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The Honorable David N. Cicilline
The Honorable F. James Sensenbrenner, Jr.
Subcommittee on Antitrust, Commercial, and Administrative Law
Committee on the Judiciary
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Cicilline and Ranking Member Sensenbrenner:

I am the James G. Dinan University Professor at the University of Pennsylvania Law School and the Wharton School. My principal area of teaching and research is antitrust law. I am author of *Antitrust Law* (formerly with the late Phillip E. Areeda and the late Donald F. Turner), the most cited legal treatise on this subject. You have asked several questions about the adequacy of existing antitrust policy to address competitive problems in digital markets. For the record, for more than ten years I have not been paid for either consulting work or research support by any entity involved in these markets.

The goal of antitrust is to identify and sanction anticompetitive practices, which are those that harm consumers by reducing output unreasonably, leading to higher prices or reduced quality or innovation. Antitrust is not a cure-all for political problems, patent problems, breach of contract, fraud, invasion of privacy or other violations of tort law, unless the practice in question also harms competition. Nor is it well designed to pursue business firm bigness for its own sake. Large firm size becomes an antitrust problem only when it impairs competition. When is does so, however, the interests of consumers and business can diverge to the extent that businesses profit from both higher output, which generally benefits consumers; and higher price-cost margins, which typically reduce output and injure consumers. An important benefit of this consumer-oriented approach to antitrust is that maximum output is also conducive to economic growth, which benefits everyone, including business and labor.

Your first two questions pertain to the adequacy of existing law addressing monopolistic conduct or anticompetitive transactions, including mergers in digital markets. It is important to distinguish the statutory text, which is very broad, from the narrower case law. Section 1 of the Sherman Act, 15 U.S.C. §1, reaches every agreement that "restrains trade," which encompasses all anticompetitive output reductions. Section 2, 15 U.S.C. §2, reaches all acts that "monopolize" markets. The Clayton Act's substantive provisions are even broader, reaching tying, exclusive dealing, and mergers "where the effect may be

substantially to lessen competition or tend to create a monopoly" (15 U.S.C. §§14, 18). If one simply looked at the language of these statutes, they would seem adequate for the task.

By contrast, federal judicial interpretation of these provisions is much narrower, for several reasons. One is the residue of a legitimate reaction against excessive antitrust enforcement in the 1970s and earlier, much of which occurred at consumers' expense. However, since that time antitrust has shifted very far in the other direction. Today the marginal antitrust decision is much more likely to reflect under- rather than overenforcement. A second is the fact that many judges obtained any antitrust training they received a quarter century or more ago. Since then, notable progress in theoretical and empirical economics has both improved our techniques of analysis and shown the need for greater enforcement, particularly in markets with a significant technological or digital component. A third is a naivete about efficiencies, which assumes that they explain many more anticompetitive practices than they do in fact.² Finally, a fourth is residue of a belief, once widespread, that markets tend naturally to self-correct, resulting in a bias against enforcement. These same developments in economics indicate that this proposition is false, and that we have paid a heavy price for it in the form of lower output, unnecessarily high price-cost margins, and reduced innovation. The amount of monopoly in the economy has been climbing at a worrisome rate, to its highest level in decades, as borne out by numerous studies employing a variety of methodologies.³ In any event, antitrust law is not living up to the potential that Congress envisioned.

In some areas the federal judiciary exhibits an anti-enforcement bias that can be quite damaging. For example, the Supreme Court has been unreasonably harsh in defining the burden that plaintiffs must meet in rule of reason cases. Under the rule of reason, a plaintiff's obligation should be to provide evidence of power and a sufficiently suspicious restraint that it requires an explanation. At that point the burden of proof should shift to the defendant. Some decisions such as *California Dental*⁴ and *American Express*⁵ have required plaintiffs to prove far too much at the beginning. The result is that the rule of reason has lost much of its usefulness as an enforcement tool. As another example, the Supreme Court has been unnecessarily harsh on class actions, and more particularly on enforcement of arbitration agreements. The Federal Arbitration Act, 9 U.S.C. §1 et seq., was intended to provide a different, less cumbersome forum, not to take away rights that

²The view is a relic of Robert H. Bork's belief that efficiencies resulting from antitrust practices are not capable of being proved, but that they are ubiquitous and that relatively small efficiency gains can offset large competitive harm. None of these propositions has withstood analysis. See Herbert Hovenkamp and Fiona M. Scott Morton, Framing the Chicago School of Antitrust Analysis, Univ. Pa. L. Rev. 2020 (forthcoming), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3481388.

³One example is Jan De Loecker & Jan Eeckhout, *The Rise of Market Power and the Macroeconomic Implications*, Q. J. Econ. (forthcoming 2020) (Nat'l Bureau of Econ. Research, Working Paper No. 23687, 2017) https://www.nber.org/papers/w23687.pdf. On the policy relationship between concentration and high margins, see Herbert Hovenkamp & Carl Shapiro, Horizontal Mergers, Market Structure, and Burdens of Proof, 127 Yale L.J. 1996 (2018).

⁴ California Dental Assn. v. FTC, 526 U.S. 756 (1999).

⁵ Ohio v. American Express, 138 S.Ct. 2280 (2018).

the law grants. While legislative reform of the rule of reason is complex, the arbitration problem is not: Congress should make clear that if an arbitration agreement purports to take away a particular right, a private plaintiff is free to assert that right in court. For example, if an arbitration agreement precludes class actions, an affected class of plaintiffs should be free to go to court.⁶

Your first substantive question concerns the adequacy of the existing law of monopolistic conduct, which refers to exclusionary practices by firms with substantial market power. The answer here is that more could be done. Antitrust experts are becoming more sophisticated in their assessment of market power, which is the power of firms to profit by increasing prices above cost. Prior to the rise of modern econometric techniques, antitrust courts almost always estimated market power "indirectly," as an inference from a firm's share of a relevant market. This method is still in widespread use even though superior methodologies have become available. Market definition approaches in digital markets can be particularly prone to error because the products are often significantly differentiated. For example, to state that "Google and Facebook control 70% of digital advertising" tells us little unless we know the extent to which digital advertising competes with more traditional advertising media. On the other hand, if we include traditional advertising in the market, we treat the two forms as perfect competitors, which understates market power. Market definition is necessarily binary: something is either inside or outside the market. In general, market definitions that include differentiated products will understate market power. This is particularly unfortunate because most antitrust activity in high tech markets involves differentiated products.

Today we have developed econometric techniques that can address this market power question more accurately, without the need for a market definition. One historic limitation on the use of these techniques was the availability of sales data, but in digital marketplaces these data are comprehensive. Another roadblock is the Supreme Court's conclusion in its 2019 *American Express* decision that a relevant market must be defined in cases involving vertical relationships. In any event, the *AmEx* decision is purely statutory and within Congressional power to amend. Any statutory reform for dealing with internet commerce should make clear that market power for antitrust purposes should be measured by the best available technique for the situation, and it should avoid the error of continuously expressing market power in terms of a market share of a relevant market.

⁶See, e.g., American Express Co. v. Italian Colors Rest., 570 U.S. 228 (2013), which enforced an arbitration provision precluding class actions, with the result that injured parties could not maintain a class action at all. A better interpretation would be that the arbitration agreement simply does not apply to forms of action that it excludes, thus leaving affected plaintiffs an opportunity to bring their class action in Federal District Court.

⁷E.g., https://www.cnbc.com/2019/08/02/facebook-and-googles-ad-dominance-is-showing-more-cracks.html (Aug. 2019).

⁸For an introduction see 2B Antitrust Law ¶¶520, 521 and current Supp.

⁹Ohio v. American Express Co. (*AmEx*), 138 S. Ct. 2274 (2018). Techniques have been developed to get around the problem. See Antitrust Law ¶520e (2020 Supp.).

¹⁰ Another serious error, also emanating from the *AmEx* decision, is to require that *factual* questions about market competition should be decided "as a matter of law," thus placing them

Courts cannot always avoid traditional market definition approaches, but when they can direct measurement will provide a better solution.

Based on public information, it seems unlikely that the existing platforms have sufficient market power to be considered "monopolists" in most of the product markets where they operate. One possible exception is Amazon's very large proportion of the eBook market. However, eBooks constitute approximately 20% of all book sales, so this question confronts the market definition issue discussed above. Another problematic area is internet advertising, where market share numbers are likely to be unreliable and power is better estimated directly from econometric evidence. In fact, internet advertising enjoys some distinct advantages in cost and reach, making the exercise of market power more likely. In any event, the market power of the large platforms is very likely sufficient for offenses such as exclusive dealing, most-favored-nation agreements, or tying.

The monopolization offense also requires proof of anticompetitive conduct. Exclusionary contract practices such as exclusive dealing can be anticompetitive even if the defendant is less than a monopolist. While predatory or other forms of exclusionary pricing is possible, the case for predatory pricing claims against individual internet sellers seems weak. First, digital platforms are "two sided" markets, which means that revenue must be measured by looking at all relevant sides. For example, while Google and Facebook are largely free to users they are almost certainly not engaged in predatory pricing. Most of their revenue comes from advertising. There have been allegations that Amazon once engaged in predatory pricing of ebooks, but those claims were found by both the Justice Department and the court to be unpersuasive, and I do not quarrel with that outcome. Agency investigations of the major platforms currently underway may uncover additional instances of anticompetitive pricing, but I am presently unaware of any.

The other unilateral monopolistic practice that warrants attention is the unilateral refusal to deal, mainly with rivals. United States antitrust law on unilateral refusals is less interventionist than that of the European Union and other jurisdictions. A more aggressive but cautious position would be conducive to increased competitiveness and economic growth. An overly broad duty-to-deal rule can make firms slow to invest their own resources in new markets, given that they have an entitlement to free ride on the established assets of other firms. However, an overly conservative approach can weaken both price competition and innovation if it permits dominant firms to renege on commitments that

outside the reach of fact finding. See, e.g., United States v. Sabre Corp., 2020 WL 1855433 (D.Del Apr. 7 2020), which relied on *AmEx* to hold, as a matter of law, that a two sided market and a more traditional market cannot compete with one another. Thousands of traditional taxicab companies and drivers who have been injured by Uber, Inc., would be surprised to hear that Uber and taxicabs cannot be competitors.

¹¹Given that ebooks and traditional books use very different production technologies and that the marginal cost of ebooks is low, ebooks very likely enjoy significant market power notwithstanding their competition with traditional books.

¹² See 3B Antitrust Law ¶¶767-768.

¹³See United States v. Apple, 889 F. Supp.2d 623, 641-642 (S.D.N.Y. 2012) (approving consent decree and rejecting objections that Amazon had been engaged in predatory pricing).

involve significant collaborative development. The harm must accrue not merely to the targeted firm but to the market as a whole. In sum, refusal to deal rules should be designed to encourage entrepreneurial collaboration by protecting a firm's investment, but to discourage free riding on the investments of others. The district court's opinion in the *Qualcomm* case, currently being litigated in the Ninth Circuit, provides a reasoned example of this approach.¹⁴

I see little merit in various proposals to break up large digital platforms such as Amazon or Facebook. These proposals appear to see size itself as the wrong to be proscribed and offer little assurance that price or output will improve. The opposite is more likely. The United States does not have a good track record with enforced breakups for monopolistic practices. Aside from recent mergers, there is no obvious way to break up highly integrated digital platforms without doing serious harm to both consumers and investors. Breaking off individual features simply makes the platform less attractive to users but does little to alleviate monopoly. Any breakup that interferes with economies of scale will result in higher costs and very likely higher prices or decreased product quality. In any event, a breakup proposal must be more than rhetorical flourish. It must be accompanied by specifics showing which assets are to be spun off, as well as well-informed predictions concerning the impact on output, price, or quality.

Also highly problematic is one popular "quasi" breakup proposal, which is that Amazon be required to establish separate platforms for sales of its own products and the numerous sales it makes as a broker for other merchants. The principal victims will be consumers, and the principal beneficiaries will be other large businesses whose products Amazon currently sells. For example, the AmazonBasics house brand of consumer batteries currently competes on the Amazon website with Duracell (owned by Berkshire Hathaway), as well as brands such as Ray-O-Vac, Energizer and Delco, all owned by large firms. AmazonBasics small appliances are sold in competition with Black and Decker, America's largest manufacturer of small appliances. AmazonBasics luggage is sold in competition with Samsonite, the world's largest luggage manufacturer. AmazonBasics sticky notes and other consumable office supplies are sold in competition with 3M, also a very large firm. One can go on with this list, but the point should be clear. The impact of Amazon's house brand competition in close juxtaposition with third parties is to force

¹⁴FTC v. Qualcomm, Inc., 411 F.Supp.3d 658 (N.D.Cal. 2019), app. docketed and stay granted, 935 F.3d 752 (9th Cir. 2019). On the rationales for refusal-to-deal rules in such cases, see Herbert Hovenkamp, FRAND and Antitrust, Cornell L. Rev. (2020) (forthcoming), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3420925.

¹⁵See William Kovacic, Failed Expectations: The Troubled Past and Uncertain Future of the Sherman Act as a Tool for Deconcentration, 74 Iowa L. Rev. 1105 (1989). One exception is United States v. AT&T, 552 F. Supp. 131 (D.D.C. 1982), aff'd mem. sub nom. Maryland v. United States, 460 U.S. 1001 (1983) (consent decree breaking up AT&T).

¹⁶ A version of this proposal, which has been widely circulated, was offered by former Presidential candidate Senator Elizabeth Warren. See https://medium.com/@teamwarren/heres-how-we-can-break-up-big-tech-9ad9e0da324c. It is critiqued in Herbert Hovenkamp, The Looming Crisis in Antitrust Economics, ____ Boston Univ. L. Rev. (2020), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3508832.

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down the prices of the large name brands, most of which enjoy significant trademark appeal and high margins. Segregating Amazon's house brands from the name brands (or requiring Amazon to withdraw from the market of one or the other), will reduce price pressure on the name brands, enabling yet higher prices. Consumers will be harmed and small businesses are unlikely to be benefitted. Wise antitrust enforcement requires figuring out who is being hurt, and how, before proceeding.

Your second question pertains to contract practices. Here, antitrust has good but underutilized tools. Currently the enforcement agencies are investigating several large platforms for possible anticompetitive abuses. I am not privy to those investigations, other than what has been made public. But antitrust policy should be brought to bear on such contract practices as most-favored-nation clauses (MFNs),¹⁷ anti-steering clauses,¹⁸ exclusive dealing and related practices, including tying. While these offenses require a showing of market power, the power requirements should not be as strong in networked markets as they are in more traditional industries. Interconnection tends to magnify market distortions and collaborative networks are far more dependent on inter-firm cooperation than are more traditional markets. On the other side, while there is always a fear of price fixing, the number and diversity of participants generally weakens our concern.

Antitrust condemnation of these contract practices should not ordinarily lead to divestiture or other structural remedies. In most cases a prohibitory injunction plus disgorgement of unlawfully obtained gains is sufficient. I do believe that disgorgement should be broadly preserved as a remedy under an Agency's general equitable power. A simple cease-and-desist order is rarely sufficient deterrence, because the remedy permits the firm to retain its unlawful gains. It is like ordering the serial shoplifter to stop, but without return of previously stolen merchandise. Shoplifting will be profitable. This is a statutory issue and Congress should ensure that the agencies' equitable powers include the authority to obtain disgorgement or analogous recoveries such as fines.

I do caution against too simplistic a view of the impact of large platform contract practices on affected groups, particularly small business and consumers. For example, while some small businesses who compete with Amazon are undoubtedly harmed, many others are benefitted because Amazon has effectively become their internet broker. They receive access to internet distribution tools including billing and collection that they could not match on their own. As a result, one should not act too categorically. There is no good substitute for factual determinations of harms from contract practices. Specific instances

¹⁷An MFN clause requires one firm to give (or receive) as-good-as or preferential treatment over similarly situated rivals.

¹⁸ An anti-steering clause forbids a reseller from shifting customers from one product, service, or form of payment to another which might be mutually advantageous for both the customer and the merchant.

¹⁹See FTC v. Credit Bureau center, LLC, 937 F.3d 764 (7th Cir. 2019) (denying disgorgement relief), overruling FTC v. Amy Travel Serv., Inc., 875 F.2d 564 (7th Cir. 1989). See Judge Wood's dissent from the denial of rehearing, noting the conflict in the Circuits. In any event, the majority's decision seems inconsistent with California vs. American stores, 495 U.S. 471 (1990) (general equitable powers included the right to seek divestiture).

of anticompetitive practices such as MFNs or exclusive dealing should be identified and remedied by both injunctive relief and private treble damages actions in appropriate cases.

By the same token, given a nominal retail price that is often zero, the presumption is strong that consumers are benefitted by the major platforms. But that issue needs to be taken apart and evaluated. For example, tying that injures rivals, such as bundling free services to costly advertising or collateral services, can harm competition notwithstanding a nominal price of zero. Such situations also require close individual analysis, not categorical treatment.

One important issue that may require attention, depending on the outcome of pending litigation, is anticompetitive reneging on FRAND licensing commitments. Many substantial networks, including telecommunications, video technologies, and autonomous vehicles, are the product of collaborative innovation. These networks require both technological compatibility and interconnection. Participants agree voluntarily to license their patents to others at Fair, Reasonable, and Nondiscriminatory (FRAND) terms. The process has been well known in the law and economics literature for decades: firms bid for the right to be included at a time when the market for alternatives is competitive. Later, when technological choices have become more limited, they are held to their promise to license on terms set by competition. Technological progress and delivery in these areas depend on firms' ability to invest and develop, confident that they will obtain the patent rights they need at a competitive price.

FRAND commitments are contractual, and breach of a contract neither entails nor precludes an antitrust violation.²¹ When market power and anticompetitive effects are present, however, practices such as selective refusals to license, tying, loyalty requirements, or exclusive dealing that involve FRAND patents undermine this competitive system and can violate the antitrust laws. Judge Koh found as much in her *Qualcomm* decision.²² If Qualcomm's conduct is approved other firms will do the same thing, as is apparently occurring in Europe,²³ and the FRAND system will fall apart. One thing Congress should consider is legislation to protect the FRAND process, which has produced very considerable innovation in a competitive environment. I do not subscribe to the view that protecting one firm's dominance will facilitate either national security or 5G development. Competitive markets that encourage competitive innovation and production are far more conducive to technological progress as well as higher output. Many of Qualcomm's actions, such as pressuring Apple to stop dealing with Intel in this area, are nothing less than socially costly restraints on innovation.

²⁰E.g., Harold Demsetz, Why Regulate Utilities?, 11 J.L. & Econ. 55 (1968).

²¹Hovenkamp, FRAND and Antitrust, supra.

²²FTC v. Qualcomm, Inc., 411 F.Supp.3d 658 (N.D.Cal. 2019), app. docketed and stay granted, 935 F.3d 752 (9th Cir. 2019).

²³ See https://theconversation.com/car-wars-how-nokia-could-find-itself-at-centre-of-eu-investigation-over-technology-patents-129643 (on Nokia and FRAND patents for autonomous vehicles).

The problem of anticompetitive mergers also needs attention. The language of \\$7 of the Clayton Act is extremely broad, prohibiting all mergers whose "effect may be substantially to lessen competition, or to tend to create a monopoly." 15 U.S.C. §18. The statutory language does not distinguish among horizontal, vertical, or conglomerate mergers. Nor does it require any particular measure of industrial concentration. Empirical studies have repeatedly shown, however, that too many approved mergers result in competitive harm, mainly increased prices.²⁴ Merger policy should not be designed to go after large size for its own sake. It needs to rest on sound economic theory about when mergers lead to lower output and higher prices. These tests should be objective and not depend on the testimony of affected firms. Efficiency claims, which are frequently asserted in litigation, should be disregarded except where proof is particularly strong and nonspeculative, and then only as a tie-breaker for mergers that are barely above acceptable concentration thresholds.²⁵ Merger law should also reflect sound economic analysis about bargaining behavior among profit-maximizing firms that often serves to explain why both horizontal and vertical mergers lead to higher prices. The draft Vertical Merger Guidelines recently released by the Agencies are a good first step.²⁶

One pressing merger threat is widespread digital platform acquisitions of much smaller firms.²⁷ Many of these acquisitions do not fit into the framework that the antitrust Agencies apply and that I support as a general matter.²⁸ First, the acquisitions of competitors typically involve firms that are too small to trigger scrutiny under existing law. Many troublesome acquisitions involve complementary products, such as when a platform acquires a technology that improves its messaging abilities or augments its product line. In general, adding complementary products or services is competitively beneficial. Such acquisitions can limit potential competition, however. While the enforcement agencies challenged potential competition mergers in the 1960s,²⁹ enforcement excesses of those years moved the Agencies to all but abandon the field. The two sets of recent merger guidelines for horizontal (2010) and vertical (draft, 2020) mergers do not address them at any length.

The threat to potential competition posed by these acquisitions is their elimination of nascent entrants. The current tech giants all started out in someone's garage, so to speak. Newcomers with promising technology may turn into platform giants themselves.

²⁴ E.g., John Kwoka, Mergers, Merger Control, and Remedies (2014).

²⁵Cf. New York v. Deutsche Telekom AG, ____ F.Supp.3d ____, 2020 WL635499 (S.D.N.Y. 2020) (approving merger between Sprint and T-Mobile cellular carriers after applying a lax standard for proof of efficiencies in a highly concentrated market).

²⁶ See U.S.DOJ and FTC, Draft Vertical Merger Guidelines (released Jan. 10, 2020), available at https://www.ftc.gov/system/files/documents/public_statements/1561715/p810034verticalmergerguidelinesdraft.pdf.

²⁷Wikipedia maintains useful tables of firms acquired by the major platforms. These can be sorted by date, size of acquisition, area of activity, and the like. E.g., "Wikipedia List of Acquisitions by [Facebook] (or by Google, Apple, Amazon, Microsoft, etc.).

²⁸See Antitrust Law, Chs. 9 (horizontal mergers) & 10 (vertical mergers).

²⁹ E.g., FTC v. Procter & Gamble Co., 386 U.S. 568 (1967) (disapproving cleanser company's acquisition of bleach producer).

Acquisitions became a way of removing these threats by preventing the emergence of new large rivals. This is critical because one good solution to the problem of platform dominance is a larger number of platform competitors.

Predicting which nascent firms will grow into substantial rivals is difficult, and merger law has historically required transaction specific proof. Nevertheless, prediction of future effects is the essence of merger law. Analyzing platform acquisitions will require more categorical treatment of a class of practices, as antitrust currently does with its per se rule. One promising solution would be to prohibit such acquisitions broadly, but permit dominant firms to obtain *non*exclusive rights in acquired technology. To illustrate, if Facebook wishes to acquire WhatsApp in order to improve its messaging services it would be able to purchase only a nonexclusive right to WhatsApp's technology. Such a right would give Facebook all it needs to take advantage of WhatsApp's product, but it would not prevent WhatsApp from further development or licensing its technology to others. One objection to this proposal is that it reduces WhatsApp's acquisition value. Factually that is true. From Facebook's perspective, WhatsApp has value as both an integration asset and an exclusion asset. This rule would say in effect that Facebook is entitled to purchase the integration but not the exclusion.³¹

Your third question concerns the institutional structure of antitrust enforcement. Funding for the antitrust enforcement agencies has not kept up with economic growth. Public enforcement is down even as the rate of supracompetitive returns is up. To some extent state antitrust enforcers attempt to pick up this slack, but this approach is inadequate for digital platforms that operate in virtually every state. One historical purpose of federal antitrust law was to provide a nationwide jurisdiction that could achieve national uniformity. Further, the Agencies should have the authority to seek disgorgement of unlawful gains where appropriate, and particularly in areas where underenforcement is chronic or private enforcement inadequate.

As to the existence of separate agencies with overlapping but distinctive authorities, I think it important that the two Agencies be maintained. Only the Department of Justice has the authority to pursue criminal charges, which are an essential part of federal antitrust policy. By contrast, as an administrative agency the FTC can enforce antitrust policy without using the more cumbersome machinery of Article III courts. For complex noncriminal matters this is particularly valuable. Further, the leadership structure of the FTC gives it greater political stability than the Antitrust Division. The Head of the Antitrust Division changes with every new President, and enforcement ideology can

³⁰This acquisition actually occurred in 2014. See https://money.cnn.com/2014/02/19/technology/social/facebook-whatsapp/index.html. On nonexclusive licensing as a partial solution, see Kevin Bryan & Erik Hovenkamp, Startup Acquisitions, Error Costs, and Antitrust Policy, 87 Univ. Chi. L. Rev. 331 (2020).

³¹ The rule might also diminish the value to sellers, although that is not entirely clear. On the one hand, WhatsApp would command a lower price if it could give Facebook only a nonexclusive license. On the other, it could retain full residual rights to its company and its technology. In any event, patents are clearly "assets" covered by §7's condemnation of anticompetitive asset acquisitions. See 5 Antitrust Law ¶1202f.

change suddenly, as it did between the Bush and Obama administrations, and again between the Obama and Trump administrations. By contrast, the five Commissioners of the FTC have fixed and staggered terms and turnover cannot be accomplished so readily.

Under current law both Agencies have authority to enforce the Clayton Act, which means mainly that there is divided jurisdiction over mergers, a problem that the Agencies solve adequately by agreement among themselves. While the FTC does not have direct authority to enforce the Sherman Act, §5 of the FTC Act covers everything that the Sherman Act covers, plus some additional practices. The potential of this somewhat ambiguous power has never been fully realized. Because §5 of the FTC Act contains no agreement requirement it could be used to reach collusion-like activity without the need to prove a Sherman §1 "contract, combination, or conspiracy." Collusion-like behavior in the absence of a legally recognizable agreement is one of the most formidable problems that antitrust must confront.³² Here the FTC could be helpful in promulgating rules or Guidelines to identify and enjoin specific practices that tend to facilitate collusion but that do not have significant and provable social benefits. Given the wariness of the courts to follow along in these efforts, 33 this may require clarifying legislation. One possibility is language amending §5 of the FTC Act, 15 U.S.C. §45, to reach both unilateral and multilateral conduct that "restrains trade unreasonably" and authorize rule making accordingly.

Section 5 enforcement is also valuable in those areas where private enforcement might be deemed excessive or unwise. Unlike the antitrust laws, §5 cannot be enforced by private parties. This can be valuable for enforcement in areas where private enforcement may threaten overdeterrence or excessive litigation.

While the two Agencies generally co-exist quite well, there have been exceptions, but these hardly call for merging the two Agencies. For example, the FTC continued to enforce the Robinson-Patman Act long after the Justice Department abandoned those efforts four decades ago.³⁴ Currently, the Agencies are far apart on issues relating to collaborative innovation and standard essential patents, and are even litigating against one another in one high profile case.³⁵

In the case of the Robinson-Patman Act, the Justice Department was correct to terminate public enforcement actions when it did. By contrast, in the current dispute over standard essential patents the FTC is correct. Here, the two Agencies seem to be guided by two very different models of innovation. The FTC enforcement efforts are based on a model of collaborative innovation that has become critical to the development of

³² The courts have been quite candid about the problem. See Valspar Corp. v. E.I. Du Pont De Nemours & Co., 873 F.3d 185, 193 (3d Cir. 2017), observing that in concentrated markets firms can readily achieve cartel like results without a Sherman Act "agreement."

³³ E.g., E.I. du Pont de Nemours & Co. v. FTC, 729 F.2d 128 (2d Cir. 1984) (overturning FTC's condemnation of parallel facilitating practices).

³⁴See DOJ, Report on the Robinson-Patman Act (1977).

³⁵See FTC v. Qualcomm, Inc., 935 F.3d 752 (9th Cir. 2019) (staying remedy in FTC Case against Qualcomm at request of Justice Department).

information technologies in networked markets. Such markets are characterized by a great proliferation of patents of mixed quality, the need for interoperability, and enforceable agreements to guide innovation and dissemination of technology. By contrast, the Justice Department model seems to be more focused on individual entrepreneurs, patent centrality, and some apparent suspicion of collaboration. In significant part these differences in perspective reflect differences in the nature of innovation and patents in different industries.

This is an area that may need Congressional attention, depending in part on the outcome of the *Qualcomm* litigation. If one participant in FRAND is allowed to unravel the system with impunity, others will quickly follow. A model of collaborative innovation that has proven successful in information technologies will fall apart. If that happens the United States could lose a significant portion of its technological edge in an area that has experienced rapid economic growth. Enforcement here must also recognize that FRAND-encumbered patents are distinctive. While the patent system itself is technically unitary, encompassing all types of technology, FRAND has emerged in areas that are dominated by information technologies, networking and collaborative innovation. As a result, more aggressive enforcement in one area need not affect the other area.

Thank you for the opportunity to offer my thoughts. If I can be of further assistance, please let me know.

Sincerely,

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