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2-15-2022

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#### Repository Citation

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## ANTITRUST INTEROPERABILITY REMEDIES

Herbert Hovenkamp\*

### Introduction

Among the most important developments in antitrust this decade are the competitive problems posed by large digital platforms. The most frequently mentioned candidates are Alphabet (Google), Amazon, Apple, and Meta (Facebook). Many others should be on this list but have managed to avoid most of the attention. Among them are Microsoft, which is bigger than three of the four principal targets,<sup>1</sup> and other two-sided digital platforms including Uber and eBay. Equally large traditional retailers like WalMart have escaped notice as well, even though they engage in many of the same practices. Indeed, to the extent their customers have less mobility, the same practices are more harmful in brick-and-mortar stores. For example, if WalMart engages in “self-preferencing” of house brands the customer can escape only by driving to a different store. If Amazon does the same thing the customer can typically flee with a mouse click.

This essay sidesteps most of the interesting questions about whether the platforms have done anything unlawful. Rather, it assumes that they have and focuses on the appropriate remedy. One of the most frequently mentioned remedies in the general press or

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<sup>1</sup>See <https://companiesmarketcap.com/> (continuously updated ranking of firms by market cap). Among tech firms the ranking is Apple, Microsoft, Alphabet, Amazon, Tesla, Meta). Meta’s (Facebook’s) position reflects a steep decline in shareholder value that occurred in early February, 2022).

occasionally by politicians or interest groups is “breakup,”<sup>2</sup> often given without much detail about what that entails or how it should be accomplished. The other obvious remedies are prohibitory or mandatory injunctions, as well as damages in cases brought by private plaintiffs.

Compelled interoperability is also a promising remedy that can solve many competition problems without interfering unnecessarily with the structures that make digital platforms attractive and that have contributed so much to economic growth. Because of the wide variety of structures and business models for big tech, “interoperability” must be defined broadly. It can realistically include everything from “dynamic” interoperability that requires real time sharing of data and operations, to “static” interoperability which requires portability but not necessarily real time interactions. Also included are the compelled sharing of productive assets, most frequently intellectual property rights. The best way to think about interoperability remedies is broadly.<sup>3</sup> Designing such remedies requires identification of the particular structures or practices that are making these markets less competitive than they might be. As developed below, interoperability is not the best remedy in all situations, nor even for all of those that involve digital platforms.<sup>4</sup>

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<sup>2</sup>E.g., Senator Elizabeth Warren, “It’s Time to Break Up Amazon, Google and Facebook” Medium (March 8, 2019).

<https://medium.com/@teamwarren/heres-how-we-can-break-up-big-tech-9ad9e0da324c>. See also ZEPHYR TEACHOUT, BREAK ‘EM UP: RECOVERING OUR FREEDOM FROM BIG AG, BIG TECH, AND BIG MONEY (2020). For a good critique, see Maham Usman, *Breaking up Big Tech: Lessons from AT&T*, 170 UNIV. PA. L. REV. (2021) (forthcoming), available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3859441](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3859441).

<sup>3</sup>See, e.g., JOHN PALFREY AND URS GASSER, INTEROP: THE PROMISE AND PERILS OF HIGHLY INTERCONNECTED SYSTEMS 5 (2012) (defining interoperability as the “ability to transfer and render useful data and other information across systems, applications, or components.”).

<sup>4</sup> See discussion *infra*, text at notes \_\_\_.

Approaches to antitrust remedies should begin with one important principle, which is that a productive asset presumptively has the size and shape that it has because of market forces, including consumer choice. “Shape” here refers not merely to a firm’s horizontal size, but also to the extent of its vertical integration or operations in collateral markets.<sup>5</sup> Simply breaking up a firm without examining the reasons for its size and shape will do more harm than good. A promising approach in some cases is creation of a “commons” or other institutional mechanism that permits an asset to be shared. For example, we might be able to keep a network intact but force competition within it. For example, no one would advocate for a breakup of the telephone system into discrete networks unable to communicate with one another. Here, an interoperability decree created the benefits of competition on a single unified network.<sup>6</sup>

The discussion here assumes that an antitrust violation has been found. As a result, the remedy can be fashioned by a court’s equity power in the context of litigation. Once an antitrust violation is found the court’s equity powers are very broad, falling mainly under the government’s broad authority to “prevent and restrain” antitrust violations.<sup>7</sup> In addition, Congress and perhaps even state or local governments have the power to mandate interoperability legislatively, without the need for proof of an antitrust violation.

Interoperability remedies are a form of injunction. They are not structural because of themselves they do not force the divestiture, or spin-off, of any productive asset. They do require sharing of some information. Occasionally an interoperability remedy is also structural. For example, the consent decree that broke up the AT&T telephone

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<sup>5</sup>GEORGE E. HALE AND ROSEMARY D. HALE, MARKET POWER: SIZE AND SHAPE UNDER THE SHERMAN ACT (1958).

<sup>6</sup>See discussion *infra*, text at notes \_\_\_.

<sup>7</sup>15 U.S.C. §25 (2018). On the scope of this power, see Herbert Hovenkamp, *Antitrust Harm and Causation*, WASH. UNIV. L. REV. (2022) (forthcoming), available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3771399](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3771399).

system in the early 1980s divided AT&T into seven regional operating systems, separating them from AT&T's long distance division, and also from Western Electric, its manufacturer and supplier of instruments.<sup>8</sup> However, the decree also required the individual pieces of the old Bell system to interconnect with one another as well as with new competitors. This interconnection requirement was subsequently enacted into the 1996 Telecommunications Act, compelling the regional firms to interconnect with all other providers "at any technically feasible point within the carrier's network,"<sup>9</sup> and providing operational quality at least as good as that offered by the primary carrier itself.<sup>10</sup> Today these interconnection requirements are imposed by the Telecom Act and not by the antitrust laws.<sup>11</sup>

In retrospect, the interoperability requirements of the AT&T remedy were more significant and much more successful than the structural breakups were. Many of the spun-off regional operating systems have merged back with each other and even with AT&T.<sup>12</sup> In any event, it is not obvious that having multiple regional firms makes the system work any better. Firms in different geographic markets

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<sup>8</sup>United States v. AT&T Co., 552 F. Supp. 131, 141-42 & n.42 (D.D.C. 1982), *aff'd sub nom.* Maryland v. United States, 460 U.S. 1001 (1983).

<sup>9</sup>47 U.S.C. §251 (c) (2)(B).

<sup>10</sup>*Id.*, §251 (c)(2)(C).

<sup>11</sup>*See* Verizon Comm'ns v. Law Offices of Curtis V. Trinko, LLC, 540 U.S. 398 (2004) (declining to find an antitrust violation when the local exchange carriers violated interconnection obligations contained in the Telecommunications Act).

<sup>12</sup>Bell Atlantic, NYNEX, and later GTE formed Verizon; SBC and Pacific Telesis merged in 1997, and SBC and Ameritech in 1999; SBC acquired AT&T; US West acquired by Qwest in 2000. *See* Jim Chen, *The Magnificent Seven: American Telephony's Deregulatory Shootout*, 50 HASTINGS L.J. 1503 (1999). The developments are also recounted briefly in *Bell Atlantic Corp. History*, available at <http://www.fundinguniverse.com/company-histories/bell-atlantic-corporation-history/>.

ordinarily do not compete much with one another.<sup>13</sup> Interconnection, however, is another matter. Today much of the telephone system is highly competitive even as it is interactive. The biggest threat to it comes from permissive merger decisions.<sup>14</sup>

In other cases, interoperability simply requires firms to share data, operations, or some significant asset.<sup>15</sup> The requested remedy

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<sup>13</sup>Indeed, the theory of the litigation in *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007), was that, although the distinct regional operating systems had the legal right to compete with one another, in fact they had not done so, allegedly as a result of an anticompetitive agreement. The Court rejected the agreement claim.

<sup>14</sup>*E.g.*, *New York v. Deutsche-Telekom AG*, 439 F.Supp.3d 179 (S.D.N.Y. 2020) (rejecting state challenge to merger of T-Mobile and Sprint).

<sup>15</sup>The variety of situations addressed in antitrust cases include *United States v. Associated Press*, 52 F. Supp. 362 (S.D.N.Y. 1943), *aff'd* 326 U.S. 1 (1945) (requiring AP to remove bylaws that allowed its members to block membership applications, enabling broader news sharing among newspapers); *United States v. Terminal Railroad*, 224 U.S. 383 (1912) (ordering railroad terminal venture to share its facilities); *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001) (effectively requiring Microsoft to permit rival internet browsers to work on its operating system); *Image Tech. v. Kodak*, 125 F.3d 1195 (9th Cir. 1997) (requiring Kodak to sell aftermarket photocopier parts to competing service providers). *See also* *Epic Games v. Apple*, 4:20-cv-05640, 2021 WL 4128925 (N.D. Cal. Sept. 10, 2021) (rejecting Epic Games' request to abolish Apple's restrictions on iOS app distribution and in-app payment processing to allow for third-party app stores on iOS); *New York v. Microsoft Corp.*, 224 F.Supp.2d 76, 172 (D.D.C. 2002) (requiring Microsoft to disclose information so that non-Windows servers could operate on Windows systems); *In re Intel Corp.*, 128 F.T.C. 213 (1999) (requiring Intel to share technical information with rivals). *See* Spencer Weber Waller, *The Past, Present, and Future of Monopolization Remedies*, 76 *Antitrust L.J.* 11 (2009) (arguing that information and disclosure, access and

that the court rejected in the *Epic Games* antitrust case would have required Apple to make its platform available to competing app sellers that were not bound by Apple's commissions.<sup>16</sup>

The domain and usefulness of interoperability remedies are determined by considering two issues. The first is identification of the asset for which interoperability is preferred to a breakup or other antitrust remedy. The second concerns the administration of the decree.

### **The Case for Interoperability Remedies**

Interoperability remedies are worth considering when a structural breakup will make a certain asset or plant less valuable but competition among individual providers is desirable. In order to achieve both of these things, an interoperability remedy preserves the structure of physical assets but requires competition in their operation or management. Instead of breaking up the asset we create one of two alternatives. One is a situation in which rivals operate an asset jointly, but in a way that incentivizes them to compete rather than collude. The other is to mandate the sharing of data or communications in a way that permits individually owned assets to be integrated into a single network, whose network effects can then be aggregated over the full

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interoperability should be key components of future monopolization litigation remedies, citing *Microsoft* and *Intel* as examples).

<sup>16</sup>*Epic Games, Inc. v. Apple, Inc.*, \_\_\_ F.Supp.3d \_\_\_, 2021 WL 4128925 (N.D.Cal. Sep. 10, 2021) (refusing to find antitrust violation, and thus rejecting requested relief that would require Apple to permit multi-platform payment processors). See the complaint, 2020 WL 12623035 (N.D. Cal. Aug. 13, 2020), ¶16 (“But for Apple's illegal restraints, Epic would provide a competing app store on iOS devices, which would allow iOS users to download apps in an innovative, curated store and would provide users the choice to use Epic's or another third-party's in-app payment processing tool.”).

range of users. The history of both antitrust policy<sup>17</sup> and IP licensing practices<sup>18</sup> provides a wealth of instances.

Interoperability remedies are particularly attractive in two broad but interrelated sets of cases. The first one occurs when the asset in question is a “winner take all” market – that is, a natural monopoly or at least something that is subject to substantial economies of scale or scope. The second occurs when the market is subject to significant network effects that give larger networks important advantages over smaller ones. In both situations breakups are undesirable. They either increase firms’ costs, make it significantly less attractive to customers or other users, or a combination of both. To the extent that these outcomes are undesirable they are also unstable, because future competition will either force them to change or else drive them from the market. For example, if output is undifferentiated a winner-take-all market has an equilibrium of one firm.<sup>19</sup> If there are two firms in such a market, each will be inefficiently small. Further, the larger one will have cost advantages over the smaller one. Such markets move naturally to either collusion or monopoly.

In order to be effective, an interoperability remedy must decentralize control over price and output, placing them in the hand of competitors. Some networks, such as the current phone system, largely satisfy this requirement. Each participant sets its own price, but they cannot lawfully collaborate on a price for the network itself. Price fixing is a problem to be watched, but as long as sellers’ prices

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<sup>17</sup>Herbert Hovenkamp, *Antitrust and Platform Monopoly*, 130 YALE L.J. at 1952, 2021-2031 (2021).

<sup>18</sup>See CHRISTINA BOHANNAN & HERBERT HOVENKAMP, CREATION WITHOUT RESTRAINT: PROMOTING LIBERTY AND RIVALRY IN INNOVATION 325-364 (2012).

<sup>19</sup>See Paul L. Joskow, *Regulation of Natural Monopoly*, Ch., 16, pp. 1227-1348, in HANDBOOK OF LAW AND ECONOMICS (A. Mitchell Polinsky & Steven Shavell, eds., 2007).

are individually set the incentive is not obviously greater than it is in any market.

Some networks are dominated, in the sense that a single firm owns or operates it and everyone else is a mere licensee or customer. This can lead to serious problems, as the Ninth Circuit's decision in *Alaska Airlines, Inc. v. United Airlines, Inc.*<sup>20</sup> illustrates. The networks in that case were privately operated airline scheduling systems that made reservations for numerous airlines. American Airlines operated SABRE, the largest system. United Airlines operated Apollo, which was smaller.<sup>21</sup> While these systems were networks, they were "dominated" networks in the sense that for each of them a single large firm owned the network and made all of the relevant decisions about network access and pricing, although no one alleged that the system set the ticket prices of the airlines themselves. The other airlines were licensees rather than managing participants. Alaska Airlines and other smaller carriers brought an antitrust action against the systems, claiming discrimination and exclusion. In rejecting that claim the Ninth Circuit contrasted the case with the Supreme Court's *Terminal Railroad* decision, noting that the railroad terminal network in that case had been controlled by a collaboration of multiple firms. In the present case, by contrast, SABRE and Apollo were controlled by a single firm. As a result, the unilateral refusal to deal standard of §2 of the Sherman Act applied. Under it, the duty to deal is very narrow.<sup>22</sup>

The Supreme Court's 1912 decision in *United States v. Terminal Railroad Association*, which the *Alaska Airlines* decision

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<sup>20</sup>948 F.2d 536 (9<sup>th</sup> Cir. 1991).

<sup>21</sup>*Id.* at 538.

<sup>22</sup>*Id.* at 542, citing Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841 (1990). The court also dismissed as irrelevant antitrust cases requiring dealing in regulated industries, such as *Otter Rail Power Co. v. United States*, 410 U.S. 366 (1973); and *MCI Communications Co. v. AT&T*, 708 F.2d 1081 (9<sup>th</sup> Cir. 1983).

distinguished, came in an action brought by the government against a corporation controlled by a group of market participants, including railroads, bridges across the Mississippi River, and various loading and cargo storage and transfer facilities.<sup>23</sup> The Association was a holding company, formed by purchasing the shares or in a few cases the assets of these various entities.<sup>24</sup> The resulting network of facilities was a bottleneck through which east-west traffic at that point of the Mississippi River had to pass. While 24 railroads converged on the Mississippi River at Saint Louis, none passed across. Roughly half were on the west and the others on the east.<sup>25</sup> The association's intent was apparently to use that network to create a monopoly of traffic passing across the river.

Having found a Sherman Act violation, the Court approved an order requiring the operators of the association to act as an "impartial agent" for every railroad line that was compelled to use the facilities.<sup>26</sup> Under that decree the defendant was required to approve the admission to the venture "of any existing or future railroad to joint ownership and control of the combined terminal properties" so as to place it "upon a plane of equality" with the original venture participants. In addition, if an outsider railroad preferred not to become a member, the defendant association was required to permit it to use the facilities "upon such just and reasonable terms and regulations" as would place it "upon as nearly an equal plane as may be with respect to expenses and charges as that occupied by the proprietary companies."<sup>27</sup> Further, if any dispute about participation among the parties or with outsiders should arise, they would be referred to the federal district court.<sup>28</sup> The Court

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<sup>23</sup>United States v. Terminal R.R. Assn. of St. Louis, 224 U.S. 383 (1912).

<sup>24</sup>*See Id.* at 393-394 (describing many of the stock and asset transactions).

<sup>25</sup>*Id.* at 395.

<sup>26</sup>*Id.* at 410.

<sup>27</sup>*Ibid.*

<sup>28</sup>*Ibid.*:

did not order a breakup of the company, but did require that if the parties were unable to come to agreements in accordance with the decree the Court would consider a plan of dissolution.<sup>29</sup>

In contrast to the *Terminal Railroad* case, the *Alaska Airlines* decision gives us the worst of two worlds. First, as networks of multiple airlines, the reservation systems had whatever market power an aggregation of providers might acquire. For many networks this could be the entire market. Second, because the networks were controlled by a single firm, prices and terms were set unilaterally and thus were not reachable under the more aggressive price fixing and exclusionary practice provisions of §1 of the Sherman Act.

By holding up *Terminal Railroad* as a counterexample, the court was in fact making an important suggestion about effective remedies: networks of active market participants can be made to operate more competitively if decision making power is distributed over all or at least a significant subset of participants. A well designed interoperability remedy will enable a market to take full advantage of the economies that a particular asset's size and shape provide, while yet inducing competition within the network. SABRE could just as easily have been organized as a cooperative venture among the participating airlines.

Costs that decline as output increases can often serve to make breakups undesirable. Once the firm is broken into two or more pieces each will have higher costs. Further, if these economies of scale are substantial the resulting breakup will not be stable. Eventually one firm will come to dominate over the others and the market will once

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Sixth. By providing that any disagreement between any company applying to become a joint owner or user, as herein provided for, and the terminal or proprietary companies, which shall arise after a final decree in this cause, may be submitted to the district court, upon a petition filed in this cause, subject to review by appeal in the usual manner.

<sup>29</sup>*Id.* at 412.

again return to monopoly status, perhaps through bankruptcy, perhaps by merger, or perhaps by collusion.<sup>30</sup>

To illustrate, suppose that a firm's costs decline as output decreases up to the point that it produces 100 units at a cost of \$1. For any smaller output costs would be proportionately higher. Further, total market demand at a price of \$1 or a little higher is 90 units. That indicates that this firm is a natural monopoly, or "winner-take-all" market. Left to its own choices it would maximize its profits by reducing output to some lower level, say, 70 units, and charging a higher price, say \$1.60. If a structural antitrust decree broke this firm into two halves, however, its costs would be significantly higher. The firm's post-breakup "competitive" price might very well be higher and output lower than its pre-breakup "monopoly" price. In that case, not only will consumers and input suppliers such as labor be harmed, but the situation will not be sustainable in the long run.

Suppose, however, that this particular asset could be shared among several firms who could aggregate its scale economies by operating it jointly. That is, the system would retain its dominant structure but be operated competitively by a large number of firms. If these firms behaved competitively, they would share this facility and compete all the way up to the point that the plant's capacity was exhausted or the market saturated. Indeed, that structure could yield the optimal regulatory goal of performance that mimics a competitive market but in the context of a monopoly asset. The structure would be preferable to the one that Harold Demsetz famously proposed, which was that multiple firms bid against each other to operate a natural monopoly utility.<sup>31</sup> In Demsetz' model a single winning bidder won the right to operate the utility by bidding the competitive price. By contrast, under the interoperability approach a number of firms operate the asset jointly, and the antitrust laws govern their pricing and output

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<sup>30</sup>See Joskow, *supra* note \_\_\_\_.

<sup>31</sup>Harold Demsetz, *Why Regulate Utilities?*, 11 J. L. & ECON. 55 (1968).

selection behavior, as in the phone system. How often such an outcome is realistically available is yet to be determined, but it certainly could be generated much more frequently than it is currently.

The important underlying principle is that economies of scale, or the extreme situation of winner-take-all status, are things that attach to productive *assets*, not to firms as such. So the antitrust trick is to compel the existence of multiple participating firms, not to create multiple competing assets.

The problem of network effects is closely related to natural monopoly, but where the economies of scale attach to consumption rather than production. The network is more valuable as it has more users. If a network is subject to “indirect” network effects as well, it becomes more valuable to one side as it has more participants on the other side, and vice-versa. For example, Uber becomes more valuable as it has more drivers providing rides, but it will obtain more drivers by having more passengers. As a result, growth on the two sides is mutually supporting and gives a larger network a distinct advantage over a smaller one. The same thing is true of Facebook and other social networking sites. The gold standard in networks is the global telephone system in which nearly everyone can talk to nearly everyone else. Any “breakup” that created two or more networks such that members of one network could not communicate with members of the other would be much less valuable. In such cases simply breaking up the network can pose debilitating social costs, perhaps even making the network nonviable. In sum, what the telephone system needed for effective competition was multiple firms acting as decision makers, not multiple networks, and very likely not Demsetz’ idea that multiple firms should bid against one another for sole control of the network. That was the genius of the antitrust consent decree that restructured the telephone industry.

Networks can often be shared in ways that brick-and-mortar plants and stores cannot because the digital conduits that bind the members together leave room for much greater operational flexibility.

Once again, the telephone network offers an example where literally thousands of firms can participate, offering telecommunications services of various sorts, devices, and collateral services, but all on an interconnected network. So the real question is whether the experience of the telephone network can be duplicated in other settings. The answer is maybe, and perhaps often, although some creative variations will have to be tried.

Often the historical development of a network explains why it is dominant or collaborative. The original telephone system emanated from a single dominant firm, AT&T.<sup>32</sup> By contrast, the Chicago Board of Trade,<sup>33</sup> which was a marketing commons, and the Associated Press,<sup>34</sup> a news sharing wire service of newspapers, were structured from the beginning as collaborations of multiple firms. In general, if a market has a dominant firm at the time of a network's formation that firm will prefer a dominated network, as AT&T did prior to the breakup. If it does not, then the network that emerges is more likely to be collaborative.<sup>35</sup> For example, the Windows operating system emerged as dominant within Intel-based small computer systems because it was pioneered by a single firm. The Government's antitrust case was provoked by Microsoft's efforts to exclude an unruly web browser, Netscape, that threatened to "commoditize" the operating

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<sup>32</sup> On the history of the Bell AT&T system and how it related to its competitors and other networks, *see* RICHARD R. JOHN, NETWORK NATION: INVENTING AMERICAN TELECOMMUNICATIONS (2010)

<sup>33</sup> *Chicago Board of Trade v. United States*, 246 U.S. 231 (1918) (upholding as reasonable a price agreement among the trading members of an incorporated market in grains and agricultural products).

<sup>34</sup> *Associated Press v. United States*, 326 U.S. 1 (1945) (striking down discriminatory membership rule imposed by association of newspapers formed to facilitate wire service news sharing).

<sup>35</sup> *See* Michael L. Katz and Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 AM.ECON. REV. 424 (1985).

system by making the browser compatible across multiple platforms.<sup>36</sup> By contrast, email is just as networked, but it emerged as a collaborative network whose interconnectivity rivals that of the telephone system. Although there are hundreds of email clients, or providers, all of them operate on a system under which anyone who owns an address provided by one client can readily communicate with those using a different client.<sup>37</sup>

### **Designing Interoperability Decrees**

Once an antitrust violation has been proven, the first step in fashioning a remedy is determining the best type, and thus whether an interoperability remedy is even appropriate. “Winner take all” status is important, but it is not necessarily the driving factor. Most assets, including most digital platforms, are not winner-take-all. In most of these, competition is feasible without interoperability.

The principal reason that even platforms with significant network effects are not winner-take-all markets is product differentiation. For example, the United States has hundreds of dating sites and thousands of internet-based subscription periodicals,<sup>38</sup> most of which operate on two-sided platform networks. The competition results from differentiated products that compete on elements other than price. Each dating site or magazine offers a distinctive variation

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<sup>36</sup>See *United States v. Microsoft Corp.*, 1998 WL 614485 (D.D.C. Sep. 14, 1998) (denying Microsoft’s motion for summary judgment on federal antitrust claims) at \*4 (describing Bill Gates fear that the Netscape/Java combination threatened to “commoditize” the operating system). The monopolization claims were resolved by the court of appeals in *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C.Cir. 2001).

<sup>37</sup>See John Palfrey and Urs Gasser, *Interoperability in Information and Information Systems in the Furtherance of Trade* (NCCR Trade Regulation Working Paper, 2014), available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2192651](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2192651).

<sup>38</sup>For example, Zinio, a seller of digital magazines, lists more than 6000 digital magazines published worldwide. See *Zinio.com*.

of its particular product.<sup>39</sup> Very likely the world will always accommodate multiple social networking products including Facebook, Instagram, Twitter, TikTok, Reddit, Snapchat, LinkedIn, and others. While all of these benefit from network externalities and thus larger size, they are significantly different from one another and appeal to different audiences. The fact that most of them are free to users serves to enhance the extent of nonprice competition, because price is not a factor. Size certainly confers network advantages, but in differentiated markets there is almost always room for unique alternatives.

As a result, broad and mandated interoperability is not always the best remedy, even for digital two-sided platforms. It would not obviously be helpful for a nondominant dating site such as Zoosk.<sup>40</sup> Nor would increase competition among the thousands of magazines and newspapers that publish on digital platforms. In these cases product variety and robust ongoing entry<sup>41</sup> suggest that competition is working quite well. In markets that exhibit significant differentiation but that do have dominant firms, the principal thing impeding new competition is overly lax enforcement of the law against acquisitions or unreasonably exclusionary contract practices.

The fact that Facebook is not necessarily a winner-take-all network does not fully resolve the remedies issue. Indeed, if a network really is winner-take-all, then it would not need exclusionary practices in order to maintain its position. Once it had attained a dominant position it could retain it by simply operating efficiently without significant missteps. Its advantages in structure and membership size would be sufficient to exclude competing firms. On the other hand, networks that are not winner-take-all can maintain dominance only by

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<sup>39</sup>See Hovenkamp, *Platform Monopoly*, supra note \_\_ at 1996-2001.

<sup>40</sup>Zoosk.com.

<sup>41</sup>*Statista* data show that 60 new magazines entered the U.S. market in 2020. See <https://www.statista.com/statistics/238598/magazine-launches-in-the-united-states-by-category/>.

engaging in exclusionary practices. Facebook’s need to acquire Instagram illustrates the problem. Facebook very likely could not keep Instagram out of the market simply by offering its own services on attractive but sustainable terms.<sup>42</sup>

When a market does contain a dominant firm, however, interoperability as an antitrust remedy can be a way to undo the effects of exclusionary practices, including anticompetitive acquisitions. It is intended to restore competition, which is generally a central goal of an antitrust equity remedy, particularly those that reach beyond a simple injunction.<sup>43</sup>

Merger policy today has become focused mainly on collusion or collusion-like behavior rather than exclusion. The fear is that the merger will lead to either a market-wide price increase<sup>44</sup> or else a “unilateral” price increase imposed by the merging firms.<sup>45</sup> Platform acquisitions of upstart rivals need to be addressed more broadly as exclusionary practices, designed to prevent new competition from emerging. The FTC’s complaint against Facebook’s acquisition of Instagram makes clear that the FTC has gotten this message. At the time of that acquisition Facebook was obsessed with the possibilities that Instagram would turn into a significant rival – a telling indicator that Facebook is *not* a winner-take-all platform.<sup>46</sup> But the Instagram

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<sup>42</sup>See the summary of the FTC’s First Amended Complaint, *infra* note

<sup>43</sup> *E.g.*, *United States v. Microsoft Corp.*, 253 F.3d 34, 47 (D.C.Cir. 2001) (noting government’s request for remedy that would “restore competitive conditions”); *Rambus, Inc. v. FTC*, 522 F.3d 456, 462 (D.C. Cir. 2008) (remedy extending beyond an injunction required “stronger proof” that it was necessary to “restore competitive conditions”).

<sup>44</sup>See United States Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines §7 (coordinated effects), available at [Horizontal Merger Guidelines \(08/19/2010\) \(justice.gov\)](https://www.justice.gov/antitrust/horizontal-merger-guidelines).

<sup>45</sup>*Id.*, §6 (unilateral effects).

<sup>46</sup>First Amended Complaint, *FTC v. Facebook, Inc.*, #1:20-cv-3590-JEB (D.D.C. Aug. 19, 2021). See ¶¶1,7, 64 (strategy of preferring

case is easy and obvious, particularly in light of several years of hindsight showing that Instagram really did emerge as a significant platform, with about one billion users today.<sup>47</sup> At the time of the acquisition it had about 30 million users and a “handful” of employees, although it was growing rapidly.<sup>48</sup>

Many firms acquired by large digital platforms today are very small, but their systematic acquisition means that those which might have emerged as formidable rivals never will.<sup>49</sup> Evaluating dominant platform acquisitions of nascent rivals should be considered a form of risk management rather than an effort to preclude immediate competitive losses. That would require changing proof burdens to as to disfavor the acquisitions and, where possible, limit them to IP acquisitions of nonexclusive rights.<sup>50</sup> Presumptively there are very likely few situations in which a large multi-offering platform cannot get everything it needs from an acquisition through non-exclusive IP licensing.

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acquisition of rivals; ¶¶66, 72 (acquisition strategy vis-à-vis Instagram); ¶¶82-84, 88-90 (Zuckerberg’s anxiety about Instagram’s rapid growth); ¶86 (acquisition motivated by fear that Apple might otherwise acquire Instagram).

<sup>47</sup>See <https://backlinko.com/instagram-users> (early 2022 estimate).

<sup>48</sup>See “Facebook Buys Instagram for \$1 Billion,” NEW YORK TIMES (April 9, 2012), available at <https://dealbook.nytimes.com/2012/04/09/facebook-buys-instagram-for-1-billion/>.

<sup>49</sup>Wikipedia maintains updated lists of the firms acquired by each of the dominant platforms. See, e.g., “List of Mergers and Acquisitions by Meta Platforms,” WIKIPEDIA, at [https://en.wikipedia.org/wiki/List\\_of\\_mergers\\_and\\_acquisitions\\_by\\_Meta\\_Platforms](https://en.wikipedia.org/wiki/List_of_mergers_and_acquisitions_by_Meta_Platforms) (showing 92 acquisitions by Meta alone) (last visited Feb 12, 2022).

<sup>50</sup>See Kevin A. Bryan & Erik Hovenkamp, *Antitrust Limits on Startup Acquisitions*, 56 REV. INDUS. ORG. 615 (2020); Kevin A. Bryan & Erik Hovenkamp, *Startup Acquisitions, Error Costs, and Antitrust Policy*, 87 UNIV. CHI. L. REV. 331 (2020).

Further, “dynamic” interoperability is likely to be an unwieldy solution to a monopoly problem such as the one presented by Facebook. Making data fully interactive in real time could be difficult, given that these sites use different types of data and in different ways. Making such a remedy work is fundamentally an engineering question.

“Static” interoperability, or portability, is more promising. In its opinion sustaining the FTC’s monopolization complaint against Facebook, the court cited lack of data portability as a barrier to entry, which it clearly is.<sup>51</sup> As a Facebook user builds up an inventory of messages, photos, videos, contacts, and other content the cost of switching to a different provider is higher. One way to remedy this problem is to require Facebook to keep this data in an accessible format, comprising a package that could be claimed by its owner and transferred to other firms who have set themselves up to take advantage of it. Without a locked-in membership Facebook could be forced to compete more aggressively to hold users’ attention. Such a remedy should begin with the premise that the user should have the power to access and transfer his or her own data.

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<sup>51</sup>FTC v. Facebook, Inc., \_\_ F.Supp.3d \_\_, 2022 WL 103308 (D.D.C. Jan. 11, 2022) (summarizing First Amended Complaint as alleging that:

... Facebook executives recognized that “one of the most important ways we can make switching costs very high for users - if we are where all users’ photos reside[, it] will be very tough for a user to switch if they can’t take those photos and associated data/comments with them.” [citing FAC, ¶ 216.] The FTC also notes that “these switching costs can increase over time — a ‘ratchet effect’ — as each user’s collection of content and connections, and investment of effort in building each, continually builds with use of the service.” Id., ¶ 213. Finally, it alleges that Facebook was also well aware of this dynamic, with “a Facebook ordinary course document not[ing] that there are ‘many lines of evidence for a substantial ratchet effect’ and that ratchet effects ‘can confer [a] permanent advantage.’ ” Id.

Amazon presents its own unique problems. Unlike Meta (Facebook) or Alphabet (Google), much of what Amazon sells is non-digital tactile products. Further, Amazon has evolved into what is effectively a multi-seller marketplace. In fact, the proportion of its sales that represent third parties has risen dramatically and now constitutes more than 55% of its business.<sup>52</sup> Nevertheless, for antitrust purposes Amazon is treated as a single entity. That is, its situation resembles the major airlines in the computer reservation system decision described previously,<sup>53</sup> rather than the one in the *Terminal Railroad* case.<sup>54</sup>

The multi-firm operating structure in the *Terminal Railroad* case had been created voluntarily by the parties prior to the government's suit. There is no good reason that it could not be created by a judicial decree, should a suitable antitrust violation be found. This would require an operational structure in which effective decision making about product selection, pricing and other terms was made by a collaboration of market participants rather than Amazon itself. That could enable Amazon to preserve the advantage that its large platform size gives it, while facilitating internal competition. This would not require a breakup but rather a transfer of decision making authority over product selection, pricing, and related practices to a board of individual participants in the Amazon marketplace. Treating Amazon's conduct as collaborative rather than unilateral would discipline anticompetitive practices without getting courts involved in presumptively unilateral decision-making about Amazon's product selection process, how it arranges products on Amazon searches, and the like. Further a horizontal agreement among multiple firms to

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<sup>52</sup>See <https://www.statista.com/statistics/259782/third-party-seller-share-of-amazon-platform/> (showing increase of paid units sold by third parties on Amazon, rising to 57% in Q42021) (last visited Feb. 15, 2022).

<sup>53</sup>See discussion *supra*, text at notes \_\_\_.

<sup>54</sup>See discussion *supra*, text at notes \_\_\_.

engage in a restraint such as a most-favored-nation clause would get much harsher treatment than would purely vertical agreements.<sup>55</sup>

Interoperability decrees can be particularly effective as part of merger remedies, and may be necessary to preserve the viability of spun-off assets. For example, if Facebook should be ordered to spin off Instagram, as the FTC is requesting, data portability between the two could give Instagram a fair chance at competing successfully, assuming that it needs one. In fact, remedies involving IP sharing are well established in merger enforcement.<sup>56</sup>

What would be more unusual would be an order that forced Facebook to share this data with *everyone* as a remedy for a specific merger with a single firm. In its *Facebook* decision the court accepted the FTC's allegation that the high switching costs resulting from Facebook's lock on each user's accumulated data be treated as a barrier to entry, not as a unique problem related to a particular merger. That seems correct, but one important thing about entry barriers is that when they operate at all they operate against everyone, including both established potential rivals and even firms that are not yet in existence. In that case it seems quite appropriate that an interoperability order run not merely in favor of Instagram, but also for all actual and potential rivals that might be in a position to take advantage of it. While this

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<sup>55</sup> Such remedies are explored in more detail in Hovenkamp, *Platform Monopoly*, *supra* note \_\_, 2021-2031.

<sup>56</sup> See ANTITRUST DIVISION, USDOJ, MERGER REMEDIES MANUAL (Sep. 2020), available at [Justice Department Issues Modernized Merger Remedies Manual | OPA | Department of Justice](#). *See id.* at 6, noting that the divested firm must be given all assets required to be an effective long-term competitor. *See also id.* at 7:

In markets where an installed base of customers is required in order to operate at an effective scale, the divested assets should either convey an installed base of customers to the purchaser or quickly enable the purchaser to obtain an installed customer base.

Further, this may require compulsory licensing of IP rights. *Id.*, citing *United States v. Nat'l Lead Co.*, 332 U.S. 319, 348 (1947).

might seem like overreaching when given as a remedy for a particular merger, it is clearly not when used as a remedy for monopolization, which is concerned with general market dominance.

Lest such decrees seem excessively regulatory, particularly given the conservative tilt of the current Supreme Court, one should look at the decree that the Court approved in *NCAA v. Alston*.<sup>57</sup> While the NCAA is an elaborate networked market, the *Alston* decision did not govern network operations. Rather it involved the rules that the NCAA made collaboratively among its members to place limits on the compensation of student athletes. The decree was complex, covering a variety of forms that athlete compensation could take.<sup>58</sup> The Court observed that as of the time of its opinion the district court's decree seemed to be working quite well, without excessive court intervention.<sup>59</sup>

To be sure, we may be understating the difficulty of administering complex interoperability decrees. Michael Kades and Fiona Scott Morton are sufficiently pessimistic that they advocate formation of a technical committee overseen by antitrust enforcers to adopt workable interconnection standards.<sup>60</sup> That seems premature, at least at a time when we do not have a great deal of experience with enforced as opposed to voluntary interoperability. Disputes will certainly arise over issues related to the scope, terms, or prices of sharing. But ordinary bargaining relationships, including arbitration

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<sup>57</sup>141 S.Ct. 2141 (2021).

<sup>58</sup> The decree is analyzed in Herbert Hovenkamp, *A Miser's Rule of Reason: Student Athlete Compensation and the Alston Antitrust Case*, ARIZ. L. REV. (2022) (forthcoming), available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3879580](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3879580).

<sup>59</sup>*Id.* at 2163-2165.

<sup>60</sup>Michael Kades and Fiona Scott Morton, *Interoperability as a Competition Remedy for Digital Networks 3* (Washington Center for Equitable Growth, Sep., 2020), available at <https://equitablegrowth.org/working-papers/interoperability-as-a-competition-remedy-for-digital-networks/>.

or district court intervention in the case of impasse, would be less intrusive. Both the elaborate interconnection agreements contemplated by the 1996 Telecommunications Act and the provisions for FRAND licensing of standard essential patents operate in this fashion. They contemplate private negotiation with judicial intervention only when needed. Another less costly possibility is Agency Guidelines. It bears emphasis, however, that interoperability remedies will require a significant amount of distinct treatment in different industries and even for different individual firms.

As noted previously, if a platform is truly winner-take-all, then the firm who controls it does not need exclusionary practices in order to remain dominant. That does not necessarily mean that it will not use them. Once again, AT&T is an important example of a firm that traditionally was thought to be a natural monopoly, but whose position was challenged by the emergence of wireless technologies.<sup>61</sup> It was actually condemned for unlawful refusals to deal,<sup>62</sup> which are idiosyncratic because the only violation is the refusal to share the facility. Today it is doubtful that refusal to deal law would reach that far.<sup>63</sup> If it does not and if the firm avoids other unlawful practices, then a legislative solution may be what is required.

While imposed interoperability or restructuring of management are aggressive remedies, it bears emphasize that under current antitrust law they could be imposed by judicial decree only after an antitrust violation has been found. At that point, while the antitrust court's equity powers are broad, the question of prudence remains. For simple anticompetitive contracts or other discrete

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<sup>61</sup>See discussion *supra*, text at notes \_\_\_\_.

<sup>62</sup>*MCI Communications Co. v. AT&T*, 708 F.2d 1081, 1132-1134 (9<sup>th</sup> Cir. 1983) (AT&T's refusal to permit MCI to interconnect violated antitrust essential facility doctrine).

<sup>63</sup>*Verizon Comm'ns v. Law Offices of Curtis V. Trinko, LLC*, 540 U.S. 398 (2004) (Verizon's disobedience of Communications Act's interconnection requirements not an antitrust violation, although not explicitly overruling *MCI*).

behaviors, a simple injunction may be the most effective and the least disruptive. When such remedies are inadequate, however, proposed relief needs to be tested against the requirement that it can reasonably be expected to restore competitive conditions.

### **Conclusion**

Unlike the courts, Congress has the power to impose interoperability remedies without any finding of an antitrust violation. Whether it should do so is, at this stage, doubtful. Other than the AT&T consent decree, the courts have had little experience in developing and overseeing such remedies.

More important, interoperability is a two-sided coin. One of the great values of competition, and of digital competition in particular, is its diversity. Excessive interoperability may simply serve to homogenize a market by reducing the distinctiveness of individual offerings. When choice is realistically available, effective choice is the best remedy. This militates in favor of “static” interoperability, or data portability, in a case such as Facebook. It also suggests that a firm such as Amazon – in the case of a proven §2 violation – would best be dealt with by making its management more competitive rather than using legislation or the courts to micromanage its product choices.