Nos. 21-16506 & 21-16695

**IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

EPIC GAMES, INC.,

Plaintiff, Counter-Defendant–Appellant, Cross-Appellee

v.

APPLE, INC.,

Defendant, Counterclaimant–Appellee, Cross-Appellant

On Appeal from the United States District Court
for the Northern District of California
No. 4:20-cv-05640-YGR-TSH
The Honorable Yvonne Gonzalez Rogers

BRIEF OF THE AMERICAN ANTITRUST INSTITUTE AS AMICUS CURIAE IN SUPPORT OF PLAINTIFF, COUNTER-DEFENDANT–APPELLANT

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CORPORATE DISCLOSURE STATEMENT

Pursuant to Appellate Rule 26.1(a), the American Antitrust Institute states that it is a nonprofit, non-stock corporation. It has no parent corporations, and no publicly traded corporations have an ownership interest in it.

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INTEREST OF AMICUS CURIAE[1]

The American Antitrust Institute ("AAI") is an independent nonprofit organization devoted to promoting competition that protects consumers, businesses, and society. It serves the public through research, education, and advocacy on the benefits of competition and the use of antitrust enforcement as a vital component of national and international competition policy. AAI enjoys the input of an Advisory Board that consists of over 130 prominent antitrust lawyers, law professors, economists, and business leaders. See http://www.antitrustinstitute.org.[2]

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[1] The parties have lodged blanket consents with the clerk. No counsel for a party has authored this brief in whole or in part, and no party, party's counsel, or any other person—other than amicus curiae or its counsel—has contributed money that was intended to fund preparing or submitting this brief.

[2] Individual views of members of AAI's Board of Directors or Advisory Board may differ from AAI's positions.

INTRODUCTION AND SUMMARY OF ARGUMENT

Despite radical technological and business innovation over the last century, the Sherman Act remains as relevant to markets today as ever. Moreover, while the Act's application has evolved with these developments, the core legal and economic principles underlying the Sherman Act have remained remarkably constant. For good reason: faithful adherence to these first principles of antitrust law means "courts can maintain logic and consistency while avoiding analytic traps and factual errors." Steven C. Salop, *The First Principles Approach to Antitrust, Kodak, and Antitrust at the Millennium*, 68 Antitrust L.J. 187, 3 (2000) (*hereinafter* "Salop").

Central among them are the legislative judgment that consumers and society are best served by competitive markets and that the ultimate test under any antitrust analysis should be the effect of the defendant's conduct on competition. *Nat'l Soc'y of Prof'l Eng'rs v. United States*, 435 U.S. 679, 695 (1978); *see also Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 12 (1984).

Antitrust law has also steadfastly emphasized the need to confront markets as they are and to eschew formalism in favor of market realities. *Eastman Kodak Co. v. Image Tech. Servs.*, 540 U.S. 451, 462 (1992) ("Legal presumptions that rest on formalistic distinctions rather than actual market realities are generally disfavored in antitrust law."); *see also American Needle, Inc. v. Nat'l Football League*,

560 U.S. 183, 191 (2010) (modern antitrust law "eschew[s]…formalistic distinctions…in favor of a functional consideration of how the parties involved in the alleged anticompetitive conduct actually operate"). Where the anticompetitive impact of conduct is readily apparent, tests and proxies must yield to the directly observable market realities. Salop at 4 ("Market definition and market power should be evaluated in the context of the alleged anticompetitive conduct and effect, not as a flawed filter carried out in a vacuum divorced from these factors.").

This case provides a prime example of the pitfalls that come with applying multi-pronged tests and proxies without tying them back to first principles or taking account of "the context of the alleged anticompetitive conduct and effect." Salop at 191. The district court found direct anticompetitive effects from Apple's conduct yet held that Apple lacks market power. Its legal conclusion cannot follow from its finding of fact. The analysis is economically incoherent.

The district court failed to appreciate the significance of its finding of direct anticompetitive effects. Fundamentally, courts must define markets "in reference to the economic analysis of the alleged anticompetitive conduct and its market effect." *Id.* Here, the court failed to do that in at least three ways:

First, despite factual findings that directly evidence iPhone purchasers are locked-in by both information costs that prevent accurate lifecycle pricing and switching costs that weigh against switching from iOS to Android to access

alternative app-distribution services and in-app payment processors, the district court held there could be no relevant aftermarkets in Apple app-distribution and in-app payment processing. Had the district court properly understood the economic and legal significance of its factual findings in the context of Apple's alleged anti-competitive conduct and its effects, it could not have arrived at this result.

Second, in defining markets, the district court at least twice fell into the analytical trap of assuming that current, competitively-constrained market conditions reflect the contours of consumer demand. In at least two instances, it found a single product where, had it properly focused on consumer demand in the context of Epic's claims, it would have found two. As a result, it failed to credit plaintiffs' foremarket in mobile operating systems and mistook the results of Apple's leveraging as evidence that no leveraging was possible.

Third, the district court applied the *Amex* decision without attention to the economic justifications for that decision's limited application and narrow scope. As a result, the district court treated one-sided app distribution and in-app payment markets as transaction services markets, despite the fact that, by Apple's own

admission, it does not sell app-distribution services and in-app payment services to consumers and these services are not jointly consumed.

ARGUMENT

I. COURTS MUST DEFINE MARKETS CONSISTENT WITH FIRST PRINCIPLES OF ANTITRUST LAW

Legal tests and frameworks developed in the context of tangible goods can be difficult to apply in new and evolving digital markets. But such tests are only a proxy for the ultimate goal of any antitrust inquiry: to determine the impact of conduct on competition. Courts can correctly apply old tests to new contexts only by adhering to the first principles underlying this ultimate goal.

A. The District Court's Opinion Cannot be Squared with First Principles of Antitrust Law Reflected in *Kodak*

The district court correctly identified the issue at the heart of Epic's aftermarket monopolization argument: "whether competition in the initial market [for operating systems] suffices to discipline anticompetitive practices in the aftermarkets" for iOS in-app payments and iOS app distribution. Slip op. at 130; *see Kodak*, 504 U.S. at 469 n.15 ("Whether considered in the conceptual category of 'market definition' or 'market power,' the ultimate inquiry is the same—whether competition in the equipment market will significantly restrain power in the service and parts markets."). And, the court rightly recognized that "[i]ssues of lock-in or switching costs, and notice or consumer knowledge fall under th[is] analysis." *Id.*

But the district court abandoned first principles by failing to connect its assessment of switching and information costs to the ultimate competition issue Epic has raised.

In *Kodak*, the plaintiffs alleged that Kodak had market power in replacement parts for Kodak copiers and used that market power to unlawfully tie Kodak parts to Kodak repair services. *Id.* at 459. Kodak's near-100% market share in replacement parts for Kodak copiers was undisputed; the question was whether Kodak actually possessed market power over parts purchases. Kodak argued, as Apple did here, that it had no meaningful market power in the Kodak parts market, because if it tried to charge supracompetitive prices or impose anticompetitive terms on parts purchases, customers would either switch to a different brand of copier or would avoid buying Kodak copiers in the first place. On summary judgment, the Supreme Court disagreed, explaining that the theory was "perhaps intuitively appealing [but] may not accurately explain the behavior of the primary and derivative markets for complex durable goods." *Id.* at 473.

"The extent to which one market prevents exploitation of another market," the Court reasoned, "depends on the extent to which consumers will change their consumption of one product in response to a price change in another, *i.e.*, the cross-elasticity of demand." *Id.* at 469 (internal quotations omitted). Where consumers in the aftermarket can readily change their consumption in the foremarket

in response to exploitation in the aftermarket, there is no market power. Where consumers subject to exploitation in the aftermarket cannot readily avoid or change their consumption in the foremarket in response, they are "locked-in."

The Court recognized that this lock-in is a source of the market power in the aftermarket, even if the lock-in is not complete. *Id.* at 471 ("The fact that the [fore]market imposes a restraint on prices in the after-markets by no means disproves the existence of power in those markets."). Consequently, a finding of lock-in and market power in this context necessarily suggests that the aftermarket is a relevant antitrust market. *Id.* at 469 n.15 ("Whether considered in the conceptual category of 'market definition' or 'market power,' *the ultimate inquiry is the same*—whether competition in the equipment market will significantly restrain power in the service and parts markets.") (emphasis added).

The Supreme Court identified two causal factors that can generate lock-in: information costs and switching costs. *Id.* at 473. Information costs prevent "lifecycle pricing." *Id.* High information costs matter because consumers who cannot readily assess the full lifecycle costs when they purchase a product cannot account for those costs when making their initial purchasing decision. *Id.* Switching costs prevent switching to a different product after the initial purchasing decision. High switching costs matter because consumers who cannot easily switch

products in the foremarket cannot escape the exercise of market power in the aftermarket.

Information costs lead consumers into a vulnerable position, and switching costs keeps them there. Together, they generate a relevant antitrust market: an aftermarket where consumers are locked-in. Absent competition *in* the aftermarket, market power can be exercised in the aftermarket with anticompetitive effect.

Here, the district court found that both switching costs and information costs were present,[3] yet found no aftermarket for iOS app distribution or in-app payment. Again, the legal conclusion does not coherently follow from the fact-finding. To find such switching and information costs without finding an aftermarket is fundamentally incompatible with the market definition principles underlying *Kodak* and *Newcal Industries, Inc. v. IKON Office Solutions*, 513 F.3d 1038 (9th Cir. 2008). The presence of these information and switching costs necessarily suggests that competition in the foremarket will not "significantly restrain" market power in the aftermarket. *Kodak*, 504 U.S. at 469 n.15.

[3] The district court found switching costs when it held: "The Court can agree that it takes time to find and reinstall apps or find substitute apps; to learn a new operating system; and to reconfigure app settings. It is further apparent that one may need to repurchase phone accessories." Slip op. at 50. It found information costs when it held: "Apple's anti-steering provisions hid critical information from consumers," Slip op. at 2, and that "Apple used other provisions to hide information on those commission rates from the consumers…. Without information, consumers cannot have a full understanding of the costs." Slip op. at 50-51.

Moreover, the district court is wrong to assert that the popularity of Apple's products reduces the magnitude of switching costs. Slip op. at 51 ("evidence strongly suggests that low switching between operating systems stems from overall satisfaction with existing devices, rather any [sic] 'lock-in'"). To be sure, demand for Apple's devices and operating system has significant implications for competition in the markets for devices and operating systems. But the only relevant question here is whether that foremarket competition disciplines the aftermarkets. If it does not, the foremarket competition says nothing about market power in the aftermarkets.

Similarly, the district court is wrong to assert that consumer knowledge that the iPhone is a walled garden reduces the magnitude of information costs. Slip op. at 131 ("In short, there is no evidence in the record demonstrating that consumers *are unaware* that the App Store is the sole means of digital distribution on the iOS platform."). The only relevant question is whether customers have a way to assess the costs of Apple's walled-garden approach at the time they purchase an iPhone. It is consumers' inability to assess Apple's aftermarket *pricing* constraints at the time of purchase that generates the information costs and prevents foremarket competition from disciplining aftermarket conduct.

The district court held that streaming services and cross-platform gaming have also reduced switching costs, Slip op. at 131, but again the court cannot

connect its dots. This holding is fundamentally incompatible with its holding that these services are not included in the mobile gaming market. Slip op. at 85. When the district court found that streaming services and cross-platform gaming are not part of the relevant market in this case, it necessarily found that switching between mobile gaming and these products *is not sufficient to constrain prices* in mobile gaming. To simultaneously hold that these products are outside the relevant market yet meaningfully reduce switching costs is pure nonsense. The holdings cannot coexist as a matter of law and economics.

B. The District Court Did Not Properly Assess Apple's Conduct as It Relates to the Source of Apple's Market Power

Where high information and switching costs lock consumers into an aftermarket, the lock-in can be illegally exploited in the aftermarket in at least two key ways that Epic raises: (1) leveraging and (2) raising entry barriers. First, where lock-in creates market power in an aftermarket, a firm can use its power in the aftermarket as a *means* to secure market power in a second aftermarket. That is leveraging. Epic alleges that Apple did so by exploiting customers locked into an app-distribution aftermarket to force them to use Apple's IAP services.

Second, a company can monopolize by taking steps to strengthen or deepen the existing lock-in of its customers in any or all of its aftermarkets. Anticompetitive acts that increase lock-in raise entry barriers. Epic alleges that Apple

increased lock-in of aftermarket App Store and IAP customers by anticompetitively increasing or maintaining information and switching costs.

These two methods of exploiting lock-in can be analyzed differently depending on the source of market power in the aftermarket. In a tying or monopoly leveraging case like *Kodak*, the source of market power in the market being leveraged (*e.g.*, the tying market) is irrelevant. The anticompetitive conduct is the leveraging of that monopoly in one (after)market into monopoly power in another (after)market (e.g., leveraging parts to get power in service). Monopoly leveraging is illegal and anticompetitive even if the monopoly power being leveraged is completely lawful.

Accordingly, the fact that the original power comes from producing a superior product that customers love, Slip op. at 50-51 (customer satisfaction), or from some other legal conduct, Slip op. at 48 ("not necessarily nefarious"), does not excuse leveraging that market power into another market where competition would otherwise exist. *Kodak*, 504 U.S. at 479 n.29 ("The Court has held many times that power gained through some natural and legal advantage such as a patent, copyright, or business acumen can give rise to liability if 'a seller exploits his dominant position in one market to expand his empire into the next.'") (quoting *Times-Picayune Publishing Co. v. United States*, 345 U.S. 594, 611 (1953)); *Image Tech. Servs. v. Eastman Kodak Co.*, 125 F.3d 1195, 1216 (9th Cir. 1997) ("Section 2 of

the Sherman Act condemns exclusionary conduct that extends natural monopolies into separate markets.”).

On the other hand, when it comes to increasing lock-in to raise entry barriers, the source of the information and switching costs that create lock-in *does* matter. When lock-in is increased, the allegation in a monopolization case is that the defendant took actions with the purpose and design to acquire, enhance or maintain monopoly power. Merely possessing market or monopoly power is not illegal, and firms with monopoly power are permitted and encouraged to compete like any others, including in an aftermarket. Only the acquisition or maintenance of monopoly power (or attempts) by means other than competition on the merits is illegal. Thus, where the source of market power is lock-in created by switching and information costs, the question of whether those costs *have been raised or maintained* by unlawful actions of the defendant, or instead by competition on the merits, is at the heart of the inquiry.

In undertaking that inquiry, though, courts must bear in mind that market power arising from sources other than defendants allegedly anticompetitive actions *is irrelevant*. Monopolistic conduct that raises entry barriers almost always arises in a context where the defendant has some degree of legitimate and legal market power, be it from a first-mover advantage, a high-quality product, or for structural reasons. The source of that market power is generally not relevant, because

monopolization is concerned not with the background market power of the defendant, but with the defendant's allegedly illegal actions *to increase or maintain that market power*. Salop, at 4 ("Market definition and market power should be evaluated in the context of the alleged anticompetitive conduct and effect….").

So too here. Apple has a certain degree of lawfully earned market power from the fact that the iPhone is a unique product that consumers like and is protected from competition by intellectual property rights. As discussed above, that market power relates to the foremarket. Likewise, aftermarkets for the App Store and in-app payment systems exist because of switching and information costs that prevent foremarket competition from effectively cabining the exercise of market power in these aftermarkets.

All of this is immaterial to Epic's monopolization claims. It is not the existence of aftermarkets where Apple has market power that Epic alleges constitutes illegal monopolization. It is that Apple took steps to *increase or maintain* the information and switching costs, and thus its power in these aftermarkets, that Epic alleges is illegal.

Properly understood against the context of Epic's allegations, it is clear that the district court misunderstood the significance of its finding that people are reluctant to switch away from the iPhone in response to Apple's conduct in the app distribution and in-app payment markets because of "overall satisfaction with existing

devices." Slip op. at 51. It is *because* consumers are overall satisfied with Apple's iPhone and iOS that Apple's monopolization scheme was effective. For consumers who are "overall happy with their devices," switching is a high cost, indeed.

At its core, Epic's monopolization claim is that Apple engaged in conduct to maintain or increase its market power in app distribution and in-app payment markets by increasing or maintaining the high switching and information costs that create lock-in. How? By imposing contractual restrictions on developers that (a) prevented them from reducing information costs by the use of links and other forms of communication through their apps and (b) prevented them from reducing the costs of switching away from Apple's App Store or iOS IAP by allowing customers to keep the iPhone and iOS they like while blocking them from accessing rival app stores or in-app payment methods. That consumers genuinely like the overall iPhone product is exactly what makes the second restriction so effective; it means the cost of switching away from the App Store or iOS IAP is the cost of giving up the iPhone altogether. *See* Phillip Areeda & Herbert Hovenkamp, Antitrust Law ¶ 564 (4th and 5th eds. 2013-2020) (markups in aftermarkets are particularly effective when small relative to the overall cost of the product).

C. A Common Error Underlies the District Court's Failure to Recognize Distinct Markets in at Least Two Instances

Proceeding from first principles rooted in economics also helps identify a common error behind the district court's failure to recognize distinct markets in at

least two instances. The district court rejected plaintiffs' claim that a foremarket for mobile operating systems exists that is distinct from the market for smartphones. Slip op. at 45 ("[I]t is illogical to argue that there is a market for something that is not licensed or sold to anyone. Competition exists for smartphones which are more than just operating systems."). Accordingly, it concluded there could be no aftermarkets for the App Store and iOS IAP.[4] Slip op. at 45–46 ("Given the Court's rejection of the foremarket theory, the aftermarket theory fails as it is tethered to the foremarket."). The district court also rejected Epic's claim that in-app payment processing and app-distribution are distinct product markets. Slip op. at 65–67 (finding "[t]he [IAP] system is not something that is bought or sold" and, therefore, not "a separate and distinct product" from the App Store). As a result, it held the App Store and IAP could not be anticompetitively tied together. Both of these holdings are rooted in a common and fundamental error: assuming that the way markets currently operate reflects the way competitive markets would operate. This same fundamental error underlies the infamous "cellophane fallacy" and many other intellectual traps for the unwary in antitrust law.

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[4] There is no logical reason why the conclusion that there can be no aftermarket must follow from the district court's conclusion that no separate market for mobile operating systems exists. If the district court concluded that mobile operating systems and mobile handsets are two parts of a single product, as it appears to have done, then there is no reason it should not have assessed whether *that product*, the iPhone, constitutes a foremarket.

Salop at 197; Donald Turner, *Antitrust Policy and the Cellophane Case*, 70 Harv. L. Rev. 281 (1956).

How two products are *currently* sold is not always reliable evidence of whether the two products occupy separate markets. Relying on current sales can lead a court, as the district court did, to mistake a monopolist's tying and bundling for evidence that two markets are one. The district court twice fell into this trap in defining markets in this case. First, the district court took the fact that Apple handsets and the Apple iOS are always sold together as evidence that there is no distinct market for mobile operating systems. Slip op. at 45 ("[I]t is illogical to argue that there is a market for something that is not licensed or sold to anyone."); *see also id.* at 127 ("[T]here is no market for the non-product [operating systems]."). Second, the district court took the fact that Apple 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. In both cases, the district court's reasoning was fallacious and its conclusions, properly understood in the context of the conduct and markets at issue, directly contradicted by its own evidentiary findings.

It is axiomatic that markets are defined by consumer demand. *See, e.g.*, Fed. Trade Comm'n & U.S. Dep't of Just., Antitrust Div., Horizontal Merger Guidelines § 4 (2010) ("Market definition focuses solely on demand substitution factors."). Accordingly, to determine if two markets are distinct, one has to ask

whether consumer demand for those products is distinct. *Jefferson Parish*, 466 U.S. at 19 ("[T]he answer to the question whether one or two products are involved turns not on the functional relation between them, but rather on the character of the demand for the two items."); *see also Rick-Mik Enters., Inc. v. Equilon Enters. LLC*, 532 F.3d 963, 974 (9th Cir. 2008). Meaning, do consumers always want to buy the two products as a single package or are there a significant number of consumers who would like to buy only one of the products or who want both types of products but want to mix-and-match brands or types?

The contours of consumer demand are not always directly observable from transactions, particularly where markets are constrained. Areeda & Hovenkamp, *supra* ¶ 1744g ("bundling in … a noncompetitive market carries no single-product implication"). Intellectual property rights mean that Apple is the only company that can produce iPhones and iOS, whether together or separate. Apple has decided to offer them only in combination. But, this business decision by Apple is not evidence that mobile handsets and mobile operating systems constitute distinct markets or that no market for mobile operating systems exists, because it is not necessarily a reflection of consumer demand. Indeed, because Apple is the only possible seller of iPhones and iOS and only sells them together, there is no way to directly observe whether consumers prefer to mix-and-match the iPhone handset with other operating systems or iOS with other handsets.

That Apple does not sell iPhones and iOS separately, however, does not mean there is no evidence about whether mobile handsets and mobile operating systems are distinct markets. *See Rick-Mik Enters, Inc.*, 532 F.3d at 975 (explaining the need to examine indirect evidence in assessing whether allegedly tied goods are a single product). Apple is not the only maker of mobile handsets and mobile operating systems. Like Apple, Google makes and sells mobile handsets and mobile operating systems in a combined product (Pixel), but Google also licenses its mobile OS to other handset manufacturers who combine it with non-Google handsets for sale to customers. *Kodak*, 504 U.S. at 62 ("to be considered two distinct products, there must be sufficient consumer demand so that it is efficient for a firm to provide [the products separately]"). Indeed, Pixel is not even the most popular Android handset, suggesting there is considerable demand for mixing and matching mobile operating systems and mobile phones, and that handsets and operating systems compete in distinct markets.[5]

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[5] The district court's apparent concern that a finding of separate markets would undermine ecosystem competition is also misplaced. Slip op. at 45 ("Consumers should be able to choose between the types of ecosystems and antitrust law should not artificially eliminate them."). A finding that handsets, operating systems, app stores, and in-app payments are separate markets would not bar Apple from continuing to offer the iPhone handset with the iOS and the App Store or limit apps in the App Store to those that use IAP. To the extent Apple has market power in any of those markets, antitrust law would place limits on Apple's ability to exercise that market power. But it would not eliminate existing ecosystem competition or Apple products.

The fact that consumers do not want handsets without operating systems, or operating systems without handsets, does not negate separate markets for handsets and operating systems either. Slip op. at 45 ("Competition exists for smartphones which are more than just the operating system."). Distinct markets can exist, even for jointly consumed products. *Eastman Kodak Co. v. Image Tech. Servs.*, 903 F.2d 612, 615-16 (9th Cir. 1990) ("That products must be used together does not eliminate the possibility that they form distinct markets."); *Jefferson Parish*, 466 U.S. 2 (finding distinct markets for surgical services and anesthesiology services); *see also United States v. Microsoft Corp.*, 253 F.3d 34, 45, 52, 60 (D.C. Cir. 2001) (en banc); *Digidyne Corp. v. Data Gen. Corp.*, 734 F.2d 1336, 1346 (9th Cir. 1984). And, whether jointly consumed products are in distinct markets can change over time. Areeda & Hovenkamp, *supra* ¶ 1741 ("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.").

The district court fell into the same trap in analyzing Epic's tying claim, mistaking the very market constraint that Epic alleges to be illegal (the tie) as evidence of consumer preference. The district court concluded that app distribution and in-app payments do not compete in distinct product markets because Apple only offers them together. Just as with handsets and operating systems, the court

failed to realize that markets cannot be determined by what sellers offer, because those offerings may reflect consumer demand but may also reflect illegal restraints. Areeda & Hovenkamp, *supra* ¶ 1744g ("bundling in … a noncompetitive market carries no single-product implication").

The fact that two products are always sold together by a monopolist in no way shows that the seller is not tying; it could just as well indicate that the tie is already in place and completely effective. *Id*. ¶ 777a ("failing to find separate products is not dispositive of antitrust liability when the defendant is a monopolist"); *id.* (citing integrated software components as an example). Indeed, the more complete the defendant's monopoly in the tying product, the fewer sales of separate products will occur, regardless of consumer demand.

Instead, the legal and economic tests require that courts look to consumer *demand*, because the essence of market definition is the determination of what consumers view as substitutes. Importantly, however, courts must look at evidence of what consumer demand *would be* in the *absence* of the alleged tie. This need to understand demand *in the absence of the tie* is why evidence about transactions before the tie was put in place or after it was lifted or from parts of the same or similar markets that are not subject to the tie are particularly powerful evidence; they show what consumers would demand *if the tie were not in place*. Likewise, evidence that consumers want to purchase the products separately, even if they are not

currently able to do so, is also highly probative of distinct consumer demand and, thus, distinct markets. All of this evidence was present in this case, *see* Epic Opening. Br. at 68-71, but the district court disregarded that evidence because it did not appreciate that competitively constrained markets do not reflect consumer demand.

D. *AmEx* Applies Only to the Narrow Economic Circumstances that Underly Its Departure from Well-established Market Definition Principles

The Supreme Court's decision in *Ohio v. American Express*, 138 S. Ct. 2274 (2018) ("*Amex*"), is a controversial but narrow departure from fundamental market definition principles. When a platform sells transaction services to both sides of a two-sided market, *Amex* recognizes a "single market" for "transactions" comprised of both sides of the platform. It requires that the transactions are jointly consumed, the transaction services are simultaneously sold to both sides, and the platform generates "pronounced" indirect network effects and interconnected pricing and demand. *Amex*, 138 S. Ct. at 2280–81, 2286.

Despite *Amex*'s short lifespan, it is already the most heavily criticized Supreme Court opinion of the modern antitrust era. Leaders of the antitrust bar have

called the decision "wrong,"[6] "alarming,"[7] "deeply flawed,"[8] "tortured,"[9] "a mistake,"[10] "nonsense,"[11] "inappropriate,"[12] "regressive,"[13] a "house of cards,"[14] and worse. By "grouping both the buyer and seller into the same relevant market," it "make[s] any coherent economic analysis of the relevant market impossible." Hovenkamp, *supra*, at 53. *Amex* thus raises difficult questions about whether and when the two sides of a transaction platform should qualify for single-market treatment.

The parties opted not to fight over the application of *Amex* to app transactions—both sides' experts agreed to a two-sided transaction market for app transactions. Slip op. at 121. However, in a three-paragraph analysis, the district court

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[6] Dennis W. Carlton, *The Anticompetitive Effects of Vertical Most-Favored-Nation Restraints and the Error of Amex*, 2019 Columbia Bus. L. Rev. 93, 93 (2019).
[7] Herbert Hovenkamp, *Platforms and the Rule of Reason: The American Express Case*, 2019 Columbia Bus. L. Rev. 35, 52 (2019).
[8] Jack Kirkwood, *Antitrust and Two-Sided Platforms: The Failure of American Express*, 41 Cardozo L. Rev. 1805, 1815 (2020).
[9] Steven C. Salop et al., *Rebuilding Platform Antitrust: Moving on from Ohio v. American Express* (forthcoming), *transcript available at* https://bit.ly/3o2a2Tk
[10] Michael Katz & Jonathan Sallet, *Multisided Platforms and Antitrust Enforcement*, 127 Yale L.J. 2142, 2151 (2018).
[11] Hovenkamp, *supra* at 57, 81.
[12] Michael L. Katz & A. Douglas Melamed, *Competition Law as Common Law: American Express and the Evolution of Antitrust*, 168 U. Penn. L. Rev. 2061, 2101 (2000).
[13] Hovenkamp, *supra* at 46, 51.
[14] Jeffrey Harrison, *Ohio v. American Express: Misunderstanding Two-Sided Platforms; the Charge Card "Market;" and the Need for Procompetitive Justifications*, 70 Mercer L. Rev. 437, 455 (2019).

nonetheless relied on *Amex* and extended it to apply beyond transaction services to reach distribution services. *Id*. It did so based entirely on conclusory statements, saying only that "two-sided transaction platforms sell transactions," that "Apple also provides services to facilitate those transactions," and "those services are co-extensive with 'transactions.'" *Id*. It did not apply the *Amex* requirements for two-sided transaction services or otherwise explain how it came to believe "distribution services" should be included among "those services." *Id*.

The Supreme Court's only unmistakable holding in *Amex* was that "courts must include both sides of the platform—merchants and cardholders—when defining the credit-card market." 138 S. Ct. at 2286. But it also held that "it is not always necessary to consider both sides of a two-sided platform." 138 S. Ct. at 2286. Accordingly, it is critically important for courts to interpret *Amex* carefully to ensure it finds its proper place in antitrust doctrine through a process of common-law evolution, mindful that "from the beginning the Court has treated the Sherman Act as a common-law statute." *Leegin Creative Leather Prods., Inc. v. PSKS, Inc.*, 551 U.S. 877, 899 (2007)*; see, e.g.,* Katz & Melamed, *supra*, at 2065 ("[T]he litigation involving American Express is the first to focus specifically on how to account for the possibility that the challenged conduct has opposing effects on user welfare on different sides of the platform"; "A healthy common law-like process would enable the law to adapt as appropriate in the light of new learning and new experience.");

Carlton, *supra*, at 105 ("The beauty of the common law is that a bad decision can be either overturned or so confined to its unique facts that the effect of bad decisions can be mitigated. I hope that is what happens here.").

Many two-sided markets, including two-sided markets that facilitate transactions, do not warrant single-market treatment under *Amex*. Most importantly, the single-market approach fails in two-sided transaction markets when "competitive conditions may differ on the two sides of a platform." Katz & Sallet, *supra*, at 2155. When network effects are not sufficiently "pronounced" to preclude competition except from other transaction platforms, firms that are *not* platforms and that do *not* sell transactions may compete exclusively on one side of the market or exclusively on the other. *United States v. Sabre Corp.*, 452 F. Supp. 3d 97 (D. Del. 2020) (making fact findings that one-sided firm in fact imposes competitive pressure on one side of platform); *see* Salop et al., *supra*, at 24–25 (explaining why *Sabre* court's fact-findings rendered its application of *Amex* "demonstrably wrong").

Indeed, the most sensible and perhaps only coherent way to read *Amex* is that it holds single-market treatment to be appropriate only when network effects are sufficiently pronounced that competition on one side of the two-sided platform is precluded, and the only firms capable of applying competitive market pressure on any one side of the platform are other transaction platforms. *See Amex*, 138 S. Ct. at 2287 ("Only other two-sided platforms can compete with a two-sided

platform for transactions…. Only a company that had both cardholders and merchants willing to use its network could sell transactions and compete in the credit-card market.”).

When network effects are insufficiently pronounced and a two-sided transaction platform therefore faces different rivals on each side, it faces different unilateral incentives to compete or coordinate with the different rivals on each side. Katz & Sallet, *supra*, at 2155, 2158. A single-market approach does not work in these circumstances because it “neglects the fact that two very different groups utilize the transaction service, and their interests are not fully aligned.” *Id*. at 2158. Indeed, user interests on each side may often be in conflict, where one side would benefit from a higher net transaction price and the other from a lower net transaction price. *Id*. When such a conflict exists, the net two-sided price is unhelpful to an antitrust analysis, because it does not provide a market signal that expresses the interests of any one side. *See id*.

When network effects are not strong enough to prevent competition from breaking out on one side of a two-sided transaction platform, courts should recognize the platform as “a dual trader in separate though interdependent markets.” *Times-Picayune Publishing Co.*, 345 U.S. at 610; *see Amex*, 138 S. Ct. at 2286 (what distinguishes newspapers from two-sided transaction platforms “like the credit card market” are “weak indirect network effects”).

The district court here did not come close to meeting the challenges posed by *Amex*. Its primary mistake was to assume without analysis that there is no "substantive" difference, only a "semantic" difference, between "services to facilitate…transactions" and "distribution services" under *Amex*. Slip Op. at 121–22. The critical substantive difference is that *Amex* holds transaction platforms are "understood as 'suppl[ying] only one product'—transactions." 138 S. Ct. at 2286. Even a cursory analysis should have revealed that the app distribution services are not "transaction" services under *Amex*.

For example, *Amex* requires that two-sided transaction platforms that warrant single-market treatment sell transaction services to *both* sides. *Id*. at 2286 (Credit card networks sell transaction services to both cardholders and merchants and "*cannot* sell transaction services to either cardholders or merchants individually." (emphasis added)). But Apple charges only a "commission" on distribution and in-app-payment services, and it charges the full commission to developers; it doesn't charge users anything for distribution services.

On the user side, Apple collects a payment, but Apple itself says it does so as the developers' "selling agent." Brief for Petitioner Apple at 37, *Apple, Inc. v. Pepper*, No. 17-204, 139 S. Ct. 1514 (filed Aug. 10, 2018) [hereinafter "Apple *Pepper* Br."] ("[O]n the consumer-facing side of the platform, Apple acts as the developers' selling agent, as is typical in electronic commerce. This makes Apple a

'seller' in the same transactional sense that a travel agent 'sells' airline tickets (for airlines)."). Apple thus transacts with consumers but without selling *them* any services, much as travel agents typically transact with travelers on behalf of airlines, without charging the travelers. Apple thus does not "sell" distribution and in-app-payment services to both sides; only to one side—the side it charges a commission.

Similarly, *Amex* holds that single-market treatment is only appropriate if the transaction is "jointly-consumed." 138 S. Ct at 2286. But Apple itself does not believe distribution services are jointly consumed. It says, "Developers are the ones who purchase distribution, not consumers." Apple *Pepper* Br., *supra*, at 36 ("The commission structure … is established by contracts between Apple and developers."). Distribution services thus fail to qualify for single-market treatment on this basis as well.

Moreover, *Amex* holds that single-market treatment is only appropriate if it is "necessary to accurately assess competition." 138 S. Ct. at 2287. The *Amex* majority cites an article written principally by Italian economist Lapo Filistrucchi for this proposition, which it cites seven other times. Filistrucchi et al. explain that transactions between the two sides of a platform can enable "the side that pays more to pass through the difference in its cost of interacting to the side that pays less. If a complete pass-through were possible, the price structure chosen by the platform would not matter," and the platform would not be two-sided in any

relevant economic sense. Lapo Filistrucchi et al., *Market Definition in Two-Sided Markets: Theory and Practice*, 10 J. Comp. L. & Econ. 293, 299 (2014)).

As relevant here, Apple has acknowledged that "the full commission, e.g., 30 cents per app in the case of $0.99 apps," is charged to the developer, and that as a result "[d]evelopers … with inelastic demand would pass most of it to consumers." Apple *Pepper* Br. at 28. There is at least an unresolved question as to whether complete pass-through is possible and therefore negates *Amex*—a question the district court never considered.

Fundamentally, the purpose of the market definition exercise in antitrust law is to identify the "competitive arena within which significant anticompetitive effects are possible." Federal Trade Comm'n & U.S. Dep't of Justice, Commentary on the Horizontal Merger Guidelines 6–7 (2006). It is not meant to be "an end in itself." Horizontal Merger Guidelines, *supra*, § 4, at 7. The district court's application of *Amex* to distribution services threatens to turn the market definition exercise upside down and convert it into a tool for ignoring actual competition on one side of a platform. *See* Pls. Br. at 71 ("*Amex* did not turn a two-sided market into a black hole").

II. UPHOLDING THE DECISION BELOW WOULD PROVIDE A ROADMAP FOR PLATFORMS TO EVADE FEDERAL ANTITRUST LAWS WITH ENORMOUS IMPLICATIONS FOR CONSUMERS, DEVELOPERS, AND MARKETS

Lock-in and two-sided markets are ubiquitous issues in modern technology markets, where switching and information costs are particularly prevalent and most markets have some two-sided characteristics. Carl Shapiro & Hal R. Varian, Information Rules: A Strategic Guide to the Network Economy 104 (1999). If the district court's cramped and misguided reading of *Kodak* and progeny and its expansive reading of *AmEx* are allowed to stand, they will provide a roadmap for Apple and other technology companies to escape antitrust liability by exploiting consumers and suppliers locked into monopolized and monopsonized aftermarkets and paying lip service to *AmEx* to avoid the consequences. *See Apple, Inc. v. Pepper*, 139 S.Ct. 1514, 1523 (2019) (rejecting Apple's antitrust standing theory because it "would provide a roadmap … to structure transactions … so as to evade antitrust claims…and thereby thwart effective antitrust enforcement).

In addition to the individual switching costs and information barriers present in this case, significant network effects in many technology and software markets also lead to high *collective* switching costs that lock in consumers. Shapiro & Varian, *supra*, at 184–86. In addition, unlike physical equipment, like photocopiers and mobile handsets, which wears out over time, data caches that generate switching costs in many technology markets strengthen lock-in over time. *Id.* at 122–23.

It is relatively easy to switch from Facebook to another social network when your account is an hour old and you have only 3 connections, but it is astronomically harder when you have a network of hundreds or thousands of connections and years or decades worth of conversations, photos, and interactions.

In technology markets, information costs can also be higher. Accurate lifecycle pricing is harder in data-driven technology markets because consumers must account for not just their consumption and the seller's pricing in aftermarkets but also concerns about data portability and privacy. Daniel J. Solove, *The Myth of the Privacy Paradox*, 89 Geo. Wash. L. Rev. 1, 43 (Jan. 2021) (explaining the high information costs facing consumers in tech market when assessing privacy and data risks). And, as technology rapidly evolves, and companies find new ways to exploit existing customers' information, consumers face costs they never could have imagined, let alone quantified, when choosing a product in the foremarket. *Id.*

Correct application of *Kodak* rooted in a proper understanding of the role of information costs, switching costs, and consumer demand is critical to effective antitrust enforcement in technology markets.

Similarly, although the merits of *AmEx* even in the narrow circumstances addressed by the Supreme Court are questionable, undisciplined and expansive

application of its holding in technology markets would be catastrophic for antitrust enforcement.

CONCLUSION

For the foregoing reasons, the decision below should be reversed and the case remanded.

Respectfully submitted,
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CERTIFICATE OF SERVICE

I hereby certify that on this 27th day of January, 2022, I electronically filed the foregoing with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit using the appellate CM/ECF system. Counsel for all parties to the case are registered CM/ECF users and will be served by the appellate CM/ECF system.

s/ Laura M. Alexander

Dated: January 27, 2022

UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

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