factual disputes by consulting only the evidence introduced during trial and plaintiffs’ remedies phase submissions, without considering the evidence Microsoft sought to introduce.”).
buyer, despite the government’s vetting, failed.\textsuperscript{68} And, a number of studies find that mergers were anticompetitive despite government-required divestitures.\textsuperscript{69} The monopoly context is far more challenging. Even a break-up is not simply cutting a company in two. The remedy must define how the new companies interact with each other and others in the marketplace.

\textbf{b. Lessons from AT&T Remedy litigation.}

A remedy that is designed to last for years in a technology market will be complicated to administer. The government and AT&T had spent years, on-and-off-again, negotiating the break-up remedy before submitting the settlement to the court in 1982. The ultimate consent decree was effective, “premised on an articulable economic theory,” and administered by the court.\textsuperscript{70} Judge Greene proved that the approach “can be a defensible judicial enterprise.” Even so, over the next 15-plus years, Judge Greene would issue hundreds of orders implementing and interpreting the agreed upon settlement.\textsuperscript{71} Only the Telecommunications Act of 1996 ended the judicial oversight.

The implementation of the AT&T settlement, which was largely successful, underscores the challenges that a court faces. The court had to moderate among a cacophony of conflicting interested parties. Over 100 parties had intervened in the settlement and could have overwhelmed the court with requests for oversight and relief. At the same time, the court also created a waiver procedure that allowed parties to seek modification or relief from the order’s line of business prohibitions: Within four months, “the RBOCs [Regional Bell Companies] had filed nine requests for waivers.”\textsuperscript{72}

\begin{footnotes}
71 \textit{Id.} at 1400 n.1 (1999).
72 \textit{Id.} at 441424.
\end{footnotes}
The demands of overseeing the consent were beyond the capacity of the court, even for the focused and diligent Judge Greene. He created a process that delegated oversight to the Department of Justice’s Antitrust Division. Rather than appealing to the court for enforcement in the first instance, interested parties would have to ask the Department of Justice to enforce the order. Similarly, Judge Greene channeled waiver requests from the RBOCs, through the Department of Justice. Petitions for modification were also filed with the Department of Justice. It would publish the request, allow public comment, consult with interested parties, and conduct analysis. Only then would the court consider the request. Examining Judge Greene’s approach is useful because it provides guidance on what procedures can work. Our proposed rule is a similar, but more structured approach than the ad hoc process Judge Green developed for himself.

Judge Greene, as a practical matter, relied on the Antitrust Division in much the same way that an agency such as the Federal Communication Commission or the Federal Trade Commission relies on professional staff. A judge with two law clerks simply cannot manage an order that affects hundreds of individual parties differently and involves complicated waiver requests without additional help. Judge Greene’s solution was necessary, creative, and largely successful. But it required the court to use resources from the Antitrust Division to be successful, an idea our proposed rule adopts.

c. Lessons from Microsoft Remedy Litigation

In contrast, the remedy in the Microsoft case was less successful on its own terms. Although successfully bringing the case itself may have deterred future anticompetitive activity, the remedies provisions did not lead to increased competition. A full discussion of the Microsoft remedy is beyond the scope of this article. At issue in Microsoft was whether Microsoft had illegally maintained its monopoly for Intel-based operating systems. A network effect – the “applications barrier to entry” – gave Windows protection from competition. An operating system has more value when many software developers write programs to run on it, but those developers are attracted by users, who are themselves attracted by developers, creating the virtuous circle that

73 Id.
74 Id. at 1426.
75 Interview with Phillip Verveer (May 28, 2020).
76 For a general discussion of the Microsoft Antitrust cases, see Andrew w. Gavil and Harry First, “The Microsoft Antitrust Cases: Competition Policy for the Twenty-First Century, (MIT 2014).
characterizes network effects. The threat Microsoft faced from the Java middleware was that it would create interoperability between applications and rival operating systems. Instead of writing software for each operating system, a developer would write for Java middleware -- which was capable of running on each operating system. An analogous situation applied to servers. In addition to other relief that barred several practices Microsoft had used to suppress competitors, the final settlements required Microsoft to allow interoperability with middleware and servers.\(^77\) The settlement also created a three-person technical committee to oversee compliance with the provisions.

The interoperability provision had little impact for a number of reasons, providing lessons for the future.\(^78\) Instead of considering how to lower entry barriers new operating systems faced, \(^79\) the court focused too narrowly on protecting middleware because Microsoft had suppressed the threat from middleware: \(^79\)

“The idea that the only appropriate remedy in the case should be directed at middleware seems curiously misplaced. Conduct directed at middleware wasn’t a competitive problem for its own sake in the plaintiffs’ monopolization but was of concern because it maintained the applications barrier to entry into the market for operating systems. By the time of the remedy, however, middleware was not a threat it had been nor could it have been. Rather, the court should have been “looking broadly for ways to lower the applications barrier to entry,”\(^80\)

The court should have focused on provisions that would have lowered the barriers to entry facing the most likely threats at the time of the settlement: Apple and Linux. Arguably, the interoperability requirements applied too narrowly, did not lower entry barriers, and did not spur new potential threats to the Windows operating system.\(^81\)

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\(^79\) Id. at 758.
\(^80\) Id.
The interoperability provisions regarding servers and PCs was one area where compliance became an issue. Microsoft initially refused to use Adobe Acrobat to image the necessary protocols and continually missed its deadlines to produce the protocols. The Technical Committee was unable to resolve issues. Eventually, the judge extended the length of the decree because Microsoft had not complied with these interoperability requirements.\(^{82}\) It was not until the last report to the court before the final judgement would expire on May 12, 2011, that the plaintiffs were satisfied that Microsoft’s interoperability procedures were sufficiently complete.

This example demonstrates that remedy challenges increase when the parties remain adverse as in *Microsoft*. Though the trial court found a violation in 2000 and adopted the plaintiffs’ proposed divestiture, the Court of Appeals rejected the remedy and criticized the lower court for deferring to the plaintiffs. Another two years of litigation and settlement negotiations would occur before the settlement was entered, and almost another decade before Microsoft fully complied with its requirements.

5. **FTC rulemaking would improve remedies**

Our rulemaking proposal builds on lessons from Judge Greene’s handling of the AT&T cases and Judge Kollar-Kotelly’s approach in the *Microsoft* case, but adds three important features. To deal with both the volume and complexity of issues, the AT&T court relied on the Antitrust Division to be a gatekeeper. Rather than rely on the *sui generis* process that developed in the AT&T case and the somewhat more formal Technical Committee in *Microsoft*, we propose formalizing the process so that the contours of the remedy would be known at the beginning of any case. Historically, the most effective competition rules are those that “ease barriers to market entry in related or even new markets unknown at the time of entry.”\(^{83}\)

The standing default rule creates a technical committee to set the standard needed for the case at hand, and to monitor compliance with that standard.\(^{84}\) This committee is akin to a standard setting organization, except that it is overseen by the FTC to ensure it focuses on entry and competition and to prevent capture by dominant firms. The technical issues involving

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\(^{82}\) See *Generally, Gavil and First, supra n. 77.*

\(^{84}\) The defendant would have to fund the cost of the committee, including the salaries of the members. In terms of compliance, if a company has a complaint, it would raise it with the FTC, and the FTC would determine whether to deal with it directly or refer it to the technical committee.
interoperability are likely to be too time consuming and difficult for an agency to handle by itself. Standard setting organizations are common in the economy and they ensure interoperability of everything from cell phones to mechanical parts such as screws to computer memory chips and computers. Of course, standard setting organizations can be abused. Therefore, the composition and oversight of the standard setting body is critical to define in any FTC rule.

Because, in our setting, interoperability is a remedy for illegal conduct, it must be a constant working assumption of the agency and the court that the defendant does not wish interoperability, has market power, and will attempt to defeat interoperability and associated entry. Thus, in our hypothetical example, the body that creates the particular interoperability standard will include industry participants, and it must include Facebook, but it must not be manipulated by Facebook in a way that allows Facebook to maintain its market power. Under our proposal, we limit the competitive dangers because the FTC understands the defendant’s strategy (it prevailed in the litigation), would be the final decision maker, and has substantial experience in assessing the competitive impact of Standard Setting Organizations. The technical committee in the proposal is a more robust and formal version of that developed in the Microsoft case and would be better placed to develop standards quickly.

Second, the rule incorporates strong penalty provisions. The markets for which this rule is designed are subject to tipping, which means that further anticompetitive conduct at just the right moment can maintain market power. The remedy structure must be responsive enough, and include a large enough penalty, to deter anticompetitive conduct. The remedy procedure must be fast enough that an Order violation cannot achieve its goals before the Commission makes a finding, so that the defendant will be unlikely to profit from the violation. Our draft rule provides what we believe would effectively deter order violation.

We understand that there are unresolved legal issues such as how one determines what is a violation (is it by day, by user, etc.) or addresses areas with contrary authority (whether the FTC can assess fines and what counts as equitable relief). And, one case explicitly rejects the FTC’s ability to obtain monetary penalties in its internal adjudication process.\(^{86}\) Some of the issues would be less significant if a court adopted the rule as a framework and explicitly ordered the types of fines proposed in the rule or adjusted them according to relevant case facts. In a rulemaking, the Federal Trade Commission could and should consider these issues. We do not delve into the legal issues regarding monetary relief here. The point, rather, is that the most effective approach will have a mechanism that deters the defendant platform relying on the lack of consequence to achieve its goals.\(^{87}\)

Third, we propose that the FTC use its rulemaking authority to design a default order. The FTC could use this order in its own administrative litigation or offer it as a starting point for remedies in federal court litigation. The FTC could define the situations, such as the Facebook example here, where divestiture or other remedies are, alone, unlikely to be sufficient to fully restore the lost competition. Given the growth of digital platforms of all kinds, it seems likely that the agencies will continue to encounter defendants that have network effects and therefore designing such a rule would have a long-term payoff. The rulemaking process allows input from all parties potentially affected, potential competitors, content providers, and individuals. The Commission, unlike a court in litigation, can survey all evidence, including academic and technical literature, not just what meets the standards of the rules of evidence. A rule can address nuances including how to fine-tune enforcement mechanisms.

Rulemaking provides a tool that can be used instead of, or in conjunction with, ordering a break-up, and the Commission or a court can better tailor such a rule to limit any unintended costs, according to the case at hand.\(^{88}\) Having a remedy in its toolkit that removes network effects at the level of the company - and instead makes them operate at the level of the market, available to all - will be of tremendous benefit to future consumers.


\(^{87}\) Congress could explicitly create a procedure for the FTC to assess fines or seek fines. See *e.g.* *Monopolization Deterrence Act of 2019*, S. 2237, 116 Cong. § 1 (2019).

a. Benefits of Rule Making

Rulemaking has several benefits over developing a remedy during litigation. One instance of rulemaking is likely to be less burdensome and time-consuming than litigating the same remedy issues in every case with network effects.\textsuperscript{89} The rulemaking process allows input from all parties potentially affected in future cases like entrepreneurs, content providers, and consumers. The Commission, unlike a court in litigation, can survey all evidence, including academic and technical literature, not just what meets the standards of the rules of evidence. Because a rulemaking is not adversarial, it will be easier for the FTC to identify areas of consensus. The rulemaking process is likely to develop a better outcome.

The rule would improve decision-making in the FTC adjudication. The default rule would be binding on the Administrative Law Judge as a starting point and would provide a framework to work through the complicated issues that arise in crafting a remedy. For each case, the ALJ, and then the Commission, would have to decide whether the provisions address the issue and how they must be tailored to fit the specific issues of the case. The ALJ’s initial decision could focus on the important areas of contention. In turn, the initial decision is more likely to be helpful to the Commission by focusing on the most important areas of contention. Enshrining a default order in the Commission’s litigation procedures would be more effective than issuing guidance or a policy statement on remedy. Further, guidance or a policy statement would have less weight and formality than a rule.

The rule would function differently in federal court where the Commission would ask the court to enter the order with the same basic structure (technology committee, decision by the Commission, and stiff penalties). The order would largely be the same, but there would be some differences. For example, the Commission would ask for the court to include the stated penalties for order violations. If the court adopted the penalty provision (or some variant thereof), the Commission would later have the ability to seek penalties in the event of an order violation. The Department of Justice, in a monopolization case addressing a social network, could also build its relief from the default rule and ask the court to enter it as an order. In that situation, the Antitrust Division would be designated to oversee the technology committee.

\textsuperscript{89} See id. at 215.
The court would be free to ignore the order, adopt it, or modify it. But many courts would likely use it as a starting point. Rulemaking is a multiparty process, which would make it more likely that the provisions would be effective and less likely that they would have unintended negative consequences. The rule’s mere existence would make the remedy process more manageable and alleviate the challenges of the court attempting to craft and monitor a remedy on its own relying solely on the adjudicative process. The Department of Justice, states attorney generals, and private plaintiffs could also offer the rule as a starting point for developing a remedy.

The principles developed in the rulemaking could also form the basis for seeking preliminary relief. In the context of nascent and potential competitors, preliminary relief may be the only realistic way to protect the harmed competitors. The rulemaking would help focus the Commission and other enforcers on the most important principles for relief, allowing them to quickly propose preliminary relief in a variety of situations.

b. FTC Authority for Rule Making

Section 6(g) of the Federal Trade Commission Act gives the FTC the authority to issue rules and procedures “for the purpose of carrying out the provisions” of the FTC Act. Existing caselaw interprets this mandate broadly, upholding the FTC’s right to issue substantive rules. Many have advocated that competition rulemaking could improve antitrust enforcement. Current Federal Trade Commissioner Rohit Chopra and Lina Khan argue that rulemaking has three main benefits over adjudication: the Commission can “issue clear rules to give market participants clear notice about what the law is, helping ensure that enforcement is predictable,” “relieve antitrust enforcement of steep costs and prolonged trials,” and provide “a transparent and participatory process, ensuring that everyone who may be affected by a new rule has the opportunity to weigh in on it, granting the rule greater legitimacy.” In May 2009, Professor Hemphill suggested rulemaking as a better approach than adjudication for addressing pay-for-delay (or reverse-payment) settlements. Earlier, Professor Baker advocated rulemaking to stop “practices

facilitating oligopoly coordination.” 93 Professor Daniel Crane has also advocated for competition rulemaking. 94 Although much discussed, the Commission has issued only one competition rule (to prevent discriminatory practices in the sale of men’s and boy’s pants to retailers). 95 The Commission never enforced the rule and withdrew it in the 1990s. 96

Others, however, have raised concerns about rulemaking. According to Federal Trade Commissioner Phillips, the current Supreme Court could decide any rule declaring an act or practice an unfair method of competition would be unconstitutional under the nondelegation doctrine. 97

Our proposed rule avoids those controversies. Our rule is different because it is purely procedural, no different than the FTC’s rules of practice, which determine how the Commission operates and how it adjudicates cases. It would not declare conduct illegal and it would not institute general rules that regulate all companies in the market. It would define one method by which the Commission would address certain types of violations. The Commission would still have to find a violation. Even then, the order would not be binding. The default order would simply provide a starting point for how the Commission would address remedy.

c. Rule-Making Process

It is unlikely that the rule could be challenged until it was applied in a specific case because no one would have standing. To challenge an agency rule, the plaintiff must allege it has suffered injury in fact that is “(a) concrete and particularized, and (b) actual or imminent, not conjectural or

93 See Baker, supra n.88, at 207.
95 Trade Regulation Rule on Discriminatory Practices in Men’s and Boy’s Tailored Clothing Industry, https://books.google.com/books?id=g- jj6XC6r48C&pg=PA1&lpg=PA1&dq=federal+Trade+Commission+rule+mens+and+boys+pants&source=b l&ots=T- TNvURSxg&sig=ACfU3U3giHEusyUG1XaqKhWEN7NVj9TsWQ&hl=en&sa=X&ved=2ahUKEwid0ei1v4Pq AhW9SJABHR4WGl0OQ6AEwAnoECAUQAQ#v=onepage&q=federal%20Trade%20Commission%20rule% 20mens%20and%20boys%20pants&f=false
97 Id. at pp 216-222.
hypothetical.” Until the Commission determines a company has violated the Federal Trade Commission Act, it has not suffered any harm. Nor is a company likely to argue that it is in imminent danger because its current behavior violates the law.

When the rule has been applied in a specific case, it will likely have been tailored to the specific circumstances. The review would focus on the actual order issued in the case, which would depend on the record in the specific case. Nevertheless, we consider whether the rule would be upheld on its own, which could occur in two situations. First, if a court found standing. Second, in a particular litigation, a party might challenge the default order under the Administrative Procedure Act (APA) and argue that because the default order is inappropriate, the specific remedy must be vacated. In our view, in either situation a court would likely uphold the rule.

The validity of the proposed rule would depend on whether it satisfies the requirements of the APA. Notice and Comment rulemaking is well established under the APA and gives the Commission flexibility in developing a rule. At a minimum, the Commission would need to issue a Notice of Proposed Rule Making, take comments, and issue a final rule that includes a statement of the rule’s purpose and the basis for the rule.” The Commission could hold workshops or even a hearing if it felt that would be helpful.

A court can vacate the rule if it is “arbitrary and capricious, an abuse of discretion, or otherwise not in accordance with the law,”

"is in excess of statutory jurisdiction, or authority, or limitation, or short of statutory rights” or "without observance of procedure required by law.” These concerns are unlikely to be valid in our setting. Although there is dispute as to how stringent judicial review under the APA is, courts do not second guess the agency’s determination. As long as the FTC’s rule reflects the evidence in the record, employs acceptable reasoning, addresses concerns, and considers alternatives, the rule should not be found to be arbitrary and capricious.

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100 5 U.S.C. § 706(2)(A). While other statutory bases for objecting to the rulemaking exist, they either do not apply to Notice and Comment rulemaking (section 2(c) and 2(F)) or are easily satisfied. As long as the agency follows the procedures identified in the APA, the agency has complied with the requirements under Section 2(B) that the rule making is not contrary “To constitutional right, power, privilege, or immunity.” Vt. Yankee Nuclear Power Corp v. Nat. Res. Def. Council, 435 U.S. 519, 542 n. 16 (1978).
As the discussion above illustrates, there is already a rich academic and policy discussion on the types of anticompetitive harms that can occur in digital markets and how to address them.  

The rule could not be “in excess of statutory jurisdiction, or authority, or limitation, or short of statutory rights.” This factor often depends on whether an agency receives *Chevron* deference. Here, however, regardless of the amount of deference, a court is unlikely to hold that any agency exceeds its statutory rights to make procedural rules to manage its adjudicative process. The rule simply organizes how the Commission addresses remedy in a particular class of cases in administrative litigation. It has no binding effect on federal cases, although a federal court could choose to adopt the rule in whole or in part. During the rule-making process itself, the Commission should consider whether assigning burdens of persuasion or production would transform a procedural rule into a substantive one.

A third objection would be that the Commission acted “without observance of procedure required by law.” The type of rule proposed here is unlikely to raise such concerns. The rule does not regulate conduct in the first instance. It applies only after a finding that the respondent violated the Federal Trade Commission Act. Further, it does not limit respondent’s rights to argue for different relief.

As to the specific order in a case or the implementation of the order, the dominant firm could appeal the Commission’s decision (and might be likely to do so), but an appellate court would interfere only if “there is no reasonable relation between the remedy and the violation.” If the case was in federal court, the court could order a similar process. If the dominant firm disagrees with a decision of the interoperability committee, the FTC would review and make a recommendation to the court, and then the court would resolve the issue. Compared to leaving the decision to the incumbent or an incumbent-dominated organization, the proposed process is more likely to develop a standard that maximizes benefits and minimizes costs.

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103 See *supra*, nn. 13-22.
106 See *Atlantic Refinery Co. v. Federal Trade Commission*, 381 U.S. 357, 376 (1965),
107 These procedures are similar to Judge Green’s approach in AT&T, see, *supra*, nn. 71-74.
d. Draft Rule

We provide a draft of an interoperability rule as a concrete example of the principles we have discussed. In order for this desirable remedy to be a possibility in the event that the court finds Facebook liable, the FTC would want the capability to administer the adoption of interoperability to a defendant and an industry. If the FTC has such a capability in place, it can offer interoperability to the court as a potentially effective and predictable remedy. Enforcement will benefit if the FTC adopts an Interoperability Order immediately.

Upon a finding that,

(1) the defendant has been found liable for violating Section 5 of the Federal Trade Commission Act by engaging in conduct that violates Section 2 of Sherman Act,

(2) the defendant’s product or service experiences strong network effects and these are a barrier to entrants, and

(3) the market has tipped, competition has been suppressed to the detriment of consumers, and the harm cannot easily be restored because past nascent or potential entrants no longer exist or are severely weakened.

The Federal Trade Commission shall presumptively adopt the following provisions to establish interoperability as the best chance of restoring the lost competition in a way that benefits consumers.

a) The Federal Trade Commission will create an interoperability committee. This committee will determine the standard for interoperability plus relevant accompanying privacy standards. Such committee will include the defendant, potential entrants, industry participants, independent technical experts chosen by the FTC, and representatives of the FTC. The standard will be chosen to facilitate entry as well as a positive user experience. The committee will not adopt technical standards that maintain market power of the defendant. The FTC will make the final determination of the standard in its sole discretion.

b) An entrant that wishes to use the standard must obtain a license from the FTC. Such a license is royalty free and may be obtained on demonstrating to the FTC that
the applicant complies with all relevant US laws, maintains privacy rules of the standard, and will adhere to the interoperability rules set forth below.

c) The defendant will be required to use the interoperability standard. The defendant may not interoperate on the included functionality except through the formal standard. Other competitors who choose to license the standard must offer interoperability using the standard with the defendant and all other licensees without discrimination among them.

d) The FTC, (or the Court) in its sole discretion, may revoke the license of any licensee if that licensee systematically violates consumer protection or privacy laws. Any offending licensee may be fined up to $19,000 multiplied by the total number of users on the offending site multiplied by the number of days of the violations, for privacy violations such as analyzing the data of, or otherwise monetizing, the off-platform contacts of its users.\textsuperscript{108}

e) The FTC will establish a procedure for evaluating the conduct of any platform’s violation of the interoperability standard. Such a procedure must be prompt or network effects will impair competition. Upon credible report of lack of interoperability, the FTC will investigate and interview the offending platform within 24 hours. The FTC will determine if a platform is at fault within the subsequent 3 days and order compliance within an additional 24 hours. Thus, interoperability will be restored promptly.

f) Compliance of the defendant requires significant penalties due to the strength of network effects and the lucrative nature of a monopoly position. If the defendant fails to comply with the interoperability standard, entrants will not be able to offer quality service because the majority of users will still be on the defendant’s platform. Entrants will not grow, and the defendant’s market power and position will be retained. Thus, if the FTC finds failure to comply with interoperability, it has the power to levy a fine of 1% of the platform’s annual revenue for each day of noncompliance, beginning on the

\textsuperscript{108} “Sole discretion” applies to the relationship between the FTC and interoperability committee. The FTC’s decision would be subject to judicial review under the Administrative Procedure Act if it was an FTC adjudication and would have to be approved by the court in a federal court action.
day the conduct was reported and ending on the day it was corrected.\textsuperscript{109} Determination of whether this fine is warranted and the extent of its duration shall be at the sole discretion of the FTC. The amount of the fine shall be large enough to deprive the defendant of any revenue earned as a result of the violation in order to deter future violations.

g) If the period without interoperability causes any significant harm to competition, the defendant or licensee with market power shall be fined an additional sum representing treble the gains from the conduct. This provision is designed to deter the incumbent from targeted short periods of interoperability that would eliminate or severely hobble rivals. A failure of interoperability at a critical moment (perhaps during an important holiday or event) could set back entrants and prolong monopoly profits by the defendant. The FTC shall estimate the impact of the conduct on the preservation of monopoly profits using the best available existing economic tools. Those tools will necessarily be imperfect, but this uncertainty shall not be a barrier to levying a fine of treble the estimated gains to the incumbent from the conduct. The FTC shall further have the power to order the removal of the CEO or other executive who ordered the conduct.

h) The Commission will order additional relief that is necessary to remedy the violations.

In any matter, the respondent before the Federal Trade Commission may request modification, changes, additions, or deletions for the standard order. The Commission Judge shall grant such proposals if it (a) would not diminish competition and serve some legitimate purpose or (b) would more effectively restore competition. The Commission shall not modify the standard order if such modification would allow the respondent to maintain its monopoly by means other than competition on the merits, including increasing the respondent’s ability to discriminate against, or deny access to the respondent’s platform to, potential or nascent competitors.

6. Conclusion

The proposed rule we put forward in this paper causes the network effects of a particular product, e.g. social media networks, to be experienced at the level of the market as a whole, not

\textsuperscript{109} As discussed above, whether the FTC has the power to impose fines in administrative litigation is beyond the scope of the article, see discussion, supra n. 86-87.
the level of one company. The rule lowers entry barriers to rival firms as well as raising the benefit that consumers get from the product, as it will connect them to more users. Application of the rule should generate a vibrant social network market where users can choose among many differentiated providers competing on dimensions of importance to them, such as the safety of the content or the user interface. While we have proposed our interoperability remedy as a rule for the FTC to adopt through its rule-making process, we want to stress that we view the rule as having much more general applicability. We chose this framing for the paper because of the possibility that the FTC’s investigation of Facebook could lead to litigation (unknown at the time of writing), in which case the agency would need a practical remedy. An interoperability rule provides a possible solution to that problem. Further, in the context of litigation, interoperability is an issue precisely because there has been a violation of law, and the court or factfinder has an obligation to remedy the harm. Concerns about the need for the requirement or that it may be overly broad are less relevant than in other contexts such as legislation or regulation.

But our rule could form a model for those contexts as well. A legislature could pass a law similar to our rule that would open up the social media sector so that it resembles the email and telephone networks. A regulator, either in the digital or telecommunications area, might adopt such a rule to advance the public interest, or be instructed by a legislature to do so, but it would depend on the regulators’ authority. If the regulator had authority over only a limited set of digital platforms judged to have gatekeeper status, it might have to address the problem through a license scheme that requires reciprocal interoperability with all other license holders, as we propose here.\footnote{This tension is raised in Amelia Fletcher, “Market Investigations for Digital Platforms: Panacea or Complement?” UEA CCP working paper August 2020} A mechanism that has attracted a great deal of policy attention lately is the UK’s Market Investigation tool. This tool permits the CMA to investigate an industry and, if it determines that competition is not working well in that industry, mandate changes to fix those flaws. If a Market Investigation of the social network industry found that it lacked competition and dynamism due to high entry barriers, mandatory interoperability imposed by the competition authority would be an attractive solution.