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**A Strategy for Challenging Anticompetitive Refusals to
Deal in the Digital Economy**

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I.	Introduction	Error! Bookmark not defined.
II.	Background	4
	A. <i>Aspen</i> and <i>Trinko</i>	4
	B. The Lower Courts’ Rule From <i>Trinko</i>	7
	C. Difficulties in Fighting Modern Anticompetitive Practices	7
III.	<i>Trinko</i> is a narrow holding and permits certain refusal-to-deal claims in digital markets.	8
	A. General Principles of Section 2.....	8
	B. Another Look at <i>Aspen Skiing</i> and <i>Trinko</i>	9
	C. <i>Lorain Journal</i> : Unilateral, Conditional Refusals to Deal	11
	D. <i>Otter Tail</i> : Refusals to Deal, Even in the Absence of a Preexisting Course of Dealing.....	12
	E. Case Study of <i>Epic v. Apple</i>	12
IV.	Characteristics of Digital Markets May Allow Some RTD Claims to be Distinguished from <i>Trinko</i> on the Facts.	13
	A. Amazon Audible’s Use of DRM Exemplifies One Digital Market in which Low Costs of Cooperation with Rivals may Allow a Facts-Based Distinction from <i>Trinko</i>	15
	B. Some Digital Goods and Services, such as Web Engines and Browsers, Do Still Fall Into <i>Trinko</i> ’s “Brand New” Framing.....	16
V.	Tying is another critical tool in the antitrust toolkit.....	18
	A. Tying applies to much of the anticompetitive conduct we see in digital markets.....	19
	B. Anticompetitive effects of tying increasingly outweigh efficiencies.....	20
	C. Addressing challenges facing plaintiffs under current tying doctrine.....	22
	D. Separate products as a proxy for anticompetitive effects.....	23
	i. Courts have a mixed record on “separate products” in digital markets.....	24
	ii. Avoiding future missteps.....	26
	E. Pushing back on the rule of reason in platform tying claims.....	28
	i. <i>Microsoft</i> should be cabined to situations involving bundling of existing digital services. 30	
	ii. <i>Microsoft</i> should not apply where a defendant alleges efficiencies that benefit only consumers.	30
	iii. <i>Microsoft</i> should not apply to total platform restrictions.	32
	iv. Longer term effort to preserve and strengthen per se tying.	32
VI.	Conclusion	33

Digital markets have a competition problem. Emboldened by years of lax antitrust enforcement and bolstered by powerful network effects and economies of scale, today’s Big Tech platforms have amassed durable market power across an array of digital markets and have engaged in anticompetitive strategies to preserve and extend this market power.¹ This market dominance has led to a range of well-documented harms in core platform markets.² Because many platforms serve as gatekeepers between consumers and other providers of goods and services—including physical goods, software applications, multimedia content, and more—this platform market power has allowed Big Tech platforms to increasingly extend their dominance into these goods and services markets.³ At the same time, lower courts—misconstruing case law and relying on dicta from the Supreme Court—have made it difficult for enforcers and plaintiffs seeking to challenge these practices.⁴

One of the core strategies for preserving or extending this dominance has been refusing to deal with rivals or denying rivals access to or interoperability with core platforms.⁵ In some cases, due to the characteristics of digital markets, platforms may not have serious business justifications for these refusals to deal. Unfortunately, judicial skepticism has been at its highest toward claims that platforms have anticompetitively denied or conditioned access to their core platforms.⁶ This has led to calls for a dramatic break in existing Supreme Court doctrine, through legislation if needed.⁷ In this paper, we take a different approach.

Our paper proposes a strategy to reinvigorate challenges to refusals to deal without requiring a change to existing Supreme Court case law. We open with a survey of RTD doctrine: we make clear that *Trinko* did not narrow the window for RTD claims altogether—rather it was a narrow holding confined to narrow circumstances. *Trinko*, properly understood, left open § 2 claims rooted in longstanding Supreme Court jurisprudence. We then propose three different case

¹ See, e.g., Digit. Competition Expert Panel, *Unlocking Digital Competition*, GOV.UK (Mar. 2019), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785547/unlocking_digital_competition_furman_review_web.pdf; STAFF OF H. SUBCOMM. ON ANTITRUST, COMMERCIAL, AND ADMINISTRATIVE LAW, 117TH CONG., INVESTIGATION OF COMPETITION IN DIGITAL MARKETS (Comm. 2022) [hereinafter HOUSE ANTITRUST REPORT]; Luigi Zingales & Filippo Maria Lancieri, *Policy Brief*, STIGLER COMM. ON DIGIT. PLATFORMS 6 (Sep. 2019), <https://www.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms--committee-report---stigler-center.pdf>.

² See *id.*

³ E.g., Digit. Competition Expert Panel, *supra* note 1, at 58 (“Many of the issues of concern in digital markets relate to platforms giving preferential treatment to their own upstream or downstream products and services, and thereby extending their market position into associated markets, and potentially thereby consolidating their core market position.”); Erik Hovenkamp, *The Antitrust Duty to Deal in the Age of Big Tech*, 131 YALE L.J. 1483, 1488-89 (2022) (listing allegations of anticompetitive conduct involving products related to core platforms).

⁴ See *infra* Section II.B.

⁵ See, e.g., HOUSE ANTITRUST REPORT, *supra* note 1, at 336.

⁶ See, e.g., Hovenkamp, *supra* note 3, at 1488 (“Most federal circuits have responded by erecting hyperstringent proof requirements that make it nearly impossible for plaintiffs to win [on refusal-to-deal claims].”).

⁷ See, e.g., HOUSE ANTITRUST REPORT, *supra* note 1, at 336 (recommending that Congress consider “overriding judicial decisions that have treated unfavorably essential facilities and refusal to deal-based theories of harm”); American Choice and Innovation Online Act, H.R. 3816, 117th Cong. (2021) (severely limiting the ability of platforms to restrict access or refuse to interoperate with other businesses).

theories or approaches to pleading that can allow plaintiffs to get around the effects of *Trinko* on the treatment of RTD claims in the lower courts.

First, we argue that *Lorain Journal/Otter Tail*-style refusal-to-deal claims remain alive and well, and we explain how these kinds of claims can reach conduct prevalent in digital markets. Where *Trinko* cannot be confined on the law, we consider possible ways to distinguish *Trinko* on the facts—arguing that many of the digital markets with which antitrust enforcers are grappling today look very different than physical infrastructure market at issue in *Trinko*. Finally, we consider similarities between RTD and other formalistic antitrust doctrines: we argue that it is often possible to circumvent *Trinko* and related precedent entirely by reaching anticompetitive conduct in digital markets through tying claims. We argue that tying doctrine is up for the task and propose tools to strengthen and reinforce tying jurisprudence to ensure it can continue to play a role in digital markets.

I. Background

This Part provides background on the narrow view of the refusal-to-deal doctrine often applied by lower courts today. This Part proceeds by first providing summaries of *Aspen*⁸ and *Trinko*,⁹ cases in which the Supreme Court has provided guidance on refusals to deal. It then provides a summary of the rule that lower courts have fashioned from these two cases. This Part concludes with an example that illustrates how this narrow view has made it difficult to challenge anticompetitive conduct by modern tech platforms.

A. *Aspen* and *Trinko*

In *Aspen* and *Trinko*, the Supreme Court provided important guidance on when refusals to deal are cognizable under Section 2 of the Sherman Act. The *Aspen* Court allowed a refusal-to-deal Section 2 claim, whereas the *Trinko* Court disallowed such a claim. This Section summarizes the facts and holdings of these two cases, and later Parts discuss various aspects of these cases in greater detail.

First, in *Aspen*, the Court allowed a refusal-to-deal claim where a monopolist unilaterally discontinued a joint venture with its rival without a plausible efficiency justification.¹⁰ At issue was a former joint venture between two ski resort companies that provided a joint pass to the four ski areas in Aspen, Colorado.¹¹ Ski Co., which owned three ski areas, unilaterally discontinued the joint pass by making Highlands, the owner of the fourth area, “an offer that [it] could not accept” and by rejecting all counteroffers.¹² Subsequently, Ski Co. introduced a ski ticket for its three ski areas.¹³ Highlands’s attempts to unilaterally recreate the joint ticket (called the “Adventure Pack”) were frustrated when Ski Co. refused to sell lift tickets to Highlands, even at retail price; and when

⁸ *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985).

⁹ *Verizon Commc’ns, Inc. v. Law Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398 (2003).

¹⁰ *Aspen*, 472 U.S. at 610.

¹¹ *Id.* at 589-90.

¹² *Id.* at 592-93.

¹³ *Id.* at 593.

Ski Co. refused to accept vouchers that Highlands created that were redeemable for retail price, even though they were backed by funds at an area bank.¹⁴ Highlands eventually sold Adventure Packs with money orders or traveler's checks without any identifying features, which Ski Co. accepted.¹⁵ However, Ski Co. then increased its single-ticket price, rendering it unprofitable for Highlands to market the Adventure Pack.¹⁶ Within four years of the joint ski pass's termination, Highlands' market share had declined by nearly half.¹⁷ Highlands filed suit against Ski Co. for monopolization of the downhill skiing services market in Aspen in violation of Section 2 of the Sherman Act, and a jury returned a verdict finding Ski Co. liable.¹⁸

At the Supreme Court, Ski Co. argued that it had no duty to deal with Highlands, but the Court quickly dismissed this argument. Ski Co. was a monopolist that “ma[de] an important change in the character of the market” with “no valid business reasons,” not merely a firm that decided to not enter a new joint venture.¹⁹ The Court then found that Ski Co.’s conduct was exclusionary. In making this determination, the Court found several facts relevant, including the superior quality of the all-Aspen ticket, the adverse effects on Highlands’ market share, and the lack of business justification for Ski Co.’s actions (especially its rejection of the Adventure Pack vouchers that would have entailed no cost to Ski Co. itself).²⁰ This evidence supported the inference that Ski Co. was acting predatorily, and “not motivated by efficiency concerns.”²¹

Second, in *Trinko*, the Court did not permit a refusal-to-deal claim where the facts were dissimilar to *Aspen* and where the monopolist was already subjected to an extensive regulatory scheme that imposed a duty to create “something brand new.”²² The case arose out of allegations that Verizon²³ violated certain duties under the Telecommunications Act of 1996.²⁴ Verizon controlled the “local loop” in several Northeastern and Atlantic states—this was the physical infrastructure such as “a twisted pair of copper wires, coaxial cable, [or] fiber optical cable” that “connect telephones to the switches that direct calls to their destination.”²⁵ Given the prohibitive expense of building a new local loop, a carrier could only provide local service to an area if it had access to the local loop.²⁶ The 1996 Act tried to solve this problem: it created new duties for local exchange carriers like Verizon. These local exchange carriers were now required to “afford access

¹⁴ *Id.* at 594.

¹⁵ *Id.* at 594 & n.15.

¹⁶ *Id.* at 594 n.15.

¹⁷ *See id.* at 594-95 (“Highlands' share of the market for downhill skiing services in Aspen declined steadily after the 4-area ticket based on usage was abolished in 1977: from 20.5% in 1976-1977, to 15.7% in 1977-1978, to 13.1% in 1978-1979, to 12.5% in 1979-1980, to 11% in 1980-1981.”).

¹⁸ *Id.* at 595.

¹⁹ *Id.* at 603-05.

²⁰ *Id.* at 605-10.

²¹ *Id.* at 610-11.

²² *Verizon Commc'ns, Inc. v. Law Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398, 410 (2003).

²³ Similar to the Court, this paper uses “Verizon” to also refer to Verizon’s predecessors NYNEX and Bell Atlantic. *Id.* at 402 n.1.

²⁴ *Id.* at 401.

²⁵ *Law Offs. of Curtis V. Trinko, L.L.P. v. Bell Atl. Corp.*, 305 F.3d 89, 94 (2d Cir. 2002) (quoting Plaintiff’s Complaint; *AT&T Corp. v. FCC*, 220 F.3d 607, 618 (D.C. Cir. 2000)).

²⁶ *Id.*

to the[ir] poles, ducts, conduits, and rights-of-way . . . to competing providers” and to provide interconnection with their networks “that [was] at least equal in quality to that provided” by such carriers to themselves.²⁷ The plaintiffs filed suit, alleging that Verizon violated Section 2 of the Sherman Act by not providing equal quality access to the local loop to competing local exchange carriers.²⁸

The Court rejected this challenge to Verizon’s conduct. It first acknowledged that “a refusal to cooperate with rivals can constitute anticompetitive conduct and violate §2,”²⁹ and added that “is at or near the outer boundary of §2 liability.”³⁰ The Court then considered the facts it analyzed in *Aspen*. In that case, Ski Co. had unilaterally terminated its “voluntary (*and thus presumably profitable*) course of dealing” with Highlands, “suggest[ing] a willingness to forsake short-term profits to achieve an anticompetitive end.”³¹ Likewise, the “unwillingness to renew the ticket *even if compensated at retail price* revealed a distinctly anticompetitive bent.”³² These two factors were not relevant to the *Trinko* case. Verizon’s prior conduct “shed[] no light upon the motivation of its refusal to deal” – neither “competitive zeal” nor “anticompetitive malice.”³³ Verizon’s “reluctance” to interconnect at the cost-based rate of compensation” under the statutory scheme told the Court “nothing about dreams of monopoly.”³⁴ In particular, the Court found it significant that the 1996 Act imposed a duty to create “something brand new.”³⁵ These elements only existed “deep within the bowels of Verizon . . . brought out on compulsion of the 1996 Act and offered not to consumers but to rivals, and at considerable expense and effort.”³⁶ The Act required the design and implementation of “new systems . . . to make that access possible” and this lawsuit was only filed due to the “failure of one of those [new] systems.”³⁷ These factors make *Trinko* different from *Aspen*.

The Court then turned to the regulatory regime at issue to explain why an antitrust duty did not exist. In particular, “the existence of a regulatory structure designed to deter and remedy anticompetitive harm” limited any benefit derived from antitrust enforcement.³⁸ The 1996 Act was “much more ambitious than the antitrust laws”: the Act attempted to “*eliminate*” monopolies, not merely prevent them.³⁹ And here, “the [regulatory] regime was an effective steward of the antitrust function” – rendering the benefits of antitrust intervention “slight.”⁴⁰ The Court, thus, held that the complaint did not raise a cognizable claim under the Sherman Act.⁴¹

²⁷ *Id.* (quoting 47 U.S.C. § 251(b)(4); 47 U.S.C. § 251(c)(2)(C)).

²⁸ *Trinko*, 540 U.S. at 404-05.

²⁹ *Id.* at 408.

³⁰ *Id.* at 409.

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.* at 410.

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.* at 412.

³⁹ *Id.* at 415.

⁴⁰ *Id.* at 413-14.

⁴¹ *Id.* at 416.

B. *The Lower Courts' Rule from Trinko*

This Section provides a sketch of how lower courts often read *Aspen* and *Trinko* as recognizing duties to deal in only limited circumstances. These courts then apply this purported rule expansively to reject claims. These courts rely on the following logic: First, the *Aspen* Court “upheld a jury verdict finding liability when a monopolist (Company) first voluntarily agreed to a sales and marketing joint venture with a rival (Aspen Highlands) and then later discontinued the venture even when the evidence suggested the arrangement remained a profitable one.”⁴² Second, the *Trinko* Court characterized *Aspen* as “at or near the outer boundary of § 2 liability” and refused to recognize a refusal-to-deal claim in a case where the facts were not similar to those in *Aspen*. Combining these characterizations of *Aspen* and *Trinko*, many lower courts limit the refusal-to-deal doctrine to only those cases with facts similar to *Aspen*. Even though, as Part II illustrates, *Trinko* did not characterize the facts in *Aspen* as mandatory, these lower courts read them as such.

The lower courts have not coalesced around a precise test for when a case is similar enough to *Aspen* to merit Section 2 liability. Nonetheless the Tenth Circuit’s approach is illustrative: under its test, “to invoke *Aspen*’s limited exception, . . . at least two features present in *Aspen*” must be present: (1) “there must be a preexisting voluntary and presumably profitable course of dealing between the monopolist and rival”; and (2) “the monopolist’s discontinuation of the preexisting course of dealing must ‘suggest[] a willingness to forsake short-term profits to achieve an anti-competitive end.’”⁴³ These features, according to the court, are “essential component[s]” of the refusal-to-deal doctrine.⁴⁴ To the extent that the doctrine is “underinclusive,” the court argued that it was better to “err on the side of” not imposing a duty to deal.⁴⁵

C. *Difficulties in Fighting Modern Anticompetitive Practices*

This approach raises the barrier for when regulators or consumers can fight anticompetitive conduct by modern tech companies. A paradigmatic example is how the District Court dealt with the challenge to Facebook’s API policy in *New York v. Facebook, Inc.*⁴⁶ The State Plaintiffs alleged that Facebook pursued an “open first – closed later approach.”⁴⁷ Facebook allowed app developers

⁴² *Novell, Inc. v. Microsoft Corp.*, 731 F.3d 1064, 1074 (10th Cir. 2013) (Gorsuch, J., concurring).

⁴³ *Id.* at 1074-75. The Ninth Circuit has similarly created a three-part test for this “limited exception”: (1) a company “unilateral[ly] terminat[es] . . . a voluntary and profitable course of dealing”; (2) “the only conceivable rationale or purpose is ‘to sacrifice short-term benefits in order to obtain higher profits in the long run from the exclusion of competition’”; and (3) “the refusal to deal involves products that the defendant already sells in the existing market to other similarly situated customers.” *Caccuri v. Sony Interactive Ent. LLC*, 21-CV-03361-RS, 2023 WL 1805137, at *1 (N.D. Cal. Feb. 7, 2023). The District Court in Facebook created its own three-part test: the only actionable refusals to deal were those “specific instances in which that policy was enforced (i) against a rival with which the monopolist had a previous course of dealing; (ii) while the monopolist kept dealing with others in the market; (iii) at a short-term profit loss, with no conceivable rationale other than driving a competitor out of business in the long run.” *Fed. Trade Commn. v. Facebook, Inc.*, 560 F. Supp. 3d 1, 25 (D.D.C. 2021).

⁴⁴ *Novell*, 731 F.3d at 1076.

⁴⁵ *Id.*

⁴⁶ 549 F. Supp. 3d 6 (D.D.C. 2021).

⁴⁷ Complaint at ¶ 14-16, *New York*, 549 F. Supp. 3d 6 (D.D.C. 2021) (No. 20-cv-03589).

onto its platform, thereby gaining significant benefits such as increased engagement and a larger user base.⁴⁸ Once Facebook established a monopoly, it changed its API policy to condition access to its platforms in ways that would restrict competitive threats: for example, apps created on the Facebook platform could not integrate with any other social platform.⁴⁹ The District Court held that this Facebook API policy did not rise to a cognizable refusal-to-deal claim, as it was not similar to *Aspen*.⁵⁰ To the argument that Facebook’s conduct was anticompetitive “conditional dealing,” the court was skeptical that such a doctrine even existed.⁵¹

II. *Trinko* is a Narrow Holding and Permits Certain Refusal-to-Deal Claims in Digital Markets.

This Part explains why the expansive reach lower courts have given to *Trinko* misconstrues its narrow holding. The Supreme Court has always applied a flexible, functional approach in deciding whether a firm incurs liability under Section 2 of the Sherman Act. The Court’s decision in *Trinko* did not purport to alter that approach: the Court merely held that, in the context of the particular regulatory scheme at issue, the Sherman Act imposed no duty to provide a rival with access to facilities upon request. This ruling did not alter cases like *Lorain Journal*,⁵² which prohibited the imposition of conditions in dealings with customers to foreclose competition; or *Otter Tail*,⁵³ which allowed a claim alleging refusal to deal with a rival even in the absence of preexisting voluntary course of dealing. This Part concludes with a case study of how *Trinko* can be distinguished in the Apple App Store claim in *Epic v. Apple*.⁵⁴

A. General Principles of Section 2

Section 2 of the Sherman Act makes it illegal “to monopolize, or attempt to monopolize . . . any part of the trade or commerce among the several States, or with foreign nations.”⁵⁵ Monopolization has two elements: “possession of monopoly power in the relevant market” and “the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.”⁵⁶ This second element can be characterized as requiring proof of “anticompetitive conduct,” and courts recognize that “the means of illicit exclusion, like the means of legitimate competition, are myriad.”⁵⁷ Accordingly, Section 2 analysis proceeds on a “case-by-case basis,” focusing on “actual market realities” and the “particular facts disclosed by the record.”⁵⁸

⁴⁸ *Id.*

⁴⁹ *Id.* ¶ 199.

⁵⁰ *Facebook*, 549 F. Supp 3d at 28-29, 31.

⁵¹ *Id.* at 31.

⁵² *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951).

⁵³ *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973).

⁵⁴ *Epic Games, Inc. v. Apple, Inc.*, 2023 WL 3050076 (9th Cir. 2023).

⁵⁵ 15 U.S.C. § 2 (2018).

⁵⁶ *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966).

⁵⁷ *Verizon Commc’ns Inc. v. Law Offs. Of Curtis V. Trinko, LLP*, 540 U.S. 398, 414 (2004) (quoting *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) (en banc)).

⁵⁸ *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 466-67 (1992).

Given these general principles, lower courts have adopted a burden-shifting approach to detect anticompetitive conduct, similar to the rule-of-reason test for Section 1 cases.⁵⁹ First, a plaintiff must show that a monopolist engaged in conduct with “anticompetitive effect.”⁶⁰ Second, the defendant may provide a “‘procompetitive justification’ for its conduct.”⁶¹ Finally, the plaintiff must rebut this justification—or “demonstrate that the anticompetitive harm for the conduct outweighs the procompetitive benefit.”⁶² Although the Supreme Court has never explicitly followed this framework in Section 2 case, as explored below, the Court’s analyses in refusal-to-deal cases are best understood through the framework of burden shifting.

B. *Another Look at Aspen and Trinko*

Section II.B illustrates how several lower courts have fashioned a set of requirements for refusal-to-deal claims. This subsection discusses why these courts misread *Aspen* and *Trinko*: these cases were merely instantiations of the general Section 2 approach. Instead, these courts were perhaps misled by the *Trinko* Court’s expansive dicta.

First, the *Aspen* opinion did not purport to create the requirements that the Tenth Circuit read into the case. Instead, the Court’s analysis is best understood through the framework of a burden-shifting approach. Rather than a requirement for “preexisting voluntary and presumably profitable course of dealing,” the Court is better understood as undertaking Step 1 of the burden-shifting framework to analyze whether a monopolist engaged in conduct with anticompetitive effect. It found it important that Ski Co. took an action that “ma[de] an important change in a pattern of distribution *that had originated in a competitive market.*”⁶³ The joint ticket had emerged when “three independent companies operated three different ski mountains,” and the record showed that joint tickets existed in other multimountain areas with competitive markets—from these facts, the Court inferred that joint tickets satisfied “consumer demand in free competitive markets.”⁶⁴ This decision was thus “a decision by a monopolist to make an important change in the character of the market.”⁶⁵ Once this change to the market occurred, consumers lost access to a “superior quality” ticket that they preferred, and Highlands lost a significant share of the market.⁶⁶

⁵⁹ *United States v. Microsoft Corp.*, 253 F.3d 34, 58 (D.C. Cir. 2001) (en banc).

⁶⁰ *Id.*

⁶¹ *Id.* at 59 (citing *Eastman Kodak*, 504 U.S. at 483).

⁶² *Id.* This approach (in particular, the final step) is not without controversy among commentators. See generally Karen L. Grimm, *General Standards for Exclusionary Conduct* (Fed. Trade Comm’n Staff Working Paper, 2008), https://www.ftc.gov/system/files/documents/public_events/section-2-sherman-act-hearings-single-firm-conduct-related-competition/section2generalstandards.pdf. Robert H. Bork, representing the Project to Promote Competition and Innovation in the Digital Age in an amicus brief, argued that the *Microsoft* four-part test “[was] clearly a correct statement of the law.” Brief for the Project to Promote Competition and Innovation in the Digital Age as Amicus Curiae in Support of Respondent to the Limited Extent of Clarifying Sherman Act Section 2 Analysis, *Verizon Commc’ns Inc. v. Law Offs. of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004) (No. 02-682), 2003 WL 21751250, at *4.

⁶³ *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 603 (1985) (emphasis added).

⁶⁴ *Id.*

⁶⁵ *Id.* at 604.

⁶⁶ *Id.* at 605-08.

The Court next analyzed whether “[Ski Co.’]s conduct was justified by any normal business purpose”⁶⁷ – best understood as the Court engaging in Step 2 of the burden-shifting framework. The answer was no: Ski Co.’s purported justifications were all unsupported or contradicted by the record. Here, the Court went on to say, the evidence supported the inference that Ski Co. was “willing to sacrifice short-run benefits and consumer goodwill in exchange for a perceived long-run impact on its smaller rival.”⁶⁸ The Tenth Circuit in *Novell* fashioned this statement into a requirement. This sentence does not, however, create a requirement. The jury had only been instructed that a firm “does not violate Section 2 if valid business reasons exist for that refusal,” and the jury never had to make a finding that Ski Co. engaged in this type of predatory conduct.⁶⁹ Thus, the *Aspen* Court found that the defendant did not meet its burden – it did not create a new test for refusal-to-deal claims, and its analysis is best understood through the burden-shifting framework.

Second, *Trinko* makes clear that the analysis in *Aspen* went toward whether the conduct at issue was exclusionary. Per the *Trinko* Court, the *Aspen* Court “found significance in the defendant’s decision to cease participation in a cooperative venture”; that “[t]he unilateral termination of a voluntary . . . course of dealing suggested a willingness to forsake short-term profits to achieve an anticompetitive end”; and that “the defendant’s unwillingness to renew the ticket even if compensated at retail price revealed a distinctly anticompetitive bent.”⁷⁰ These statements do not indicate an intent to create a rigid set of requirements, but are better understood as the Court evaluating anticompetitive effect and efficiency justifications. As the *Trinko* Court reemphasized, “[a]ntitrust analysis must always be attuned to the particular structure and circumstances of the industry at issue.”⁷¹ Indeed, if refusal-to-deal claims needed to satisfy a set of requirements, the Court could have stopped its analysis after finding the lack of a prior voluntary course of dealing. Instead, the Court focused on how the case was different from *Aspen* in a “more fundamental way” – that the 1996 Act required the creation of “something brand new” that “exist[ed] only deep within the bowels of Verizon” and was “brought out on compulsion.”⁷²

This close look at the language in *Aspen* and *Trinko* illustrates that the narrow refusal-to-deal doctrine fashioned by the lower courts is not consistent with the Supreme Court’s approach. The following two Sections look at the Supreme Court cases in *Lorain Journal* and *Otter Tail*. Both cases deal with types of refusals to deal: *Trinko* did not cite to *Lorain Journal* and, therefore, did not alter the validity of cognizable conditional refusals to deal; further, *Trinko* explicitly reaffirmed the holding in *Otter Tail*, even though the case did not involve voluntary prior course of dealing.

⁶⁷ *Id.* at 608.

⁶⁸ *Id.* at 610-11.

⁶⁹ The Seventh Circuit agrees with this interpretation. See *Viamedia, Inc. v. Comcast Corp.*, 951 F.3d 429, 463 (7th Cir. 2020) (“We leave open the question whether allegations of short-term losses are necessary to state a refusal-to-deal claim.”). *But see Covad Commc’ns Co. v. Bell Atl. Corp.*, 398 F.3d 666, 675 (D.C. Cir. 2005) (reaching the same interpretation as the Tenth Circuit).

⁷⁰ *Verizon Commc’ns Inc. v. Law Offs. Of Curtis V. Trinko, LLP*, 540 U.S. 398, 409 (2004).

⁷¹ *Id.* at 411.

⁷² *Id.* at 410.

C. Lorain Journal: *Unilateral, Conditional Refusals to Deal*

In *Lorain Journal Co. v. United States*, the Court permitted a unilateral, conditional refusal-to-deal claim.⁷³ The newspaper publisher Lorain Journal had “enjoyed a substantial monopoly in Lorain[, Ohio] of the mass dissemination of news and advertising, both of a local and national character” for several years.⁷⁴ In 1948, WEOL began to operate as a radio station in the area, and the station received most of its income from advertising.⁷⁵ Fearful of the incipient threat to its advertising business, Lorain Journal imposed a condition on its advertisers: any Lorain County entity that placed advertisements at WEOL could not advertise in the newspaper.⁷⁶ In a ruling that even Robert Bork praised,⁷⁷ the Supreme Court held that these actions violated Section 2.⁷⁸

Although the Court did not characterize it so explicitly, the Court applied an approach that, in retrospect, tracks the burden-shifting approach applied by lower courts today. First, the Court found that Lorain Journal engaged in conduct with an anticompetitive effect. Lorain Journal’s conduct, the Court said, was analogous to a coordinated refusal to deal.⁷⁹ If a cartel of newspapers tried to monopolize news and advertising in a city by boycotting anyone who advertised with a radio station, that cartel would violate Section 1 and 2 of the Sherman Act.⁸⁰ Likewise, if a single newspaper with a substantial monopoly attempted to destroy threatened competition through such a scheme, it would violate Section 1 of the Sherman Act.⁸¹ The lower court had concluded that Lorain Journal undertook such a scheme to eliminate WEOL’s threat to its monopoly over lower advertising—this was sufficient for Lorain Journal to incur liability.⁸² The Court rejected Lorain Journal’s argument that firms had an *unqualified* right to refuse to deal with whomever they pleased.⁸³ Instead, it re-emphasized that under the Sherman Act, firms could not use refusals to deal “as a purposeful means of monopolizing interstate commerce.”⁸⁴ Second, the Court found no valid business justification. Lorain Journal had claimed “that it[s conduct] was part of the publisher’s program for the protection of the Lorain market from outside competition.”⁸⁵ The

⁷³ 342 U.S. 143 (1951).

⁷⁴ *Id.* at 147.

⁷⁵ *Id.* at 148.

⁷⁶ *Id.* at 149.

⁷⁷ ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 345 (1978) (calling *Lorain Journal* “entirely correct”).

⁷⁸ *Lorain Journal*, 342 U.S. at 154.

⁷⁹ The Court had previously allowed claims of coordinated refusals to deal in several cases. In *Binderup v. Pathe Exchange, Inc.*, the Court allowed a movie exhibitor’s lawsuit to proceed when it alleged that a combination of film distributors blacklisted him and refused to lease him movies. 263 U.S. 291, 302 (1923). In *Fashion Originators’ Guild of America v. FTC*, the Court upheld an FTC order against a clothing manufacturers’ guild that boycotted any retailers who sold copies of designs created by the guild’s members. 312 U.S. 457, 461-63 (1941). In *Associated Press v. United States*, the Court upheld an injunction against the Associated Press, when its bylaws prohibited nonmembers from receiving AP news and allowed members to block membership applications from their members. 326 U.S. 1 (1945).

⁸⁰ *Id.* (citing *Fashion Originators’ Guild* and *Binderup*)

⁸¹ *Id.*

⁸² *Id.* at 150-51.

⁸³ *Id.* at 156.

⁸⁴ *Id.* at 155.

⁸⁵ *Id.* at 154 n.8.

Court summarily rejected this contention. Lorain Journal was thus liable for its conditional refusal to deal.

D. *Otter Tail: Refusals to Deal, Even in the Absence of a Preexisting Course of Dealing*

In *Otter Tail Power Co. v. United States*, the Court permitted a refusal-to-deal claim against a fully integrated electric power company that refused to sell power at wholesale prices to proposed municipal distribution systems and also refused to transfer (or “wheel”) power purchased from other suppliers to those systems.⁸⁶ The Court’s analysis, once again, is best understood through the burden-shifting approach. First, Otter Tail had engaged in conduct that had anticompetitive effect. Otter Tail had used its dominance in power transmission “to foreclose potential entrants into the retail area from obtaining electric power from outside sources of supply.”⁸⁷ Second, there were no procompetitive justifications. There were “no engineering factors” that prevented Otter Tail from selling or wheeling power.⁸⁸ Otter Tail’s “refusals to sell at wholesale or to wheel were *solely* to prevent municipal power systems from eroding its monopolistic position.”⁸⁹ The Court rejected Otter Tail’s argument that its tactics protected itself from municipalities turning to public power, as “the promotion of self-interest alone” could not immunize illegal conduct.⁹⁰ Otter Tail’s claim that compulsory dealing would “erode its integrated system and threaten its capacity to serve adequately the public” was unsupported by the record.⁹¹ Given the absence of procompetitive justifications, Otter Tail was liable for its conduct.

E. *Case Study of Epic v. Apple*

Given that *Trinko* did not alter the standard, flexible approach to analyzing refusal-to-deal claims, this subsection sketches how this analysis might apply to the refusal-to-deal claim in *Epic v. Apple*.⁹² In *Epic*, Epic Games alleged that Apple imposed anticompetitive conditions on access to the Apple App Store. Apple allowed developers to publish apps on the App Store only upon an agreement to follow Apple’s various rules, including its rule prohibiting apps acting as storefronts, its rule prohibiting apps that stream games, and its rule requiring that only Apple’s in-app purchase system be used for in-app purchases.⁹³ Apple removed Epic’s gaming app from the App Store after Epic violated these developer policies.⁹⁴

Although the Ninth Circuit resolved these issues on the ground that Epic Games did not properly define the relevant market in the case,⁹⁵ if a market could be properly defined, these allegations plausibly raise a claim of an improper conditional refusal to deal under *Lorain Journal*.

⁸⁶ 410 U.S. 366, 370-71 (1973).

⁸⁷ *Id.* at 377.

⁸⁸ *Id.* at 378.

⁸⁹ *Id.* (emphasis added).

⁹⁰ *Id.* at 380 (quoting *United States v. Arnold, Schwinn & Co.*, 388 U.S. 365, 375 (1967)).

⁹¹ *Id.* at 381-82.

⁹² *Epic Games, Inc. v. Apple, Inc.*, No. 21-16506, 2023 WL 3050076 (9th Cir. Apr. 24, 2023).

⁹³ *Id.* at *4.

⁹⁴ *Id.* at *5.

⁹⁵ *Id.* at *30.

The threshold step is met: Apple’s conduct toward app developers is analogous to Lorain Journal’s conduct toward advertisers. Just as Lorain Journal conditioned access to its readers depending on whether advertisers used a rival advertising platform, Apple conditions access to its users depending on whether developers use a rival payment platform.

Under the functional analysis applied in *Lorain Journal* and *Otter Tail*, Apple must provide sufficient procompetitive justifications for its policy. This type of analysis is similar to the second step of the rule-of-reason inquiry. In the case, Apple proffered three justifications: data security, data privacy, and promotion of interbrand competition; and the court accepted these justifications as procompetitive.⁹⁶ The appellate court’s analysis of the Section 1 claims in *Epic*, finding that the procompetitive justifications outweighed the anticompetitive effects, would likely apply with equal force to a refusal-to-deal claim under Section 2.⁹⁷ Importantly, however, Epic’s Section 2 claims would be evaluated *on the merits*, rather than being dismissed for failure to state a claim under a misinterpretation of *Trinko*, and plaintiffs can challenge security or privacy justifications. As we argue later,⁹⁸ courts should be skeptical of crediting these justifications given the heterogenous preferences of today’s sophisticated consumers – and skepticism is particularly warranted when less-restrictive alternatives are available.

III. Characteristics of Digital Markets May Allow Some RTD Claims to be Distinguished from *Trinko* on the Facts.

By distinguishing instead of overruling *Aspen*, *Trinko* left open a potential path for refusal-to-deal claims based on factual distinctions arising from different market realities. In this Part, we identify two factual distinctions between *Trinko* and *Aspen* that may allow some RTD claims in digital markets: compelled sharing of services that had not previously been made externally accessible, and the need for development of new systems or services. We use a series of short case studies to indicate areas where digital markets may allow some of these claims to proceed under RTD doctrine by distinguishing them on their facts from the narrow framework laid out in *Trinko*.

In *Trinko*, the Court noted that the services in question differed in a “fundamental way” from the bundled mountain passes in *Aspen*, in that “the services allegedly withheld are not otherwise marketed or available to the public.”⁹⁹ But, unlike *Trinko*’s compelled sharing (“statutory compulsion” under the 1996 Act)¹⁰⁰ of services that had previously been internal to Verizon, many digital platforms explicitly encourage input from third-party developers (e.g., app developers on iOS). In these cases, removing or altering access to APIs or platform features could be framed as a “unilateral termination” of business dealings, bringing such claims under *Aspen*’s RTD framework rather than *Trinko*’s.¹⁰¹ Thus, *Trinko*’s distinction between *Aspen*’s “unilateral

⁹⁶ See *infra* Section V.D.i & V.E.ii for a discussion of the *Epic* litigation and Apple’s procompetitive justifications.

⁹⁷ *Epic Games*, at *26-27 (rejecting Epic’s Section 1 claims), *30 (“Moreover, even assuming Apple has monopoly power, Epic failed to prove Apple’s conduct was anticompetitive.”).

⁹⁸ See *infra* Section V.D.ii & V.E.ii.

⁹⁹ *Trinko*, 540 U.S. at 410.

¹⁰⁰ *Trinko*, 540 U.S. at 409.

¹⁰¹ *Id.* See also Fiona M. Scott Morton & David C. Dinielli, *Roadmap for an Antitrust Case Against Facebook*, Omidyar Network, 24-25 (2020).

termination of a voluntary (*and thus presumably profitable*) course of dealing,” and the complaint brought against Verizon leaves open a possible avenue for RTD claims involving services that the defendant has previously offered or offers only to a subset of competitors, or arising from ecosystems with substantial preexisting cooperation (to mutual benefit).¹⁰²

Even where a dominant firm has not previously made its infrastructure available to the public, *Trinko* may allow plaintiffs to successfully challenge a RTD when external sharing or interoperability would require low R&D costs, due to the Court’s distinction between existing products in *Aspen* and “something brand new” in *Trinko*.¹⁰³ As part of its reasoning for denying the Section 2 claim against Verizon, the Supreme Court notes that:

The unbundled elements offered pursuant to § 251(c)(3) exist only deep within the bowels of Verizon; they are brought out on compulsion of the 1996 Act and offered not to consumers but to rivals, and at considerable expense and effort. New systems must be designed and implemented simply to make that access possible¹⁰⁴

This description of the R&D effort necessary to make Verizon services available to competing local exchange carriers allows future claims to make several distinctions when considering digital markets. These hinge on whether the good or service in question can be framed as non-rivalrous (that is, whether one agent’s use or possession of it impedes another agent’s simultaneous consumption) and whether the service is easily scalable without substantial further development.

Some commentators have framed *Trinko*’s “something brand new” distinction in terms of marketing and public availability rather than R&D.¹⁰⁵ When addressing digital RTD claims, however, it may be more fruitful to emphasize the Court’s distinction on the basis of the “considerable expense and effort” necessary to make a service available to a competitor. Difficulty or expense in assisting rivals may be construed as a reasonable business justification not to do so—but in the case of already extant products locked behind internal APIs or licensing policies, this justification may not be as persuasive. Under this framing, *Trinko* might be read as asserting that, in circumstances like Verizon’s where the service in question would be expensive and difficult to provide to rivals (high R&D costs) and might reduce the quality of service for their own customers (rivalrous), there exists a presumption as a matter of law that a refusal to deal is justified. However, such a presumption would be inappropriate to invoke in circumstances where providing access to the relevant service would not invoke these costs (i.e., where the service in question is non-rivalrous, already extant or inexpensive to adapt from existing tools, and easily scalable).

Digital markets are not homogenous with regards to these characteristics. The following case studies indicate some digital markets with features that may distinguish them from *Trinko*’s

¹⁰² *Trinko*, 540 U.S. at 409.

¹⁰³ *Trinko*, 540 U.S. at 410.

¹⁰⁴ *Id.*

¹⁰⁵ Tyler Angelini, *Reviving the Essential Facilities Doctrine: Revisiting Verizon Communications, Inc. v. Law Offices of Curtis v. Trinko, LLP to Assert an Essential Facilities Claim Against Apple and the App Store*, 25 CHAPMAN L. REV. 259, 278 (2021).

RTD framing (audiobook distributor siloing through use of digital rights management (DRM), and some forms of interoperability between information systems), and others that may be similar enough under the Supreme Court’s framing of *Trinko* to make them difficult to bring as RTD claims under existing doctrine (mandated use of WebKit on iOS devices).

A. *Amazon Audible’s Use of DRM Exemplifies One Digital Market in Which Low Costs of Cooperation with Rivals may Allow a Facts-Based Distinction from Trinko.*

Digital markets in which allowing access to contested goods or services would require little to no development costs provide one possible avenue for pressing RTD claims without running afoul of *Trinko*. One example of such a market is Amazon Audible’s stranglehold on audiobook distribution platforms, and their use of DRM to prevent easy portability of purchased audiobooks across players.

Amazon’s Audible controls a substantial fraction of the downloadable audiobook distribution market (nearly 90% in some verticals).¹⁰⁶ Publishers who distribute audiobooks through Audible are required to use Audible DRM, which prohibits users who purchase Audible audiobooks from taking their audiobooks outside the Audible ecosystem.¹⁰⁷ Functionally, this requires Audible listeners to use either the Audible app or the Apple Books app (Apple Books and iTunes have a partnership allowing Audible audiobooks to be played through these apps after authentication of the host Audible account). While circumvention of DRM is not particularly difficult, it is a breach of Amazon’s terms of use—and declining to use Amazon’s DRM means forgoing sales in a huge section of the market.¹⁰⁸

By applying DRM to audiobook downloads, Audible requires that its customers either use the Audible app or its partners, or violate their terms of service by using external tools (e.g., OpenAudible or Libation) to convert downloaded audiobooks to mp3s. When purchasing an eBook on Audible, consumers are actually purchasing a license to use the eBook, exclusively on the Audible platform or its partners.¹⁰⁹ Audible DRM thus locks users into the Audible ecosystem, impeding their ability use third-party alternative players. On the publishers’ side, network effects and Audible’s market share allow Audible to demand unfavorable contract terms, such as low royalty rates, or “easy exchange” programs that deprive authors of royalties altogether.¹¹⁰ Amazon’s control of the market also allows them to restrict access—until May 2021, Amazon refused to sell Amazon Publisher eBooks to libraries.¹¹¹

¹⁰⁶ Cory Doctorow, *We Need to Talk About Audible*, Publishers Weekly, Sep. 18 2020.

¹⁰⁷ *Id.*

¹⁰⁸ Cory Doctorow, *Guest Editorial: Cory Doctorow is a Bestselling Author, but Audible Won’t Carry his Audiobooks*, BRANDON SANDERSON (Apr. 6, 2023).

¹⁰⁹ Ali Petot, *The \$500 Ebook: How Copyright and Antitrust Law Failed America’s Libraries: Extending First Sale Doctrine Protections to Libraries’ Ebook Purchases or Implementing Price Caps As Alternative Solutions to Lower Ebook Costs*, 99 WASH. U. L. REV. 1733, 1735 (2022).

¹¹⁰ Alison Flood, *Audible adjusts terms after row over ‘easy exchanges’ that cut royalties*, THE GUARDIAN (Nov. 26, 2020).

¹¹¹ Petot, *supra* note 109, at 1736.

This market differs from the facts of *Trinko* in two respects. First, unlike Verizon’s unwilling cooperation with rivals following “statutory compulsion,”¹¹² Amazon’s stance on DRM at the time of Audible’s acquisition could indicate a preexisting intent to cooperate: Amazon Music downloads sold without DRM (though music exposed through Amazon Music APIs is now DRM-locked¹¹³), and Amazon initially announced that they would remove Audible DRM.¹¹⁴ While these actions do not directly parallel Ski Co.’s discontinuation of the 4-region pass, they could demonstrate a similar shift in intent. However, these characteristics (and most attempts to distinguish from *Trinko* based on the Supreme Court’s reliance on prior collaboration in *Aspen*) are specific to this case study more so than digital markets more generally.

Second, providing access to DRM-free audiobooks would not require the development of a “brand new” good or service infrastructure.¹¹⁵ Removal of DRM and facilitation of interoperability of audiobook players would not require substantial R&D or reduce the quality of service provided by the Audible app to its users. Audible’s preexisting agreement with Apple indicates that they already have the capability to make their audiobooks available to third-party platforms. Additionally, Audible’s DRM is already easy to remove (as exemplified by the flotilla of tools built to do so and guides on their use). Mandated interoperability of audiobooks across listening platforms would not require “design[] and implement[ation] [of new systems] simply to make that access possible”¹¹⁶ Audiobooks represent a clear example of a non-rivalrous good in a digital ecosystem.

Unfortunately, while making a digital market like the audiobook ecosystem interoperable would likely incur relatively low R&D costs, distinguishing the market from the one at issue in *Trinko*, the same is not true of every digital market. In some cases, technical features locking users into a given good or service are baked into the development of that service, and interoperability or other forms of cooperation with rivals would incur substantial costs or development of *Trinko*’s “brand new” good.¹¹⁷

A. *Some Digital Goods and Services, such as Web Engines and Browsers, Do Still Fall into Trinko’s “Brand New” Framing*

Some anticompetitive features of digital goods and services arise from design choices made early in the implementation process. In these cases, redesigning for interoperability would involve substantial effort and expense, and likely meet *Trinko*’s criteria for a reasonable business justification countermanding any duty to deal.

As an example of a digital market where high development costs might preclude an RTD claim, we consider Apple’s use of their proprietary web engine, WebKit, on all iOS mobile devices.

¹¹² *Trinko*, 540 U.S. at 409.

¹¹³ Amazon Developer, *Playback & DRM Overview*, Amazon, https://developer.amazon.com/docs/music/playback_overview.html

¹¹⁴ See *supra* note 106.

¹¹⁵ *Trinko*, 540 U.S. at 410.

¹¹⁶ *Id.*

¹¹⁷ *Id.*

Browser engines control the rendering of source code into viewable webpages.¹¹⁸ Apple and Google develop and maintain the world’s two most widely used browsers and browser engines, WebKit and Blink. These two browser engines split the UK’s market share about 50/50, and the US’s similarly.¹¹⁹ While Android phones allow use of competing browser engines (though most use Google’s Blink), Apple products do not – all iOS phones use WebKit.

This results in several anticompetitive effects. Most directly, there is no competition in browser engines on iOS, and the use of WebKit on all Apple devices dictates features that iOS browsers can provide. The CMA Mobile Ecosystems Report notes that “due to the key role of browser engines, [browser vendors] are limited in differentiating their browser from other browsers on iOS.”¹²⁰ This results in a lack of cross-compatibility with Android devices – browser developers working on both operating systems need to build their browsers for different browser engines. WebKit also restricts functionality of web apps (for example: lack of push notifications, lack of full screen display, lack of Web-Bluetooth, etc.), meaning that web apps have severe restrictions in functionality and performance as compared to native apps, which can only be downloaded through Apple’s app store.

Unfortunately, the development costs Apple would need to incur to make its mobile devices capable of hosting other web engines would likely cause a Section 2 claim to run afoul of *Trinko* – such a shift would almost certainly be framed as a “compulsion . . . offered not to consumers but to rivals, and at considerable expense and effort.”¹²¹

This case suggests that the differences between digital and physical goods/services may not be the most effective way to distinguish a RTD claim from *Trinko* on the facts, since the telecom infrastructure in *Trinko* does have several important characteristics in common with many claims one might want to bring in digital markets. Instead, a more fruitful route to take might be finding claims which more closely resemble *Aspen* on at least one of the axes on which the Supreme Court distinguished *Trinko*: claims brought by a competitor (or would-be entrant), where the defendant exhibits shifting intent from cooperation to exclusionary conduct (or, ideally, preexisting cooperation), involving goods and services already available to consumers which would require only nominal R&D to be made interoperable.

* * *

We have discussed multiple ways in which plaintiffs can succeed on RTD claims, despite the Supreme Court’s decision in *Trinko* and its effects in the lower courts. Refusal-to-deal claims can still proceed under the Section 2 doctrine that preexisted and continues to exist after *Trinko*, including claims in the mold of *Otter Tail* and *Lorain Journal*, as well as the more narrowly prescribed *Aspen* mold. Today’s digital markets also allow litigants to distinguish *Trinko* on the facts: where opening up a dominant firm’s infrastructure to a rival imposes de minimis costs,

¹¹⁸ PC Mag, *browser engine*, <https://www.pcmag.com/encyclopedia/term/browser-engine> (last visited on May 20, 2023).

¹¹⁹ *Mobile Ecosystems*, Competition & Markets Authority ([web](#)) (2022).

¹²⁰ *Id.* at 154.

¹²¹ *Trinko*, 540 U.S. at 410.

Trinko should not apply. *Trinko* also has no bearing in platform markets of today where dominant firms actively solicited potential rivals to interoperate. In the next Part, we propose a final leg of a strategy to get out from under the weight of *Trinko*.

IV. Tying is Another Critical Tool in the Antitrust Toolkit.

In this final Part, we propose an alternative approach for avoiding the stringent limitations lower courts have imposed on RTD claims after *Trinko*. This strategy is to lean into formalistic antitrust doctrines that often deal with conduct similar to refusals to deal, like tying and exclusive dealing. Because these doctrines are rooted firmly in longstanding Sherman Act jurisprudence, separate from RTD case law, they provide powerful alternative theories under which plaintiffs can challenge anticompetitive conduct.

Although formalist doctrines can be more limiting in scope, doctrines like tying and exclusive dealing can be powerful tools for plaintiffs where the facts fit. And although formalist doctrines cannot eradicate empirical complexity, they do helpfully limit the scope of analysis and provide at least relative simplicity. This relative simplicity makes these doctrines attractive to those across the political spectrum that argue that courts are not equipped to handle the complex economic and policy considerations underlying antitrust litigation.

For this essay, we focus on tying, which can and should play a central role in combatting anticompetitive conduct in digital markets. Tying has a long history in claims against technology giants, and continues to be an important aspect of the allegations against Big Tech platforms today.¹²² However, the record of these tying claims has been mixed. Here, we address some of the issues that have served as stumbling blocks in these cases. We argue that under existing antitrust law, these issues should not be a barrier to claims when applied to *current* economic and factual circumstances.

In addition to providing an alternative theory for plaintiffs to get in the door, tying claims have a number of advantages or benefits over RTD or more generalized monopolization claims. First, tying generally involves Section 1 of the Sherman Act. Regardless of the tying framework applied,¹²³ plaintiffs need only to prove market power – not monopoly power – to prevail. This is a much easier standard to meet.¹²⁴ Second, there are many cases which will clearly fall outside the

¹²² See, e.g., *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001); Complaint, *United States v. Google LLC*, No. 20-cv-03010 (D.D.C. Oct. 20, 2020) (search monopolization); Complaint, *United States v. Google LLC*, 23-cv-00108 (E.D. Va. Jan. 24, 2023) (digital ad tech monopolization); *Epic Games, Inc. v. Apple Inc.*, 559 F.Supp.3d 898 (N.D. Cal. 2021), *aff'd in part, rev'd in part and remanded*, No. 21-16506, 2023 WL 3050076 (9th Cir. Apr. 24, 2023).

¹²³ See *infra* Section V.E.

¹²⁴ *Eastman Kodak Co. v. Image Tech. Services, Inc.*, 504 U.S. 451, 481 (1992) (“Monopoly power under § 2 requires, of course, something greater than market power under § 1.”). To prove monopoly power, courts demand – at a minimum – a market share of 60% or greater. ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION, PHILLIP E. AREEDA & HERBERT HOVENKAMP ¶ 801 (4th and 5th eds., 2015-2021). See, also, *Federal Trade Commission v. AbbVie Inc.*, 976 F.3d 327, 371–372, 2020-2 Trade Cas. (CCH) ¶ 81393 (3d Cir. 2020), cert. denied, 2021 WL 2519407 (U.S. 2021).

RTD framework where tying would apply. Finally, at least for now, tying claims can be brought on a modified per se basis, making the burden for plaintiffs easier to meet.

A. *Tying Applies to Much of the Anticompetitive Conduct We See in Digital Markets.*

Tying claims can address efforts by dominant players in one goods or service market to extend market power into another market by foreclosing rivals. Tying occurs when a company with market power in one market refuses to sell that product (tying product) unless a customer also buys a product in a distinct market (tied product), or agrees not to buy the product from a competitor.¹²⁵ Tying can also include imposing differential pricing on the unbundled and bundled products, such that customers are effectively coerced into buying the bundle.¹²⁶

The *Microsoft* litigation at the turn of the century and the ongoing *Epic v. Apple* saga provide two helpful examples of tying in the digital economy. In *Microsoft*, the Department of Justice alleged, *inter alia*, that Microsoft had tied its internet browser, Internet Explorer, to its dominant operating system, Windows. That is, consumers that wanted to purchase Windows also had to purchase Internet Explorer. Microsoft implemented this tie by requiring Windows licensees to license Internet Explorer as a bundle at a single price, preventing manufacturers and consumers from removing Internet Explorer from Windows-based computers, and overriding users' choice to use an alternative default browser.¹²⁷ In the Apple litigation, Epic alleged that Apple tied its in-app payment processing system to its mobile operating system and app distribution services.¹²⁸ Apple instituted this purported tie by requiring app developers that want to distribute their apps via iOS to "[c]onfigure apps to use [in-app payment processing] when the purchases are subject to [Apple's] commission."¹²⁹

In digital markets, the doctrine may be relevant whenever a dominant digital platform extends beyond its core business to branch out into other areas and markets additional services to its core platform users. Where those platforms serve as important gateways to access other services,

¹²⁵ *Eastman Kodak Co. v. Image Tech. Services, Inc.*, 504 U.S. 451, 458 (1992) ("Kodak implemented a policy of selling replacement parts for micrographic and copying machines only to buyers of Kodak equipment who use Kodak service or repair their own machines.").

¹²⁶ Tying based on differential pricing often incorporates a predation standard:

[D]ifferential pricing becomes equivalent to an unlawful tying arrangement when the price discount, as applied to the original price of the tied product, in effect lowers the price of the tied product below the seller's cost. In that case, differential pricing becomes a predatory investment of monopoly profits from one market aimed at creating a monopoly in another; the seller's monopoly power in the tying product market, rather than its ability to offer the tied product at a competitive price, drives the differential pricing.

Collins Inkjet Corp. v. Eastman Kodak Co., 781 F.3d 264, 271 (6th Cir. 2015).

¹²⁷ *Microsoft*, 253 F.3d at 84.

¹²⁸ The *Epic* litigation demonstrates how tying can get at conduct that might otherwise be characterized as a refusal to deal. Epic alleged the Apple tied its products by delisting apps that used unauthorized payment systems. Apple thus refused to deal with alternative payment systems, or refused to deal with apps that worked with alternative payments systems.

¹²⁹ *Epic*, 559 F.Supp.3d at 943.

tying can have significant anticompetitive effects in those related markets. This is particularly concerning where consumers are reliant on a handful of key gateways to reach other businesses.

Because of the important role mobile operating systems play in connecting users to other services and products, they raise many potential tying-related concerns. Consumers that buy an iPhone and iOS operating system must also use Apple's voice assistant, Siri, and can only backup their data to Apple's cloud product. iOS always comes with Apple's payment and wallet service, Apple Pay. Other products or services that could be tied to mobile operating systems include mobile gaming, music streaming, messaging, maps, health tracking, connecting devices, device tracking, and digital advertising.

Opportunities for tying exist beyond mobile ecosystems. Enterprise software platforms like Salesforce and NetSuite also have app stores that offer a variety of add-on services. These platforms might try to tie their own core offerings to other proprietary add-on services. In the same vein, Microsoft recently announced that it will stop automatically bundling Teams videoconferencing and messaging with its Office products to head off an antitrust probe in the EU, following a complaint by a competitor.¹³⁰ Video-game platforms offer similar opportunities: Microsoft could tie the Xbox console to its own app store and cloud gaming offerings.¹³¹ Virtual reality may be the next frontier for tying. As Meta increasingly expands from VR hardware into VR games, they could seek to tie games to the hardware itself.¹³²

We do not suggest that illegal tying is occurring in all or any of these examples. Moreover, each of these examples could (and often does) implicate anticompetitive conduct other than tying. However, these examples should illustrate the myriad of opportunities for tying created by the digital economy and make clear the stakes of these issues.

B. Anticompetitive Effects of Tying Increasingly Outweigh Efficiencies.

Tying raises both competitive concerns and competitive efficiencies, especially in digital markets. Tying may harm consumers by limiting consumer choice and generating market power in the tied market. Tying reduces choice in a static sense because consumers generally benefit from shopping around and choosing the best product themselves. Tying reduces choice in a dynamic sense and generates market power through foreclosure.¹³³ Foreclosure arises where some portion of the tied market is inaccessible to competitors.¹³⁴ Where foreclosure is great enough, competitors

¹³⁰ Javier Espinoza, *Microsoft agrees to stop bundling Teams with Office*, FIN. TIMES (Apr. 24, 2023), <https://www.ft.com/content/be838956-7038-4179-8a1c-851b83048d5d>.

¹³¹ Cloud gaming increasingly competes with platform gaming. See Complaint at 15, Microsoft, No. 9412, FTC (filed Dec. 8, 2022), https://www.ftc.gov/system/files/ftc_gov/pdf/D09412MicrosoftActivisionAdministrativeComplaintPublicVersionFinal.pdf.

¹³² The FTC's unsuccessful challenge to Meta's acquisition of Within, a VR fitness app, was based on similar concerns.

¹³³ Erik Hovenkamp & Herbert J. Hovenkamp, *Tying Arrangements and Antitrust*, 52 ARIZ. L. REV. 925, 926-27 (2010).

¹³⁴ This is the same anticompetitive concern raised by exclusive dealing.

may be forced to exit the market, changing the structure of the tied market itself.¹³⁵ In two-sided platforms, foreclosure may occur where a competitor is unable to reach a critical mass needed to effectively compete on either side of the platform.¹³⁶ Foreclosure reduces the number of options available to consumers, and can give the remaining sellers market power.

Tying may also create anticompetitive feedback loops, such as tying of certain products in a way that further locks consumers into the tying market. For example, cloud services tied to operating systems may make it harder for consumers to take their data elsewhere and leave that operating system. One industry report explains how cloud can help “command ownership of customers,” through a “device lock-in” or “OS lock-in model,” “increasing customer reliance on [the provider’s] platform and suite of applications.”¹³⁷

Tying may also have a number of procompetitive benefits. Tying may reduce consumer transaction costs, which include the time and effort involved in choosing many different products. It may be more convenient or desirable to buy a package of goods or services that could be sold separately (a classic example is “tying” a right shoe to the left shoe). Another efficiency is reduced distribution costs—marketing and sales costs may be lower when products are bundled.¹³⁸ In multi-sided markets, the reduction of distribution costs may have the additional benefit of solving coordination problems that arise when trying to attract demand from multiple sides: “platforms can tie in a product for free to consumers, to then attract business users to the other side (e.g., advertising).”¹³⁹ In digital markets, data from one market might be used to provide better services in another market.¹⁴⁰ There may also be certain economies of scope to bundling. For example, it may be more efficient to tie services where the code for one service can be reused for another.¹⁴¹ Tying can also enable efficient price discrimination, especially where the tying product is a high-fixed-cost good and the tied product is a low-marginal-cost, variable-quantity good. The classic example is tying ink cartridges to printers, and charging low cost for printers and above marginal costs for ink. However, the welfare effects of some of the arguments in favor of tying can be mixed. Some forms of price discrimination are welfare reducing.¹⁴² The flip side of cheap distribution to existing platform users may be foreclosure of rivals.¹⁴³

¹³⁵ Michael D. Whinston, *Tying, Foreclosure, and Exclusion*, 80 AM. ECON. REV. 837, 838 (1990)

¹³⁶ Qian Wu & Niels J. Philipsen, *The Law and Economics of Tying in Digital Platforms: Comparing Tencent and Android*, 19 J. COMPETITION L. & ECON. 103, 107-108 (2022). See also Einer Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, 123 HARV. L. REV. 397, 413 (2009) (“[F]oreclosing a market can create anticompetitive effects by depriving rivals of network effects or economies of scale, scope, distribution, supply, research, or learning.”).

¹³⁷ *Making smartphones brilliant: Ten trends*, MCKINSEY & COMPANY (2012), https://www.mckinsey.com/~media/mckinsey/dotcom/client_service/high%20tech/pdfs/making_smartphones_brilliant_march_2012.pdf.

¹³⁸ Wu & Phillipsen, *supra* note 136, at 107.

¹³⁹ *Id.* at 106.

¹⁴⁰ *Id.* at 107.

¹⁴¹ See *United States v. Microsoft Corp.*, 253 F.3d 34, 93 (D.C. Cir. 2001) (arguing that the bundling of a browser with an operating system might enable an independent software developer to rely on the presence of the browser’s APIs without needing to include them in their own packages).

¹⁴² ECONOMICS OF REGULATION AND ANTITRUST 249 (Kip Viscui, Jon Vernon & Joseph Harrington, Jr. eds., 3d ed. 2000)

¹⁴³ Wu & Phillipsen, *supra* note 136, at 108.

There is ample evidence suggesting the balance between tying’s competing welfare effects in digital markets has begun to skew more anticompetitive than it has historically. First, the benefits to consumer choice in digital markets have grown much greater: consumers are much more tech-savvy than they were at the dawn of the mobile internet. Today’s consumers increasingly shop around for digital services and have a complex set of heterogeneous preferences around criteria like privacy and security.¹⁴⁴ Concerns about foreclosure are even greater now: Dominant digital platforms have seen their market power grow increasingly entrenched over the last couple decades, defended by significant network effects, data moats, and behavioral biases.¹⁴⁵ As a few key platforms have become central intermediaries and gateways through which consumers buy many (if not, most) goods and services,¹⁴⁶ the potential for foreclosure by these platforms has only grown. As these platforms gain footholds in adjacent markets (i.e., candidate “tied” markets), the risk of harmful tying in these markets increases.¹⁴⁷ Significant network effects and the value of existing data create significant entry barriers that further reduce competition in these adjacent markets.

The potential efficiency gains from tying are also under new pressure. Distribution costs tend to be lower in digital markets, limiting the benefit of further reducing distribution costs.¹⁴⁸ Although digital platforms may lower consumer transaction costs by filtering services and reducing cognitive burden associated with having to choose,¹⁴⁹ platforms often exploit other cognitive biases in ways that cut against these benefits—for example, by setting anticompetitive default settings or benefiting from information asymmetries. The potential efficiencies to developing digital products and services may also be lower today: today’s software developers often code in a much more modularized way in which software components are much more independent.¹⁵⁰ In sum, the concerns raised by tying likely significantly outweigh its potential benefits in many of today’s digital markets.

C. Addressing Challenges Facing Plaintiffs Under Current Tying Doctrine

¹⁴⁴ See *infra* Section V.D.ii.

¹⁴⁵ John M. Newman, *Antitrust in Digital Markets*, 72 VAND. L. REV. 1497, 1504 (2019) (describing the “unique” durability of power in digital markets).

¹⁴⁶ See *id.* at 1506 (“Today’s digital-focused firms . . . act as portals through which one can access only desired information and services.”).

¹⁴⁷ See Elhauge, *supra* note 136, at 413 (explaining how reduced competition in the tied market increases potential harms from tying).

¹⁴⁸ Gaia Bernstein, *In the Shadow of Innovation*, 31 CARDOZO L. REV. 2257, 2287–88 (2010) (“Digital technologies reduced the costs for individual creation and distribution.”).

¹⁴⁹ Newman, *supra* note 145, at 1507 (“A digital portal lowers cognitive burden—and performs that service at a point in history when humans are desperately in need of it.”). See also Grant A. Pignatiello, Richard J. Martin & Ronald J. Hickman Jr., *Decision Fatigue: A Conceptual Analysis*, 25 J. HEALTH PSYCHOL. 123, 123 (2020) (“Evidence suggests that individuals experiencing decision fatigue demonstrate an impaired ability to make trade-offs, prefer a passive role in the decision-making process, and often make choices that seem impulsive or irrational.”).

¹⁵⁰ See *What are microservices?*, IBM, <https://www.ibm.com/topics/microservices>; Karl Brategren, *Software Modularity*, MODULAR MGMT., <https://www.modularmanagement.com/blog/software-modularity>; James Lewis, *Microservices*, MARTINFOWLER.COM (Mar. 25, 2014), <https://martinfowler.com/articles/microservices.html>.

The antitrust law of tying reflects a compromise that seeks to balance these competing effects through certain legal presumptions and proxies in a structured analysis. Whether this legal structure is appropriate is hotly debated,¹⁵¹ and it has come under some fire in the courts.¹⁵² However, at least for now, tying law remains an important tool for antitrust enforcers. We argue below that the formalistic proxies tying law employs are able to reflect the changes in this competitive balance to keep up with market realities. These market realities also provide a powerful argument against efforts by defendants to chip away at tying doctrine.

A basic tying claim requires showing that one party agreed to “sell one product but only on the condition that the buyer also purchases a different (or tied) product, or at least agrees that he will not purchase that product from any other supplier.”¹⁵³ Under the so-called *per se* tying rule, such an agreement is illegal “if the seller has appreciable economic power in the tying product market and if the arrangement affects a substantial volume of commerce in the tied market.”¹⁵⁴ Although this is referred to *per se* tying, it does require evidence of market power in the tying market. The requirement that a tie involve separate products has also served as a stumbling block to some tying claims.

Even where the elements of *per se* tying are satisfied, plaintiffs in digital markets have run into another obstacle: Courts are increasingly demanding plaintiffs meet a more defendant-friendly rule-of-reason tying standard. The D.C. Circuit first articulated this approach in *Microsoft*, and the Ninth Circuit recently endorsed it in *Epic v. Apple*.¹⁵⁵ Below we explain the policy rationale underlying the rule-of-reason approach and show that it does not apply to many of the cases of tying prevalent in digital markets today.

D. *Separate Products as a Proxy for Anticompetitive Effects.*

An important hurdle for *any* tying claim – *per se* or rule of reason – is demonstrating the existence of separate products. A plaintiff must show that the allegedly illegal tie includes two distinct products for which there is separate demand.¹⁵⁶ The requirement of “separate products” may have originated “as a purely linguistic requirement: unless products are separate, one cannot be ‘tied’ to the other.”¹⁵⁷ However, today the separate-products inquiry serves an important functional role in screening out false positives. As the D.C. Circuit explained in *Microsoft*, the separate-products inquiry serves as a proxy that balances the benefits of bundling against the

¹⁵¹ See, e.g., Hovenkamp & Hovenkamp, *supra* note 133, at 967 (“[T]his analysis suggests that the current test for evaluating ties under the antitrust laws is wrong on two different counts.”); Christian Ahlborn, David S. Evans & A. Jorge Padilla, *The antitrust economics of tying: a farewell to per se illegality*, 49 ANTITRUST BULLETIN 287 (2004) (proposing a new framework for tying); Whinston, *supra* note 135 (defending modern tying law); Elhauge, *supra* note 136 (same).

¹⁵² See *Microsoft*, 253 F.3d at 92-95.

¹⁵³ *Eastman Kodak Co. v. Image Tech. Services, Inc.*, 504 U.S. 451, 461 (1992) (internal quotations omitted).

¹⁵⁴ *Id.* at 462 (internal quotations omitted).

¹⁵⁵ See Ahlborn et al., *supra* note 151 (describing the evolution from *per se* to rule-of-reason treatment).

¹⁵⁶ *Jefferson Par. Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 18-22 (1984), *abrogated in part by Illinois Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28 (2006).

¹⁵⁷ *Microsoft*, 253 F.3d at 85.

benefits of consumer choice in an unbundled market.¹⁵⁸ The law assumes that tying can only have anticompetitive consequences where there is “sufficient demand” for the tied product such that it would be “efficient to offer [the tied product] separately from [the tying product].”¹⁵⁹ The test attempts to answer what firms operating in a fully competitive market would do: where the efficiencies of bundling dominate the benefits to consumer choice, there would be no separate demand and firms without market power would bundle.

To determine whether there is separate demand, courts use both direct and indirect evidence. “Direct evidence addresses the question whether, when given a choice, consumers purchase the tied good from the tying good maker, or from other firms”¹⁶⁰ – that is, evidence that directly demonstrates consumer preferences. Survey data, actual requests from buyers, and historical purchasing patterns may all provide direct evidence. Indirect evidence requires observing what firms without market power do: “If competitive firms always bundle the tying and tied goods, then they are a single product.”¹⁶¹

It's important to be clear on what the separate demand inquiry is not. Whether there is separate demand does *not* turn on the existence of a functional relationship between two products.¹⁶² Similarly, the fact that two products or services may be complementary – even where one product is “useless without the other” – does not demonstrate a lack of separate demand.¹⁶³

The question of whether there is separate demand is a highly fact-intensive, empirical question that must be evaluated in each situation. Because it is so fact-intensive, precedent is useful but not dispositive. This also makes creative lawyering less risky: losses on the issue of separate demand do not create binding precedent that can hamper future litigation. Moreover, whether there is separate demand can—and often does—change over time: “What has at times been considered one product may come to be considered two products because changes in technology, economic costs, or consumer preferences make unbundling the components feasible and commonplace.”¹⁶⁴

1. Courts Have a Mixed Record on “Separate Products” in Digital Markets.

Courts have had a mixed record on the question of separate demand in digital markets. The *Microsoft* court found that there was evidence of demand for web browsers separate from demand for operating systems.¹⁶⁵ There was direct evidence “that many consumers, if given the option, would choose their browser separately from the OS.”¹⁶⁶ There was indirect evidence from the industry that rival operating system vendors offered versions without the browser or allowed it to

¹⁵⁸ *Id.*

¹⁵⁹ *Jefferson Par.*, 466 U.S. at 21-22.

¹⁶⁰ *Microsoft*, 253 F.3d at 86.

¹⁶¹ *Id.*

¹⁶² *Jefferson Par.*, 466 U.S. at 19.

¹⁶³ *Id.* at 19 n.30.

¹⁶⁴ AREEDA & HOVENKAMP, *supra* note 124, ¶ 1741.

¹⁶⁵ Recall, the claim was that Microsoft had tied its operating system to its web browser.

¹⁶⁶ *Microsoft*, 253 F.3d at 88.

be uninstalled.¹⁶⁷ Surveying similar cases in other courts, the D.C. Circuit found mixed answers in cases involving ties between hardware and software (often operating systems tied to computers) and ties across complementary hardware markets.¹⁶⁸

Epic v. Apple provides a more recent example that shows how courts often struggle with the question of separate demand. There, the district court found that Apple’s in-app payment system did not constitute a separate product from iOS and the App Store (collectively, the “iOS app distribution platform”), and instead, was “but one component of the full suite of services offered by iOS and the App Store.”¹⁶⁹ The court focused on the fact that the in-app payment system included more than simply payment processing. It also included “tracking and verifying digital purchases,” ensuring Apple receives its “appropriate commission,” conducting “fraud-related checks,” and providing information and spending control tools to consumers.¹⁷⁰ The court found Epic might have shown separate demand for payment processing, but failed to show separate demand for additional services.¹⁷¹ Finally, the court found that the relevant market was a two-sided transaction platform that could not “be broken into pieces to create artificially two products.”¹⁷²

On appeal, the Ninth Circuit disagreed with the district court, finding that Epic had sufficiently demonstrated the existence of separate products.¹⁷³ The circuit court held that each of the trial court’s justifications for its findings were “clearly erroneous or incorrect as a matter of law.”¹⁷⁴ Most importantly, the trial court impermissibly focused on the functional integration of payment processing with iOS and the App Store. The lower court also failed to credit relevant evidence of demand for payment processing as a separate product, including the fact that Apple does not require use of its in-app payment services in other similar contexts and evidence that numerous app developers had asked to use other payment services. In addition, the trial court erred as a matter of law by concluding that products in a two-sided market can never be broken into separate products.¹⁷⁵ In addition to the errors identified by the Ninth Circuit, Epic’s amici argued that the trial court had succumbed to the *Cellophane* fallacy,¹⁷⁶ by taking “the fact that Apple

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

¹⁶⁹ *Epic Games*, 559 F.Supp.3d at 1046.

¹⁷⁰ *Id.* at 971-72.

¹⁷¹ *Id.* at 972.

¹⁷² *Id.* at 1046.

¹⁷³ *Epic Games*, 2023 WL 3050076, at *28. The circuit court nevertheless upheld the district court’s finding that Apple did not engage in *anticompetitive* tying, finding that the arrangements were not unreasonably restrictive under the rule of reason standard. See *infra* note 191 and accompanying text.

¹⁷⁴ *Id.*

¹⁷⁵ *Id.*

¹⁷⁶ *United States v. E. I. du Pont de Nemours & Co.*, 351 U.S. 377 (1956). The *Cellophane* fallacy specifically refers to situations in which a defendant firm that has *already monopolized* a market alleges that it does not have market power because “it would not be profitable for the firm to raise its price above the prevailing price.” Steven C. Salop, *Potential Competition and Antitrust Analysis – Note*, OECD (June 10, 2021). Of course, in this scenario, it is not profitable to raise the price because the observed price *is* the monopoly price.

requires nearly all apps distributed through its app store to use its IAP as conclusive evidence that Apple’s App Store and its IAP occupy the same market.”¹⁷⁷ The court also appeared to focus on the efficiencies of bundling for Apple (i.e., it enables Apple to collect its commission), not for consumers.

Although the Ninth Circuit ultimately got the question of separate products right, the district court’s missteps demonstrate how it can be a stumbling block for claims dealing with tying in digital markets and emphasizes how critical it is for courts to get this right.

2. Avoiding Future Missteps

Despite the occasional setback, there are powerful arguments plaintiffs can make to demonstrate the existence of separate demand for many of the related products and services we discussed earlier. There are a few major trends that may help avoid courts reaching false negatives when dealing with the issue of separate demand.

First, changing consumer preferences for digital services – driven by greater sophistication and familiarity – have created increased separate demand for these services. As digital technologies have become ubiquitous, consumers have grown more digitally literate and have developed more sophisticated, heterogeneous preferences. The rapid (and sometimes forced) adoption of digital technologies during the Covid pandemic supercharged many of the trends towards increased penetration of various digital services.¹⁷⁸ As digital-native Gen-Z consumers grow in spending power,¹⁷⁹ this trend can only be expected to increase. As technologies first emerge, tying related products might significantly reduce consumer transaction costs by generating greater awareness of new goods and services.¹⁸⁰ When the iPhone was first released, very few (if any) consumers would have had the technical know-how or awareness to demand the ability to choose their preferred app store. However, as consumers become more aware of new technologies, the transaction costs associated with purchasing related services may go down, and the benefits of consumer choice may become increasingly salient.

More generally, the *Cellophane* fallacy arises when one “assum[es] that the way markets currently operate reflects the way competitive markets would operate.” Brief of The American Antitrust Institute as Amicus Curiae in Support of Plaintiff, Counter-Defendant– Appellant at 15, *Epic Games, Inc. v. Apple Inc.*, No. 21-16506 (9th Cir. Jan. 27, 2022).

¹⁷⁷ Brief of The American Antitrust Institute as Amicus Curiae in Support of Plaintiff, Counter-Defendant– Appellant at 16, *Epic Games, Inc. v. Apple Inc.*, No. 21-16506 (9th Cir. Jan. 27, 2022).

¹⁷⁸ *What’s Next for Digital Consumers*, MCKINSEY (May 23, 2021), <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/whats-next-for-digital-consumers>.

¹⁷⁹ Augusta Saraiva & Reade Pickert, *Gen Z Spending Gets Supercharged by Inflation and Wage Growth*, BLOOMBERG (Mar. 13, 2023), <https://www.bloomberg.com/news/articles/2023-03-13/gen-z-americans-keep-spending-in-face-of-high-inflation-consumer-prices#xj4y7vzkg>.

¹⁸⁰ Shikhar Sarin, Trina Segó & Nataporn Chanvarasuth, *Strategic Use of Bundling For Reducing Consumers’ Perceived Risk Associated with the Purchase of New High-Tech Products*, J. MKTG. THEORY & PRAC. 71 (2003) (describing multiple mechanisms by which bundling of high-tech products can promote adoption by consumers); Andrea Ovans, *Make a Bundle Bundling*, 75 HARV. BUS. REV. 6 (1997) (discussing how bundling can help create new markets).

The value of increased choice may be particularly great where consumers have heterogeneous preferences.¹⁸¹ There is evidence that consumers have developed more heterogeneous preferences around privacy and security. Although most consumers have growing concerns about privacy and security, consumers differ with respect to the types of data, the types of services, and the types of protection they care most about.¹⁸² Moreover, privacy and security are not simply a sliding scale of more or less: “‘Security’ means different things for different market participants.”¹⁸³ We already see significant competition among many digital products to offer the most attractive combination of privacy and security for users. For example, consumers can choose from a variety of messaging services to communicate with others, each of which offers different levels and types of encryption and other protections.¹⁸⁴

These distinct preferences could have particular salience in markets that could present viable tying claims. For example, users might disagree with the level and type of encryption offered by Apple’s cloud product, or raise concerns about the company’s decisions to share certain types of cloud data with law enforcement.¹⁸⁵ Consumers using voice assistants like Siri or Alexa might have concerns about how audio recordings are processed, stored, and handled.¹⁸⁶ Neither of these are mere hypotheticals: Apple recently walked back a plan to screen photos uploaded to iCloud to support law enforcement, and Alexa saw a major consumer backlash after consumers realized Amazon stored audio recordings of its users’ Alexa requests.¹⁸⁷ In sum, the increasing sophistication of digital consumers and the increased heterogeneity of preferences in digital markets may make it easier for plaintiffs to marshal direct evidence of separate demand for adjacent products and services.

Two other major trends involve an improved ability to filter out misleading evidence that could be used to argue against the existence of separate products. First, improved understanding of behavioral and cognitive biases may play a role in discrediting evidence that purports to demonstrate a lack of separate demand for particular products or services. Behavioral economists,

¹⁸¹ Brent Neiman & Joseph Vavra, *The Rise of Niche Consumption*, ___ AM. ECON. J.: MACROECON. (forthcoming 2023) (demonstrating how increases in product availability lead to welfare gains where consumers have heterogeneous preferences).

¹⁸² *Consumers Want Privacy. Marketers Can Deliver*, BCG (Jan. 21, 2022), <https://www.bcg.com/publications/2022/consumers-want-data-privacy-and-marketers-can-deliver>; *The consumer-data opportunity and the privacy imperative*, MCKINSEY (Apr. 27, 2020), <https://www.mckinsey.com/capabilities/risk-and-resilience/our-insights/the-consumer-data-opportunity-and-the-privacy-imperative>.

¹⁸³ Brief of Amicus Curiae the Electronic Frontier Foundation in Support of Appellant, Cross-Appellee Epic Games and Reversal, 14-16, *Epic Games, Inc. v. Apple Inc.*, No. 21-16506 (9th Cir. Jan. 27, 2022) (describing how different groups of consumers have different security needs met by very different product design choices).

¹⁸⁴ See Max Eddy, *The Best Secure Messaging Apps for 2023*, PC MAG. (Jan. 9, 2023) <https://www.pcmag.com/picks/best-secure-messaging-apps>.

¹⁸⁵ See Lily Hay Newman, *Apple Kills Its Plan to Scan Your Photos for CSAM. Here’s What’s Next*, WIRED (Dec. 7, 2022), <https://www.wired.com/story/apple-photo-scanning-csam-communication-safety-messages/>.

¹⁸⁶ Stephen Perkins, *How to delete your Alexa voice recordings*, ANDROID POLICE (Feb. 8, 2023), <https://www.androidpolice.com/how-to-delete-alexa-recordings/>.

¹⁸⁷ Alina Utrata, TWITTER (Jan. 23, 2022), <https://twitter.com/AlinaUtrata/status/1485194962027388929> (“I downloaded all the data Amazon has on me, and honestly the creepiest thing about it is that they sent me the *actual audio files* of every time I spoke* to Amazon Alexa”).

psychologists, and other researchers have amassed significant evidence on the prevalence of cognitive biases and the effects of choice architecture – the framing and presentation of choices – on decision making.¹⁸⁸ This appreciation for the role of choice architecture can help filter out evidence that might purport to show that consumers do not value choice in certain contexts. Default bias is powerful: the fact that consumers may not exercise their choice to switch away from a default choice provides very little evidence of consumer preferences or the value of choice.¹⁸⁹ Similarly, consumers cannot be said to make a choice that reflects actual preferences if they do so out of decision fatigue.

Second, there is much greater recognition of the pervasiveness of market power in digital markets and the novel ways in which digital platforms leverage this market power. For indirect evidence to play any role in the separate demand inquiry, that evidence must show what firms operating in a *competitive* market would do: whether a monopolist ties a product tells us almost nothing about whether tying is in fact efficient. In many digital markets, there may be little to no evidence whatsoever of what firms with competition do. Growing appreciation for the durable market power¹⁹⁰ exercised by many tech platforms allows plaintiffs to discredit evidence of bundling that comes from players with market power. In sum, as our understanding of competitive realities in digital markets has grown, so too has our ability to identify genuine evidence of beneficial bundling.

A final related trend that may help plaintiffs demonstrate the existence of separate products comes from the flurry of regulatory activity around the world aimed at improving competition in digital markets. If these efforts succeed in introducing greater competition, they may also create indirect evidence of whether firms *without* market power engage in bundling. In this way, tying claims may become easier to bring as other regulatory efforts succeed. The adoption of the Digital Market Act in Europe and the current wave of antitrust enforcement in the United States and abroad may thus have the additional benefit of providing powerful counterfactuals for courts dealing with claims of anticompetitive tying.

E. Pushing Back on the Rule of Reason in Platform Tying Claims.

Although proving separate demand is an important threshold requirement, the bigger hurdle for plaintiffs bringing tying claims in digital markets is prevailing under the rule-of-reason

¹⁸⁸ See, e.g., Eric J. Johnson, Suzanne B. Shu, Benedict G. C. Dellaert, Craig Fox, Daniel G. Goldstein, Gerald Häubl, Richard P. Larrick, John W. Payne, Ellen Peters, David Schkade, Brian Wansink & Elke U. Weber, *Beyond Nudges: Tools of a Choice Architecture*, 23 MKTG. LETTERS 487 (2012) (surveying various cognitive biases and discussing impact of different choice architectures on decision making); Idris Adjerid, Alessandro Acquisti & George F. Loewenstein, *Choice Architecture, Framing, and Cascaded Privacy Choices*, 65 MGMT. SCI. 1949 (2019) (discussing role of choice architecture in the context of privacy decisions); Nuria Rodríguez-Priego, René van Bavel, José Vila & Pam Briggs, *Framing Effects on Online Security Behavior*, FRONT. PSYCH. 21 (Oct. 2020) (same, in the context of security).

¹⁸⁹ For example, although Android allows third-party app stores, the Google Play Store – which is preinstalled and prominently placed on effectively all Android devices – accounts for over 90% of all app downloads. See *Mobile Ecosystems: Market Study Final Report*, COMPETITION & MKTS. AUTH. 91, 105-06 (June 10, 2022).

¹⁹⁰ See, e.g., *Unlocking Digital Competition: Report of the Digital Competition Expert Panel*, GOV.UK 41-42 (Mar. 2019).

framework lower courts have begun to apply to tying claims involving digital platforms. Both the tying claims in *Microsoft* and in *Epic* ultimately failed at the appellate level because plaintiffs had failed to prove that the restraints at issue were *unreasonable*.¹⁹¹

Even under the rule-of-reason framework, plaintiffs can and perhaps increasingly will prevail with increasing recognition of market power in digital markets. Tying may be a useful way for plaintiffs to get past the motion to dismiss stage, where RTD claims might otherwise fail. Nevertheless, *Microsoft* and *Epic* make clear the obstacles plaintiffs face under the rule-of-reason approach and underscore the need to fight to preserve the per se standard. Thus, a final component for a longer-term strategy to reinvigorate tying doctrine is forcefully defending the per se rule in tying claims.

In *Microsoft*, the D.C. Circuit held that the per se tying standard was not appropriate for claims involving tying in “platform software markets” because it “creates undue risks of error and of deterring welfare-enhancing innovation.”¹⁹² Instead, the circuit court remanded with instructions to conduct a rule-of-reason analysis into purported tying.¹⁹³ This decision has led to a steady erosion of per se tying in the lower courts, with many anticipating that the Supreme Court will follow the D.C. Circuit’s lead and abolish per se tying altogether.¹⁹⁴

The D.C. Circuit held that per se rules are reserved for conduct with which the courts have “considerable experience,” and the tying arrangement at issue—involving physical and technological integration—was “unlike any the Supreme Court has considered.”¹⁹⁵ The court identified three specific reasons for deviating from the per se rule. First, it found that the “separate-products test is a poor proxy for net efficiency from newly integrated products.”¹⁹⁶ Second, it found that the type of efficiencies created by platform tying were novel and had not been factored into the Supreme Court’s per se rule.¹⁹⁷ In particular, the efficiencies raised by *Microsoft* improved the value of the platform to both consumers and—the novel part—makers of complementary goods. Finally, it found that “wooden application of per se rules” in these markets “may cast a cloud over platform innovation.”¹⁹⁸

¹⁹¹ *Epic Games*, 2023 WL 3050076, at *30; *Microsoft*, 253 F.3d at 94. Note that *Microsoft* did not find that the restraints were reasonable, but rather, remanded to the lower court to conduct the analysis.

¹⁹² *Microsoft*, 253 F.3d at 90.

¹⁹³ *Id.* at 94.

¹⁹⁴ *E.g.*, Ahlborn et al., *supra* note 151 (“The overall direction of the journey, however, has been made clear, and *Microsoft III* is unlikely to be the final stop, as the criticism of the court of appeals concerning *Jefferson Parish* is of a general and universal nature.”); Herbert J. Hovenkamp, *The Rule of Reason*, 70 FLA. L. REV. 81, 96, 162 (2018) (noting that the Supreme Court’s *Illinois Tools Works* decision came close to abandoning the rule); William E. Kovacic, *The Future Adaptation of the Per Se Rule of Illegality in U.S. Antitrust Law*, 1 COLUM. BUS. L. REV. 33, 84-85 (2021) (arguing Supreme Court will at least change the language with which it describes tying liability).

¹⁹⁵ *Id.* at 90.

¹⁹⁶ *Id.* at 92.

¹⁹⁷ *Id.* at 90; *see also id.* at 93-94 (describing these purportedly novel efficiencies).

¹⁹⁸ *Id.* at 96.

In the discussion that follows, we explain discuss how rule-of-reason tying can and should be cabined based on the discussion in *Microsoft*. We conclude by discussing a more affirmative strategy to preserve per se tying in digital markets.

1. *Microsoft* Should Be Cabined to Situations Involving Bundling of Existing Digital Services.

The D.C. Circuit’s questions about the efficacy of the separate-products test arose because both the “direct consumer demand and indirect industry custom inquiries” are “backward-looking” and therefore provided “poor proxies for overall efficiency in the presence of new and innovative integration.”¹⁹⁹ However, this concern has very little salience where the tied good or service is itself new. At a minimum, this suggests rule-of-reason analysis should not apply where bundling involves the delivery of a new service or product.

Where a platform creates a new service and ties it to its core platform, the separate-products test is much more likely to yield false *negatives* than false positives. Where a service is new, consumers will rarely have the awareness or sophistication to demand the ability to purchase it as an unbundled product.²⁰⁰ Nor will there be a competitor from whom a consumer could purchase a given service. In these cases, there will be no indirect evidence of industry practices because the product or service is new to the industry.

Take, for example, voice assistants on mobile operating systems. When Apple first rolled out Siri, there were no other major mobile voice assistants on the market. Apple introduced consumers to the product, and over time, consumers have grown increasingly familiar and comfortable with voice assistants. For there to be any direct evidence that consumers demand voice assistants as a separate product, they must be aware that alternative voice assistants exist, and that there is some benefit or reason to shop around for alternative voice assistants. In a world of scarce consumer attention, strong default bias, and a high value placed on convenience, this is a hefty burden to meet.

In these situations, the separate-products test is stacked against a finding of separate products. Only when plaintiffs demonstrate meaningful benefits to consumer choice can they demonstrate the existence of separate products here. The D.C. Circuit’s concerns about the ineffectiveness of the separate-products test have no salience where bundling does not involve a tied good that was widely adopted before any bundling.

2. *Microsoft* Should Not Apply Where a Defendant Alleges Efficiencies That Benefit Only Consumers.

¹⁹⁹ *Id.* at 89.

²⁰⁰ This intuition is the corollary to our earlier discussion around changing consumer preferences. There, we explained how consumers’ greater comfort and sophistication with new technologies might lead to increased separate demand for related services. Here, we explain that this demand is unlikely to exist in the absence of this technological familiarity.

The D.C. Circuit acutely focused on the way in which bundling in platform markets raises *novel* efficiencies not previously considered by the Supreme Court. The novel efficiencies identified by the D.C. Circuit involved benefits to complementary services on the tying platform. In particular, Microsoft claimed third-party software developers benefited from the availability of Internet Explorer’s APIs, which allowed them to develop software without incorporating those APIs into their own code. The D.C. Circuit contrasted this justification with Supreme Court precedent involving efficiencies that benefited only consumers (i.e., where “the use of the tied good made the tying good more valuable to users”²⁰¹). In these cases, purported efficiency benefits could be met instead with quality standards.²⁰²

Microsoft should be cabined to situations where defendants raise credible efficiencies benefiting third-party platform developers or service providers. Applying the rule of reason only to these cases is both consistent with precedent and allows plaintiffs to challenge much of the anticompetitive tying that may occur in digital markets today. For example, if Apple were to claim that it ties its cloud product to iPhone to improve user privacy and security, it would be subject to *per se* scrutiny, not the rule of reason. By contrast, Apple would still be permitted to impose strict quality requirements (e.g., certain minimum privacy and data standards) on competing cloud operators that wished to sell mobile cloud storage to iOS users. Any quality requirements would be scrutinized under the rule-of-reason analysis in a more general Sherman Act § 1 or § 2 claim.

Apple raised precisely this kind of consumer-facing efficiency in *Epic*. In particular, Apple argued that its payment processing restrictions improved consumer security. This kind of efficiency is precisely the kind that should not justify deviation from the longstanding *per se* rule. It is simply a repackaging of the quality assurance justification the Court dealt with in *International Salt Co*²⁰³ and which the *Microsoft* court distinguished.²⁰⁴ There, the Court held that tying salt to machinery used to process salt was not justified by the concerns that the machinery required salt of a certain quality because the same result could be achieved *through quality standards*. Under *Microsoft*, Apple’s security justification should be treated as a quality justification that has long been excluded from tying jurisprudence under the *per se* rule.²⁰⁵

Moreover, there are strong policy reasons why courts should reject justifications based on consumer-facing benefits in digital markets. As *Epic v. Apple* demonstrates, platforms increasingly justify ties between products on the basis of improved security or privacy.²⁰⁶ However, as

²⁰¹ *Microsoft*, 253 F.3d at 90.

²⁰² *Id.*

²⁰³ *Int’l Salt Co. v. United States*, 332 U.S. 392 (1947), *abrogated in part by Illinois Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28 (2006).

²⁰⁴ *Microsoft*, 253 F.3d at 90.

²⁰⁵ Apple’s other justifications—a desire to collect a commission or to monetize its investments—may also be insufficient to justify deviation from the rule as both efficiencies benefit Apple, rather than consumers or third-party developers. The monetization defense in particular appears to be foreclosed by *Kodak*. *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451 (1992) (rejecting the justification that restraints were needed to protect *Kodak*’s investments in product development, manufacturing, and sales from competitors that would eat into its servicing revenues). A broader discussion of these issues is beyond the scope of this paper.

²⁰⁶ See Erika M. Douglas, *Data Privacy as a Procompetitive Justification: Antitrust Law and Economic Analysis*, 97 NOTRE DAME L. REV. REFLECTION 430, 434-35 (2022) (on growing intersection between privacy and antitrust).

discussed, security or privacy are not one-size-fits-all quality metrics that can be evaluated as better or worse. Improvements to subjective quality-based measures like security and privacy should bear little weight where consumers have heterogeneous preferences and needs for privacy and security. The value of consumer choice is much greater when dealing with these kinds of purported efficiencies than dealing with more objective elements.

3. *Microsoft* Should Not Apply to Total Platform Restrictions.

A final way to distinguish or cabin *Microsoft* is to focus on the type of tying or type of restraint. The tying in which *Microsoft* engaged prevented consumers from entirely removing Internet Explorer and effectively foreclosed an important distribution channel for rival browsers (i.e., by limiting preinstallation of competing browsers). However, users were free to install competing browsers on their own and use these browsers to access internet services. Thus, third-party developers could rely on the APIs provided by Internet Explorer, but consumers had a choice if they were willing to purchase an additional browser.

By contrast, many of the ties that exist in digital markets today prevent consumers from using alternative services altogether. Apple does not allow consumers to use any alternative app stores or any alternative payment processors for in-app purchases. Similarly, Apple severely limits the functionality of voice assistants and payment services that can be used via iPhone.²⁰⁷ Although *Microsoft* itself does not address this distinction, it may provide a basis for distinguishing the arguably more egregious kinds of tying in which digital giants like Apple engage today.

4. Longer Term Effort to Preserve and Strengthen Per Se Tying.

We have discussed a number of ways in which litigants can distinguish tying claims from those at issue in *Microsoft* and seek to cabin its holding. Over the longer term, however, preserving per se tying will require a more affirmative strategy. It will take a track record of successful claims, many argued under the rule-of-reason framework, to solidify its position. Both litigants and scholars have an important role to play in demonstrating the anticompetitive effects of tying in digital markets and creating a record that justifies a per se rule even in such innovative industries. If reestablishing a per se rule is not achievable (or even desirable), the endpoint might instead be a set of presumptions that replaces a full-bore rule of reason inquiry, or a set of clear limits on where the rule-of-reason is appropriate in tying cases.

One critical area of focus for this agenda is evaluating the effect of dominant platform tying on dynamic innovation. The D.C. Circuit was highly sensitive to the possibility that a per se rule would penalize innovative and efficient bundling. However, a rule-of-reason approach that favors false negatives over false positives may unduly hamper innovation by nondominant firms—in platform markets, firms that do not operate dominant platforms. Consider, for example, the voice assistant startup that never gets off the ground because it can never compete with Siri if it cannot access iOS users. Although preserving the incentive for dominant firms to innovate is important,

²⁰⁷ See *Mobile Ecosystems: Market Study Final Report*, COMPETITION & MKTS. AUTH. 192 (June 10, 2022) (voice assistants); *id.* at 193 (payment services).

so too is innovation by its rivals. Greater innovation by rivals often encourages innovation by dominant firms.²⁰⁸

Any singular instance of bundling by a platform may or may not generate efficiencies that outweigh the benefits of rivalrous innovation. Moreover, the effects of enforcement on innovation are ambiguous and depend on the situation. However, where bundling of high-value related services becomes a regular occurrence or a strategy for platforms, the effects of bundling on innovation may be particularly pernicious. If a platform regularly bundles these offerings in a manner that successfully forecloses rivals, the “platform owner may destroy any incentive, in the future, to invest in application development for new platforms.”²⁰⁹

This becomes a “systemic problem,” that risks “corruption of the entire system of platform-based innovation that has been so central to technological progress.”²¹⁰ The fact that this harm transcends any individual case counsels for a rule that reaches beyond any individual case. Although this kind of policy consideration differs from the typical justification for per se condemnation—that the conduct at issue is almost always anticompetitive—it may warrant per se condemnation, or at least a strong presumption of harm. Moreover, this type of conduct—unlike bundling of wholly new services—falls squarely within the reach of *Microsoft*. Thus, avoiding this harm requires grappling squarely with *Microsoft* and its policy justifications.

* * *

We now have decades of experience with digital markets. We have seen the effects of more lenient antitrust enforcement: tech platforms have durable, pervasive market power across digital markets. There is good evidence to suggest the welfare effects of tying in digital markets have begun to skew even more anticompetitive than when *Microsoft* was decided. Moreover, we have ample examples of the value of competition where it has been allowed to foster. The widespread success of the app economy demonstrates the value that ecosystems yield from enabling and fostering competition in adjacent markets. All this suggests that the battle for the per se standard is far from over.

V. Conclusion

In this paper, we have offered elements of a strategy to combat anticompetitive conduct in digital markets. Our three-pronged strategy aims to combat anticompetitive denials of interoperability, denials of access to core platforms, and other conduct through which dominant platforms use their role as gatekeepers to hinder competition in related digital markets. Antitrust enforcers and plaintiffs should continue to bring ambitious litigation targeting refusals to deal, cabining *Trinko* and related precedent to their narrow factual and legal circumstances while relying both on general, longstanding monopolization jurisprudence and specific tools like tying.

²⁰⁸ See Jonathan Baker, *Evaluating Appropriability Defenses for the Exclusionary Conduct of Dominant Firms in Innovative Industries*, 80 ANTITRUST L. J. 431, 434 (2016).

²⁰⁹ Tim Wu, *Taking Innovation Seriously: Antitrust Enforcement If Innovation Mattered Most*, 78 ANTITRUST L. J. 313, 323 (2012).

²¹⁰ *Id.*

Although the lower courts have too often gotten it wrong, antitrust law – applied properly – is flexible enough to support a robust enforcement agenda in digital markets.