INNOVATION MISUNDERSTOOD

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Innovation is transformative and key to future prosperity. It is therefore of no surprise that antitrust laws seek to promote it. What is surprising, however, is that despite the central role that innovation occupies in competition cases, its actual treatment by the courts is far from nuanced. In this paper, we reflect on the D.C. Circuit's 2023 ruling in N.Y. v Meta *to illustrate the prevailing monocular vision adopted by the court in its treatment of innovation. That vision, we argue, reflects simplistic assumptions as to innovation dynamics and mistaken beliefs about the digital economy. It is further compounded by jurisprudential problems that characterize U.S. antitrust laws. The result is troublesome. While "everyone talks about innovation," the courts do little to inquire on its scope, nature, and value. Nor do courts recognize the impact of anticompetitive strategies deployed by the dominant platforms on disruptive innovations and their heterogeneity.*

INTRODUCTION

Ask a roomful of antitrust lawyers and economists what is most responsible for advances in our standard of living, and the likely consensus is innovation. Repeat the question in the context of the digital economy, and many will likely identify digital platforms as champions of innovation. The image often is of the platforms acting as coral reefs, enabling innovators to access and provide their diverse services and products to consumers and business users.

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Now consider when that assumption is challenged and a leading digital platform is accused of inhibiting, rather than enabling, innovation. That was the case in 2020 when a bi-partisan coalition of 46 states, the District of Columbia, and Guam challenged Meta for its acquisitions of Instagram and WhatsApp and its monopolization. Seventy-five pages of the states' 123-page complaint outlined Meta's campaign to either buy or bury nascent competitive threats.[1] But the case never proceeded to discovery or trial. Instead, Meta was able to dismiss the states' lawsuit at the onset of litigation.

Why? In 2023 the D.C. Circuit delivered its ruling on the matter. The court opened with a preliminary observation: "The States' lawsuit is not only odd, but old."[2] Why odd? Because the D.C. Circuit opined, "the States' suit concerns an industry that, even on the States' allegations, has had rapid growth and innovation with no end in sight."[3] Adding to that, the D.C. Circuit opined that "courts should proceed cautiously when asked to deem novel products or practices anti-competitive. Many innovations may seem anti-competitive at first but turn out to be the opposite, and the market often corrects even those that are anti-competitive."[4] The court never provided any empirical evidence for its conjecture about innovation in the digital economy. Nor did it offer any empirical support for opining that Meta's banning seven rivals from its platform "was a drop in the bucket" of the millions of apps and websites that could integrate into Facebook's platform.[5] The idealized image of a coral reef attracting and promoting innovation triumphed.

But the evidence and market reality, as we will explain below, point to the contrary conclusion. It makes perfect economic sense for Meta to

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[1] Multi-State Complaint, State of New York et al v. Facebook Inc., No. 1:20-cv-03589 (D.D.C. December 9, 2020) [hereinafter States Comp.].

[2] New York v. Meta Platforms, Inc., 66 F.4th 288, 295 (D.C. Cir. 2023).

[3] *Id*.

[4] *Id*. at 305.

[5] *Id*. at 306.

integrate complementary innovations that reinforce its power and its underlying value chain while killing off any disruptive technologies. And, as we show, killing off a few disruptive innovators can significantly harm innovation.

So, the D.C. Circuit got it wrong, one might respond. The competition agencies in the U.S. certainly seem to reflect this view. The Federal Trade Commission, after all, as of 2023 was pursuing its monopolization case against Meta,[6] and the Department of Justice and states had multiple monopolization cases against Google.[7] In their complaints, the agencies warn against the negative effects on innovation.

So, who is right about the effects of platforms on innovation, and how could it be so misunderstood?

As this article explores, the D.C. Circuit's ruling points to three principal problems with current antitrust law in the United States.

The *first* is jurisprudential. Between the 1940s and 1960s, the federal courts interpreted the Sherman and Clayton Acts in light of their "legislative history and of the particular evils at which the legislation was aimed."[8] That changed over the past 40 years when the courts (notably those adhering to the then-Chicago and Harvard School economic theories) imposed their economic ideologies into the law. Rather than check these jurists, the Supreme Court began quoting them. Moreover, the Court began making important policy tradeoffs in its antitrust decisions. Although the Biden administration is seeking to reorient antitrust law to its legislative intent, one

[6] FTC v. Facebook, Inc., 1:20-cv-03590-JEB (D.D.C.), https://www.ftc.gov/legal-library/browse/cases-proceedings/191-0134-facebook-inc-ftc-v.

[7] Complaint, United States v. Google, No. 1:23-cv-00108 (E.D. Va. filed Jan. 24, 2023); Complaint, United States v. Google, No. 1:20-cv-03010 (D.D.C. filed Oct. 20, 2020); Complaint, Colorado v. Google, No. 1:20-cv-03715-APM (D.D.C. filed Dec. 17, 2020); Complaint, Texas v. Google, No. 4:20-cv-957 (E.D. Tex. filed Dec. 16, 2020).

[8] Apex Hosiery Co. v. Leader, 310 U.S. 469, 489 (1940).

significant obstacle is the courts, who continue to impose their economic views. The courts' views were shaped in a pre-digitalized era and are affected, to a large extent, by long-dead economists and the monopolies who cite them. The *Meta* case, as we explore, is just one recent example.

The *second* problem flows from the courts' rambling through the wilds of conflicting economic theories, and their assumptions regarding the nature of and value of innovation. Too often, courts adopt a monocular vision that fails to acknowledge the centrality of disruption, equates investment levels with innovation, and assumes market forces will optimize innovation output. These simplified assumptions, when applied to markets already dominated by leading platforms, undercut disruptive innovation. And mistakes involving innovation are especially costly, as we point out. America's current market power problem, innovation decline, and limited heterogeneity in innovation output are warning signs that the courts either ignore or do not see.

The *third* problem supplements the misconception as to the nature of innovation, with overly optimistic assumptions as to its dynamics. Optimism about the ability of markets to self-correct and deliver optimal innovation leads the courts to underestimate the distorting effects generated by leading platforms. Again here, ideology and intellectual capture seem to influence the decision-making, while being hidden behind general statements from past eras.

These three problems go to the heart of antitrust enforcement and have a direct impact on its effectiveness. These entrenched problems not only affect the court's ruling in *Meta* and deliberation in other cases, but also how markets evolve, companies compete, and money is invested.

In what follows we expand on the source and impact of each of these problems and illustrate how they manifested in the *Meta* decision. We

subsequently consider how the reality of digital markets justifies the recalibration of our approach to innovation.

Part I focuses on the jurisprudential problem that distorts our current analysis of digital markets and triggers legal and business uncertainty. Part II takes a closer look at the commonly held beliefs regarding the nature and value of innovation that lead the courts astray. Part III considers the third problem that stems from overly optimistic assumptions as to the ability of competition and markets to self-correct and yield optimal results absent intervention. Part IV explores steps to address these problems. It considers changes to antitrust jurisprudence and the need for Congress to update the antitrust laws.

I. RAMBLING THROUGH THE WILDS OF CONFLICTING ECONOMIC THEORY

A. From Jurisprudence to Fortune Telling

Antitrust enforcement increased in the latter part of the Franklin D. Roosevelt administration.[9] The Supreme Court and lower courts sought to interpret the antitrust laws in light of their "legislative history and of the particular evils at which the legislation was aimed."[10] Congress, in 1950, as in 1890, was concerned that concentrated economic power could undermine democracy. As Senator Kefauver observed, "if our democracy is going to survive in this country we must keep competition, and we must see to it that the basic materials and resources of the country are available to any little fellow who wants to go into business." [11] The evil of greater concentration

[9] Maurice E. Stucke & Ariel Ezrachi, *The Rise, Fall, and Rebirth of U.S. Antitrust Movement*, HARV. BUS. REV. (Dec. 15, 2017).

[10] *Apex Hosiery*, 310 U.S. at 489.

[11] Ford Motor Co. v. United States, 405 U.S. 562, 569 n.5 (1972).

was "quite apparent. When people lose their economic freedom, they lose their political freedom."[12]

Thus, Congress in 1950 updated the Clayton Act, enabling the DOJ and FTC to block vertical and conglomerate mergers. With the uptick in antitrust enforcement, the Court hewed closely to the Congressional intent for the 1950 Celler-Kefauver amendments.[13] The Court also identified three jurisprudential concerns. The first was "subverting congressional intent by permitting a too-broad economic investigation."[14] A second concern was the "limited utility" of courts in "examining difficult economic problems."[15] A third concern was ill-defined legal standards. Because of the courts' "inability

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[12] *Id.*

[13] *See, e.g.*, United States v. Von's Grocery Co., 384 U.S. 270, 275–77 (1966) ("Like the Sherman Act in 1890 and the Clayton Act in 1914, the basic purpose of the 1950 Celler-Kefauver Act was to prevent economic concentration in the American economy by keeping a large number of small competitors in business. In stating the purposes of their bill, both of its sponsors, Representative Celler and Senator Kefauver, emphasized their fear, widely shared by other members of Congress, that this concentration was rapidly driving the small businessman out of the market. . . . It both revitalized s 7 of the Clayton Act by 'plugging its loophole' and broadened its scope so as not only to prohibit mergers between competitors, the effect of which 'may be substantially to lessen competition, or to tend to create a monopoly' but to prohibit all mergers having that effect. By using these terms in s 7 which look not merely to the actual present effect of a merger but instead to its effect upon future competition, Congress sought to preserve competition among many small businesses by arresting a trend toward concentration in its incipiency before that trend developed to the point that a market was left in the grip of a few big companies. Thus, where concentration is gaining momentum in a market, we must be alert to carry out Congress' intent to protect competition against ever increasing concentration through mergers. The facts of this case present exactly the threatening trend toward concentration which Congress wanted to halt."); Brown Shoe Co. v. United States, 370 U.S. 294, 315–16 (1962) ("The dominant theme pervading congressional consideration of the 1950 amendments was a fear of what was considered to be a rising tide of economic concentration in the American economy. Apprehension in this regard was bolstered by the publication in 1948 of the Federal Trade Commission's study on corporate mergers. Statistics from this and other current studies were cited as evidence of the danger to the American economy in unchecked corporate expansions through mergers. Other considerations cited in support of the bill were the desirability of retaining 'local control' over industry and the protection of small businesses. Throughout the recorded discussion may be found examples of Congress' fear not only of accelerated concentration of economic power on economic grounds, but also of the threat to other values a trend toward concentration was thought to pose.").

[14] United States v. Philadelphia Nat. Bank, 374 U.S. 321, 362 (1963).

[15] United States v. Topco Assocs., Inc., 405 U.S. 596, 609 (1972).

to weigh, in any meaningful sense, destruction of competition in one sector of the economy against promotion of competition in another sector," the Court formulated per se rules and legal presumption.[16] So, "in any case in which it is possible, without doing violence to the congressional objective embodied in § 7," the Court sought to "simplify the test of illegality . . . in the interest of sound and practical judicial administration."[17]

In *Philadelphia National Bank,* for example, the Court, consistent with Congress's design to prevent undue concentration, laid out the following legal presumption:

> *a merger which produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market is so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects.*[18]

While the Court did not identify the smallest percentage market share that would trigger its legal presumption, a post-merger share of 30% presented that threat that Congress sought to prevent.[19]

In hewing to the congressional intent in creating presumptions and per se rules, the Court observed in 1972:

> *Without the per se rules, businessmen would be left with little to aid them in predicting in any particular case what courts will find to be legal and illegal under the Sherman Act. Should Congress ultimately determine that predictability is unimportant in this area of the law, it can, of course, make per se rules inapplicable in some or all cases, and leave courts free to ramble through the wilds of economic theory in order to maintain a flexible*

[16] *Id*. at 609–10.
[17] *Philadelphia Nat. Bank*, 374 U.S. at 362.
[18] *Id.*
[19] *Id.* at 364.

approach.[20]

Antitrust law, for the Court, was law, not economic policymaking. The Court questioned its ability to shape economic policy through its interpretation of the antitrust laws. For example, even if the merging parties could show that based, "on some ultimate reckoning of social or economic debits and credits, [their merger] may be deemed beneficial" that "value choice of such magnitude is beyond the ordinary limits of judicial competence, and in any event has been made for us already, by Congress when it enacted the amended § 7."[21]

Thus, when Alcoa, which produced 27.8% of aluminum conductor, acquired a nascent competitive threat, which had only 1.3% of that market, the merger violated the law.[22] In citing the legislative history,[23] the Court noted how Rome was a maverick and innovator that disrupted this oligopolistic industry with its "special aptitude and skill in insulation, and an active and efficient research and sales organization pioneering aluminum insulation."[24] The fact that the Court could not quantify the economic harm post-merger was irrelevant, as Congress specifically sought "to prevent accretions of power which 'are individually so minute as to make it difficult to use the Sherman Act test against them.'"[25]

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[20] *Topco*, 405 U.S. at 610.

[21] Ford Motor Co. v. United States, 405 U.S. 562, 570 (1972) (quoting *PNB*, 374 U.S. at 37); see also United States v. Pabst Brewing Co., 384 U.S. 546, 552–53 (1966) (discussing how Congress, in passing § 7 and in amending it with the Celler-Kefauver Anti-Merger amendment, "was concerned with arresting concentration in the American economy, whatever its cause, in its incipiency" and even if this assumption of Congress was wrong, and that small businesses would inevitably disappear and concentration would increase whether mergers were prohibited or not, it was not for the courts to review this policy decision of Congress).

[22] United States v. Aluminum Co. of Am., 377 U.S. 271, 280 (1964).

[23] *Id*.

[24] *Id*. at 281.

[25] *Id*. at 280 (quoting S. Rep. No. 1775, 81st Cong., 2d Sess., p. 5; U.S. Code Congressional Service 1950, p. 4297).

Antitrust jurisprudence changed in the late 1970s. The Supreme Court no longer interpreted the antitrust laws in light of their "legislative history and of the particular evils at which the legislation was aimed."[26] How so? The Court reasoned that the "general presumption that legislative changes should be left to Congress has less force with respect to the Sherman Act," which the Court instead treated "as a common-law statute."[27] Thus, it is ironic that the current Court "typically greet[s] assertions of extravagant statutory power over the national economy with skepticism," [28] while not displaying any such concern in exercising this power in interpreting the antitrust laws. Thus, the Court began rambling through the wilds of economic theory, replacing its per se illegal rule for vertical restraints[29] with its "rule of reason" standard which "evolves with new circumstances and new wisdom."[30]

Following the Supreme Court's lead, many lower courts likewise treated antitrust law as evolving common law, which gave the courts' economic viewpoints an outsized role.[31] Because the Court's rule of reason standard analysis "evolves with new circumstances and new wisdom,"[32]

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[26] *Apex Hosiery*, 310 U.S. at 489.

[27] Leegin Creative Leather Prod., Inc. v. PSKS, Inc., 551 U.S. 877, 899 (2007); State Oil Co. v. Khan, 522 U.S. 3, 20–21 (1997) ("[T]he general presumption that legislative changes should be left to Congress has less force with respect to the Sherman Act in light of the accepted view that Congress 'expected the courts to give shape to the statute's broad mandate by drawing on common-law tradition'"); Bus. Elecs. Corp. v. Sharp Elecs. Corp., 485 U.S. 717, 732 (1988) ("Sherman Act adopted the term 'restraint of trade' along with its dynamic potential. It invokes the common law itself, and not merely the static content that the common law had assigned to the term in 1890").

[28] W. Virginia v. Env't Prot. Agency, 213 L. Ed. 2d 896, 142 S. Ct. 2587, 2609 (2022) (internal citation omitted).

[29] Cont'l T. V., Inc. v. GTE Sylvania Inc., 433 U.S. 36, 59 (1977) (overruling per se illegal standard for vertical, non-price restraints), *Khan*, 522 U.S. at 21 (overruling per se illegal standard for vertical, maximum resale price agreements); *Leegin,* 551 U.S. at 899 (overruling per se illegal standard for vertical, minimum resale price agreements).

[30] *Bus. Elecs. Corp*., 485 U.S. at 732.

[31] *Id.* Exceptions exist. *See, e.g.,* Host Int'l, Inc. v. MarketPlace, PHL, LLC, 32 F.4th 242, 253 (3d Cir. 2022) ("Federal courts are not economists, and we should avoid an unnecessary 'ramble through the wilds of economic theory.'") (quoting *Topco*, 405 U.S. at 609 n.10).

[32] *Khan*, 522 U.S. at 21 (quoting *Bus. Elecs. Corp*., 485 U.S. at 731-32).

neither stare decisis nor legislative intent matter. Instead, the Court's "rule of reason requires an evaluation of each challenged restraint in light of the special circumstances involved" and "[t]hat the analysis will differ from case to case is the essence of the rule."[33] And the Court's "new wisdom" can lead to considering pronouncements that contradict the legislative intent.

Consider monopolies. Congress repeatedly raised concerns about monopolies, including their impact on individual liberty and democracies.[34] Likewise, the Court construed the purpose of the Sherman Act as to protect the public interest "from the evils of monopoly and price control by the maintenance of competition."[35] This was true "whatever difference of opinion there may be among economists as to the social and economic desirability of an unrestrained competitive system."[36]

Now the courts praise monopolies: "The mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system," noted the Supreme Court. "The opportunity to charge monopoly prices—at least for a short period—is what attracts 'business acumen' in the first place;

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[33] In re Nat'l Collegiate Athletic Ass'n Athletic Grant-in-Aid Cap Antitrust Litig., No. 14-CV-02758-CW, 2018 WL 1524005, at *8 (N.D. Cal. Mar. 28, 2018) (quoting Oltz v. St. Peter's Cmty. Hosp., 861 F.2d 1440, 1449 (9th Cir. 1988)).

[34] James May, *Antitrust in the Formative Era: Political and Economic Theory in Constitutional and Antitrust Analysis*, *1880-1918*, 50 OHIO ST. L.J. 257, 288-296 (1989) (collecting legislative history); see also Maurice E. Stucke, *Should the Government Prosecute Monopolies?*, 2009 U. IL. L. REV. 497.

[35] United States v. Trenton Potteries Co., 273 U.S. 392, 397 (1927); N. Pac. Ry. Co. v. United States, 356 U.S. 1, 4 (1958) ("The Sherman Act was designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade."); see also Kansas City Star Co. v. United States, 240 F.2d 643, 658 (8th Cir. 1957) ("'The purpose of the Sherman Anti-Trust Act is the preservation of a system of free competitive economic enterprise and the protection of the public against the evils incident to monopolies . . . tending directly toward unreasonable suppression or restraints of interstate trade or commerce.' 58 C.J.S., Monopolies § 18, p. 972. The Act aims to secure equality of opportunity and the protection of the public against the evils incident to monopolistic practices.").

[36] *Trenton Potteries*, 273 U.S. at 397.

it induces risk taking that produces innovation and economic growth."[37] The Court never explained on what authority it could make this economic judgment in interpreting the Sherman Act. Moreover, it never offered any evidence for this dubious assertion. Nonetheless, by mid-2023, over 70 cases quoted this dictum.

When courts replace legal presumptions with an open-ended rule-of-reason inquiry and replace congressional concerns with the jurist's particular economic beliefs, the rule of law takes a hit. Under the rule of reason's vague and open-ended principles, prospective compliance with its requirements exceedingly difficult.[38] Even the Supreme Court has criticized its own legal standard: "[W]hatever its merits may be for deciding antitrust claims," the Court observed, the "elaborate inquiry" required under that standard "produces notoriously high litigation costs and unpredictable results."[39] Likewise, several justices called the rule of reason "amorphous,"[40] "unbounded,"[41] and "unruly."[42] As they commented, "[g]ood luck to the district courts that must, when faced with a patent settlement, weigh the 'likely anti-competitive effects, redeeming virtues, market power, and potentially offsetting legal considerations present in the circumstances.'"[43]

To make matters worse, there is even less clarity today over the basic aspects of this legal standard. For example, does the rule of reason have three steps or four? Can a defendant justify its anticompetitive restraint with

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[37] Verizon Commc'ns Inc. v. L. Offs. of Curtis V. Trinko, LLP, 540 U.S. 398, 407 (2004).

[38] For many criticisms of the standard, see Maurice E. Stucke, *Does the Rule of Reason Violate the Rule of Law?*, 42 U.C. DAVIS L. REV. 1375 (2009).

[39] Kimble v. Marvel Ent., LLC, 576 U.S. 446, 459 (2015).

[40] Oneok, Inc v Learjet, Inc, 575 US 373, 398 (2015) (Scalia, J. dissenting, with Roberts, C.J. joining).

[41] F.T.C. v. Actavis, Inc., 570 U.S. 136, 177 (2013) (Roberts, C.J., dissenting, with Justices Scalia and Thomas joining).

[42] *Id*. at 173.

[43] *Id.*

procompetitive benefits in unrelated markets? The Ninth Circuit grappled with these issues in its review of Epic's monopolization and tying claims against Apple.[44]

Now the primary beneficiaries of the antitrust laws are those who can afford it. And even for them, the outcome is uncertain. As one district court recently noted, his was "not the first major antitrust trial" where the parties "presented 'costly and conflicting . . . economic . . . models' and 'incompatible visions of the competitive future,"' so that the "dueling experts 'essentially cancel each other out as helpful evidence [that] the Court could comfortably endorse as decidedly affirming one side rather than the other.'"[45] Consider another jurist's bleak assessment of antitrust jurisprudence:

> *Adjudication of antitrust disputes virtually turns the judge into a fortuneteller. Deciding such cases typically calls for a judicial reading of the future. In particular, it asks the court to predict whether the business arrangement or conduct at issue may substantially lessen competition in a given geographical and product market, thus likely to cause price increases and harm consumers. To aid the*

[44] Epic argued that, even if Apple's security and privacy restrictions were pro-competitive, they increased competition in an altogether different market, and thus were not legally cognizable under the rule of reason. Noting that the Supreme Court's precedent on this issue was not clear, the Ninth Circuit avoided the issue since Epic did not raise it before the trial court, and thus did not preserve it on appeal. Epic Games, Inc v. Apple, Inc., 67 F.4th 946, 989 (9th Cir. 2023). Ironically, the Supreme Court had the opportunity to clarify this issue recently but did not. In Nat'l Collegiate Athletic Ass'n v. Alston, 210 L. Ed. 2d 314, 141 S. Ct. 2141, 2155 (2021), the Court noted that some amici argued that "competition in input markets is incommensurable with competition in output markets, and that a court should not 'trade off' sacrificing a legally cognizable interest in competition in one market to better promote competition in a different one; review should instead be limited to the particular market in which antitrust plaintiffs have asserted their injury." But because the parties did not raise this issue, the Court opted not to clarify its own legal standard. Likewise, it remains unclear whether the rule of reason entails three or four steps. As the Ninth Circuit observed, "Supreme Court precedent neither requires a fourth step nor disavows it," and how the Court, in its two most recent Rule of Reason decisions, discussed only three steps. *Epic*, 67 F.4th at 993.

[45] United States v. Am. Airlines Grp. Inc., No. CV 21-11558-LTS, 2023 WL 3560430, *23 (D. Mass. 19 May 2023) (quoting New York v. Deutsche Telekom AG, 439 F. Supp. 3d 179, 187 (S.D.N.Y. 2020)).

> *courts perform that murky function demands a massive enterprise. In most cases, the litigation consumes years at costs running into millions of dollars. In furtherance of their enterprise, the parties to the dispute retain battalions of the most skilled and highest-paid attorneys in the nation. In turn, the lawyers enlist the services of other professionals – engineers, economists, business executives, academics – all brought into the dispute to render expert opinions regarding the potential procompetitive or anti-competitive effects of the transaction.*[46]

Thus, outside of those remaining antitrust offenses still deemed per se illegal (such as price fixing and market allocations), antitrust litigation is typically a war of attrition, where litigants must finance battalions of expensive lawyers and economic experts, and where the courts are generally left to their own economic beliefs. As a result, for a potential disruptive start-up, antitrust offers little, if any, protection. It cannot afford to sue monopolists, and even if the government intervenes, as the next subpart shows, effective relief remains unlikely.

Economics, of course, can inform antitrust law and serve to ensure its measured application. But it should not be used to displace the law. An economics-based rule of reason, as it is implemented by the courts, offers little certainty once theory and modeling are stretched and manipulated to suit one's agenda.[47] At the end, behind the economic façade, ideology, and preconceived views play a central role in the courts' decision making as we'll see with the *Meta* decision.[48]

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[46] *Deutsche Telekom*, 439 F. Supp. 3d at 186; McMorris v. Williamsport Hosp., 597 F. Supp. 899, 909 (M.D. Pa. 1984) ("It is well recognized that the courts are ill-suited to engage in the searching economic analysis frequently required by the rule of reason.").

[47] This problem also exists in Europe. *See, e.g.*, Simon Bishop, *Snake-Oil with Mathematics is Still Snake-Oil: Why Recent Trends in the Application of so-called "Sophisticated" Economics is Hindering Good Competition Policy Enforcement*, 9 EUR. COMP. J. 67, 72 (2013); Gunnar Niels, *The Economist in Court: Guilty of Theories that don't Fit the Facts*, 6 COMPETITION L. REV. 358 (2007).

[48] Ariel Ezrachi, *Sponge*, 5 J. ANTITRUST ENFORCEMENT 49 (2017).

B. The Meta *Decision*

With that context, let us consider when a bi-partisan coalition of states sued Meta for illegally monopolizing the social networking market.

As many 1Ls were taught, the standard of review for a motion to dismiss under the Federal Rules of Civil Procedure was supposed to be deferential to the plaintiff. The court took true the well-pleaded facts in the complaint and drew all reasonable inferences in the plaintiff's favor. As the courts long ago pointed out, "a motion to dismiss under [the Federal Rules of Civil Procedure] is merely a decision on pleadings, and for that reason, it is granted sparingly and with caution. This is especially true in antitrust cases."[49] Indeed, at one time the Supreme Court cautioned that even summary judgment should be used "sparingly in complex antitrust litigation where motive and intent play leading roles, the proof is largely in the hands of the alleged conspirators, and hostile witnesses thicken the plot."[50] That changed after the Court's decision in *Twombly*.[51]

Seventy-five pages of the states' 123-page complaint outlined Meta's campaign to either buy or bury nascent competitive threats. The states alleged that Meta illegally maintained its monopoly in the "Personal Social Networking Services" in part by "acquiring firms that it believed were well positioned to erode its dominance — most notably, Instagram and

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[49] KWF Indus., Inc. v. Am. Tel. & Tel. Co., 592 F. Supp. 795, 797 (D.D.C. 1984); see also Hospital Building Co. v. Trustees of Rex Hospital, 511 F.2d 678 (4th Cir. 1975), rev'd on other grounds, 425 U.S. 738 (1976); South Carolina Council of Milk Producers, Inc. v. Newton, 360 F.2d 414 (4th Cir. 1966); Chapiewsky v. G. Heileman Brewing Co., 297 F. Supp. 33, 38 (W.D. Wis. 1968); Nat'l Constructors Ass'n v. Nat'l Elec. Contractors Ass'n, Inc., 498 F. Supp. 510, 528 (D. Md. 1980), modified, 678 F.2d 492 (4th Cir. 1982); Burch v. Goodyear Tire & Rubber Co., 420 F. Supp. 82 (D. Md. 1976), aff'd, 554 F.2d 633 (4th Cir. 1977).

[50] Poller v. Columbia Broad. Sys., Inc., 368 U.S. 464, 473 (1962)

[51] Bell Atlantic Corp. v. Twombly, 550 U. S. 544 (2007).

WhatsApp." Thus, Meta's purchases of Instagram and WhatsApp violated not only Section 2 of the Sherman Act but also Section 7 of the Clayton Act, which prohibits acquisitions "the effect of [which] may be substantially to lessen competition, or to tend to create a monopoly."[52] Those claims were dismissed on account of latches, which we do address here. The states also alleged that Meta illegally maintained its monopoly "by adopting policies preventing interoperability between Facebook and certain other apps that it saw as threats, thereby impeding their growth into viable competitors."[53] Plaintiffs alleged as the district court summarized,

> *that Facebook adopted and enforced several anticompetitive policies governing the use of its APIs. Most prominently, in 2013 it announced a policy of refusing to allow third-party, freestanding apps (like the chess app or the ESPN app discussed above) to access those APIs if they "replicate[d] [Facebook's] core functionality" — i.e., if they competed with Facebook Blue. . . . The States allege that, from 2013 to 2015, Facebook enforced that policy against a number of freestanding apps to which it had previously offered API access. . . . Facebook also allegedly enforced the policies "proactively" against newly launched apps that it feared could become a threat . . .. The States contend that these actions represent unlawful "conditional dealing" or unlawful "refusal[s] to deal" with apps that had their API access revoked or blocked.*[54]

The district court, however, held that the States' allegation held "no water as a matter of law."[55] The district court ironically never turned to the law itself, namely the congressional concerns that guided the earlier courts. Indeed, the district court recognized that a monopolist's unilateral refusal to deal could be anticompetitive. So, what then was the court's legal basis that

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[52] 15 U.S.C. § 18.

[53] New York v. Facebook, Inc., 549 F. Supp. 3d 6, 13 (D.D.C. 2021), aff'd sub nom. New York v. Meta Platforms, Inc., 66 F.4th 288 (D.C. Cir. 2023)

[54] *Facebook*, 549 F. Supp. 3d at 24.

[55] *Id.*

a monopoly's general policy of refusing to provide API access to its competitors does not violate Section 2 of the Sherman Act?

It was other court decisions and a law review article, which opined that such a refusal is "essentially per se lawful" or "presumptive[ly] legal[ ]."[56] Where did the other courts get this legal presumption of per se lawfulness? Not from the earlier Supreme Court case law, which in construing the Sherman Act, disavowed any such unqualified right.[57] Indeed, the courts disregard the italicized qualifier from a leading 1919 Supreme Court case: "*In the absence of any purpose to create or maintain a monopoly*, the act does not restrict the long recognized right of trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal."[58]

Instead of Congressional intent, the district court's belief that a monopolist can unilaterally refuse to deal with rivals, even when it is anticompetitive, rested on "three overriding considerations of antitrust policy."[59] Here again, one would expect that such an antitrust policy would come from Congress. But again that was not the case. Instead, the court relied on the Supreme Court's and other courts' economic theories.

First, and most importantly, the district court in *Meta* noted, "[f]irms may acquire monopoly power by establishing an infrastructure that renders them uniquely suited to serve their customers. Compelling such firms to share the

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[56] *Id.* at 25.

[57] Otter Tail Power Co. v. United States, 410 U.S. 366, 380 (1973); Lorain J. Co. v. United States, 342 U.S. 143, 155 (1951) (while the defendant publisher claimed "a right as a private business concern to select its customers and to refuse to accept advertisement from whomever it pleases," the Court did not dispute that general right: "But the word 'right' is one of the most deceptive of pitfalls; it is so easy to slip from a qualified meaning in the premise to an unqualified one in the conclusion. Most rights are qualified.' . . . The right claimed by the publisher is neither absolute nor exempt from regulation. Its exercise a purposeful means of monopolizing interstate commerce is prohibited by the Sherman Act.").

[58] United States v. Colgate & Co., 250 U.S. 300, 307 (1919).

[59] *Facebook*, 549 F. Supp. 3d at 25.

source of their advantage is in some tension with the underlying purpose of antitrust law, since it may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities."[60] But the district court never cited the empirical basis for that presumption – namely, that imposing a duty to deal would deter monopolies from investing, innovating, or expanding. This statement, while sometimes true, is as we'll see later, not presumptively true in the digital economy, where interoperability is key.

The second basis that the district court provided for its legal presumption was ironically that courts should not be economic planners: "compelled sharing puts federal courts in the role of central planners," requiring them to pick and choose the applicable terms and conditions of the forced sharing they would order "despite their being ill-equipped to assume this role."[61] Here the court disavows central planning even though it adopts an economic policy

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[60] *Id.,* quoting *Trinko*, 540 U.S. at 407–08.

[61] *Id.* (quoting Aerotec Int'l, Inc. v. Honeywell Int'l, Inc., 836 F.3d 1171, 1183 (9th Cir. 2016)). The Ninth Circuit in *Aerotec* cited an earlier decision, MetroNet Servs. Corp. v. Qwest Corp., 383 F.3d 1124, 1131 (9th Cir. 2004), which quotes the Court's *Trinko* decision, 540 U.S. at 407–08. In *Trinko*, the Court said that cartels, unlike monopolies, have a workable, administrable remedy "that does not require judicial estimation of free-market forces." 540 U.S. at 410 n.3. One problem for the *Trinko* Court was its earlier decisions where the Court imposed a duty to deal on the monopoly. In *United States v. Terminal R. R. Ass'n of St. Louis*, 224 U.S. 383, 411 (1912), for example, the Court ordered the monopoly joint venture to either (a) admit other railroads on "just and reasonable terms" or (b) if the other railroads so prefer, allow them to use the monopoly's facilities "upon such just and reasonable terms and regulations as will, in respect of use, character, and cost of service, place every such company upon as nearly an equal plane as may be with respect to expenses and charges as that occupied by the proprietary companies." The *Trinko* Court sought to distinguish *Terminal Railroad* as involving "concerted action, which presented greater anticompetitive concerns and is [more] amendable to a remedy that does not require judicial estimation of free-market forces: simply requiring that the outsider be granted nondiscriminatory admission to the club." *Trinko*, 540 U.S. at 410 n.3. But the *Trinko* Court mischaracterized its earlier decision in three respects. First, in *Terminal Railroad*, the Court held that defendants' concerted and unilateral actions in Terminal Railroad Association violated both sections 1 and 2 of the Sherman Act. Second, the principal defendant was a monopoly, which the United States sought to break up. Third, the remedy in *Terminal Railroad* was not free of "judicial estimation of free-market forces." *Id*. Instead, the Court, ordered the monopoly to deal with rivals, and if any dispute arose over what constitutes "just and reasonable terms," the parties could submit the dispute to the district court for resolution. *Terminal R.R.*, 224 U.S. at 412–13.

that privileges a monopolist's anti-competitive behavior over any innovator requiring interoperability. As we'll also see, this denial of interoperability can chill innovation.

The district court's third basis for the legal presumption was that "'compelled sharing may actually provide opportunities for collusion' between the monopolist and its rival or rivals."[62] Collusion, the court surmised, is "the supreme evil of antitrust,"[63] and itself quite "injuri[ous] to consumers and the competitive process alike."[64]

By now one can expect that this is wrong on several levels. In enacting the antitrust laws, Congress never endorsed this hierarchy, which as a matter of economic policy makes no sense.[65] Judge Learned Hand recognized the "absurdity" of condemning cartels while not extending the condemnation to monopolistic practices: The cartel's agreements "are only steps toward that entire control which monopoly confers."[66] Moreover, the economic evidence rejects the courts' Schumpeterian belief that monopoly rents are necessary "to safeguard the incentive to innovate."[67] So not only is the economic thinking underlying this legal presumption wrong, the courts ignore the congressional concerns regarding monopolies' political, social, and ethical implications.

On appeal, the D.C. Circuit could have rectified the lower court's faulty legal presumption. Instead, the appellate court compounded the error, through its economic policymaking. First, the D.C. Circuit opined that the States' monopolization lawsuit was "odd" because the "the States' suit

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[62] *Facebook*, 549 F. Supp. 3d at 25.
[63] *Id*., quoting *Trinko*, 540 U.S. at 408.
[64] *Id*., quoting *Novell*, 731 F.3d at 1073.
[65] Stucke, *Should the Government Prosecute Monopolies?*, *supra* note, at 499–500.
[66] United States v. Aluminum Co. of Am., 148 F.2d 416, 428 (2d Cir. 1945).
[67] ARIEL EZRACHI & MAURICE STUCKE, HOW BIG-TECH BARONS SMASH INNOVATION – AND HOW TO STRIKE BACK 143-60 (2022); Stucke, *Monopolies, supra* note, at 120-22.

concerns an industry that, even on the States' allegations, has had rapid growth and innovation with no end in sight."[68] As one would expect by now, the D.C. Circuit never provided any empirical evidence for its statements about innovation in the digital economy.

Next, the D.C. Circuit added its gloss to *Trinko*'s economic theories, without providing any empirical support: "courts should proceed cautiously when asked to deem novel products or practices anti-competitive. Many innovations may seem anti-competitive at first but turn out to be the opposite, and the market often corrects even those that are anti-competitive."[69]

Nor did the D.C. Circuit offer any empirical basis for its conclusion that Meta's banning seven rivals from its platform under the company's core functionality policy was "a drop in the bucket" of the ten million apps and websites that integrated into Facebook's platform:

> *Facebook banning these seven, even if the States' allegations are correct, would not amount to any "continuing harm" to the States' constituents . . . and a court order to Facebook would serve no antitrust purpose. . . . As the district court put it, we "cannot turn back the clock to 2013, 2014, or 2015." . . . It makes no sense to require Facebook to foreswear a policy that ended in 2018, or to provide Facebook Platform access to a handful of companies which are either defunct or have changed their business model ever since Facebook banned them. Injunctive relief would be unwarranted even if the States could prove their allegations.*[70]

As a legal matter, can the courts determine that a monopolist can kill off a few innovators, as long as it does not kill off others? Previously, the Court held that it could not. The Sherman Act does not tolerate anticompetitive behavior "merely because the victim is just one merchant

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[68] New York v. Meta Platforms, Inc., 66 F.4th 288, 295 (D.C. Cir. 2023).
[69] *Id.*
[70] *Meta*, 66 F.4th at 306.

whose business is so small that his destruction makes little difference to the economy."[71] As the Court noted, "[m]onopoly can as surely thrive by the elimination of such small businessmen, one at a time, as it can by driving them out in large groups."[72] Regardless, Congress made that decision when enacting the Sherman Act. But now courts make this trade-off.

Part II below addresses why the D.C. Circuit was wrong as an empirical matter. But important here is to consider the court's economic theorizing from a rule of law perspective. Ideally, the court should consider how its prevailing legal standard fares under rule of law principles. The rule of law is often considered a precondition for effective antitrust enforcement. Ideally under rule of law principles, an antitrust standard should be easy to apply and enforce (administrability); yield predicable results (consistency); leave little, if any, subjective input from the decision-makers (objectivity); reach as wide a scope of conduct as possible (applicability); and the standard its objectives should be understandable (transparency).

As we have seen, antitrust jurisprudence has been criticized, even by the Court itself, for its inaccuracy, poor administrability, subjectivity, lack of transparency, and yielding inconsistent results.[73] Outside the offenses still deemed per se illegal (such as price-fixing and market allocation), antitrust

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[71] Klor's, Inc. v. Broadway-Hale Stores, Inc., 359 U.S. 207, 213–14 (1959) (discussing group boycott).

[72] *Id.*

[73] *See, e.g.*, *Kimble*, 576 U.S. at 446; *Oneok*, 575 U.S. at 398; *Actavis*, 570 U.S. at 173, 177; Credit Suisse Sec. (USA) LLC v. Billing, 551 U.S. 264, 281–82 (2007) (complaining of high risk of inconsistent results in antitrust cases); *Trinko*, 540 U.S. at 414 (complaining about antitrust's interminable litigation); *Twombly*, 127 S. Ct. at 1966, 1967 n.6 (quoting Asahi Glass Co. v. Pentech Pharm., Inc., 289 F. Supp. 2d 986, 995 (N.D. Ill. 2003)); see also CIVIL RULES ADVISORY COMMITTEE, MINUTES 32 (Nov. 8-9, 2007), http://www.uscourts.gov/rules/Minutes/CV11-2007-min.pdf (demonstrating that court "spent some time decrying the enormous burdens that could be imposed by [antitrust] discovery, and in doubting the possibility that effective management of staged and focused discovery can be used to enable a plaintiff to determine, at relatively reasonable cost to the defendants, whether information exclusively available to the defendants can be used to supply a better preliminary fact showing that will justify full-scale discovery and litigation").

litigation is a risky, costly endeavor. Just consider Epic's antitrust lawsuit against Apple. Despite retaining, among others, a former federal district court judge and former Assistant Attorney General of the Antitrust Division, Epic's monopolization claims ran aground, as the district court came up with her own relevant product market, and found that Apple was not a monopoly, despite evidence to the contrary, including its monopoly profits[74] and its contract terms with app developers, which were "standardized and nonnegotiable—a contract of adhesion," and that only "a few developers have succeeded in modifying these terms by threatening to go to other platforms."[75]

The courts' economic policymaking has significant implications on innovation. As the next Part addresses, tech monopolies have every incentive to maintain and expand their dominance through anticompetitive means. Any innovator that threatens to disrupt these tech barons' value chains will likely be acquired, copied, or killed. What recourse do these innovators have under the antitrust laws? How can any antitrust plaintiff anticipate and respond to the court's particular economic beliefs? If the court believes that many innovations that appear anticompetitive turn out to be procompetitive, how can the plaintiff disprove the court's supposition? If it waits too long, latches will bar its claim (and any relief would likely be too little too late). And if the court believes that a monopoly can refuse to deal with some nascent competitive threats with the intent to kill them off, as long as it deals with other companies, who may not threaten its monopoly, how does one counsel one's client? Ordinarily, one could state the law: a monopoly owes no duty to deal absent any purpose to create or maintain a monopoly. But even if one

[74] Epic Games, Inc. v. Apple Inc., 559 F. Supp. 3d 898, 952 (N.D. Cal. 2021) (noting how Apple's margins for its app store exceeded 70 percent), aff'd in part, rev'd in part, and remanded, 67 F.4th 946 (9th Cir. 2023)

[75] *Id.*

has evidence of anticompetitive intent, the court, guided by its own economic theories, may rule otherwise. Given how far antitrust has strayed from both congressional intent and the rule of law, there is a significant disincentive to challenge anticompetitive behavior under antitrust laws. This loss of protection for innovators and consumers affects innovation, market behavior, and market contestability.

Thus, the courts' rambling through the wilds of economic policy favors the monopolist. Their approach reflects a rooted ideological assumption as to the error costs of intervention being higher than those associated with no intervention. Yet, arguably, when dealing with entrenched digital platforms, the cost of a false negative (a failure to condemn anticompetitive conduct) increases in magnitude and results in durable distorting effects.[76] In *Meta*, this laissez-faire ideology triumphed and tilted the decision toward no intervention. The key issue for our discussion is that the economic reasoning presented by the parties served as expensive background with which the court did not materially engage. As often is the case, it was merely an analytical façade, behind which ideology and personal beliefs reside.

Subsequently, if one cannot anticipate the court's economic predilections when drafting one's monopolization complaint, the complaint will likely be dismissed. Even if it survives, the judge, as an economic prognosticator and policymaker, can take an unexpected turn. And even if one judge decides against the monopolist, the appellate judges, persuaded by their own economic views, can rule in the monopolist's favor. And even if they don't, prospective plaintiffs recognize that future judges may hold

[76] STIGLER CENTER MARKET STRUCTURE AND ANTITRUST SUB-COMMITTEE REPORT (2019) Page 73, https://research.chicagobooth.edu/-/media/research/stigler/pdfs/market-structure---report-as-of-15-may-2019.pd; Jonathan B. Baker, *Taking the Error Out of 'Error Cost' Analysis: What's Wrong with Antitrust's Right*, 80 ANTITRUST L.J. 1 (2015).

different economic beliefs. And these economic beliefs do not necessarily represent economic realities. Those in need of antitrust protection, including innovators and disruptors, are systematically marginalized if they challenge the prevailing business models of powerful firms. And we pay the price.

II. THE COURTS' FAULTY BELIEFS ON THE NATURE AND VALUE OF INNOVATION

Let us now move from the jurisprudential problem to the coarse treatment of innovation and begin with D.C. Circuit's opinion that the "the States' suit concerns an industry that, even on the States' allegations, has had rapid growth and innovation with no end in sight."[77]

What innovation, the court did not say. While the states' complaint mentions innovation on eight pages, it was in the context of how Meta's monopolistic behavior "chilled innovation, deterred investment, and forestalled competition in the markets in which it operates."[78] Although Facebook's social network has grown (in terms of number of users), it remains the dominant network in the United States and in many other countries.[79] As for innovation, the court seem to be captivated by the high levels of investment in research and development (R&D). Of course, there is little doubt that the leading digital platforms, such as Alphabet (Google), Apple, Meta, Amazon, and Microsoft, invest heavily in research and development (we refer to them collectively as Tech Barons). A look through their financial statements over the past decade reveals a staggering level of

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[77] *Meta*, 66 F.4th at 295.

[78] States Compl. ¶ 6; see also *id*. at ¶¶ 8 (alleging how users suffered from "suppressed innovation"); 185; 231; 246 (alleging how advertisers were deprived of additional innovation); 264; & 269.

[79] States Compl. ¶¶ 61-72; MAURICE E. STUCKE, BREAKING AWAY: HOW TO REGAIN CONTROL OVER OUR DATA, PRIVACY, AND AUTONOMY 3, 15-17, 29 (2022)

investment in R&D.[80] But while the D.C. Circuit, among others, remains captivated by the level of investment, it ignored the nature and value of innovation. In this Part, we consider the first two of three fundamental errors that jurists (and policymakers) have made about innovation in the digital economy.

The first error is in failing to distinguish the type of innovation (whether it was disruptive or complementary) and its value. The second error is in underestimating the value of disruptive innovations.

The result is that reality is far more nuanced than what courts opine: while the Tech Barons seemingly deliver many benefits and advance valuable innovation, at the same time, they stifle plenty.

A. Treating All Innovation Alike.

In opining that Meta's banning of seven companies was "a drop in the bucket" of the ten million apps and websites that integrated into Facebook's platform, the D.C. Circuit assumed that the websites and apps offered similar types of innovation. It failed to distinguish the type of innovation (whether it was disruptive or complementary) and its value. As a result, it glossed over the "continuing harm" that arises when a monopoly quashes an innovator that can potentially disrupt the monopolist's value chain. Indeed, the opinion contains important clues, whose significance the court never recognized. One is that the surviving threats *"changed their business model ever since Facebook banned them."*[81] Another clue is that Meta killed off a few innovators while not killing off millions of other websites and apps.

In assuming that whatever harm caused by Meta's ban was more than

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[80] EZRACHI & STUCKE, BIG TECH BARONS, *supra* note, at 14-18.

[81] *Meta*, 66 F.4th at 306 (state that it "makes no sense . . . to provide Facebook Platform access to a handful of companies which are either defunct or have changed their business model ever since Facebook banned them").

offset by the many websites and apps that could integrate, the court never asked: why did Meta ban certain companies and not others? Why did the survivors change their business model? And what was the significance of these answers to innovation? As we'll see, Tech Barons, like Meta, have the incentive to kill off *disruptive* innovations that threaten their value chain, while promoting innovations that *sustain* their value chain.

1. Disruptive and Sustaining Innovation

The federal courts do not generally distinguish between *disruptive* and *sustaining* innovations.[82] While these terms dominate the business literature

[82] A Westlaw search in August 2023 found no cases that mention sustaining innovation, and only 13 cases that cite disruptive innovation. For the latter, it was often one of the parties, rather than the court, that used the term disruptive innovation. *See, e.g.*, SourceOne Dental, Inc. v. Patterson Companies, Inc., No. 15-CV-5440 (BMC), 2018 WL 2172667, at *8 (E.D.N.Y. May 10, 2018) (noting that defendants' objections of expert's conclusions that SourceOne had a "disruptive business model" and was a "first mover" were not supported by the facts of the case is an insufficient basis to exclude the testimony, and are "exactly the type that can be effectively addressed through cross-examination"). In only one case did the court apply the term. New York v. Deutsche Telekom AG, 439 F. Supp. 3d 179, 226 (S.D.N.Y. 2020) (noting that "DISH's track record and numerous awards for innovation and customer experience, as well as evidence of the currently confidential and creative strategic partnerships that DISH is planning, suggest that DISH would compete as a disruptive 'maverick' in the RMWTS Markets, offering low prices for innovative and high-quality services). But, in that case, the district court overestimated the maverick's ability to prevent anticompetitive effects, and American consumers paid the price. Sprint and T-Mobile sought to merge, which would leave the wireless telephone market with only three major mobile network operators. The Trump administration orchestrated a consent decree with the premise that DISH would become a significant competitive constraint. The states sued, arguing that despite the divestitures required under the DOJ consent decree, the T-Mobile/Sprint merger would likely stifle competition in the highly concentrated wireless market, forcing consumers to pay higher wireless prices. The district court disagreed, using its "own tried and tested version of peering into a crystal ball"—basically reading "what the major players involved in the dispute have credibly said or not said and done or not done, and what they commit to do or not do concerning the merger," which somehow would equip the court "to interpret whatever formative conduct and decisive events [it] can reasonably foresee as likely to occur." *Deutsche Telekom*, 439 F. Supp. 3d at 187–88. Both the Trump administration and the district court got it wrong. Before the T-Mobile/Sprint merger, wireless prices were steadily declining every year for at least a decade. U.S. Bureau of Labor Statistics, *Wireless Telephone Services in U.S. City Average, All Urban Consumers, not Seasonally Adjusted*, https://data.bls.gov/timeseries/CUUR0000SEED03?output_view=data. After the merger closed in mid-2020, mobile wireless prices increased suddenly. The average price of mobile

and debate, they are often used to describe varying phenomena. As one 2020 business survey noted, "it is not always clear what disruptive innovation exactly means, what will be disrupted, and by whom."[83] Central to the concepts of disruptive and sustaining innovations has been the work of Clayton M. Christensen. In his seminal book THE INNOVATOR'S DILEMMA, the late Harvard Business School professor shed light on the unique characteristics that often separate well-established, well-managed firms from disruptive innovators.[84] The former, being successful and competent in servicing their clientele, will seek to innovate and deliver value to their customers. Their innovations tend to be *sustaining* and focus on satisfying present and future customer needs while securing profits and growth. They will strive to innovate and improve products and services by giving their existing customers something more and better in what they want. Indeed, it is rational for established firms to continue offering sustaining innovations that their customers want and refrain from introducing innovations that their customers do not demand (and whose only appeal would be in lower-end segments or new markets where the margins and profits are lower).[85]

In contrast, Christensen's disruptive innovators offer "a very different value proposition than had been available previously."[86] Being free from the

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services in the last 6 months of 2020 was 4.3 per cent higher than the average price for the first 6 months, and the average price remained elevated in 2021, 2022, and 2023. *Id*. The price hike is especially troublesome given T-Mobile and Sprint's promise not to increase prices post-merger.

[83] Steven Si & Hui Chen, *A Literature Review of Disruptive Innovation: What It Is, How It Works and Where It Goe*s, 56(4) JOURNAL OF ENGINEERING AND TECHNOLOGY MANAGEMENT (2020).

[84] CLAYTON M. CHRISTENSEN, THE INNOVATOR'S DILEMMA—WHEN NEW TECHNOLOGIES CAUSE GREAT FIRMS TO FAIL (2016); see also Rajesh K. Chandy and Gerard J. Tellis, *The Incumbent's Curse? Incumbency, Size, and Radical Product Innovation*, 64 (3) J. OF MARKETING (2000); Birgitta Sandberg & Leena Aarikka-Stenroos, *What Makes It So Difficult? A Systematic Review on Barriers to Radical Innovation*, 43(8) INDUSTRIAL MARKETING MANAGEMENT 1293 (2014).

[85] EZRACHI & STUCKE, BIG TECH BARONS, *supra* note, at 23-40.

[86] CHRISTENSEN, THE INNOVATOR'S DILEMMA, *supra* note, at xviii.

need to service a large existing customer base and free from the short-term growth requirements of the leading organizations and their high-cost structures, the disruptive innovator can experiment and offer novel value propositions. Typically, the revenues, margins, and profits are initially much lower in these low-end or emerging markets compared to the established markets. Under Christensen's theory, established customers do not necessarily want or cannot use these disruptive innovations when introduced (for example, the established mainframe computer manufacturers did not want smaller disk drives). But over time, if successful, the disruptive innovation will cannibalize and challenge the existing industries.

Christensen's ideas, while subject to criticism,[87] help us appreciate how different corporate structures, values, and cultures can affect whether the company focuses and pursues sustaining or disruptive innovation. With these limitations in mind, over the past decade, many leading thinkers have developed and refined the definition of disruptive innovation to capture the different dimensions of disruption.[88] Consequently, the term now includes

[87] One notable criticism is that Christensen's theory captures only a narrow dimension of disruptive innovation: the innovator only enters a low-margin market or new markets with different customers. Since disruption comes in many forms and different market settings, his theory has limited applicability. Christian Hopp et al., *Disruptive Innovation: Conceptual Foundations, Empirical Evidence, and Research Opportunities in the Digital Age*, 35(3) JOURNAL OF PRODUCT INNOVATION MANAGEMENT 446–57 (2018) (surveying literature); Carlos Tadao Kawamoto & Renata Giovinazzo Spers, *A Systematic Review of the Debate and the Researchers of Disruptive Innovation*, 14(1) JOURNAL OF TECHNOLOGY MANAGEMENT AND INNOVATION 73–82 (April 2019); Jill Lepore, *The Disruption Machine: What the Gospel of Innovation Gets Wrong*, NEW YORKER (June 16, 2014), https://www.newyorker.com/magazine/2014/06/23/the-disruption-machine.

[88] *A Third Way to Innovation—Questions for David Robertson, Interview by Karen Christensen*, ROTMAN MANAGEMENT (Winter 2018), https://www.rotman.utoronto.ca /Connect/Rotman-MAG/IdeaExchange/Page1/Winter2018-David-Robertson (discussing a Third Way of innovation where (1) a set of complementary innovations around a core product make the product more appealing or valuable; (2) the complementary innovations operate together and with the key product as a system to carry out a single strategy or purpose—what Robertson calls the promise to the user; and (4) the complementary innovations—even those delivered by outside partners— are closely and centrally managed by the owner of the key product); Steven Si & Hui Chen, *A Literature Review*, *supra* note, at 101568 (synthesizing the literature in describing disruptive innovation as: an innovation

multiple taxonomies and dimensions, business models, and processes.[89]

In the digital economy, disruptive innovation involves a process in which the innovator's business model, products, or services (whether low- or high-margin) disrupt (or are perceived to disrupt) the existing value chain. The disruption comes in the form of a new value proposition that threatens the current or future value chain (which is the prevailing business model, the range of activities needed to create a product or service, the profits generated from them, and how the profits are allocated among the firms).

2. Applying the Concepts of Value Chain, Sustaining Innovation and Disruptive Innovation to Meta

process in which technologies, products, or services are initially inferior than those provided by incumbents in the attributes that mainstream consumers value, but these technologies, products, or services can attract and satisfy the consumers in low-end or new markets with advantages in performance attributes [such as being cheap, simple, or convenient] that these consumers value but which at the same time are neglected by mainstream markets. Over time, through the incremental improvement of technology or process, a disruptive innovation gradually satisfies the needs of mainstream consumers, to attain a certain market share from or even replace incumbents in mainstream markets); Clifford Maxwell and Scott Duke Kominers, *What Makes an Online Marketplace Disruptive?*, HARVARD BUSINESS REV. (May 24, 2021) (noting how disruptive innovations bring nonproducers and nonconsumers together—disruptive marketplaces make good on famed Silicon Valley investor Bill Gurley's observation that internet marketplaces "literally create 'money out of nowhere'" because "in connecting economic traders that would otherwise not be connected, they unlock economic wealth that otherwise would not exist"); more generally, see JOSHUA GANS, THE DISRUPTION DILEMMA (2016) (who explores demand and supply side disruption and notes that disruption occurs when "successful firms fail because they continue to make the choices that drove their success"). Neele Petzold, Lina Landinez, & Thomas Baake, *Disruptive Innovation from a Process View: A Systematic Literature Review*, 28(2) CREATIVITY AND INNOVATION MANAGEMENT 157–74 (2019).

[89] For the different taxonomies of innovation, see Claudia S. L. Dias & João J. Ferreira, *What We (Do Not) Know about Research in the Strategic Management of Technological Innovation?*, 21(3) INNOVATION: ORGANIZATION & MANAGEMENT 398–420 (2019), DOI: 10.1080/14479338.2019.1569464; Delio Ignacio Castaneda & Sergio Cuellar, *Knowledge Sharing and Innovation: A Systematic Review*, 27(3) KNOWLEDGE & PROCESS MANAGEMENT 159–73 (2020), https://onlinelibrary.wiley.com/doi/epdf/10.1002/kpm.1637; Adrian Kovacs et al., *Radical, Disruptive, Discontinuous and Breakthrough Innovation: More of the Same?*, ACADEMY OF MANAGEMENT ANNUAL MEETING PROCEEDINGS (2019): 14866, DOI: 10.5465/AMBPP.2019.272; Steven Si & Hui Chen, *A Literature Review*, *supra* note, at 101568.

Meta's three popular platforms – Facebook, Instagram, and WhatsApp -- are free to consumers. So, Meta's business model is based on behavioral advertising where user data is collected for personalized ads and targeted marketing.[90] To analyze the value chain, we can look at the steps and information flow used to generate value and consider who captures what portion of that value within Meta's behavioral advertising ecosystem. The *value chain* analysis would consider, among other things, how the value is created (namely the ability to predict and manipulate human behavior and target ads accordingly) and how the profits are distributed (for example, the websites and apps within Meta's advertising network).

A *sustaining technology* would promote Meta's behavioral advertising ecosystem without disrupting the pre-existing value chain. So, Meta accesses our data whenever we visit the mobile apps within the Facebook Audience Network, which by itself catches over three billion people each month.[91] But even if one could avoid Meta and its advertising network, the company still tracks us whenever we visit the millions of websites and apps with a Facebook "Like" button or that use "Facebook Analytics" services.[92] Data is transmitted to Meta when we visit that third-party website or app, even before

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[90] Meta Platforms Annual Report 2023, Form 10-K (Feb. 2, 2023), https://annualreport.stocklight.com/nasdaq/meta/23578439.pdf (substantially all of Meta's 2022 revenues ($113.642 billion of $116.609 billion) was generated from marketers advertising on Facebook, Instagram, Messenger, and third-party mobile applications within Meta's advertising network).

[91] *Place Your Facebook Ads on Mobile Apps with Audience Network*, https://www.facebook.com/business/marketing/audience-network [https://perma.cc/S3QM-M5L8].

[92] N.Y. State Dept. of Financial Services, Report on Investigation of Facebook Inc. Data Privacy Concerns (Feb. 18, 2021), https://www.dfs.ny.gov/system/files/documents/2021/02/facebook_report_20210218.pdf [hereinafter, NY State Facebook Report]; Bundeskartellamt, Case Summary, Facebook, Exploitative business terms pursuant to Section 19(1) GWB for inadequate data processing, at 10 (Feb. 15, 2019) [hereinafter Bundeskartellamt Facebook Case Summary]; AUSTRALIAN COMPETITION AND CONSUMER COMMISSION, DIGITAL PLATFORMS INQUIRY—FINAL REPORT at 86 (2019) [hereinafter ACCC Final Report]; SHOSHANA ZUBOFF, THE AGE OF SURVEILLANCE CAPITALISM 159–61 (2019) (discussing the evolution of this tracking feature, which Facebook first called a programming bug, when it was in fact a feature).

we see the "Like" button.[93] The amount of data Facebook receives is staggering. Meta received approximately one billion events per day from health apps alone on users, such as when someone opened the health app, clicked, swiped, or viewed certain pages, and placed items into a checkout.[94]

Thus, none of these millions of apps and websites seriously disrupt Meta's value chain; instead, they sustain Meta's dominance in social networking.[95] Those that funneled personal data to Meta also helped Meta reinforce its dominance in online display behavioral advertising.[96] In 2020, Facebook generated $84.17 billion in advertising revenue (or over $230.6 million per day). By 2022, Facebook generated $113.642 billion in ad revenues or over $311 million per day.[97]

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[93] Bundeskartellamt Facebook Case Summary, *supra* note, at 10.

[94] NY State Facebook Report, *supra* note, at 4–5, 12. Facebook reported to the NY Department of Finance that from November 21–28, 2020, "a daily average of approximately 25 million events sent by health apps triggered" its system to screen sensitive health information, "which represents only approximately 2.5% of the daily total number of events sent by health apps during that same time.").

[95] States Compl. ¶ 195 (Facebook "recognized that it did not have the resources to create and develop every useful social feature and that its Platform would enable third-party developers to expand the services available on Facebook, thus making Facebook more valuable and attractive for both existing Facebook users and new users who joined Facebook because of these apps. Platform thereby helped Facebook grow and increase user engagement, further strengthening its network effects.").

[96] By 2018, Google and Facebook obtained 58% of the $111 billion in revenues from the digital ad market—more than all of their online competitors combined. STUCKE, BREAKING AWAY, *supra* note, at 93. In some countries, like the United Kingdom and Australia, Google, and Facebook capture about 80% of the billions spent on digital advertising. *Id*. Google dominates the general search advertising market, controlling over 90% of revenues in the United States, EU member states, and many other counties. *Id*. Facebook controls the bulk of online display advertising generally and social advertising in particular, with over 10 million active advertisers in 2020. *Id*. at 93. In the U.K, for example, Facebook in 2020 controlled between 45 and 55% of the U.K.'s online display market, with an even higher share for online display video advertising (with a 50 and 60% share). *Id*. Besides funneling data to Meta, the third-party applications accessible through Facebook's Platform "expanded Facebook's opportunities to show advertisements because users spent more time on Facebook services, third-party developers purchased ads on Facebook, and for a period of time Facebook took a 30% share of the revenue third-party applications earned from in-app purchases. These monetary benefits were hardly insignificant: a single third-party developer was responsible for over 10% of Facebook's total 2011 revenue." States Compl. ¶ 196.

[97] Meta 2023 Annual Report.

Against this, consider a company that seeks to disrupt this multi-billion dollar advertising ecosystem with new technology. Such disruptor (to which we refer as a Tech Pirate) operates in risky and uncertain territory. It will gear its organization toward ongoing discovery in an attempt to identify new technological proposition and match it to future customer needs. This ongoing and taxing trial-and-error process could eventually deliver society a new value proposition.[98] Think for example of technology that disrupts current online advertising business models, or the prevailing tracking and targeting technology. As a society we rely on Tech Pirates to offer heterogeneity in innovation.

In addition to all the obstacles associated with developing new value propositions, Tech Pirates face a significant external threat from the Tech Barons. The latter may try to protect themselves against disruption and in doing so quash the pirates. After all, built into the pirates' disruptive strategy is its threat to the Tech Barons' ecosystem and profit model.

That tension, while the heart of the digital innovation story, was disregarded by the court in *Meta*. In failing to note the difference between disruptive and sustained innovation, the court was indifferent toward the states' extensive allegations of how these exclusionary practices stifled innovation.

In the innovation story, the focal point should not be the number of sustaining innovations that were allowed into the ecosystem. These, after all, support the ecosystem and enhance its power. Our focus ought to be on the fate of disruptive innovations that present a new value proposition. Thus, we should worry about would-be disruptors who abandon or change their innovation to align with the leading platform's value chain. Rather than

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[98] CHRISTENSEN, THE INNOVATOR'S DILEMMA, *supra* note, at 178–79, 182 (discussing the need for agnostic marketing where no one knows whether, how, or in what quantities a disruptive product can or will be used before they experience using it).

simply noting this in passing, the court should have asked what circumstances led to the change and the extent to which they reflect a market failure. Regardless, it is doubtful whether they serve as proof that innovation flourishes.

3. Value of Innovation

Although innovation is often associated with creating value, the process of innovation—the introduction of a new idea, technology, method, or product—may not necessarily increase overall welfare. While subjective, value is neither amorphous nor linked solely to consumer demand. Other definitions of value—besides the monetary worth of something—exist, including the innovation's "relative worth, utility, or importance."[99] Innovation can generate value by increasing overall well-being, could generate mixed effects (for example, creating some value but largely redistributing wealth), or be truly toxic—focused on primarily extracting and destroying value.[100]

The innovations that our policies should prioritize in the digital economy are, of course, value-creating innovations. Heterogeneity and diversity of innovation are key to value creation. Diversity counterbalances the increased concentration of power and can disperse profits throughout and outside the ecosystem.[101] It is also more likely to be driven by consumer wants and needs and as such serve their interests. By contrast, innovation that is driven by powerful entities that can ignore the interest of consumers would more likely serve the interests of these powerful entities, rather than society.

This leaves us with a helpful insight into the likelihood of value-creating

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[99] *Value*, MERRIAM-WEBSTER, https://www.merriam-webster.com /dictionary/value.
[100] EZRACHI & STUCKE, BIG TECH BARONS, *supra* note, at 31-35.
[101] *Id.* at 33-38.

innovation: it will decrease as an entrenched gatekeeper's power over that ecosystem increases. The gatekeeper will seek to lock in users so that users cannot easily switch to viable outside options. The innovation within that ecosystem will likely be sustaining rather than disruptive. And if the ecosystem's underlying value chains and profitability are linked to value extraction, then increasingly more innovations will aim to extract value or are toxic (where the gatekeeper profits, but overall well-being decreases). Put differently, market power supports value extraction and toxicity.[102]

This is where Tech Pirates can play a central role. In exploring disruption both within and outside the entrenched companies' value chains, these pirates can potentially offer significant heterogeneity, choice, and value, both within and outside of consumer-facing industries. When the pirates' disruptive innovation creates value and serves broader societal interests, the pirates provide the ultimate contribution. Because of this relative freedom, the Tech Pirates are disproportionately responsible for disruptive innovation and its diversity.

Granted monopolies like Meta, Google, Apple, Amazon, and Microsoft might disrupt large, well-established sectors with a significant potential pay-off (such as automobiles and health care). But they have not (nor will they in the future) disrupted their own ecosystems' value chain. Google and Meta, for example, will not offer privacy innovations that will disrupt or cannibalize their existing ecosystems' value chains, which rely on behavioral advertising. If they did, they would stand to lose billions of dollars in ad revenues. In contrast, the Tech Pirates seek innovation anywhere the opportunities arise—small markets, emerging markets, or existing large markets.

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[102] For evidence of this increased toxicity and its impact outside the ecosystem, see *id*. at 101-39.

4. WhatsApp

To consider the interplay between a Tech Baron and Tech Pirate, let us consider WhatsApp. An outsider would not have deemed the texting app as a disruptive threat to Meta's social network. Nor did WhatsApp's founders originally foresee their app disrupting the world's largest social network. Indeed, one of the app's cofounders shared an earlier version of the texting app with friends, "but none of them liked it." Moreover, "issues like battery draining, crashing of the app, etc. made [the cofounder] so disappointed that he lost all the hope and started to look for a new job."[103] After WhatsApp's launch in 2009, it began rapidly acquiring users, and its functionalities, such as adding pictures, changed in response to how users were using the texting app.

But as WhatsApp was evolving, Meta used advanced technology to monitor and assess the threat to see whether "an app offering mobile messaging services would enter the personal social networking market, either by adding personal social networking features or by launching a spinoff personal social networking app."[104] In an April 2012 email, for example, Mr. Zuckerberg identified the threat posed by the "messaging apps . . . using messages as a springboard to build more general mobile social networks."[105] And by October 2012, three years after its launch, Meta executives and employees saw WhatsApp as a serious strategic threat. As a Meta business growth director predicted internally, "[t]his might be the biggest threat we've ever faced as a company."[106] As Meta's director of product management

[103] Aashish Pahwa, *The History of WhatsApp*, FEEDOUGH (Sept. 8, 2021), https://www.feedough.com/history-of-whatsapp/.

[104] FTC Compl. ¶ 17, filed in FTC v. Facebook, Inc., No. 1:20-cv-03590 (D.D.C. December 9, 2020); States Compl. ¶¶ 146-47.

[105] FTC Compl. ¶ 18.

[106] FTC Substitute Amended Complaint ¶ 108, filed in FTC v. Facebook, Inc., No. 1:20-cv-03590 (D.D.C. Sep't 8, 2021); States Compl. ¶ 103.

wrote to colleagues: "[T]his is the biggest threat to our product that I've ever seen in my 5 years here at Facebook; it's bigger than G+, and we're all terrified. These guys actually have a credible strategy: start with the most intimate social graph (I.e. [sic] the ones you message on mobile), and build from there."[107] At a February 2013 Meta board presentation, the directors were warned that mobile messaging services were "a threat to our core businesses: both [with respect to] graph and content sharing. [T]hey are building gaming platforms, profiles, and news feeds. [T]hese competitors have all the ingredients for building a mobile-first social network."[108]

Through trial and error, WhatsApp was evolving beyond a texting app, with value-added features that threatened Meta's social network. Indeed, WhatsApp was not tied to a particular platform (as was Apple's iMessage), nor was WhatsApp concentrated to specific regions (unlike LINE, Kakao, or WeChat). Being a Tech Pirate, WhatsApp offered innovations (both functional and improved privacy) that provided users greater value, including greater privacy protections.

Its innovations also challenged Meta's value chain and offered a different value proposition. As the States alleged,

> *WhatsApp was a reliable, privacy-focused service that collected minimal information about users and did not show ads. WhatsApp founder Jan Koum believed that engineers should focus on making the user experience better rather than spending time on ads, and that WhatsApp users placed great value on the privacy of their communications.*[109]

Plus, WhatsApp was scaling quickly. By February 2014, it surpassed Facebook Messenger, with over 450 million monthly active users worldwide

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[107] FTC Substitute Amended Compl. ¶ 110; States Compl. ¶ 151.
[108] FTC Substitute Amended Compl. ¶ 111; States Compl. ¶ 152.
[109] States Comp. ¶ 156.

and gaining users at a rate of 1 million per day, placing it "on a path to connect 1 billion people."[110]

To eliminate the disruptive threat, in 2014 Meta purchased the company for $19 billion. Meta internally described the acquisition as a "land grab" that "[p]revents probably the only company which could have grown into the next [Facebook] purely on mobile."[111] Once under Meta's control, WhatsApp's business models and innovations were modified and aligned with the Tech Baron's value chain. Meta "cabined" WhatsApp to mobile messaging services,[112] and users were left with less innovation heterogeneity and fewer options outside the Tech Baron's value chain.

WhatsApp's privacy features were also degraded, as the States alleged in the *Meta* complaint:

> *[O]nce free from the competitive threat WhatsApp presented, in August 2016, Facebook changed WhatsApp's terms of service and privacy policy and eroded the pre-acquisition promises it had made. It combined user data across the services by linking WhatsApp user phone numbers with accounts on Facebook Blue, enabling WhatsApp user data to be used across all Facebook products. Thus, Facebook Blue users who had declined to give their phone numbers to Facebook suddenly found their phone numbers connected to their Facebook Blue accounts anyway. Facebook was able to use that additional data in its recommended friend ("People You May Know") ranking, leading to growth of its social graph. This harm to users' privacy resulted from Facebook's acquisition of WhatsApp.*[113]

WhatsApp's fate is not unique. In the past years, Tech Barons targeted and marginalized other Tech Pirates that posed a threat, including the fate of

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[110] FTC Substitute Amended Compl. ¶ 113; see also States Compl. ¶¶ 155, 159.
[111] FTC Substitute Amended Compl. ¶ 122.
[112] *Id.* ¶ 126.
[113] State Compl. ¶ 48.

the privacy app Disconnect (which Google kicked out of its ecosystem), the search engine DuckDuckGo (which promotes privacy, but many have never heard of because of Apple's revenue-sharing agreement with Google), Aptoide (which was subject to Google's dark patterns), and Sonos (which was forced to limit its innovations of speakers with multiple digital assistants).[114]

5. Antitrust Implications

Returning to the courts generally, and the *Meta* case in particular, this has several important implications.

First, one cannot treat all innovations alike. At a minimum, one must distinguish between disruptive and sustaining innovations, the value of the innovation, and whether a powerful gatekeeper controls the digital ecosystem. This is because the powerful gatekeepers are not agnostic about which innovators to invite to their ecosystems and which ones to acquire (or kill off). Instead, the court must understand the monopolists' incentives: they will not allow, within their power, any change that might disrupt their ecosystem's value chain. With these clarifications, one can better understand why Meta would foster interoperability with millions of apps and websites since they did not likely pose a threat to Meta or its ecosystem's value chain. To the extent, these apps and websites offered innovations, they were likely sustaining (for example, the health apps that attracted users and channeled the personal data to Meta).

Second, as Meta and the other monopolies expand their ecosystems to new products and services, the value chain for innovations cannot disrupt their ecosystems' preexisting value chains. For example, Meta is developing

[114] For a full review, see EZRACHI & STUCKE, BIG-TECH BARONS, *supra* note, at 41-100.

its own virtual reality platform, which may disrupt how we communicate with others and play games. But Meta will design its metaverse platform to not disrupt Meta's underlying behavioral advertising value chain (where it continues to make nearly all of its revenues). As a result, apps that seek access to Meta's metaverse platform cannot expect to be allowed to disrupt Meta's value chain (for example, by offering users superior privacy features to avoid being tracked or profiled for behavioral advertising). As a result, as the monopoly's ecosystem significantly expands, there will be concomitantly fewer industries to disrupt. Thus, the Tech Baron's innovation efforts will likely concentrate on the defensive, sustaining innovations that fortify the market power of its existing platforms, products, and services and its ability to capture more profits within its expanding ecosystem.

Third, when there are fewer lucrative industries to disrupt, there will be fewer Tech Pirates. Moreover, as the next subpart discusses, today's digital monopolies possess weapons that their predecessors lacked to identify and marginalize these disruptive innovators. Recognizing this, many would-be Tech Pirates either steer clear of the Tech Barons' ecosystems. If this is not possible, the innovator must change its business model to not disrupt the monopolist's prevailing ecosystem. That is what the D.C. Circuit acknowledged in *Meta,* but it failed to recognize this fact's significance. When an innovation switches from being disruptive to sustaining to pacify a monopoly, we lose out. The innovation will likely deliver less value and helps fortify, rather than destabilize, monopoly power.

Finally, one cannot conclude, as the D.C. Circuit did, that Meta's killing off a few innovators is offset by its granting interoperability to millions of other apps and websites. We do not know the value of the innovation, if any, that these million other websites and apps offered. But they were not disruptive to Meta's ecosystem. But the loss of one Tech Pirate can be far

greater than access to a million apps, whose sustaining innovations reinforce the Tech Baron's power.

For example, suppose IBM was not subject to antitrust scrutiny in the 1970s and thus continued to bundle its hardware (such as its new personal computer) with software (such as the PC operating system).[115] It is unlikely that Microsoft would have emerged. But even if it did, could IBM justify killing off one disruptive threat (say Microsoft's competing operating system) with the fact that it granted interoperability to many computer programs that did not disrupt IBM's monopoly? Hardly.

III. MISPLACED OPTIMISM ABOUT THE INVISIBLE HAND AND INNOVATION DYNAMICS

In opining that "courts should proceed cautiously when asked to deem novel products or practices anti-competitive," the D.C. Circuit stated that "[m]any innovations may seem anti-competitive at first but turn out to be the opposite, and the market often corrects even those that are anti-

[115] In the late 1960s, IBM controlled about 70% of the computer market. After the DOJ challenged IBM's practices, particularly its "bundling" hardware and software, IBM changed course. This led to the development of the computer software industry. "Precipitated by a massive antitrust complaint filed against IBM by the Justice Department in January 1969, the company reexamined its practices and decided to stop requiring customers to buy software, services, and hardware as one bundle in June of the same year. This pricing change opened up software markets to independent companies." R. Lougee-Heimer, *The Common Optimization INterface for Operations Research: Promoting Open-Source Software in the Operations Research Community*, 47 IBM J. RES. & DEV. 57, 59 (2003) (citing THOMAS J. WATSON, JR., FATHER, SON & CO.: MY LIFE AT IBM & BEYOND (1990)). A decade later, when preparing to launch its personal computers, the still dominant IBM approached the start-up Microsoft about creating a version of a BASIC computer program. Microsoft suggested that IBM talk to Digital Research, whose CP/M operating system had become the standard for computer hobbyists. Digital Research's president apparently disliked the arrogant IBM from his university days and was late in meeting the IBM executives. After the negotiations stalled, IBM returned to Microsoft to create an operating system for its personal computer. When introducing its PC, IBM sold the Microsoft operating system for a much lower price than the CP/M-86 system. See ERIC D. BEINHOCKER, THE ORIGIN OF WEALTH 326–27 (2006); Classic ScobleShow, http://www.podtech.net/scobleshow/technology/1593/ (Aug. 8, 2007, 09:34 EST).

competitive."[116]

The D.C. Circuit never provided any empirical support for these assertions. At a most basic level, the D.C. Circuit failed to grasp that monopolies are already impervious to market forces. That is, after all, why they can charge supra-competitive prices.

But one innovation myth, which the D.C. Circuit adopted in *Meta*, is that disruptive innovation is always around the corner. After all, the D.C. Circuit in Meta opined that "the market often corrects even those [innovations] that are anti-competitive." Courts assume like Austrian economist Joseph Schumpeter, that competition is a "gale of creative destruction." Under this school of thought, competition is "for the field," rather than "within the field."[117] For example, the D.C. Circuit in the Microsoft monopolization case, cited Schumpeter that in technologically dynamic markets, "entrenchment may be temporary, because innovation may alter the field altogether."[118] So, the tech platforms compete through innovation for temporary market dominance, "from which they may be displaced by the next wave of product advancements."[119] Later courts cite this language, and D.C. Circuit's opinion in 2001 "there is no consensus among commentators on the question of whether, and to what extent, current monopolization doctrine should be amended to account for" network effects.[120]

But how could a court in 2022 rely upon a 20+-year-old decision on contestability and the role of network effects? While that alone is hard to justify, it is harder to explain when every competition authority today

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[116] *Meta*, 66 F.4th at 305.

[117] United States v. Microsoft, 253 F.3d 34, 49–50 (D.C. Cir. 2001).

[118] *Id*.

[119] *Id*. quoting Howard A. Shelanski & J. Gregory Sidak, *Antitrust Divestiture in Network Industries*," 68 U. CHI. L. REV. 1, 11–12 (2001).

[120] In re EpiPen (Epinephrine Injection, USP) Mktg., Sales Pracs. & Antitrust Litig., 44 F.4th 959, 1005 (10th Cir. 2022) (quoting *Microsoft*, 253 F.3d at 50); New York v. Deutsche Telekom AG, 439 F. Supp. 3d 179, 242 (S.D.N.Y. 2020).

recognizes the role of network effects, scale economies, and the role of personal data in helping firms maintain their dominance.[121] Indeed, the States' complaint discussed how network effects, switching costs, and data further insulate Meta from competition,[122] and how Meta's CEO and executives recognized the power of network effects.[123]

But even a cursory glance would inform the court that these markets are not significantly contestable. The court was probably drafting its opinion using Microsoft's operating system, which still captures over 60 percent of the worldwide operating system market for desktop, tablet, and console computers.[124] The judge, in taking a break, might be among the 3.07 billion people logging on to Facebook, Instagram, Messenger, or WhatsApp each day (or the 3.88 billion logging on at least once each month).[125] And the judge, in recently searching for something while out and about, most likely used Google's search engine[126] on an Apple iPhone or smartphone using Google's Android operating system.[127]

Of course, while creative destruction still occurs, it has not displaced the Tech Barons. Innovations, for example, might have changed how one

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[121] See STUCKE, BREAKING AWAY, *supra* note, at 5-25 (collecting sources).

[122] States Compl. ¶¶ 39-46.

[123] *Id.* ¶¶ 33 & 163 (noting how in 2013, "Zuckerberg sent an email to senior management at Facebook informing them that a new WhatsApp feature had hardened his view that the company was a competitive threat: 'I want to call out two competitive near term issues we face. The first is WhatsApp adding a feature like this for public figures . . . . If the space is going to move in this direction, being the leader and establishing the brand and network effects matters a lot. This alone should encourage us to consider this soon. . . . When the world shifts like this, being first is how you build a brand and network effect. We have an opportunity to do this at scale, but that opportunity won't last forever. I doubt we even have a year before WhatsApp starts moving in this direction.'").

[124] https://www.statista.com/statistics/268237/global-market-share-held-by-operating-systems-since-2009/

[125] https://s21.q4cdn.com/399680738/files/doc_financials/2023/q2/Earnings-Presentation-Q2-2023.pdf.

[126] Even if the geographic market was worldwide, Google controls over 90 percent of the search engine market. https://gs.statcounter.com/search-engine-market-share.

[127] https://gs.statcounter.com/os-market-share/mobile/worldwide (Android and iOS control over 99 percent of the worldwide mobile operating system market).

searches for information online – from one's desktop computer to one's smartphone or AI-powered digital assistant. But *how* we search has not displaced the dominant search engine, Google, followed by Microsoft, nor their value chains.

Had the court considered network effects, scale economies, and the competitive significance of personal data, it would not have overestimated the probability of market forces stamping out the Tech Baron's anticompetitive innovations.

Consider the durability of the Tech Barons' dominance. Most U.S. companies live short lives. As one study found, the average half-life of US publicly traded companies is close to 10.5 years, meaning that half of all companies that began trading in any given year have disappeared in 10.5 years.[128] Nor are platforms guaranteed long lives. One study calculated that 209 platforms had failed and died over the past 20 years. Most of them (85 percent) were transaction platforms, which had shorter lives (on average 4.6 years) than the innovation platforms (5 years) or hybrid platforms (7.4 years) in the survey.[129] So, many companies and platforms die within ten years of their birth. In that case, it is all the more remarkable that Meta, Google, Apple, Amazon, and Microsoft have successfully dominated multiple markets for years and seem poised to continue their domination and expansion over the next decade.

In assuming that market forces will quickly stamp out any toxic innovations, the D.C. Circuit in *Meta* also failed to recognize the levers available to the Tech Barons to distort the demand and supply of innovation

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[128] GEOFFREY WEST, SCALE: THE UNIVERSAL LAWS OF GROWTH, INNOVATION, SUSTAINABILITY, AND THE PACE OF LIFE IN ORGANISMS, CITIES, ECONOMIES, AND COMPANIES 402 (2018).

[129] MICHAEL A. CUSUMANO, ANNABELLE GAWER & DAVID B. YOFFIE, THE BUSINESS OF PLATFORMS: STRATEGY IN THE AGE OF DIGITAL COMPETITION, INNOVATION, AND POWER 108 (2019).

within their ecosystem, and the nature of innovation outside the ecosystem.[130] Dominant platforms can suppress healthy innovators by depriving them of the "oxygen" needed to survive. Being in control of ever-expanding ecosystems enables the Tech Barons to distort the paths of innovation and control, to a large extent, the trajectory of innovation efforts. The distortion results in reduced disruption, reduced innovation plurality, and increased toxicity coming from the Tech Barons' ecosystems.

Moreover, Tech Barons have tools that earlier monopolies lacked. Being in control of the ecosystem, they can use advanced technologies to identify, hunt, and marginalize the Tech Pirates that pose a potential threat. The Tech Barons do not have to worry about false positives (killing companies that may not turn out to be a Tech Pirate). Their concern is false negatives (not identifying potential threats to their value chain). With deep pockets, the rational strategy is to be as aggressive as one can be—namely to acquire, kill, or marginalize any possible threat (with limited pushback from government agencies).

The Tech Baron, like the casino, does not always win. But it doesn't have to. It just needs to exclude those that threaten its value chains and profits (just as casinos use facial recognition software to exclude card counters and anyone else who has devised a way to improve the odds in their favor). The disruptive Tech Pirates may unwittingly find themselves at the center of the Tech Barons' dartboard. The potential threat they pose to the barons' hegemony may result in their being hunted and eliminated.

Here we'll consider two tools (which earlier monopolies lacked): the nowcasting radar and reducing interoperability.

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[130] For more on these tools, see EZRACHI & STUCKE, BIG TECH BARONS, *supra* note, at 41-100.

A. Nowcasting Radar

The Tech Barons, unlike past monopolies, don't just benefit from market power; they control expanding ecosystems, where others operate. From this position of power and collection of data, which is further enhanced by the use of search inquiries; monitoring of social network postings and tweets; and surveilling service providers, sellers, or users, the Tech Barons can identify market patterns and discern trends (and threats) well before others.[131] They deploy advanced analytics that transform near-perfect market surveillance into a detailed picture of ongoing market activities, trends, and emerging threats.

Using their nowcasting radar, these Tech Barons can monitor in real-time competitive portals where start-ups may emerge—within and outside their ecosystem—and identify and neutralize nascent threats. They can track the nascent competitive threats shortly after they take off and intercept or shoot them down long before they become visible to competition authorities and others. At times, the Tech Barons may better understand the technology's disruptive potential than the Tech Pirates themselves, as they see the whole ecosystem and can identify trends, opportunities, and threats.

This data advantage turns the nowcasting technology into a game-changer. Facebook, for example, acquired the data-security app Onavo to track users' smartphone activity.[132] As the states alleged in *Meta,* that nowcasting radar was central in Meta's identifying WhatsApp as a potential threat:

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[131] STUCKE, BREAKING AWAY, *supra* note, at 33-38; MAURICE E. STUCKE & ALLEN P. GRUNES, BIG DATA AND COMPETITION POLICY 285–87 (2016).

[132] Deepa Seetharaman & Betsy Morris, *Facebook's Onavo Gives Social-Media Firm Inside Peek at Rivals' Users*, WALL STREET JOURNAL (August 13, 2017), https://www.wsj.com/articles/facebooks-onavo-gives-social-media-firm-inside-peek-at-rivals-users-1502622003.

> *Zuckerberg and his top executives closely monitored the Early Birds Reports and other analyses derived from Onavo data to watch for emerging competitive threats. For example, Onavo data and analytics played a significant role in Facebook's targeting and ultimate acquisition of WhatsApp. According to one Facebook executive, Zuckerberg was "focused on Onavo data" identifying new market entrants with "extreme growth." Sheryl Sandberg, according to Guy Rosen, applauded the Onavo acquisition and described it as the "gift that keeps on giving.*"[133]

Meta, of course, is not alone in its ability to monitor its ecosystem and beyond. Amazon, for example, accessed third-party sellers' data "to identify and replicate popular and profitable products from among the hundreds of millions of listings on its marketplace."[134] Superior surveillance, access to data, and advanced monitoring enable the Tech Barons to identify user trends and potential threats.

Despite the states' allegations of this weapon in their complaint, including admissions by Meta executives on how they relied on their nowcasting radar to identify and neutralize threats, both the district and appellate courts failed to grasp the implications for Tech Pirates operating inside or adjacent to the monopolists' ecosystems. Being subjected to ongoing monitoring and targeting, Tech Pirates have fewer places to hide. They operate in a landscape that is often transparent to the Tech Baron, who has access to non-public

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[133] States Compl. ¶ 147; Eve Smith, *The Techlash against Amazon, Facebook and Google—and What They Can Do*, ECONOMIST (January 20, 2018), https://www.economist.com/news/briefing/21735026-which-antitrust-remedies-welcome-which-fight-techlash-against-amazon-facebook-and (noting how this nowcasting radar "helped [Facebook] spot several potential threats, including Instagram, a photo app, which it bought in 2012; WhatsApp, a messaging service, for which it paid a stunning $22bn in 2014; and tbh, a social-polling app, which it acquired last year [2017]. When Snapchat rebuffed it in 2013, it responded by cloning the app's most successful features.").

[134] MAJORITY STAFF OF H. COMM. ON THE JUDICIARY, SUBCOMM. ON ANTITRUST, COMMERCIAL AND ADMINISTRATIVE LAW, REPORT AND RECOMMENDATIONS: INVESTIGATION OF COMPETITION IN DIGITAL MARKETS 275 (2020) [hereinafter House Report] (internal footnotes omitted).

information and insights on market trends. So, the nowcasting radar itself can chill disruptive innovation, when any would-be innovator knows that the monopoly can identify its efforts and use multiple weapons to marginalize or kill this threat.

B. Interoperability

Tech Barons have multiple strategies to distort the supply of innovation – thereby limiting the ability of disruptors to reach the market – and manipulate the demand for the Tech Pirate's innovation.[135]

We'll consider here one weapon, namely hindering interoperability. Interoperability, as an important 2020 congressional antitrust report described, is "fundamental to the open internet."[136] Interoperability opens the supply lanes for innovation by increasing the opportunities for synergies and reducing customers' switching costs. At a basic level, the Tech Pirate's technology must work well with other essential services within the Tech Barons' ecosystems. If it does not work, users will blame the Tech Pirate, not the Tech Baron. So, one significant risk is that the Tech Baron will hinder the performance of the Tech Pirate's technology or its ability to communicate seamlessly with the customers.

For example, the Tech Baron can deny the Tech Pirates access to its application programming interfaces (APIs). APIs are "'libraries' of pre-packaged computer code that assist different pieces of software in communicating with one another."[137] App developers use APIs "when they want their app to request data from the operating system or from other applications, among other tasks."[138] So, Google Play Services APIs are

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[135] EZRACHI & STUCKE, BIG TECH BARONS, *supra* note, at 41-100.
[136] House Report, *supra* note, at 385.
[137] Multi-State Complaint, Utah et al. v. Google LLC, ¶ 116.
[138] *Id.*

essential to app developers. Without access to Google Play Services, "any app using location and mapping functionality (e.g., ride-sharing and real estate apps), push notifications (e.g., many apps that create reminders, location-based triggers, or personalized notifications), or Google's Ad-Mob (i.e., apps that monetize through in-app advertising) will not properly function."[139]

But, even if the Tech Pirate's technology works at a basic level, the Tech Baron can improve interoperability for its own (or favored) technologies, which effectively degrades interoperability for the disfavored technologies.

Think about it. How many of us use (or even remember) MapQuest, which was once the dominant mapping application? AOL purchased it in 1999 for $1 billion; Verizon later acquired it when acquiring AOL. In 2019, Verizon sold MapQuest to System1, an ad-tech company, for an undisclosed amount, which was "not material enough for Verizon to file paperwork."[140]

Multiple problems befell MapQuest, including underestimating Google Maps. But a crucial issue was interoperability. Not only did Apple and Google set their competing mapping apps as the default on Android and iOS (which affects the demand for innovation),[141] but each Tech Baron had its mapping app work seamlessly with its other products and services (such as the browser, search engine, and calendar, which automatically used the Tech Baron's mapping app).

Interoperability is so vital that even the Tech Barons warn their investors about how other Tech Barons might hinder their interoperability. Consider Meta's warning of this risk:

> *We are dependent on the interoperability of Facebook and our other products with popular mobile operating systems,*

[139] *Id.* at ¶ 125.

[140] Bruce Sterling, *Dead Media Beat: MapQuest*, WIRED (Oct. 9, 2019), https://www.wired.com/beyond-the-beyond/2019/10/dead-media-beat-mapquest/.

[141] EZRACHI & STUCKE, BIG TECH BARONS, *supra* note, at 50-54.

> *networks, technologies, products, and standards that we do not control, such as the Android and iOS operating systems and mobile browsers.*[142]

So how could a Tech Baron reduce interoperability? Meta identified myriad ways, including:

- Changes, bugs, or technical issues in such systems;
- Changes in its relationships with mobile operating system partners, handset manufacturers, browser developers, or mobile carriers; and
- Changes in terms of service or policies that
    - degrade its products' functionality,
    - reduce or eliminate its ability to update or distribute its products,
    - give preferential treatment to competitive products,
    - limit its ability to deliver, target, or measure the effectiveness of ads, or
    - charge fees related to the distribution of its products or its delivery of ads.[143]

Ironically, while Meta warns investors about how the other Tech Barons can hinder its apps' functionality, Meta, as the states alleged, used this weapon to kill off Tech Pirates. One example is the Facebook Platform, which the company built early on as an operating system to connect other applications to Meta's social graph. Zuckerberg touted it when testifying before Congress in 2020. Seemingly interoperability with the Facebook Platform is a "triple win."

With interoperability, Facebook users win (in quickly signing on to apps

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[142] Facebook 2020 10-K, 17.
[143] *Id*.

and webpages with their Facebook ID, using Facebook's social plugins, like the Like button, while on other websites or apps, and using other features like finding their Facebook friends on the new app or website).[144]

Third-party developers win (in attracting Facebook users, reading from and writing data to Facebook, and integrating their pages with Facebook's).

Meta wins (the more app developers that build onto its platforms, the more attractive Facebook becomes relative to rival social networks; Meta collects more data on its users and non-users when they aren't on Facebook, which the company uses to increase its advantage for behavioral advertising revenues).

As Meta grew, it recognized that "access to its social graph provided other applications with a tool for significant growth."[145] By 2012, with its dominance secured, Meta reexamined its position. As one of its senior executives observed:

> *When we started Facebook Platform, we were small and wanted to make sure we were an essential part of the fabric of the Internet. We've done that—we're now the biggest service on earth. When we were small, apps helped drive our ubiquity. Now that we are big, (many) apps are looking to siphon off our users to competitive services. We need to be more thoughtful about what integrations we allow and we need to make sure that we have sustainable, long-term value exchanges.*[146]

So, under its CEO's direction, Meta used its nowcasting radar to identify whether the app was a "friend or foe." Meta, as the antitrust authorities alleged, reduced the interoperability of those social apps that became too popular and a potential threat to Facebook's products.[147]

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[144] *What Does Facebook Platform Mean?*, TECHOPEDIA, https://www.techopedia.com/definition/27916/facebook-platform.

[145] House Report, *supra* note, at 166.

[146] *Id.* at 166–67.

[147] States Compl. ¶ 200 (alleging that "after years of promoting open access to Facebook

As the States alleged in their complaint:

> *As part of its strategy to thwart competitive threats, Facebook pursued an open first–closed later approach in which it first opened its platform to developers so that Facebook's user base would grow and users would engage more deeply on Facebook by using third-party services. This strategy significantly boosted engagement on Facebook, enhanced the data it collected, and made the company's advertising business even more profitable. Later, however, when some of those third-party services appeared to present competitive threats to Facebook's monopoly, Facebook changed its practices and policies to close the application programming interfaces ("APIs") on which those services relied, and it took additional actions to degrade and suppress the quality of their interconnections with Facebook.*[148]

In doing so, Meta degraded the experience of its users when they were on these threatening start-ups, including Vine, a video-sharing app that Twitter acquired in 2012. Believing that the app "replicated Facebook's core News Feed functionality,"[149] Meta cut off Vine's access to its Facebook APIs. Facebook users could no longer readily find their Facebook friends on Vine.[150] Vine died a few years later. So, Meta created "whitelists," where it gave preferential treatment to friends of the company, including Amazon, which "was spending money on advertising and partnering with Facebook on the launch of its Fire smartphone," while cutting off perceived innovation threats.[151]

In reducing interoperability, the Tech Baron can weaponize network effects, increase the innovator's costs to access users, and reduce the

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Platform, Facebook increasingly turned to Platform as a tool to monitor, leverage, and harm (via rescinding API access) apps that Facebook viewed as actual or potential competitive threats").

[148] *Id.* ¶ 14.

[149] House Report, *supra* note, at 167.

[150] *Id.*

[151] *Id.* at 169.

functionality of the innovative product. The interoperability torpedo skews the supply of innovations. Social apps, for example, will be less likely to innovate features that might be better than Facebook's, when doing so cuts them off from Facebook's social graph. Instead, to avoid being cut off, companies will innovate on complementary features that will significantly benefit Meta, but not necessarily its Facebook users.

As the States alleged,

> *An app that suddenly lost access to Facebook's APIs was hurt not only because its users would no longer be able to bring their friend list to the new app, but also because a sudden loss of functionality, which creates broken or buggy features, suggests to users that an app is unstable. Facebook's actions, therefore, disincentivized developers from creating new features that might compete with Facebook: adding new social features to an existing app might come at the significant cost of access to Facebook's APIs.*[152]

But the D.C. Circuit never considered these economic realities (or allow the States to prove this at trial). Instead, because the anticompetitive effects of Meta's conduct were similar to that of a unilateral refusal to deal, and because refusals to deals are presumptively lawful (absent one narrow exception), Meta is not liable.[153]

The fallacy of the court's logic is obvious. A monopolist could kill its rival by blowing up its business or refusing to deal. But the fact that the result in both cases is similar does not excuse the former.

The States also alleged that Meta used its control over Platform to "degrade the functionality and distribution of potential rivals' content when

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[152] States Compl. ¶ 202.
[153] *Meta*, 66 F.4th at 306.

it perceived those firms as threats to Facebook's monopoly power."[154] For the D.C. Circuit, this was "another way of saying that Facebook refused to deal with its rivals on the rivals' preferred terms."[155] That is simply wrong. There is a significant difference between refusing to deal with a rival versus actively degrading the functionality of the rivals' services.[156]

Unfortunately, being in awe of investment levels led the court to abandon any attempt at a nuanced analysis of the true effects on innovation.

C. The Creative Destruction Myth

So, who peddles this innovation myth that disruption is around the corner? For one, the Tech Barons. A common theme in GAFAM's financial reports is that their market power is transient, disruptive innovation is just around the corner, and competition remains fierce regardless of how large the platforms become.

Citing competition twenty-nine times in its 2020 Annual Report, Google, for example, warns: "Our business is characterized by rapid change as well as new and disruptive technologies. We face formidable competition in every aspect of our business, particularly from companies that seek to connect people with online information and provide them with relevant advertising."[157]

Citing competition sixteen times, Meta's 2020 annual report warns that its "business is characterized by innovation, rapid change, and disruptive technologies," and that it faces "significant competition in every aspect of [its] business."[158] So, the threat of creative destruction incentivizes the Tech

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[154] States Compl. ¶ 205.
[155] *Id.*
[156] See for example the EU General Court's judgment in Case T-612/17 *Google and Alphabet v Commission* (Google Shopping) (10 November 2021).
[157] Alphabet 2020 10-K, 7
[158] Facebook 2020 10-K, 7

Barons to innovate with the consumer in mind, and if they don't their innovations will suffer. As Eric Schmidt, then Google's CEO, said, "Google faces such strong incentives to treat its users right, since they will walk away the minute Google does anything with their personal information they find 'creepy.'"[159]

One can appreciate the irony: the Tech Barons say the Tech Pirates check their power while killing them off. Although no monopoly lives forever, it is hard to ignore the cracks in their disruption narrative.

Even if one puts aside the evidence, the Tech Barons' claims are contradictory. Take, for example, Apple's dire warning to investors: "The markets for the Company's products and services are highly competitive, and are characterized by aggressive price competition and resulting downward pressure on gross margins."[160] But wait. In that same filing, Apple reports that its gross margins on its services, which includes revenues from its 30 percent app store tax, are 70 percent. If the market were as fiercely competitive as Apple claims, such outsize profits should have attracted many entrants.[161] Apple never seeks to reconcile this contradiction, nor can it. Companies do not enjoy such extraordinarily high-profit margins in competitive markets.

IV. WHAT TO DO?

Courts will not necessarily reorient their approach and cease rambling through the wilds of conflicting economic theory – especially when they treat

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[159] Holman W. Jenkins, *Google and the Search for the Future—The Web Icon's CEO on the Mobile Computing Revolution, the Future of Newspapers, and Privacy in the Digital Age*, WALL STREET JOURNAL (August 14, 2010), https://www.wsj.com/articles/SB10001424052748704901104575423294099527212.

[160] Apple 2020 10-K, 7.

[161] United States v. E. I. du Pont de Nemours & Co., 351 U.S. 377, 420 (1956) (Warren, C.J., dissenting).

the antitrust laws as economic common law. Ironically, the Court applies its "major questions doctrine" to federal agencies while not questioning its own authority to make important economic tradeoffs and policies under the federal antitrust laws.[162]

Competition law, as a result, drifts further from the competition ideal—the congressional belief, in line with democratic principles, in dispersing economic and political power from the hands of a few, to foster more opportunities to compete, improve, and win. The agencies no longer enforce a statute "designed to be a comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade."[163] Rather than dispersing private power to advance a range of economic and political interests, antitrust law, as now construed, allows it. Rather than treat corporate concentration as a threat to innovation, workers, consumers, businesses, and citizens, the courts instead praise monopoly profits. And we bear the costs of the courts' misguided economic policies.[164]

To put it simply, antitrust enforcers lag the Tech Barons. The courts, in applying the antitrust laws, often lag behind the enforcers. (Some judges, like the D.C. Circuit in *Meta*, blindly rely on theories of Chicago School adherents, like Robert Bork, about self-correcting markets, without recognizing the different dynamics of digital markets.) As the economist John Maynard Keynes noted:

> *The difficulty lies, not in the new ideas, but in escaping the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds.*

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[162] Biden v. Nebraska, 143 S. Ct. 2355 (2023); W. Virginia v. Env't Prot. Agency, 142 S. Ct. 2587, 213 L. Ed. 2d 896 (2022).

[163] Northern Pacific R. Co. v. United States, 356 U.S. 1 (1958).

[164] https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/ (discussing the market power in many sectors of the economy).

But the courts are not alone. We should remember that courts and enforcement agencies operate within the boundaries as set in laws and regulations, and these frameworks have been entrenched and stagnated for years. A significant culprit is Congress in failing its mission, namely pruning, or eliminating policies that stifle innovation and updating the antitrust laws to keep pace with the new digital reality.

Consequently, Congress must intervene and take active steps to promote innovation. The good news is that in July 2021, the U.S. House Judiciary Committee voted in favor of a "historic package of bipartisan legislation" to address, among other things, Meta's abusing "its monopoly power to buy or bury its competitive threats."[165] The proposed legislation would have given the federal and state antitrust agencies, for example, new authority and enforcement tools "to establish procompetitive rules for interoperability and data portability online."[166]

The bad news is that antitrust reform in the U.S., as of mid-2023, has stalled—even though most Americans support it, and even though, according to the bills' chief sponsors, there are enough legislative votes to enact these reforms.[167] For some reason, Congressional leadership never put the bills up for a vote. As Democrat Congressman David Cicilline, who led the bipartisan effort, noted, "I've never heard a good explanation as to why bills which are wildly popular with the American people didn't get a vote."[168]

Key in stopping the antitrust reform was the Tech Barons' lobbying, which surprised even some members of Congress. As Cicilline remarked, "I

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[165] Press Release, *Nadler & Cicilline Statement on Federal Court's Dismissal of FTC Antitrust Suits Against Facebook* (June 28, 2021), https://democrats-judiciary.house.gov/news/documentsingle.aspx?DocumentID=4626.

[166] The Augmenting Compatibility and Competition by Enabling Service Switching (ACCESS) Act of 2021 (H.R. 3849).

[167] Cristiano Lima & David DiMolfetta, *The Technology - Cicilline Says Congress's Antitrust Push will Triumph, Even Without Him*, WASHINGTON POST (13 March 2023).

[168] *Id.*

think maybe we didn't fully appreciate just how much they would invest in stopping reforms. If I were to do it all over again, I would spend more time trying to make sure people understood what was at stake in this legislation."[169] As Republican Ken Buck commented, "Big tech has spent a ton of money in Washington DC and other places . . . The money has had the impact they intended. It has stifled the willingness to go after big tech with antitrust laws."[170]

In contrast, Europe enacted two key proposals—the Digital Markets Act (DMA) and Digital Services Act (DSA)—which seek to remedy many of the shortcomings in EU competition law as applied to these Tech Barons. The DMA, in particular, imposes specific obligations on these powerful gatekeepers precisely because Europe's antitrust policies cannot address these "gatekeeper-related problems" effectively.[171] The new acts' objective "is to ensure a contestable and fair digital sector in general and core platform services in particular" and to promote, among other things, innovation in the digital sector.[172] The new regulatory framework helps ensure digital markets are contestable and accessible to innovators, by restraining the ability of those in power to distort the market and exploit consumers.

Congress's proposed antitrust upgrades, like Europe's, would have several important benefits.

First, and most importantly, the proposals would curb the current unpredictability of analysis in courts and bring antitrust legal standards closer

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[169] *Id.*

[170] Emily Birnbaum & Maria Curi, *Big Tech Antitrust Push in Congress is Blunted by GOP-Led House*, BLOOMBERG (27 January 2023), <https://www.bloomberg.com/news/articles/2023-01-27/house-republicans-pivot-away-from-big-tech-anti trust-crackdown?leadSource=uverify%20wall>

[171] European Commission, "Proposal for a Regulation of the European Parliament and of the Council on Contestable and Fair Markets in the Digital Sector (Digital Markets Act)," SEC(2020) 437 final (December 15, 2020), 2.

[172] *Id.*

to rule of law ideals.

Consider the Senate's version of the "American Innovation and Choice Online Act."[173] The bill, like its House counterpart, clearly delineates who is subject to these laws (so that the courts would no longer undertake the highly contentious, and oft unpredictable exercise of defining relevant markets), and their legal obligations.[174]

Second, the proposals in imposing specific duties on these powerful gatekeepers, such as interoperability, contain a strong presumption of illegality. For example, the Senate bill provides:

> *It shall be unlawful for a person operating a covered platform, in or affecting commerce, if it is shown, by a preponderance of the evidence, that the person has engaged in conduct that would—*
>
> *(1) materially restrict or impede the capacity of a business user to access or interoperate with the same platform, operating system, hardware or software features that are available to the covered platform operator's own products, services, or lines of business that compete or would compete with products or services offered by business users on the covered platform.*[175]

Third, rather than the court weighing the restraint's claimed efficiencies against its anticompetitive effects (a murky, unpredictable endeavor), the Senate bill would limit the scope of affirmative defenses that the court could

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[173] S.2992, 117th Congress, 1st Sess. (2021).

[174] The bill would only apply to a "covered platform," which means an online platform that satisfies the following three criteria: (i) the number of users (having either at least 50,000,000 United States-based monthly active users on the online platform or at least 100,000 United States-based monthly active *business* users on the online platform); (ii) its United States net annual sales or a market capitalization greater than $550,000,000,000, adjusted for inflation based on the Consumer Price Index; and (iii) is a critical trading partner for the sale or provision of any product or service offered on or directly related to the online platform. The term "critical trading partner" means a person that can restrict or materially impede the access of (A) a business user to its users or customers; or (B) a business user to a tool or service that it needs to effectively serve its users or customers.

[175] Section 2(b)(1).

entertain. For example, to overcome the presumption of illegality, the defendant must show that its denial (or degradation) of interoperability --

> *(A) has not resulted in and would not result in material harm to the competitive process by restricting or impeding legitimate activity by business users; or*
>
> *(B) was narrowly tailored, could not be achieved through less discriminatory means, was nonpretextual, and was necessary to—*
>
> *(i) prevent a violation of, or comply with, Federal or State law;*
>
> *(ii) protect safety, user privacy, the security of non-public data, or the security of the covered platform; or*
>
> *(iii) maintain or enhance the core functionality of the covered platform.*[176]

Indeed this Senate bill is better than the House version, where the covered platform could show that its conduct was "necessary to . . . increase consumer welfare."[177] Judges are ill-suited to assess whether conduct increases consumer welfare, especially when there is no consensus on what constitutes consumer welfare,[178] and how to assess, consistent with the rule of law ideals of objectivity, predictability, and administrability in the digital economy whether a restraint increases consumer welfare.[179] The Senate version

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[176] Section 2(d)(2).

[177] American Innovation and Choice Online Act, H.R. 3816, § 2(c)(2).

[178] For the infirmities of the consumer welfare standard, see, e.g., Marshall Steinbaum & Maurice E. Stucke, *The Effective Competition Standard: A New Standard for Antitrust*, 86 U. CHI. L. REV. 595 (2019); Maurice E. Stucke, *Reconsidering Antitrust's Goals*, 53 B.C. L. REV. 551 (2012).

[179] For some of the economic criticisms of the consumer welfare standard, *see, e.g.*, Mark Glick et al., *Why Economists Should Support Populist Antitrust Goals*, 2023 UTAH L. REV. 769, 771 (2023) (outlining at least five reasons why the consumer welfare standard "is severely limited or defective, preventing it from being an appropriate standard for modern antitrust", namely its "material welfare" approach "cannot incorporate important issues that affect welfare, such as political democracy and sustainability;" second, it "assumes that the marginal utility of money (or the marginal social welfare with respect to a change in anyone's surplus) is constant and equal among individuals impacted by anticompetitive practices;" third, the standard "is biased in favor of the wealthy;" fourth, the standard "uses an indefensible measure of efficiency;" and finally it "ignores the input market when analyzing restraints in the output market"); Mark Glick & Darren Bush, *Breaking Up Consumer Welfare's Antitrust Policy Monopoly*, 56 SUFFOLK U. L. REV. 201, 202–03 (2023) (noting

comports with the Supreme Court's earlier assessment that value choices of such magnitude are beyond the ordinary limits of judicial competence.

Thus, if Meta sought to deny or degrade interoperability to any disruptive competitive threat, the states could allege that such conduct was presumptively illegal. No economic ruminations by the courts about such forced sharing or the virtues of monopoly profits. Nor would there be any need for competing (and expensive) economic experts and judicial fortunetelling of the conduct's anticompetitive effects. Congress would essentially restore the constitutional balance, where it makes the important economic policy tradeoffs, the courts adjudicate, and the enforcers enforce.

Even if Congress updated the antitrust laws, one cannot underestimate the Tech Barons' agility to anticipate and offset new laws and regulations and the slow reactive nature of policymakers, enforcers, and regulators. As the *Meta* opinion reflects, this gap widens as courts often run much slower than the agencies, especially in their economic thinking. So, the proposed antitrust reforms can reduce this gap but will unlikely resolve the reactive nature of enforcement, which will always lag behind the market. So even when the antitrust laws are updated to include the powerful platforms' current anti-competitive practices, there soon will be a regulatory gap. The Tech Barons would devise new anticompetitive strategies to acquire, copy, or kill the Tech Pirates. Consequently, more needs to be done to promote innovations that actually and significantly benefit us.[180] But antitrust reform is a critical step, if we want to see more Tech Pirates.

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how the Consumer Welfare Standard suffers from several defects: "(1) it employs a narrow, unworkable measure of welfare; (2) it excludes important sources of welfare based on the assumption that antitrust seeks only to maximize wealth; (3) it assumes a constant and equal individual marginal utility of money; and (4) it is often combined with extraneous ideological goals").

[180] EZRACHI & STUCKE, BIG TECH BARONS, *supra* note, at 197-214 (providing three principles to inform innovation policy reform and several ways to operationalize these principles in current laws and governmental innovation investment policies).

CONCLUSION

After all, any navigator knows a basic rule. A small degree error, insignificant in a short voyage, will increase the longer one travels. It's known as the "1 in 60 rule of thumb." A one-degree error in navigation will lead a pilot one mile away from her destination for every 60 miles of travel. This rule helps illustrate how seemingly insignificant flaws in past judicial decisions, such as dicta about the virtues of monopoly profits, have led us off course. It helps us appreciate the impact and actual costs of continuing along the current trajectory.

Ultimately, innovation in the digital economy is on the wrong trajectory. Its path is shaped more by the interests and value chains of the dominant ecosystems, rather than our interests. This failure is attributable to the failure of each branch of government to do its job. Until recently, the Executive branch failed to enforce the antitrust laws and deter the Tech Barons' anticompetitive behavior. The courts failed to do their job of adjudicating the laws in light of the Congressional intent. And Congress failed to do its job in reining in the courts' wandering through the wilds of conflicting economic theory and in updating the laws for the digital economy.

Thus, until Congress does the legislating and economic policymaking, and the courts stick to adjudicating, disruptive value-added innovation will suffer. And we will pay the price.