No. 19-16122

In the United States Court of Appeals FOR THE NINTH CIRCUIT

FEDERAL TRADE COMMISSION,

Plaintiff-Appellee,

– v. –

QUALCOMM INCORPORATED, A DELAWARE CORPORATION,

Defendant-Appellant.

Appeal from the United States District Court for the Northern District of California No. 5:17-cv-00220-LHK The Honorable Lucy H. Koh

BRIEF OF AMICI CURIAE INTERNATIONAL CENTER FOR LAW & ECONOMICS AND SCHOLARS OF LAW AND ECONOMICS IN SUPPORT OF APPELLANT AND REVERSAL

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CORPORATE DISCLOSURE STATEMENT

International Center for Law & Economics states that there is no parent corporation or any publicly held corporation that owns 10% or more of its stock.

Date: August 30, 2019

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INTEREST OF AMICI CURIAE¹

The International Center for Law & Economics (ICLE) is a nonprofit, non-partisan global research and policy center aimed at building the intellectual foundations for sensible, economically grounded policy. ICLE promotes the use of law & economics methodologies to inform public policy debates, and has longstanding expertise in the evaluation of antitrust laws and their relationship with intellectual property.

Amici also include twelve scholars of antitrust, law, and economics at leading universities and research institutions across the United States. Their names, titles, and academic affiliations are listed in Appendix A. All have longstanding expertise in, and copious research on, antitrust law and economics.

^{1.} Under Federal Rule of Appellate Procedure 29(c), *amici curiae* state that no party's counsel authored this brief in whole or in part, and no party or its counsel made a monetary contribution intended to fund the preparation or submission of this brief. No person other than *amici* or their counsel contributed money that was intended to fund preparing or submitting the brief.

Both Qualcomm and the FTC have consented to amici's filing of this brief.

Amici have an interest in the proper development of antitrust jurisprudence and are concerned the district court's decision, if left to stand, would undermine the goals of the antitrust laws. Specifically, it would institutionalize a nebulous theory of harm, untethered from sound economics, and deter companies from engaging in beneficial, procompetitive conduct. Amici believe this court should affirm antitrust law's commitment to the error cost framework and reject the district court's use of inferences from ambiguous conduct to impose antitrust liability in this case.

INTRODUCTION

The district court's decision is disconnected from the underlying economics of the case. It improperly applied antitrust doctrine to the facts, and the result subverts the economic rationale guiding monopolization jurisprudence. The decision—if it stands—will undercut the competitive values antitrust law was designed to protect.

Antitrust law should seek to minimize error and decision costs to maximize consumer welfare and reduce the likelihood of self-defeating antitrust interventions. *See* Frank H. Easterbrook, *The Limits of Antitrust*, 63 Tex. L. Rev. 1 (1984). The Supreme Court has thoroughly

incorporated the economic logic of this "error cost" framework into its antitrust jurisprudence. See Ohio v. Am. Express Co., 138 S. Ct. 2274, 2287 (2018) ("Any other analysis would lead to 'mistaken inferences' of the kind that could 'chill the very conduct the antitrust laws are designed to protect.'") (quoting Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 226 (1993)); see also Thomas A. Lambert & Alden F. Abbott, Recognizing the Limits of Antitrust: The Roberts Court Versus the Enforcement Agencies, 11 J. Competition L. & Econ. 791 (2015).

In contrast, this case is a prime—and potentially disastrous example of how the unwarranted reliance on inadequate inferences of anticompetitive effect lead to judicial outcomes utterly at odds with Supreme Court precedent.

The district court's decision confuses several interrelated theories of harm resting on the central premise that Qualcomm's business model is purposefully structured to preserve its ability to license its standard essential patents (SEPs) to device makers (OEMs) at "unreasonably high royalty rates," thus "impos[ing] an artificial surcharge on all sales of its rivals' modem chips," which "reduces rivals' margins, and results in exclusivity." *FTC v. Qualcomm Inc.*, No. 17-CV-00220-LHK, 2019 WL 2206013, slip op. at 183 (N.D. Cal. May 21, 2019) (hereinafter slip op.).

But, without more, high royalty rates, artificial surcharges, the reduction of rivals' margins, and even exclusivity do not violate the Sherman Act. Indeed, high prices are as likely the consequence of the lawful exercise of monopoly power or the procompetitive offering of higher quality products, and harm to competitors is a hallmark of vigorous competition. *See, e.g., Verizon Commc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407 (2004) ("The mere possession of monopoly power, and the concomitant charging of monopoly prices, is not only not unlawful; it is an important element of the free-market system."). Avoiding the wrongful condemnation of such conduct is precisely the point of the Court's error cost holdings.

The district court commits several key errors inconsistent with both Supreme Court precedent and its underlying economic framework.

First, the court failed to require proof of the anticompetitive harm allegedly caused by Qualcomm's conduct. Instead, the court *infers* both its existence and its cause, *see* slip op. at 42–43, justifying its approach with reference to a single case: *United States v. Microsoft*, 253 F.3d 34,

79 (D.C. Cir. 2001) ("We may infer causation when exclusionary conduct is aimed at producers of nascent competitive technologies as well as when it is aimed at producers of established substitutes.").

But the court misreads *Microsoft* and disregards contrary Supreme Court precedent. Indeed, both the Court and *Microsoft* made clear that a finding of illegal monopolization may not rest on an inference of anticompetitive harm.

In *Brooke Group*, the Court took the unusual step of reviewing an appellate decision for the sufficiency of evidence, prodded by the need to protect against the costs of erroneously condemning procompetitive conduct. *See* 509 U.S. at 230. It held that only evidence defendant's conduct injured "competition, not competitors" supports a monopolization claim. *Id.* at 224 (citation omitted). And because harm to competitors doesn't necessarily mean harm to competition, inferring anticompetitive harm from such evidence would not suffice: "mistaken inferences are especially costly, because they chill the very conduct the antitrust laws are designed to protect." *Id.* at 226 (citation omitted).

In subsequent cases, the Court redoubled its commitment to minimizing error costs arising from erroneous inferences of

anticompetitive effect. See Trinko, 540 U.S. at 414 ("The cost of false positives counsels against an undue expansion of § 2 liability.") (citation omitted); Pac. Bell Tel. Co. v. linkLine Commc'ns, Inc., 555 U.S. 438, 451 (2009).

As law and economics scholars, we are concerned that, because the district court's decision rests on tenuous, unsupported inferences, "[i]f the district court's holding is not repudiated on appeal, then the obvious consequence will be for companies to be deterred from much innocent and potentially procompetitive business conduct." Douglas H. Ginsburg, Joshua D. Wright & Lindsey M. Edwards, *Section 2 Mangled: FTC v. Qualcomm on the Duty to Deal, Price Squeezes, and Exclusive Dealing 2* (George Mason Univ. Law & Econ. Research Paper Series 19-21, Aug. 19, 2019), http://bit.ly/2z7aZzA.

This concern is not just academic. *See FTC v. Qualcomm*, No. 19-16122, Order at 6 (9th Cir. Aug. 23, 2019) (recognizing the DOJ and Departments of Energy and Defense all classified this decision as a costly false positive).

Second, the court erred in finding Qualcomm had an antitrust duty to deal with rivals. The evidence adduced could sustain the district court's ruling through only one theory: an illegal unilateral refusal to deal.² See Aspen Skiing Co. v. Aspen Highland Skiing Corp., 472 U.S. 585 (1985)). But this narrow exception—"at or near the outer boundary of § 2 liability," *Trinko*, 540 U.S. at 409—is subject to strict limitations.

Finding a duty to deal requires that the company gave up a profitable course of dealing with rivals and adopted a *less profitable* alternative. The evidence before the district court uniformly shows that Qualcomm's challenged practices were *more profitable*, and thus insufficient to support an antitrust duty to deal.

Finally, because the court didn't perform a competitive effects analysis, it failed to demonstrate the "substantial" foreclosure of competition required to sustain a claim of anticompetitive exclusion. To avoid the costs of mistaken condemnation, the Court placed tight guardrails around finding exclusionary conduct anticompetitive, requiring foreclosure of "a substantial share of the relevant market." *See Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 328 (1961). Without

^{2.} The FTC pleaded a complex theory involving many interrelated, allegedly anticompetitive practices—all of it ultimately facilitated by Qualcomm's refusal to license competitors.

this finding, which also may not be inferred, a claim of anticompetitive foreclosure is unsupportable.

In sum, the district court's approach extends antitrust law beyond the clear boundaries imposed by the Supreme Court and risks deterring significant pro-competitive conduct. If upheld, *amici* anticipate significant harm from the district court's decision.

ARGUMENT

I. Supreme Court doctrine strictly circumscribes the permissible scope of inferences of anticompetitive effect in monopolization cases

In many antitrust matters it is ambiguous whether conduct is anticompetitive or procompetitive. Other than for the few types of conduct known through judicial experience to be likely anticompetitive and thus treated under the *per se* standard, plaintiffs must show that complained-of conduct results in (or would likely result in) anticompetitive harm before a court will condemn it. "That is, it must harm the competitive *process* and thereby harm consumers." *Microsoft*, 253 F.3d at 58.

Inferring anticompetitive effect without probative evidence is tantamount to holding such conduct *per se* illegal. Yet Qualcomm's

conduct does not have a manifestly anticompetitive effect on customers and markets. See Gregory J. Werden & Luke M. Froeb, Why Patent Hold-Up Does Not Violate Antitrust Law 33-34, Working Paper, Sept. 4, 2018 (forthcoming TEX. INTELL. PROP. L. REV.) ("The Sherman Act's policy of competition is not served by giving a cause of action . . . to every standard implementer unhappy with a royalty offer from an SEP holder. Advocates of antitrust intervention in [SEP licensing] do not propose to target conduct that harms competition. They contrive to move royalty rates closer to a theoretical ideal [with] no sound theoretical or empirical basis [for doing so]."). There is thus no economic basis for curtailing the requisite proof of competitive harm under the rule of reason.

As this Court noted in granting Qualcomm's motion to stay, the DOJ and FTC vehemently disagree on whether Qualcomm has a duty to deal. *Qualcomm*, 9th Circuit Aug. 23, 2019 Order at 4. Even "the FTC does not argue that Qualcomm entered any agreements that are *per se* unreasonable." Slip op. at 20. Applying a de facto *per se* standard is wholly inappropriate here.

A. *Trinko* precludes the district court's reading of *Aspen Skiing* and *MetroNet*

The finding that a private company has a duty to help its competitors is dangerous because a duty to deal with rivals imposes liability by inference—that is, without demanding direct evidence of anticompetitive effect. This "comes dangerously close to being a form of 'no-fault' monopolization." Herbert Hovenkamp, *Unilateral Refusals to Deal, Vertical Integration, and the Essential Facility Doctrine* 28 (Univ. of Iowa Legal Studies Research Paper No. 08-31, July 14, 2008), <u>http://bit.ly/33Q5fIM</u>.

The imposition of such a duty contradicts the intended aim of the antitrust laws: the "preserv[ation of] free and unfettered competition." *N. Pac. Ry. v. United States,* 356 U.S. 1, 4 (1958). Courts should thus be "very cautious in recognizing [] exceptions" to this rule, *Trinko*, 540 U.S. at 408, and the narrow exception in *Aspen Skiing* is "at or near the outer boundary of § 2 liability." *Id.* at 409.³

^{3.} For practical purposes it is indeed "at" that boundary, as courts following *Trinko* uniformly hold that only the specific characteristics delimited in *Aspen Skiing* suffice to impose a duty to deal. *See MetroNet Servs. Corp. v. Qwest Corp.*, 383 F.3d 1124, 1131 (9th Cir. 2004).

1. For a change in conduct to suggest anticompetitive effect, it must be less profitable than the former practice

"The possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive *conduct*." *Trinko*, 540 U.S. at 407. The *Aspen Skiing* Court recognized that liability is appropriate only where a refusal to deal has *anticompetitive effect*: "The question whether [defendant's] conduct may properly be characterized as exclusionary cannot be answered by simply considering its effect on [rivals, but should also consider] its impact on consumers and whether it has impaired competition in an unnecessarily restrictive way." *Aspen Skiing*, 472 U.S. at 605. Both cases refuse to permit an inference of harm from a monopolist's refusal to deal except in very limited circumstances.

Nevertheless, the district court concluded that "Qualcomm has an antitrust duty to license its SEPs to rival modem chip suppliers" under *Aspen Skiing*. Slip op. at 135. But the court did not evaluate the effect of Qualcomm's conduct on competition; it inferred it from Qualcomm's alleged intention to harm its rivals.

Trinko accepts that direct evidence of harm may not always be required, but is nevertheless clear that anticompetitive intent suffices to

establish harm to competition only when it tends to distinguish permissible from impermissible conduct. Thus, *Trinko* notes *Aspen Skiing* relied on evidence that "sheds [] light upon the motivation of its refusal to deal—upon whether its regulatory lapses were prompted not by competitive zeal but by anticompetitive malice." 540 U.S. at 409. Here, by contrast, the court failed to ensure its inference of harm was drawn from facts that distinguish between the two.

Indeed, because of its concern with mistaken condemnation of procompetitive conduct, the Supreme Court has identified only a single scenario from which it may plausibly be inferred that defendant's refusal to deal with rivals harms consumers: The existence of a prior, profitable course of dealing, and the termination and replacement of that arrangement with an alternative that not only harms rivals, but also is *less profitable* for defendant.

A monopolist's willingness to forego (short-term) profits plausibly permits an inference that conduct is not procompetitive, because harm to a rival caused by an *increase* in efficiency should lead to higher—not lower—profits for defendant. And "[i]f a firm has been 'attempting to exclude rivals on some basis other than efficiency,' it's fair to characterize

its behavior as predatory." Aspen Skiing, 472 U.S. at 605 (quoting Robert Bork, The Antitrust Paradox 138 (1978)).

In an effort to satisfy this standard, the district court states that "because Qualcomm previously licensed its rivals, but voluntarily stopped licensing rivals even though doing so was profitable, Qualcomm terminated a voluntary and profitable course of dealing." Slip op. at 137.

But it is not enough merely that the *prior* arrangement was profitable. Rather, *Trinko* and *Aspen Skiing* hold that when a monopolist ends a profitable relationship with a rival, anticompetitive exclusion may be inferred only when it *also* refuses to engage in an ongoing arrangement that, in the short run, is more profitable than no relationship at all. The key is the relative value to the monopolist of the current options on offer, not the value to the monopolist of the terminated arrangement. *See Trinko*, 540 U.S. at 409 ("a willingness to forsake shortterm profits"); *Aspen Skiing*, 472 U.S. at 610–11 ("it was willing to sacrifice short-run benefits").

Trinko highlights the fact that the conduct in Aspen Skiing entailed an "unwillingness to renew the [prior course of dealing] even if compensated at retail price." 540 U.S. at 409. It was the refusal to enter

into a new agreement to deal with its rival at retail—which the Court believed "would have provided [defendant] with immediate benefits, and would have satisfied its potential customers" *Aspen Skiing*, 472 U.S. at 610—and not simply the termination of a profitable course of conduct that permitted an inference of anticompetitive harm. Thus, this Court has identified the rejection of a new retail arrangement as an essential element to demonstrate a duty to deal. *See MetroNet*, 383 F.3d at 1132.

Even this additional factor—the rejection of a new, profitable offer from a rival—may be insufficient to permit a court to distinguish between procompetitive and anticompetitive conduct. See Alan J. Meese, Property, Aspen, and Refusals to Deal, 73 Antitrust L.J. 81, 114 (2005) ("While [a presumption of anticompetitive harm in Aspen Skiing] may have been justified based upon the state of economic theory in 1978, this logic simply cannot survive more recent economic developments."); see also John E. Lopatka & William H. Page, Bargaining and Monopolization: In Search of the "Boundary of Section 2 Liability" Between Aspen and Trinko, 73 Antitrust L.J. 115 (2005). But what is certain is that both Trinko and Aspen Skiing found that such a presumption cannot possibly be inferred unless the conduct forgone would have been more profitable in the short run than the conduct chosen. In a word, the conduct must be irrational in this sense.

It could hardly be any other way. For an inference to satisfy the Court's requirement that antitrust law prohibit anticompetitive conduct and not deter procompetitive conduct, it must be consistent with the former and inconsistent with the latter. See Matsushita Elec. Indus. Corp. v. Zenith Radio Corp., 475 U.S. 574, 587-95 (1986). If defendant terminated a profitable course of dealing, but adopted an even more *profitable* one, there would be no way to infer anticompetitive intent or would simply reflect the effect: rather, it exercise of good business judgment.

The record here uniformly indicates Qualcomm expected to *maximize* its royalties by dealing with OEMs rather than rival chip makers; it neither anticipated nor endured short-term loss. As the district court itself concluded, Qualcomm's licensing practices avoided patent exhaustion and earned it "humongously more lucrative" royalties. Slip op. at 1243–254. That Qualcomm anticipated greater profits from its conduct precludes an inference of anticompetitive harm.

2. Intent cannot support the district court's conclusion without evidence of anticompetitive effect

Even evidence that a defendant *intended* to harm its rivals is insufficient to prove the requisite harm to competition. "[A]n act of pure malice by one business competitor against another does not, without more, state a claim under the federal antitrust laws; those laws do not create a federal law of unfair competition." *Brooke Group*, 509 U.S. at 225. Absent conduct consistent only with anticompetitive harm, an inference from the intent behind a monopolist's conduct is unjustified. "Indeed, [under most circumstances], the 'intent' to create a monopoly anticompetitively cannot be distinguished from the intent to do so competitively." Herbert Hovenkamp, *The Monopolization Offense*, 61 Ohio St. L.J. 1035, 1039 (2000).

Similarly, the *Brooke Group* Court dismissed the relevance of intent evidence in establishing the crucial element of recoupment in predatory pricing: "No inference of recoupment is sustainable on this record, because no evidence suggests that [defendant]—*whatever its intent in [its allegedly predatory conduct] may have been*—was likely to obtain the power to raise [prices] above a competitive level." 509 U.S. at 232 (emphasis added). Despite evidence that the intended outcome of defendant's scheme resulted (i.e., that prices increased), its intent to bring it about—even coupled with the fact that it *did* come about—was insufficient to establish anticompetitive effect. Because the alleged "means of recouping losses from predatory pricing is 'highly speculative,' competent evidence is necessary to allow a reasonable inference that [defendant's conduct] poses an authentic threat to competition." *Id*. (citation omitted).

Intent evidence may be useful in determining if conduct is "reasonably . . . capable of . . . maintaining monopoly power," *Microsoft*, 253 F.3d at 79, but "only to the extent it helps us understand the likely effect of the monopolist's conduct." *Id.* at 59. It is unclear exactly what role the D.C. Circuit believes intent evidence may play in that determination,⁴ but one thing *is* clear: it cannot convert an intended outcome into one with economic significance.

^{4.} But the role appears extremely limited. Intent evidence is barely referenced, and, unlike the references to intent here, used only to help identify the causal relationship between conduct and effect. *See, e.g., Microsoft*, 253 F.3d at 77.

In the absence of the ability to distinguish effects, intent evidence is likely only to exacerbate the risk of false positives—precisely the result the *Trinko* court sought to avoid. "Evidence of intent is not particularly probative of underlying economic realities of the sort that almost all antitrust laws are intended to punish and deter. . . . Reliance on . . . statements of intent by economic actors threatens to undermine the economic foundations of antitrust jurisprudence, and thus the purpose of the antitrust laws." Geoffrey A. Manne & E. Marcellus Williamson, *Hot Docs vs. Cold Economics: The Use and Misuse of Business Documents in Antitrust Enforcement and Adjudication*, 47 Ariz. L. Rev. 609, 651, 654 (2005).

The district court's failure to ensure that such inferences enabled it to distinguish anticompetitive from procompetitive effect renders its findings unsupportable.

B. *linkLine* Bolsters This Interpretation of *Trinko* and *Aspen Skiing*

linkLine confirms a heightened standard of proof to infer anticompetitive harm from ambiguous conduct. *linkLine* involved more than the standard of proof sufficient to make out a "margin squeeze" specifically; rather, it concerned the propriety of inferring harm to

competition from harm to a specific competitor, whatever form that harm takes.

The crux of the district court's decision is that Qualcomm's refusal to license its technology to rival chip makers results in less competition and higher prices in the handset market because it enables Qualcomm to avoid the effects of patent exhaustion. "Without a license to Qualcomm's SEPs, a rival cannot sell modem chips with any assurance that Qualcomm will not sue the rival and its customers for patent infringement. Qualcomm's refusal to license its SEPs to rivals also enables Qualcomm to demand unreasonably high royalty rates." Slip op. at 114.

Whatever the district court's theory of harm, it necessarily rests on Qualcomm evading the pricing constraint that exhaustion would impose: "Qualcomm can only sustain [its "anticompetitive licensing practices"] . . . by refusing to sell modem chips to unlicensed OEMs and avoiding exhaustion of its patents." *Id.* at 164. Absent that element, there is no bargaining leverage, and thus no antitrust injury: Rivals would purchase Qualcomm's patents on FRAND terms, and Qualcomm would be unable to extract higher royalties because that initial sale would

exhaust the patent, meaning OEMs would no longer need a license (or,

for that matter, Qualcomm's chips).

linkLine, following *Trinko*, precludes this theory of harm. As the *linkLine* court notes:

The nub of the complaint in both *Trinko* and this case is identical—the plaintiffs alleged that the defendants (upstream monopolists) abused their power in the wholesale market to prevent rival firms from competing effectively in the retail market. *Trinko* holds that such claims are not cognizable under the Sherman Act in the absence of an antitrust duty to deal.

555 U.S. at 439–40.

Crucially, *linkLine* clarifies that, in the absence of an antitrust duty to deal, anticompetitive effect cannot be inferred from harm to competitors, even where the effect is to raise rivals' costs and foreclose them from the downstream market.

Although these effects might seem sufficient to constitute harm to competition—and the district court's holding, in fact, rests on exactly such effects—without proof of harm to competition a defendant doesn't unlawfully leverage a monopoly by reducing its rivals' margins "absent an antitrust refusal to deal (or some other exclusionary practice) in the monopoly market or below-cost pricing in the second market[.]" *Doe v. Abbott Labs.*, 571 F.3d 930, 931 (9th Cir. 2009) (citing *linkLine*, 555 U.S. at 438).⁵ And, as discussed above, Qualcomm's refusal to license its SEPs to rivals doesn't constitute violation of an antitrust duty to deal.

C. "Evading a constraint" is not an antitrustrelevant refusal to deal

It is not enough that a firm may have a "duty" to deal, as that term is colloquially used, based on some obligation other than an *antitrust* duty, because it cannot be inferred from the evasion of *that* obligation that conduct is anticompetitive.

The district court based its determination that Qualcomm's conduct is anticompetitive on the fact that it enables the company to avoid patent exhaustion, FRAND commitments, and thus price competition in the chip market. But this conclusion is precluded by NYNEX Corp. v. Discon, Inc., 525 U.S. 128 (1998). "NYNEX immunizes a firm from antitrust liability if the firm (1) first lawfully acquired monopoly power and (2) then committed fraud or engaged in other deceptive conduct (3) that allowed it to evade pricing constraints to the detriment of consumers." Joshua D. Wright, Why the Supreme Court Was Correct to Deny Certiorari in FTC

^{5. &}quot;[B]elow-cost pricing" is not alleged here, as the FTC has made clear, FTC's Opp'n to Qualcomm's Mot. to Dismiss at 2, 15, *FTC v.* Qualcomm, No. 17-cv-00220-LHK-NMC (May 12, 2017), and the district court made no findings that would support such a conclusion.

v. Rambus, Global Competition Pol'y Mar-09 (2) (2009), at 7, http://bit.ly/345415X. The conduct need not be deceptive for the point to hold. See NYNEX, 525 U.S. at 137 (extending its holding to "cases involving business behavior that is improper for various reasons").

In *Rambus Inc. v. FTC*, 522 F.3d 456 (D.C. Cir. 2008), the D.C. Circuit, citing *NYNEX*, rejected the FTC's contention that it may infer anticompetitive effect from defendant's evasion of a constraint on its monopoly power in an analogous SEP-licensing case: "But again, as in *NYNEX*, an otherwise lawful monopolist's end-run around price constraints, even when deceptive or fraudulent, does not alone present a harm to competition." *Id.* at 466 (citation omitted).

NYNEX and Rambus reinforce the Court's repeated holding that an inference is permissible only where it points clearly to anticompetitive effect—and, bad as they may be, evading obligations under other laws or violating norms of "business morality" do not permit a court to undermine "[t]he freedom to switch suppliers [which] lies close to the heart of the competitive process that the antitrust laws seek to encourage.... Thus, this Court has refused to apply *per se* reasoning in cases involving that kind of activity." NYNEX, 525 U.S. at 137 (citations omitted).

linkLine, of course, stands for the same proposition: evading an obligation, if it is not an antitrust obligation, cannot justify the imposition of a legal restraint on "free and unfettered competition." *N. Pac. Ry.*, 356 U.S. at 4.

The district court's elaborate "surcharge" theory of harm rests on the claim that Qualcomm injures rivals. See, e.g., slip op. at 183 ("The surcharge increases the effective price of rivals' modem chips, reduces rivals' margins, and results in exclusivity."). But the record is devoid of evidence demonstrating actual harm to competition. Instead, the court infers it from what it labels "unreasonably high" licensing rates enabled by Qualcomm's evasion of competition from rivals. In turn the court finds that that evasion of competition can be the source of liability if Qualcomm evaded an antitrust duty to deal. And, in circular fashion, the court finds Qualcomm thus evaded an antitrust duty to deal because its conduct allowed it to sustain "unreasonably high" prices, reduced margins for its rivals, and exclusivity. linkLine, NYNEX, and Rambus stand for the proposition that no such circular inferences are permitted.

D. The district court ignores *Microsoft*'s distinction between "causation" and "anticompetitive conduct"

In very limited circumstances courts have permitted the inference of *causation* without direct evidence of either an anticompetitive outcome or its causal relationship with the conduct at issue. *See* slip op. at 43 ("A plaintiff need not 'reconstruct the hypothetical marketplace absent a defendant's anticompetitive conduct.'") (quoting *Microsoft*, 253 F.3d at 79). *Microsoft* held that, in government actions seeking injunctions, "courts [may] infer '*causation*' from the fact that a defendant has engaged in anticompetitive conduct that 'reasonably appears capable of making a significant contribution to maintaining monopoly power.'" 253 F.3d at 79 (citation omitted) (emphasis added). But *Microsoft* never suggested that anticompetitive *effect* may be inferred.

"Causation" and "effect" are not the same thing. Indeed, *Microsoft* addresses "anticompetitive conduct" and "causation" in separate sections of its decision. *See id.* at 58, 78. And the D.C. Circuit has explicitly rejected the district court's interpretation of *Microsoft* conflating the two. *See Rambus*, 522 F.3d at 464 (holding the analysis in *Microsoft* was "properly placed on the resulting harms to competition rather than the [conduct] itself"); ("Deceptive conduct—like any other kind—must have an anticompetitive effect in order to form the basis of a monopolization claim.") *Id.* (citation omitted).

Finding causation entails connecting evidentiary dots, while finding anticompetitive effect requires an economic assessment. Without such analysis it is impossible to distinguish procompetitive from anticompetitive conduct, and basing liability on such an inference effectively writes "anticompetitive" out of the law.

Thus, the district court is correct that it "need not conclude that Qualcomm's conduct is the sole reason for its rivals' exits or impaired status," slip op. at 204. But it is wrong to hold—in the same sentence that it can thus "conclude that Qualcomm's practices harmed competition and consumers." *Id.* The former claim is consistent with *Microsoft*; the latter is not.

II. The District Court's Exclusionary Conduct Analysis Also Impermissibly Relies on Inferences Instead of Economic Evidence

The district court's foreclosure analysis does not make economic sense and the inferences it draws in support amplify the lack of economic basis for its holding.

The Supreme Court held in *Tampa Electric* that to prevail on an exclusive dealing claim, "the competition foreclosed . . . must be found to constitute a substantial share of the relevant market." 365 U.S. 320, 326–28 (1961). In *Jefferson Parish Hospital District No. 2 v. Hyde*, the Court held that "substantial" foreclosure entails a quantitative finding. 466 U.S. 2, 32 (1984) (holding that foreclosure of 30% of the relevant market was insufficient); *see also Omega Envtl., Inc. v. Gilbarco, Inc.*, 127 F.3d 1157, 1162 (9th Cir. 1997).

The district court made no effort to establish the quantity of competition foreclosed. More troublingly, the court didn't demonstrate that the alleged foreclosure harmed competition, as opposed to just rivals. Foreclosure *per se* is not impermissible and may be perfectly consistent with procompetitive conduct. To distinguish between the two something more than an unsupported "possibility theorem" and inference of anticompetitive effect is required. Dissenting Statement of Commissioner Maureen K. Ohlhausen, *In the Matter of Qualcomm, Inc.*, No. 141-0199 (Jan. 17, 2017), at 2.

A. The district court fails to distinguish anticompetitive and procompetitive exclusion

The district court asserts that a quantitative finding is not required. See slip op. at 144 ("exclusion from market share is not the sole means to show substantial foreclosure") (citing Microsoft, 253 F.3d at 71 and E.I. du Pont de Nemours & Co. v. Kolon Indus., Inc., 637 F.3d 435, 452 (4th Cir. 2011)). Yet, as the court's citation to Microsoft should have made clear, in its stead a court must find actual anticompetitive effect; it may not simply assert it: "[I]t is clear that in all cases the plaintiff must . . . prove the degree of foreclosure. This is a prudential requirement; exclusivity provisions in contracts may serve many useful purposes." *Microsoft*, 253 F.3d at 69 (emphasis added); see also Joshua D. Wright, Moving Beyond Naïve Foreclosure Analysis, 19 Geo. Mason L. Rev. 1163, exclusion 1165(2012)("Modern cases focus intensely upon measuring foreclosure.").

Here, the court simply accepts that the extent of foreclosure was "substantial" primarily because of Qualcomm's exclusive dealing agreements with Apple. Slip op. at 144 & 148 ("An exclusive agreement may substantially lessen competition if the agreement 'severely limit[s]... competition for the most important customers ... needed to

gain a foothold for effective competition.'") (citation omitted). The court also avers that Qualcomm's alleged "hobbling" of rivals implies the requisite foreclosure effect. *Id.* at 202–08.

If there were persuasive evidence that Qualcomm's conduct prevents rivals from *competing* for business sufficient to "gain a foothold for effective competition," the economic logic underpinning these assertions *could* be sound—but only if the claim is based on evidence *inconsistent* with the conclusion that its rivals' failure to win business results from competition on the merits. The question is not whether Qualcomm's conduct "hobbled" its rivals; the question is whether that hobbling was anticompetitive. The district court does not attempt to adduce evidence showing the latter, and thus its conclusion is impermissible.

1. The economic significance of foreclosure of an important customer cannot be inferred from "hot docs"

The court's basis for inferring substantiality from the alleged foreclosure of a "most important customer" is unsatisfactory. Its primary basis is internal business statements—so-called "hot docs" characterizing the importance of Apple as a customer. Yet, such

documentary evidence is unreliable as a guide to economic significance

or legal effect.

Business people will often characterize information from a business perspective, and these characterizations may seem to have economic implications. However, business actors are subject to numerous forces that influence the rhetoric they use and the conclusions they draw. . . .

There are perfectly good reasons to expect to see "bad" documents in business settings when there is no antitrust violation lurking behind them.

Hot Docs vs. Cold Economics, 47 Ariz. L. Rev. at 652.

Assuming such language has the requisite economic or legal significance is unsupportable—especially when, as here, the requisite standard demands a particular *quantitative* significance.

While some businesspeople may consider Apple a key customer, and it may even be true that Qualcomm's practices prevented rivals from winning Apple's business, one cannot infer anticompetitive exclusion from these facts: vigorous competition would also "suppress rivals' sales and thus foreclose rivals from new or repeat OEM business." Slip op. at 200. The relevant question is not simply whether Qualcomm's conduct caused rivals to miss out on business; it is whether such foreclosure had That concluded anticompetitive effect. cannot be from the evidence offered.

2. Un-executed exclusive deals do not foreclose anyone from anything

The court also purports to find the requisite evidence of substantiality in several *proposed but never completed* deals. *Id.* at 155 (holding that because "these agreements either resulted in *or would have resulted in* exclusivity . . . [t]he cumulative impact of Qualcomm's pattern of exclusive deals is to . . . substantially foreclose the market available to rivals") (emphasis added). But, once again, causation is not the issue. Whatever Qualcomm's hope in attempting such agreements, agreements never actually executed cannot contribute to the substantiality or anticompetitiveness of foreclosure. This conclusion from inference does not comport with the basic economic logic undergirding the Supreme Court precedent demanding a high standard of proof.

B. The district court's theories of exclusionary harm are internally inconsistent and economically unsupportable

The district court is inconsistent in its theories of anticompetitive exclusion, both with itself and with the FTC's complaint. At times the court asserts a theory of harm based on Qualcomm charging inflated prices for its own chips, while raising rivals' costs through its licensing practices. *See, e.g., id.* at 198 ("Qualcomm's monopoly chip power sustains Qualcomm's unreasonably high royalty rates and billions in licensing revenue. Qualcomm's monopoly chip power also enables Qualcomm to charge monopoly prices on modem chips."). At other times the court asserts, with the FTC, that Qualcomm charges *reduced* prices for its chips, and that this reinforces its ability to raise the relative, "all-in" price of rivals' chips. *See, e.g., id.* at 186 ("QTL's chip incentive funds lower the effective price of Qualcomm's modem chips, which exacerbates the effect of Qualcomm's surcharge on rivals' chips."); *id.* at 185 ("Because the surcharge also raises the market price of rivals' chips, Qualcomm prevents rivals from underbidding Qualcomm.").

This inconsistency highlights the weakness of the court's economic reasoning. And under either theory the court fails to establish the requisite harm to competition to support its findings.

According to the court, "Qualcomm's refusal to license rivals prevents entry, promotes exit, and hampers rivals in the marketplace by *reducing rivals' customer base and sales.*" *Id.* at 193 (emphasis added).

The surcharge affects demand for rivals' chips because as a matter of basic economics, regardless of whether a surcharge is imposed on OEMs or directly on Qualcomm's rivals, "the price paid by buyers rises, and the price received by sellers falls." Thus, the surcharge "places a wedge between the price that buyers pay and the price that sellers receive," and demand for such transactions decreases. Rivals see lower sales volumes and lower margins, and consumers see less advanced features as competition decreases.

Id. at 185 (quoting N. Gregory Mankiw, Principles of Microeconomics,Vol. 1 156 (7th ed. 2014)).

Even assuming the court is correct that Qualcomm's conduct entails such a surcharge, reduced demand for rivals' chips is not the only possible effect. Yet the court fails to consider any other possibilities.

An increase in the cost of an input for OEMs can have three possible effects:

(1) OEMs can pass all or some of the cost increase on to consumers in the form of higher phone prices. Assuming some elasticity of demand, this would mean fewer phone sales and thus less demand by OEMs for chips. But the extent of that effect would depend on consumers' demand elasticity and the magnitude of the cost increase as a percentage of the phone price. If demand is highly inelastic at this price (i.e., relatively insensitive to the relevant price change), it may have a tiny effect on the number of phones sold and thus the number of chips purchased—approaching zero as price insensitivity increases.

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(2) OEMs can absorb the cost increase and realize lower profits but continue to sell the same number of phones. This would not affect demand for chips or their prices.

(3) OEMs can respond to the price changes by purchasing fewer chips from rivals and more chips from Qualcomm. While this would affect rivals' chip sales, it would not necessarily affect consumer prices, the total number of phones sold, or OEMs' margins—that result would depend on whether Qualcomm's chips cost more or less than its rivals'. If the latter, it would even *increase* OEMs' margins and/or lower consumer prices and increase output.

Alternatively, the effect could be some combination of these, where some of the cost increase (if any) could be passed on to consumers, some absorbed by OEMs, and/or some mitigated through chip purchases from Qualcomm.

Whether any of these outcomes would have exclusionary effect is inherently uncertain. But demonstrating a reduction in rivals' chip sales is a necessary but not sufficient condition for proving *anticompetitive* exclusion. The FTC did not even demonstrate that *rivals* were

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substantially harmed, let alone that there was any effect on *consumers* nor did the district court make such findings.

The district court didn't evaluate these possible, competing effects and implied the entirety of any cost increase is realized in the form of reduced purchases of chips from rival chip makers.⁶ But because the court's presumed mechanism is far from the only possible outcome, it may not be assumed to occur. As with the inference of recoupment in *Brooke Group*, this crucial element of the exclusion claim is "highly speculative," and "competent evidence is necessary to allow a reasonable inference . . . [of] an authentic threat to competition." *Brooke Grp.*, 509 U.S. at 232.

Moreover, even if the inference were proper, the court offered nothing to support its assumption that the magnitude of the exclusionary effect is "substantial" under the law.

The "all-in" cost of the modem chip in a smartphone is a small fraction of the device's price—even if manipulated by Qualcomm in the way the court claims. Consumers' demand elasticity is unknown, but it

^{6.} Nor does the court specify how much of this arises from a reduction in phone sales (effect (1) above) or from diversion of chip purchases from rivals to Qualcomm (effect (3) above). The court nevertheless implies that *both* of these effects occur.

is impossible that such small price increases could lead to a reduction in device purchases sufficient to decrease OEMs' chip purchases enough to constitute anticompetitive foreclosure, '"quantified as foreclosure of 40% to 50% of the relevant market.'" Slip op. at 144. Indeed, such an effect would imply that, say, a 10% increase in the price of a device would result in a 400% to 500% loss of sales—an impossibly high level of price sensitivity among consumers who regularly purchase \$1,000 iPhones while substantially cheaper alternatives exist.

Even if it were plausible (which it is not), the court doesn't rest its conclusions on that dynamic entirely. Instead, the court suggests at least some of OEMs' purchases of rivals' chips are diverted from rivals to Qualcomm, rather than lost through a reduction in device sales (effect (3) above). *See, e.g., id.* at 185 ("Because the surcharge also raises the market price of rivals' chips, Qualcomm prevents rivals from underbidding Qualcomm."). Thus, the court implies that the total, "all-in" cost for chips plus licenses purchased from Qualcomm instead of rivals is *lower* for OEMs.⁷ But in that scenario, even if rivals were harmed, there would be

^{7.} This assumes quality-adjusted chip prices are also comparable. If they are not—if rivals' chips without license costs (which they do not pay)

no cost increase to pass on to consumers, OEMs would earn *larger* margins, and harm to competition cannot be inferred.

In theory, this effect could conceivably foreclose rivals from the market. But, according to the court, it is inherently coupled with a cost reduction and, implicitly, a price decrease and output increase for consumers. Thus, any foreclosure effect is as likely a result of vigorous competition as anticompetitive conduct, and nothing in the court's opinion demonstrates the latter or precludes the former.

In fact, under this formulation, Qualcomm's conduct would amount to a margin squeeze under *linkLine*, and liability on these facts is specifically precluded. 555 U.S. at 452. Because Qualcomm has no duty to assist its wholesale competitors, and because it has no duty to refrain from offering more attractive retail terms, both prices are "independently lawful." Thus, there is no basis for concluding that Qualcomm's conduct harms competition. *See id.* at 457.

higher—then it is not Qualcomm's conduct preventing are "underbidding," but their inefficiency. This own is not an antitrust problem.

CONCLUSION

Contrary to established precedent, the district court's decision relies on mere inferences to establish anticompetitive effect. The decision, if it stands, would render a wide range of potentially procompetitive conduct presumptively illegal and thus harm consumer welfare. *Amici* respectfully request that this Court reverse the district court's decision. Date: August 30, 2019

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CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 32(a)(7)(C), I certify that:

This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because this brief contains 6,974 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionately spaced typeface using Word 2016, Century Schoolbook 14-point font.

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CERTIFICATE OF SERVICE

I hereby certify that on August 30, 2019, I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system.

Participants in the case who are registered CM/ECF users will be served by the appellate CM/ECF system.

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In the United States Court of Appeals FOR THE NINTH CIRCUIT

FEDERAL TRADE COMMISSION,

Plaintiff-Appellee,

– v. –

QUALCOMM INCORPORATED, A DELAWARE CORPORATION,

Defendant-Appellant.

Appeal from the United States District Court for the Northern District of California No. 5:17-cv-00220-LHK The Honorable Lucy H. Koh

ADDENDUM TO BRIEF OF AMICI CURIAE INTERNATIONAL CENTER FOR LAW & ECONOMICS AND SCHOLARS OF LAW AND ECONOMICS IN SUPPORT OF APPELLANT AND REVERSAL

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