IS ANTITRUST LAW KEEPING UP WITH PLATFORM ECONOMICS?

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INTRODUCTION

As digital platforms have expanded in size and number, so too have the questions they pose for antitrust policy. One reason for this is obvious: platform businesses like Google, Facebook, and Amazon are the new titans of industry, comprising a majority of the world's largest companies. But platforms also have distinctive economic features that distinguish them from more traditional firms.[1] This presents a challenge, as existing antitrust law has been developed around more conventional industries. Thus, many platform experts insist that antitrust must update its playbook to account for the economics of platforms.[2]

This article is concerned with a simple question: are courts evaluating platform conduct effectively?[3] This turns on two factors. The first, which is primarily about economics, is whether the courts are properly accounting for the distinctive economic features of platform markets and platform competition. The second, which is primarily about law, is whether courts are applying those economic ideas in a sensible and practical way.

The economics of platforms was an outgrowth of the literature on network industries.[4] A network good is something that agents use to "interact" with each other in some valuable way—for example, to call one another over a telephone network. A network good becomes more attractive when it has more users,

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[1] *See, e.g.,* Jean-Charles Rochet & Jean Tirole, *Two-Sided Markets: A Progress Report,* 37 RAND J. Econ. 645 (2006); Glen E. Weyl, *A Price Theory of Multi-Sided Platforms,* 100 AM. ECON. REV. 1642 (2010); Andrei Hagiu & Jullien Wright, *Multi-Sided Platforms,* 43 INT'L J. IND. ORG. 162 (2015); BRUNO JULLIEN, ALESSANDRO PAVAN, & MARC RYSMAN, TWO-SIDED MARKETS, PRICING, AND NETWORK EFFECTS, *in* HANDBOOK OF INDUSTRIAL ORGANIZATION 485, 490-91 (2021) (Kate Ho, Ali Hortaçsu, & Alessandro Lizzeri eds., 4th ed. 2021).

[2] See, e.g., David S. Evans & Richard Schmalensee, The Antitrust Analysis of Multi-Sided Platform Businesses, *in* Oxford Handbook on International Antitrust Economics (Roger Blair & Daniel Sokol eds., 2012); Bruno Jullien & Wilfried Sand-Zantman, *The Economics of Platforms: A Theory Guide for Competition Policy*, 54 Info. Econ. & Pol. 1 (2021).

[3] I focus on cases involving exclusionary conduct by platforms.

[4] BRUNO JULLIEN, ALESSANDRO PAVAN, & MARC RYSMAN, TWO-SIDED MARKETS, PRICING, AND NETWORK EFFECTS, *in* HANDBOOK OF INDUSTRIAL ORGANIZATION 485, 490-91 (2021) (Kate Ho, Ali Hortaçsu, & Alessandro Lizzeri eds., 4th ed. 2021).

as that means there are more parties to interact with. These benefits from enlarging the user base are called *network effects*.

A platform is a kind of "two-sided" (or multi-sided) network good. This means that users fall into different groups (the "sides" of the platform), and the platform facilitates interactions between users on different sides.[5] For example, Uber facilitates car rides between drivers and riders. Consequently, the two sides are interdependent, even if there are stark differences between them. This is captured by *indirect* network effects, which are the hallmark feature of two-sided platform markets. They capture the fact that a platform's appeal to each side depends on the number of active users on the other side.

For example, Uber cannot attract drivers unless there are lots of riders looking for trips; nor can it attract riders unless there are plenty of available drivers. Similarly, for a payment card network (e.g. Visa) to attract merchants, there must be lots of consumers who carry its card; and consumers prefer cards that are accepted by many merchants. Other familiar examples of two-sided platforms include online retail platforms (e.g. Amazon Marketplace); booking sites (e.g. Orbitz); PC operating systems (e.g. Windows); app stores; video game consoles; food delivery apps (e.g. DoorDash); homestay platforms (e.g. Airbnb); internet search engines; and social media platforms.[6]

There have been many antitrust cases involving platforms. Some of them predate the economic literature on platforms by decades.[7] As one might expect, there have been both successes and failures. I will argue that the famous *Microsoft* case is

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[5] By contrast, *direct* network effects arise when users interact with other members of the same group. In most early examples of network goods (e.g. telephones and email), all users fall into a common group, so all network effects are necessarily direct. In some platform markets, there are not only indirect network effects, but also direct network effects within one side of the market. For example, on a video game console, there are indirect network effects between gamers and game developers, but gamers also interact with each other when they use the console to play games together online.

[6] Search engines and social media platforms are examples of media platforms, where one side is comprised of advertisers. In these markets, indirect network effects may be much stronger in one direction than the other: advertisers want to interact with lots of users, but the feeling often isn't mutual.

[7] See, e.g., Broadcast Music, Inc. v. CBS, Inc., 441 U.S. 1 (1979) (a case centering on copyright licensing platforms).

perhaps the greatest success in this area.[8] Microsoft controlled a dominant platform (the Windows operating system), but it also sold a range of successful software programs, including the Internet Explorer web browser.[9] It was accused, and ultimately convicted, of exploiting Windows' dominance to exclude rivals in the browser market.[10]

Microsoft was ahead of its time. The platform economics literature did not really start to crystallize until shortly after the decision came out.[11] And yet the court correctly identified several key economic features of platforms that had important implications for the antitrust analysis. And it accounted for those phenomena in a practical, reasonable way, as I discuss below.

However, platform-related antitrust decisions have also committed some major missteps, even in some very recent cases. Most of them are not merely bad calls, but bad *rules*; their adverse effects will thus continue to linger and spread if not corrected. Much of this article is devoted to unpacking those missteps and offering workable solutions.

Ironically, one of the most significant missteps was committed by the Supreme Court it its attempt to take platform economics seriously.[12] In *AmEx,* the Court emphasized the importance of accounting for the distinctive economic aspects of platform industries. Its main holding was about how do define markets in platform cases. It held that, in most such cases, the market must be defined to include both sides of users.[13] The majority, and supporters of its decision, viewed this as necessary to ensure that courts consider how conduct affects users on both sides, rather than ignoring one side.

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[8] See Section I, infra.

[9] United States v. Microsoft Corp. 253 F.3d. 34, 55 (D.C. Cir. 2001).

[10] Id.

[11] Pioneering papers in the literature on multi-sided platforms include, e.g., Bernard Caillaud & Bruno Jullien, *Chicken and Egg: Competition Among Intermediation Service Providers,* 34 RAND J. ECON. 309 (2003); Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-Sided Markets*, 1 J. EUR. ECON. ASSN. 990 (2003); Mark Armstrong, *Competition in Two-Sided Markets*, 37 RAND J. Econ. 668 (2006).

[12] See Section II(A), infra.

[13] Ohio v. Am. Express Co., 138 S. Ct. 2274 (2018).

The need to consider both sides is something that many economists rightly emphasize.[14] In antitrust cases, we typically focus on one "relevant market," and we assume implicitly that industry conditions (e.g. price levels) in adjacent markets are held fixed.[15] But the two sides of a platform are highly interdependent, undermining the validity of that assumption. Even if we just want to know how a platform's restraint affects user welfare on side A, it may still be necessary to consider its impact on side B.[16]

Nevertheless, the Supreme Court was wrong to believe that these considerations necessitated its market definition rule.[17] In fact, the primary significance of the Court's decision is not that it compels courts to consider both sides—numerous alternative policies would have done that as well—but rather that it distorts the way proof burdens are allocated between the litigants. This creates substantial administrative difficulties for no good reason.[18] The *AmEx* decision also leads some basic antitrust concepts (e.g. market power) to break down or become incoherent in some cases, because the set of businesses that compete with the platform may differ between the two sides.[19]

A second major misstep involves courts evaluating complex platform conduct using antiquated, formalistic legal doctrine that is wholly divorced from platform economics.[20] This problem arises

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[14] See, e.g., Bruno Jullien & Wilfried Sand-Zantman, *The Economics of Platforms: A Theory Guide for Competition Policy*, 54 Info. Econ. & Pol. 1 (2021) ("any evaluation of a competition case involving a multi-sided platform should consider effects on all sides"); David S. Evans, The Antitrust Economics of Multi-Sided Platform Markets, 20 Yale J. Reg. 325, 328 (2003) (similar).

[15] For example, in a merger between tire manufacturers, we would typically assume that the merger will not have any significant effect on the price of rubber. As in this example, this assumption is often perfectly reasonable.

[16] For example, suppose a platform's restraint leads price to rise on side A. In a vacuum, that would suggest the practice is likely anticompetitive. But suppose the restraint is necessary for the platform to attract users on side B. Then the restraint is actually beneficial to users on side A, because the platform would be worthless to them if it could not attract users from side B. Thus, even if we just want to know how the restraint affects side A, it is still necessary to consider its impact upon side B.

[17] Section II(A)(1), infra.

[18] Section II(A)(2), infra.

[19] Section II(A)(3), infra.

[20] Section II(B), infra.

mainly in cases where a platform engages in unilateral conduct to exclude rivals in an adjacent market whose sellers rely on the platform. Courts often lump such activity into a special category of unilateral conduct known as a unilateral refusal to deal, which is evaluated under a highly idiosyncratic and controversial doctrine—the *Aspen* doctrine—that was decimated by the Supreme Court about twenty years ago.

That Court's decision to neuter *Aspen* was justified.[21] It is easily the most economically nonsensical doctrine in antitrust law. It is thus unfortunate that the Court did not formally overturn it. That would have opened the door for courts to develop a coherent alternative. Instead, the Court left the *Aspen* doctrine on life support, technically alive but utterly lifeless. What remains of the doctrine is little more than a formalistic ritual designed to make liability practically unobtainable.[22]

The problem is that many allegations of exclusionary conduct by platforms are technically unilateral refusals to deal, placing them within *Aspen's* dominion. As a result, courts do not subject such allegations to careful or cogent economic analysis. They simply work through the formalistic ritual and dismiss the complaint.

But in fact these platform exclusion allegations have almost nothing in common with the historical cases that shaped existing doctrine. Rather, they raise essentially the same antitrust concern as *Microsoft*—namely, that the defendant is exploiting a dominant platform to exclude rivals in an adjacent market. The only difference is that these platform cases involve unilateral conduct, rather than vertical restraints. But that is not a good reason to subject them to such vastly different legal rules; it is just formalistic line-drawing. I discuss the FTC's case against Facebook as an example of this.[23]

Finally, despite the Supreme Court's effort to embrace platform economics, there are still some cases where courts fail to

[21] Section II(B)(2), infra.

[22] See Erik Hovenkamp, *Antitrust's Refusal-to-Deal Doctrine: The Emperor Has No Clothes*, CPI Antitrust Chronicle (2024).

[23] Section II(B)(1), infra.

account for it.[24] I illustrate this with an example of a novel type of exclusionary conduct, which has so far received very little attention in the antitrust community. A common finding in the platform economics literature is that vertical restraints like exclusive dealing may play an important entry-facilitating role by helping to overcome some of the entry barriers arising in platform markets. Recently, some dominant platforms have begun implementing a novel type of most-favored-nation (MFN) agreement that prevents new entrants from obtaining exclusive dealing contracts. The platform economics literature suggests that such MFNs could impair competition by forestalling competitive entry. But so far the courts have failed to recognize this, instead concluding erroneously that, if anything, the MFNs are procompetitive.

I. *MICROSOFT* AS A MODEL FOR PLATFORM ANTITRUST

Microsoft is often described as a tying case, which makes it sound a little mundane. But in fact it was an early example of what is perhaps the most pervasive antitrust concern associated with dominant platforms today: that a firm may exploit its control of a powerful platform to exclude rivals in adjacent markets that rely upon the platform.[25]

The *Microsoft* court presciently identified a number of distinctive economic issues that would come to dominate economic research on platforms. Better yet, the court accounted for these phenomena in a logical and reasonable way, explaining how they bear on the relevant antitrust questions without letting them overcomplicate the analysis unnecessarily.

At the time of the *Microsoft* case, the term 'indirect network effects' was not yet in widespread use. But the court nevertheless recognized such effects as a key feature of PC operating systems. This is evident from the court's discussion of the "applications barrier to entry."

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[24] Section II(C), infra.

[25] A necessary condition for this concern to arise is that the platform business is vertically integrated into one or more adjacent markets for goods offered on the platform. For discussion of the potential antitrust issues, see, e.g., Erik Hovenkamp, Platform Exclusion of Competing Sellers, 49 J. Corp. L. 299 (2024).

> That barrier—the "applications barrier to entry"—stems from two characteristics of the software market: (1) most consumers prefer operating systems for which a large number of applications have already been written; and (2) most developers prefer to write for operating systems that already have a substantial consumer base.[26]

In this way, the court recognized that an operating system is a kind of two-sided software platform.

An important consequence of network effects is that they create entry barriers.[27] In platform markets, this manifests as a chicken-and-egg problem: to be effective, the platform must gain a critical mass of users on both sides, but nether side wants to be the first to sign up.[28] Users on side A do not want to join the platform until it has many active users from side B, but users on side B feel the same way about users from side A. This difficulty is compounded for a firm attempting to enter a platform market already dominated by a large incumbent. Network effects give large platforms a built-in advantage: they already have many users. This tends to reinforce market power.

The *Microsoft* court understood this.[29] It recognized that indirect network effects were an important piece of evidence suggesting that Microsoft had monopoly power in the operating system market.[30] But, unlike the Supreme Court's *AmEx* decision, it did not suggest that the market's two-sided nature required a special market definition. Nor did it suggest that it might be necessary to balance harms to consumers against any potential benefits to software developers.

The *Microsoft* decision also identified several other important economic concepts related to multi-sided platforms (albeit again without using modern terminology). I will mention two examples: multihoming and disintermediation.

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[26] United States v. Microsoft Corp. 253 F.3d. 34, 55 (D.C. Cir. 2001).

[27] See, e.g., Jullien, Pavan, & Rysman, supra note XXX, at 488.

[28] See, e.g., Bernard Caillaud & Bruno Jullien, *Chicken and Egg: Competition Among Intermediation Service Providers,* 34 RAND J. ECON. 309 (2003).

[29] *Microsoft*, 253 F.3d. at 55.

[30] Id.

A user *multihomes* if she uses multiple competing platforms; otherwise she *singlehomes*. Multihoming allows a user to interact with more users on the other side, since she is not locked into a single platform. In most platform markets, there is significant multihoming on at least one side of the market.[31] For example, almost all popular smartphone apps multihome on both the iPhone and Android app stores, whereas most app users singlehome on one mobile app store.

Multihoming has a significant impact on platform competition.[32] If multihoming is relatively easy (at least on one side), this tends to foster greater competition.[33] If multihoming is hard, then many users will pick the biggest platform just because it has the most users. This makes it hard for new or small platforms to be viable competitors. But if multihoming is easy, then being a smaller platform is not necessarily a death sentence.[34] As a result, a dominant platform may have an incentive to restrain multihoming, which could raise antitrust concerns.

Multihoming was an important issue in *Microsoft*. By default, it was hard for software developers to multihome—that is, to make their software available on multiple operating systems.[35] Software written for one operating system would have to undergo significant modifications before it could be run on a

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[31] In some case multihoming is common on both sides. For example, many consumers carry more than one type of payment card, and most merchants accept more than one card.

[32] *See, e.g.,* Yannis Bakos & Hanna Halaburda, *Platform Competition with Multihoming on Both Sides: Subsidize or Not?,* 66 Management Sci. 5599 (2020); Thomas D. Jeitschko & Mark J. Tremblay, *Platform Competition with Endogenous Homing,* 61 Int'l Econ. Rev. 1281 (2020); Paul Belleflamme & Martin Peitz, *Platform Competition: Who Benefits from Multihoming,* 62 Int'l J. Indust. Org. 1 (2019); Tat-How Teh, Chunchun Liu, Julian Wright, & Junjie Zhou, *Multihoming and Oligopolistic Platform Competition,* Am. Econ. J.: Microeconomics (forthcoming, 2023); Jullien, Pavan, & Rysman, *supra* note XXX, at 519-33.

[33] *See, e.g.,* Catherine Tucker, *Network Effects and Market Power: What Have We Learned in the Last Decade?,* 32 Antitrust 72, 76 (2018).

[34] For example, if consumers of video streaming platforms did not multihome, a niche platform like BritBox (which carries only British shows) would find it very difficult to compete with services like Netflix that have much larger content libraries.

[35] United States v. Microsoft Corp. 253 F.3d. 34, 53 (D.C. Cir. 2001).

different operating system. However, middleware products like Java promised to change that.[36] The expectation was that, by relying on a middleware product's APIs, an app maker could write its software a single time and its product could then be run on multiple operating systems.

Many of the allegations in *Microsoft* centered on its attempt to exclude or undermine middleware products.[37] Its goal was to restrain multihoming by software developers. It knew that, if multihoming were not cost effective for many developers, than most of them would make their products available on Windows exclusively, which in turn would ensure that it remained the most popular operating system among consumers as well.

In fact, there was some indication that middleware products might eventually be able to replace an operating system altogether.[38] That would be an example of *disintermediation*: when users bypass a platform and interact directly.[39] Most notably, Microsoft worried that consumers would eventually be able to access software programs directly through web browsers, without the need for a full-blown operating system like Windows.[40] As such, the court viewed Microsoft's attempts to exclude rival browsers like Netscape as an effort to protect its operating system monopoly from a potential source of future competition.

II. MISSTEPS IN PLATFORM ANTITRUST CASES

Unfortunately, not all courts evaluating platform conduct have lived up to the high bar set in *Microsoft*. In this section, I discuss three major missteps that are currently undermining the antitrust analysis of platform conduct in the United States.

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[36] Id.

[37] Id.

[38] Id.

[39] See, e.g., Grace Y. Gu, *Technology and Disintermediation in Online Marketplaces*, 70 Management Science 7868 (2024).

[40] Microsoft's fear was eventually realized upon the release of Google's Chromebooks—laptops that rely on the Chrome browser rather than a traditional operating system.

A. Overcorrecting for Platform Issues: the *AmEx* Decision

By the time of the Supreme Court's *AmEx* decision in 2018,[41] the economic literature on platforms was immense. The Court embraced the importance of this growing body of work and its implications for competition policy.[42] That's a good thing. Unfortunately, the Court also adopted a deeply confused policy on how platform economics should be accounted for.

AmEx centered on certain pricing restrictions that AmEx imposes on its merchants.[43] Payment cards facilitate payment exchanges between cardholders and merchants. They charge fees to merchants for every transaction, while consumers generally pay no transaction fees.[44] AmEx charges merchants higher transaction fees than most other payment cards.[45] As a result, merchants have an incentive to "steer" AmEx cardholders toward alternative payment methods by offering to reduce the purchase price if they pay with a different card.[46] This caused a precipitous drop in the use of AmEx cards.[47] To combat this, AmEx introduced "anti-steering" restrictions, which prohibited merchants from charging more for AmEx purchases than for purchases made with competing credit cards.[48]

The Department of Justice, along with a handful of states, challenged the restrictions. The district court concluded that the restrictions indeed had an anticompetitive effect.[49] En route to that determination, the court faced a fierce debate over how to define the market. AmEx insisted that the market must be

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[41] Ohio v. Am. Express Co., 138 S. Ct. 2274 (2018).

[42] Id. at XXX.

[43] Id. at XXX.

[44] On the contrary, cardholders usually receive rewards (e.g. miles) for transactions, which is akin to a negative transaction fee. Many cards do require consumers to pay annual membership fees, however.

[45] Id. at XXX.

[46] This is equivalent to imposing a surcharge on AmEx purchases.

[47] United States v. Am. Exp. Co., 88 F. Supp. 3d 143, 161 (E.D.N.Y. 2015) (merchant steering "contributed to a 25-45% shift in card volume from American Express to Visa.")

[48] Ohio v. Am. Express Co., 138 S. Ct. 2274, 2283 (2018).

[49] United States v. Am. Exp. Co., 88 F. Supp. 3d 143, 187 (E.D.N.Y. 2015).

defined to include a platform's dealings with both merchants and cardholders.[50] The court disagreed. It held that, for antitrust purposes, a payment network's dealings with cardholders and merchants constitute "two separate, yet deeply interrelated markets." It then accepted the plaintiffs' proposed market definition, which was limited to the merchant side.[51]

The Second Circuit reversed.[52] It held that the market had to be defined to include both sides. The Justice Department then dropped out of the case, while the states sought, and received, Supreme Court review. In a 5-4 decision, the majority affirmed the appellate court's reversal.[53] It held that, in antitrust cases centering on "two-sided transaction platforms," the market must be defined to include both sides of the platform.[54] This is necessary, the Court contended, because "competition cannot be accurately assessed by looking at only one side of the platform in isolation."[55]

The Supreme Court was right that antitrust needs to account for the distinctive economic features of platform markets.

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[50] Id. at 172.

[51] Id. at 175.

[52] United States v. Am. Express Co., 838 F.3d 179, 184 (2d Cir. 2016), aff'd sub nom. Ohio v. Am. Express Co., 138 S. Ct. 2274 (2018).

[53] Id. The majority held not only that the market must be defined to include both sides, but also that the anti-steering restrictions were not anticompetitive. I will focus on the former aspect of the decision, although I note that the latter has also been the subject of widespread criticism. *See* Erik Hovenkamp, *Platform Antitrust*, 44 J. Corp. L. 713 (2019); Steven C. Salop, Daniel Francis, Lauren Sillman, & Michaela Spero, *Rebuilding Platform Antitrust: Moving on from Ohio v. American Express,* 84 Antitrust L.J. 883, 895-98 (2022); Michael L. Katz & A. Douglas Melamed, *Competition Law as Common Law: American Express and the Evolution of Antitrust*, 168 U. Pa. L. Rev. 2061 (2020); John B. Kirkwood, *Antitrust and Two-Sided Platforms: The Failure of American Express*, 41 Cardozo L. Rev. 1805 (2019); Michael L. Katz, *Platform Economics and Antitrust Enforcement: A Little Knowledge Is a Dangerous Thing,* 28 J. Econ. Management Strat. 138 (2019); Michael Katz & Jonathan Sallet, *Multisided Platforms and Antitrust Enforcement,* 127 Yale L.J. 2142 (2017); Jens-Uwe Franck & Martin Peitz, *Market Definition in the Platform Economy*, 23 Cambridge Yearbook of European Legal Studies 91 (2021).

[54] The Court noted, however, that this is not necessary if indirect network effects are relatively weak in one or both directions.

[55] *Id.* at 2287.

But the *AmEx* decision was a substantial overcorrection and is likely to cause more problems than it solves. First, the need to consider both sides of users does not require AmEx's market definition rule, even if one believes that both sides' welfare should be taken into account.[56] Second, the decision raises substantial administrative challenges.[57] Taken together, these points imply that *AmEx* undermines antitrust enforcement for no good reason. Third, the Court's rule leads to economic nonsense in some cases, as some fundamental market-based variables (e.g. market power) may differ between the two sides.[58]

I conclude that the district court (and the dissenting Justices) had it right: courts must account for the interdependence between sides, but they should continue to regard them as separate markets for antitrust purposes.

1. The AmEx *Rule Is Unnecessary*

Under the consumer welfare principle, courts assess whether a restraint is anticompetitive based on how it affects the wellbeing of consumers in the relevant market. The *AmEx* decision implies that, in a two-sided market, users on both sides count as "consumers" for antitrust purposes. This raises serious difficulties, because a platform's conduct may affect the two sides in very different ways. For example, it could harm one side while benefitting the other. In such cases, establishing anticompetitive effects requires plaintiffs to balance or "net out" welfare effects between the two sides.

This has a major impact on how platform cases are adjudicated. Most antitrust cases are evaluated under the *rule of reason*—a multi-step legal framework that allocates proof burdens between the litigants.[59] The plaintiff has the initial burden to show anticompetitive effects. This requires evidence that the challenged conduct is likely to restrain competition in a way that is likely to harm consumers in the relevant market.

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[56] Section XXX, infra.

[57] Section XXX, infra.

[58] Section XXX, infra.

[59] *See, e.g.,* Michael A. Carrier, *The Four-Step Rule of Reason,* 33 Antitrust 50, 50-51 (2019).

If the plaintiff can show this, the burden then shifts to the defendant to demonstrate a procompetitive justification. The burden then shifts back to the plaintiff to show a "less restrictive alternative"—a less anticompetitive (but still practicable) course of conduct that would achieve substantially the same procompetitive benefits. If the plaintiff fails here, the analysis proceeds to a final step in which the court attempts to balance the anticompetitive and procompetitive effects. However, in practice, this step is almost never reached.[60]

Importantly, a court's market definition may affect what procompetitive effects are legally cognizable at step 2. In particular, a court may refuse to consider "out-of-market benefits" (i.e. benefits falling outside the relevant market) as a defense. This restriction is standard practice in merger cases.[61] In nonmerger cases, there is some dispute over whether out-of-market benefits are cognizable.[62] For example, some courts have seemed to indicate that consumer benefits (e.g. lower prices) could be a cognizable defense for anticompetitive harm to workers.[63]

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[60] See, e.g., Michael A. Carrier, *The Rule of Reason: An Empirical Update for the 21st Century*, 16 Geo. Mason L. Rev. 827, 828-829 (2009); Andrew I. Gavil, *Burden of Proof in US. Antitrust Law*, *in* 1 ISSUES IN COMPETITION LAW AND POLICY 137-38 (2008); Michael L. Katz & A. Douglas Melamed, *Competition Law as Common Law: American Express and the Evolution of Antitrust*, 168 U. Pa. L. Rev. 2061, 2074 (2020).

[61] The Clayton Act prohibits a merger that lessens competition "in any line of commerce … in any section of the country." 15 U.S.C. §18. Courts have interpreted this to mean that harm in any market triggers liability, implying that harms and benefits cannot be balanced between separate markets. United States v. Philadelphia Nat'l Bank, 374 U.S. 321, 370 (1963).

[62] It is sometimes suggested that the Supreme Court disapproved of out-of-market benefits in *Topco,* where it noted that "to weigh, in any meaningful sense, destruction of competition in one sector of the economy against promotion of competition in another." United States v. Topco Assocs., Inc., 405 U.S. 596, 609–10 (1972). However, this is arguably dicta, and no other Supreme Court decision (nor any statute) explicitly forbids consideration of out-of-market benefits. See, e.g., Erika M. Douglas, Reconsidering the 'Rule' Against Cross-Market Justifications in Conduct Cases*, in* Judging Big Tech: Insights On Applying U.S. Antitrust Laws to Digital Markets 67 (Laura Alexander ed., 2022).

[63] *See, e.g.,* Hiba Hafiz, *Labor Antitrust's Paradox*, 86 U. Chi. L. Rev. 381, 392-98 (2019).

The Supreme Court recently acknowledged this open question but declined to weigh in on it.[64] But in some past cases, the Court has appeared to recognize certain out-of-market benefits.[65] Note, however, that even if such benefits are deemed cognizable, it is the defendant's burden to prove them in step 2.

If a market is defined to subsume just one side of platform users, then any benefits to the other side are out-of-market. Thus, depending on how the market is defined, and upon whether out-of-market benefits are deemed cognizable, there are three possible ways that courts could address the two-sidedness of platform markets. To fix ideas, suppose a plaintiff alleges anticompetitive effects on side A, while the defendant believes there are countervailing benefits on side B. In such a case, the three options are:

> **Option 1:** The market is defined to include only side A, and benefits on side B are deemed non-cognizable. At step 1, the plaintiff need only show anticompetitive effects on side A.[66] At step 2, the only cognizable benefits are benefits to users on side A. Hence, under this option, it is never necessary to balance welfare effects between sides.
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> **Option 2:** The market is defined to include only side A, but effects on side B are deemed cognizable. At step 1, the plaintiff need only show anticompetitive effects on side A. At step 2, the defendant can carry its burden by proving countervailing benefits on side B. Balancing of welfare effects between sides may be necessary, but only if the case reaches the final step.
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> **Option 3.** The market is defined to include both side A and side B. In step 1, the plaintiff must establish a *net* harm to both sides combined.[67] Hence, welfare balancing is required at the first step.

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[64] Nat'l Collegiate Athletic Ass'n v. Alston, 141 S. Ct. 2141, 2155 (2021).

[65] See Epic Games, Inc. v. Apple, Inc., 67 F.4th 946, 989 (9th Cir. 2023) (discussing two examples).

[66] Note, however, that this may still require consideration of how the defendant's conduct affects side B, since the two sides are interdependent. See notes XXX, infra, and accompanying text.

[67] As noted above, this is a consequence of the consumer welfare principle. If users on both sides count as "consumers," then anticompetitive harm means harm to the combination of both sides.

The *AmEx* majority adopted option 3, while the dissenting justices advocated option 2.[68] Likewise, most critics of the *AmEx* decision appear to view option 2 as the correct way to address conduct in two-sided markets.[69] Arguments given in favor of the *AmEx* decision usually make some erroneous assumptions about our alternative options for evaluating platform conduct. It is therefore worth noting some subtle points about these different options.

First, notice that options 2 and 3 both consider welfare effects on both sides, even though it is only the latter that *defines the market* to include both sides. This highlights a crucial point, which is that defining the market to comprise just one side does not imply that we are disregarding welfare effects on the other side. Instead, options 2 and 3 differ only in how proof burdens are allocated between the litigants (more on this shortly).

The upshot is that, even if one feels strongly that courts should account for welfare effects on both sides, it still does not follow that *AmEx* was correct. Option 2 would do that as well—and much more effectively, as I explain below.[70] Unfortunately, observers who are unfamiliar with the minutiae of antitrust practice sometimes incorrectly assume that a rejection of the *AmEx* decision would mean ignoring one side of the market.[71] It does not help that antitrust legal scholars who support *AmEx* sometimes mischaracterize the decision that way.[72]

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[68] **CITE dissent**

[69] See, e.g., Steven C. Salop, Daniel Francis, Lauren Sillman, & Michaela Spero, *Rebuilding Platform Antitrust: Moving on from Ohio v. American Express,* 84 Antitrust L.J. 883 (2022);

[70] Section XXX, infra.

[71] See, e.g., Gunnar Niels, *Transaction versus Non-Transaction Platforms: A False Dichotomy in Two-Sided Market Definition*, 15 J. Comp. L. & Econ. 327, 330 (2019) (equating the consideration of both sides with the *AmEx* market definition rule); Bruno Jullien & Wilfried Sand-Zantman, *The Economics of Platforms: A Theory Guide for Competition Policy*, 54 Info. Econ. & Pol. 1, 10 (2021) (same).

[72] See, e.g., Brief for Amici Curiae Antitrust Law & Economics Scholars in Support of Respondents, Ohio v. Am. Express Co., 138 S. Ct. 2274 (2018) (No. 16-1454) (suggesting that, without the *AmEx* rule, courts would focus "on one side of the market alone").

The truth is that everyone, including AmEx's critics, understand the need to consider both sides. Indeed, I am not aware of any judge or antitrust scholar who has ever advocated for a policy of simply ignoring one side of the market. Even the district court in *AmEx*, which refused to include both sides in its market definition, emphasized the need to consider both sides:

> The functional reality of a multi-sided platform must be taken into account, since the antitrust significance of a restraint that nominally affects conduct on only one side of the platform cannot be assessed without considering its impact on the other side of the platform.[73]

The four dissenting Supreme Court Justices in *AmEx* made similar remarks.[74] As have the many antitrust experts who have criticized the *AmEx* decision.[75]

What about option 1? It may appear that this option would "ignore" the effect of the conduct on side B, but that is not quite right. The two sides are interdependent. Thus, even if one is focused on how the conduct affects welfare on side A, it may still be necessary to assess how the conduct affects user *behavior* on side B, since the latter affects the former.[76] Most notably, if the conduct affects the number of B-side users who join the platform, that will affect the welfare of users on side A, due to indirect network effects.

This highlights another subtle point that is often overlooked. There is a tendency to equate "considering both sides" with balancing of welfare effects between sides. But in fact, these things are entirely independent. The need to consider both sides is not optional; it is compelled by economics. The interdependence between sides means that we often *must* consider both sides, even if we are only interested in how a practice affects welfare on one side. But welfare balancing is not mandatory; it is a policy choice. Just as antitrust refuses to let an increase in defendants' profits

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[73] United States v. Am. Exp. Co., 88 F. Supp. 3d 143, 175 (E.D.N.Y. 2015).

[74] **CITE dissent**

[75] See, e.g., any of the references listed in note XXX, supra.

[76] Most notably, if the conduct affects the number of B-side users who join the platform, that will affect the welfare of users on side A, due to indirect network effects. See notes XXX, infra, and accompanying text.

justify harm to consumers,[77] it could refuse to let welfare benefits on one side justify anticompetitive harm on the other. This is what option 1 would do.

In fact, option 1 is exactly analogous to how antitrust treats resale price maintenance (RPM) and similar restraints on distribution and resale. In an RPM case, an upstream manufacturer imposes restrictions on what prices its downstream retailers can set (usually a minimum price level).[78] This raises retail prices. And, yet, today we understand that RPM often raises aggregate output, suggesting it is actually good for consumers.[79] This is because RPM affects retailers' behavior in ways that benefit consumers. It bolsters their incentives to carry and promote the good, for example.[80] This leads to many sales to consumers who would otherwise not obtain the good, either because they didn't know about it or because it wasn't available where they shop.

This is very analogous to a basic fact about platform markets, which is that requiring side A to pay more to side B can enhance welfare on side A to the extent that it raises participation on side B. For example, Uber riders would not necessarily benefit if ride prices were extremely low, because in that case very few riders would bother to sign up. It is the same with retailers—if they compete all their profits away, they have little interest in selling the good.

Importantly, however, in RPM cases we do not define the market to include both retailers and consumers. Nor has anyone ever suggested that we should balance retailers' welfare against

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[77] This is implied by the fact that antitrust employs a consumer welfare standard rather than a total welfare standard. *See, e.g.,* Steven C. Salop, *Question: What Is the Real and Proper Antitrust Welfare Standard—Answer: The True Consumer Welfare Standard*, 22 Loy. Consumer L. Rev. 336 (2009); Barak Y. Orbach, *The Antitrust Consumer Welfare Paradox*, 7 J. Competition L. & Econ. 133 (2010).

[78] In RPM cases, *See, e.g.,* Frank Mathewson & Ralph Winter, *The Law and Economics of Resale Price Maintenance*, 13 Rev. Indus. Org. 57 (1998).

[79] Id.

[80] The idea is that, by default, competing retailers selling the same good will compete intensely to the point that they make almost no money on sales of the good. But then they have little incentive to carry or promote the good. *See, e.g.,* Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877 (2007).

consumer welfare.[81] And yet we still have to consider how the RPM affects retailers—namely, its effect on their *behavior*—in order to determine the impact on consumer welfare. Option 1 would operate in exactly this way in platform cases.

Hence, we conclude that all three options would require courts to "consider both sides" of the platform. As such, in choosing an option, the question is not *whether* we should consider both sides, but *how*. In this respect, *AmEx* stands out from the other options by skewing the allocation of proof burdens in a way that makes antitrust litigation intractable, as the next section explains.

2. The AmEx *Rule Is Intractable*

The *AmEx* decision is not just unnecessary. It also creates serious problems that will undermine antitrust enforcement. Its market definition rules takes a hard problem that we are already familiar with—countervailing harms and benefits—and makes it exponentially harder than it needs to be. Even in traditional (one-sided) markets, defendants' conduct often has countervailing pro- and anticompetitive effects on the consumer base. Under the rule of reason, those harms and benefits will have to be balanced if the case reaches the final step of the rule-of-reason analysis. Even in this simpler context, a rigorous balancing of welfare is usually infeasible, and courts routinely decry its intractability.[82]

The AmEx decision makes this difficulty much more pronounced. For one thing, it moves balancing from the final step of the rule of reason analysis (which is rarely reached in practice) to the first step, effectively making balancing mandatory. This is especially problematic, because welfare balancing between the sides of a platform is inherently much more difficult than the kind of balancing that normally comes up in antitrust cases. There are several reasons for this. One is indirect network effects, which imply that a user's welfare (holding quality fixed) depends not

[81] Rather, if one could show definitively that an RPM arrangement harms consumers, then it would be illegal regardless of how profitable it is for retailers.

[82] *See, e.g.,* 42nd Parallel N. v. E St. Denim Co., 286 F.3d 401, 405 (7th Cir. 2002); Impax Lab'ys, Inc. v. Fed. Trade Comm'n, 994 F.3d 484, 497-98 (5th Cir.); Saint Alphonsus Med. Ctr.-Nampa Inc. v. St. Luke's Health Sys., Ltd., 778 F.3d 775, 790 (9th Cir. 2015).

only on price, but also on the extent of participation by users on the other side. This complicates the analysis significantly.

In fact, even setting aside this dependence of welfare on participation, it is often much hard to rely on price levels as a proxy for aggregate (two-sided) welfare effects in platform markets. In a traditional antitrust case, "consumer welfare" refers to a single group of agents who all pay the same price. In that case, we can safely assume that a price increase will harm consumers. But in a platform market, the two sides usually face different price terms.[83] Thus, if a platform's conduct leads price to rise on one side and fall on the other, the net effect on aggregate user welfare is in general ambiguous.

These points do not necessarily suggest that it is a bad idea to consider countervailing welfare effects on both sides. But they do suggest that it is a mistake to make such complex balancing a part of the plaintiff's initial burden. This relates to the second serious problem, which is that the *AmEx* decision also does not allocate burdens equitably. The rule of reason is supposed to make complex cases more manageable by distributing proof burdens between the parties in a reasonable way. The plaintiff has to give evidence of a meaningful anticompetitive effect, but it is then the defendant's obligation to show a procompetitive benefit. *AmEx* departs from this standard. To carry its initial burden, it is not enough for the plaintiff to show harm on side A, it must also *affirmatively disprove* any countervailing benefits on side B (or at least show that they are outweighed by the harm to A).

This comes at a serious cost. There are good reasons for dividing proof burdens between the litigants. If the defendant's conduct is in fact motivated by some procompetitive user benefits, the defendant is in the best position to prove them. Only once some concrete benefits are established should we consider the necessity of trying to balance countervailing welfare effects. The *AmEx* decision undermines antitrust enforcement by forgetting these principles.

3. The AmEx *Rule Produces Nonsense*

[83] In many cases, one side doesn't pay anything.

Another serious problem with *AmEx* is that, if courts attempt to lump both sides into a single "relevant market," some basic antitrust concepts about markets can no longer be defined coherently. For example, there may be no meaningful way to specify how competitive the market is or how much market power the defendant has. The problem is that these measures may differ between the two sides of the platform, making it impossible to apply them to a "market" that subsumes both sides.

Antitrust defines markets boundaries based on substitutability.[84] Specifically, a "relevant market" is defined to be a collection of reasonably close substitutes, where the degree of substitutability determined from the perspective of the firms' customers.[85] Substitutes also affect market power and the intensity of competition. The availability of more close substitutes for a firm's product reduces its ability to raise price above competitive levels and thus elicits more competitive behavior.

The problem is, users on different sides of a platform may strongly disagree about the degree of substitutability between the platform and other companies. This, in turn, means that competition may be more intense on one side of the market, or that a given platform may have more market power over one side than the other.

The two sides can disagree about substitutability for several reasons. First, when two platforms facilitate different types of interactions, one side may view them as wholly independent even if the other views them as close substitutes. For example, drivers may regard ride-sharing services (e.g. Uber) and delivery platforms (e.g. Door Dash) as close substitutes. But the consumers on these platforms do not view them as substitutable at all.[86] Second, platforms may compete with ordinary one-sided firms on one side of the market. In such cases, only the users on that side will view those firms as substitutes. For example, travelers view Airbnb and hotels as substitutes, but the hosts on Airbnb do not.

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[84] *See, e.g.,* Jonathan B. Baker, *Market definition: An Analytical Overview*, 74 ANTITRUST L.J. 129 (2007).

[85] *Id.* at 132 ("U.S. courts have long emphasized that markets should be defined with respect to the economic force of demand (buyer) substitution.")

[86] Nor do restaurants.

Third, even if two platforms intermediate the same type of interactions, differences in "homing" patterns may lead the two sides may disagree about their substitutability. To see this, consider the so-called "competitive bottleneck" model, wherein buyers singlehome while sellers multihome.[87] For example, app users view the two leading mobile app stores (Apple's App Store and the Google Play Store) as close substitutes because they offer similar selections of apps. However, most consumers will singlehome on one app store, depending on which type of smartphone they buy. As a consequence, app developers do *not* view the app stores as close substitutes, because they cannot be used to reach the same consumers—each confers access to a distinct set of app users. Thus, app developers view the app stores as largely independent.[88] This limits competition on the app developer side of the market, which in turn enables platforms to exert more market power over users on that side.[89]

In cases like these, if one defines the market to include both sides, then "it does not make sense to speak of the competitiveness of the market."[90] Instead, one can speak only of the degree of competitiveness on a given side of the market. Similarly, while it is certainly possible to speak of a platform's market power over one side or the other, there may be no coherent way to define its market power over the sum of both sides.

As this shows, under the *AmEx* market definition rule, basic antitrust concepts start to break down and lose their meaning. This is a clear sign that the *AmEx* decision is seriously flawed, not just for practical reasons but also on economic grounds. The better approach is to recognize the two sides as separate but closely interrelated markets. This avoids the conceptual problems discussed above, while still accounting for the distinctive economic features of platform markets.

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[87] *See, e.g.,* Mark Armstrong, *Competition in Two-Sided Markets*, 37 RAND J. ECON. 668 (2006).

[88] *See, e.g.,* Jullien, Pavan, & Rysman, *supra* note XXX, at 528 (in the competitive bottleneck, sellers "choose whether or not to join each platform as if it were a monopoly").

[89] *Id.* ("there is no direct competition between the two platforms to attract [sellers]" in a competitive bottleneck).

[90] Mark Armstrong, *Competition in Two-Sided Markets*, 37 RAND J. ECON. 668, 680 (2006).

B. Evaluating Platform Conduct with Formalistic Legal Doctrine

Much of the antitrust controversy surrounding platforms centers on essentially the same concerns addressed in *Microsoft*—namely, that a vertically integrated defendant might exploit a dominant platform to exclude rivals in an adjacent market who use (or interoperate with) the platform.[91] In fact, by controlling both sides of a marketplace, many dominant platforms can accomplish this through purely unilateral conduct. What is disturbing, however, is that courts presently evaluate most of that conduct under a highly formalistic legal doctrine that utterly disregards the relevant economics issues.

1. Example: FTC v. Facebook

The FTC's case against Facebook is a good example.[92] The case is mainly known for its challenge to Facebook's acquisitions of Instagram and WhatsApp. But the complaint originally included an additional claim, which centered on Facebook's unilateral conduct toward third-party app makers.[93] Facebook offers APIs that enable third-party apps to interoperate with its flagship social platform ("Facebook Blue"). It normally provides these APIs for free. However, Facebook instituted a policy under which it would selectively withhold APIs from app makers whose products compete with Facebook's products, including Facebook Blue and Facebook Messenger.[94]

For example, Facebook withheld APIs from competing messaging apps. If not for this, those messaging apps could have relied on interoperability with Facebook Blue to reach more consumers.[95] Facebook also refused APIs to "promising apps with some social functionality but which were not yet full-fledged

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[91] See Erik Hovenkamp, Platform Exclusion of Competing Sellers, 49 J. Corp. L. 299 (2024).

[92] FTC v. Facebook, Inc., 560 F. Supp. 3d 1 (D.D.C. 2021).

[93] FTC v. Facebook, Inc., 560 F. Supp. 3d 1, 10–11 (D.D.C. 2021).

[94] Id.

[95] For example, one Facebook API enables a "find friends" feature that lets an app's existing users to invite their Facebook friends to try the app. Id. at 9.

competitors to Facebook Blue."[96] This resembles the situation in *Microsoft*, where the court noted that the excluded browsers had the potential to compete with the Windows OS in the future, although they were not yet direct competitors.[97]

I do not claim that the case for antitrust liability was as strong in *Facebook* as it was in *Microsoft*.[98] My interest is not in the outcome of the *Facebook* case, but in how courts evaluate such cases in general. From an economic perspective, *Facebook* raised the same concern as *Microsoft*—that the defendant is exploiting a dominant platform to exclude rivals in an adjacent market. Thus, it stands to reason that courts should apply similar legal standards in the two cases.[99]

But that is not what happened. Unlike *Microsoft*, which involved a range of practices that included vertical agreements, *Facebook*'s behavior was purely unilateral. And the court held that it fell within a category of unilateral conduct known as a *unilateral refusal to deal* (RTD).[100] That determination ensured that the court's analysis would look nothing at all like *Microsoft*.

As the *Microsoft* opinion reflects, antitrust law is normally flexible and not overly formalistic. And it usually attempts to base liability decisions on concrete economic ideas. By contrast, RTD doctrine is extremely formalistic. It employs a rigid and highly idiosyncratic test—which I'll call the "*Aspen* test"—that is largely divorced from economics. In most circuits—including the Ninth Circuit, where *Facebook* arose—the *Aspen* test has the following elements:[101]

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[96] The court mentions Vine—a now-defunct video-sharing app (similar to TikTok)—as an example of one of the firms that was excluded.

[97] CITE Microsoft at 53-54.

[98] In *Microsoft*, evidence suggested that rival browsers were largely cut off from the most effective distribution channels. In *Facebook*, it was less clear that the denial of APIs would so seriously jeopardize the ability of rival apps to reach consumers.

[99] Erik Hovenkamp, The Antitrust Duty to Deal in the Age of Big Tech, 131 Yale L. J. 1483 (2022).

[100] FTC v. Facebook, Inc., 560 F. Supp. 3d 1, 28 (D.D.C. 2021).

[101] See, e.g., Novell, Inc. v. Microsoft Corp., 731 F.3d 1064, 1074–75 (10th Cir. 2013); FTC v. Qualcomm Inc., 969 F.3d 974, 994–95 (9th Cir. 2020).

(1) There was a history of voluntary dealing between the defendant and its rival(s).
(2) The defendant unilaterally discontinued those dealings.
(3) The defendant sacrificed short-run profits by discontinuing its prior dealings, and its only conceivable purpose for that sacrifice was to reap long-run monopoly profits by excluding the rival(s).

I will discuss the origins of this unusual test in the next subsection. For now, I simply want to emphasize how drastically this test deviates from the more general legal standard applied in *Microsoft* and most other Section 2 cases.

Notice that the *Aspen* test does not inquire into the actual competitive effects of the defendant's conduct. Instead, it focuses myopically on the defendant's intent.[102] As such, the test makes exclusionary intent a prerequisite for liability. This emphasis on intent rather than competitive effects is unlike any other area of antitrust law. Indeed, the point of antitrust is to identify and proscribe practices that harm competition—not to police firms' motives. The *Microsoft* decision captured this succinctly:

> [I]n considering whether the monopolist's conduct on balance harms competition . . . our focus is upon the effect of that conduct, not upon the intent behind it. Evidence of the intent behind the conduct of a monopolist is relevant only to the extent it helps us understand the likely effect of the monopolist's conduct.[103]

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[102] Omitting a few caveats, the idea is that firms engaged in ordinary competitive behavior do not usually forsake their own profits. So, if a firm's refusal to deal is unprofitable in the short run, but is likely to exclude rivals in the future (potentially raising long-run profits), then this may suggest that the refusal was motivated by exclusion. The voluntary prior dealing element is simply an adjunct to the profit sacrifice requirement. It implies that the dealings were profitable for the defendant (otherwise it would not have agreed to them), which may suggest the defendant is sacrificing profits by discontinuing those dealings. Courts sometimes erroneously state that the *Aspen* test is not just about intent—that what really matters is a willingness to sacrifice profits. See, e.g., FTC v. Facebook, Inc., 560 F. Supp. 3d 1, 23-24 (D.D.C. 2021). But this is nonsense. There is nothing inherently problematic about a firm sacrificing profits. The only reason we might care about a profit sacrifice is that it could help to infer exclusionary intent.

[103] CITE Microsoft at 59

Consistent with this, the *Microsoft* court did not dwell on the defendant's intent. Instead, it simply evaluated Microsoft's conduct, taking into account distinctive features of the market, and asked whether it was likely to impair competition. This analysis focused mainly on two things: (a) the extent to which rivals like Netscape were foreclosed by Microsoft's conduct; and (b) possible procompetitive justifications.

By contrast, the *Facebook* court did not inquire into those things at all. It simply applied the *Aspen* test and found no liability on that basis. For some API denials, there was no history of prior dealing (that is, Facebook had not previously given APIs to the rival in question). In other cases, the court found that there was insufficient evidence that Facebook had sacrificed short-run profits by withholding APIs.[104]

It is hard to imagine a more economically nonsensical basis for determining liability in a case like this. Suppose the court had looked into the actual effects of Facebook's conduct and found that it generated substantial foreclosure. Then, if it turns out that Facebook had not previously given APIs to an excluded rival, why would we regard this fact as exculpatory? That would suggest that anticompetitive exclusion is fine so long as you start doing it right away. And why should we care if Facebook's conduct sacrificed short-run profits? Our interest is in how the conduct affects competition, not profits.

2. Doctrinal Origins

As indicated above, antitrust recognizes RTDs as a special category of unilateral conduct. In broad outline, an RTD case involves a situation where a defendant monopolist refuses to grant rivals access to something that would help them compete. This section briefly explains why courts have tended to be mostly hostile to RTD claims, and why this hostility is partially justified. However, as the next section then explains, in many cases involving unilateral platform conduct, the RTD label is simply a formalistic distinction with no real economic import.

[104] FTC v. Facebook, Inc., 560 F. Supp. 3d 1, 24-25 (D.D.C. 2021). Additionally, the court rejected liability for some API denials because they occurred too long ago. Id. at 25-26.

The modern era of RTD caselaw began with *Aspen*.[105] The case centered on a dispute between neighboring ski resorts. They had previously cooperated by offering an "all-Aspen pass" that provided a purchaser with access to both of their skiing areas.[106] But the defendant stopped participating and it rebuffed the plaintiff-rival's attempts to buy the defendant's passes (at full retail price) so that it could continue offering a bundle of passes to both resorts.[107] Because the plaintiff's resort was much smaller, most consumers choosing between the two opted for the defendant. As a result, the plaintiff went out of business. The Supreme Court upheld a jury verdict finding the defendant liable. In the Court's view, the evidence suggested that the defendant likely sacrificed short-run profits by discontinuing the all-Aspen pass, suggesting that its conduct was motivated by exclusion.

Twenty years later, the Supreme Court revisited RTDs in *Trinko*.[108] This time, the Court was much more hostile to the doctrine. Although it did not formally overturn *Aspen*, it indicated that the scope of liability should be kept very narrow.[109]

Consequently, lower courts have largely confined RTD liability to the peculiar facts of *Aspen*. Thus, most courts now evaluate RTDs using the *Aspen* test outlined in the previous section. Note that, while the test is fundamentally an intent test, it is more specific than that, because it places severe restrictions on *how* a plaintiff must prove exclusionary intent. In particular, it must be proven using the same facts employed in *Aspen* (prior dealing, profit sacrifice, etc.). Other possible sources of intent evidence are simply rejected by fiat.

The *Aspen* test is extremely hard to satisfy. *Aspen* was a strange and idiosyncratic case, and few other cases are sufficiently factually similar to pass the test. This achieves the *Trinko*'s goal of maintaining a very narrow scope of liability.

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[105] Aspen Skiing Co. v. Aspen Highlands Skiing Corp., 472 U.S. 585 (1985).

[106] This is where the "prior voluntary dealing" element comes from.

[107] Id. at 593-94.

[108] Verizon Commc'ns Inc. v. L. Offs. of Curtis V. Trinko, LLP, 540 U.S. 398 (2004) (denying liability for a regulated telecom company's refusal to deal with rivals).

[109] Id. at 399 ("*Aspen* is at or near the outer boundary of §2 liability").

Indeed, the Facebook court described RTDs as "essentially per se lawful."[110] Consistent with this, no plaintiff in an RTD case has won a final judgment in the post-*Trinko* era.[111]

Why the hostility? Some RTD claims, if taken seriously, would cause major problems, as the Court emphasized in *Trinko*. The most important concern is that, if successful firms are required to share their technology or other resources with smaller rivals, this could chill investment by creating a free-riding problem.[112] A secondary concern is about administrability. The remedy for an RTD is compulsory dealing, but courts may not be equipped to set the terms of complex business transactions.[113]

As an example, suppose that my company (a dominant firm) achieved success because I invested billions to create my own state-of-the-art shipping yard. This cut down my distribution costs greatly. My rivals would like to use my shipping yard, but I refuse to let them. I don't want to share my competitive advantage, as that would erode my monopoly position. But what if antitrust compels me to let rivals use my shipping yard?[114] That would clearly stimulate competition. But it would also have a devastating effect on private investment.[115] And it would violate the bedrock antitrust principle that a monopoly earned "on the

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[110] FTC v. Facebook, Inc., 560 F. Supp. 3d 1, 22 (D.D.C. 2021) (citing Daniel A. Crane, Does Monopoly Broth Make Bad Soup?, 76 Antitrust L.J. 663, 669 (2010)).

[111] One district court judgment found liability for an RTD, but this was overturned on appeal. Qualcomm Inc., 969 F.3d at 994–95.

[112] Id. at 407-408 (compelling such firms to share the source of their advantage . . . may lessen the incentive . . . to invest in those economically beneficial facilities").

[113] Id. ("Enforced sharing also requires antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing—a role for which they are ill suited.")

[114] Let us assume they are willing to cover the costs I would incur by accommodating them.

[115] A firm will not want to invest in valuable new technologies if it believes it will be forced to share them with rivals. Nor would rivals have an incentive to develop their own competing technologies; it would be easier to exploit the antitrust system to free ride on others' hard work.

merits" (e.g. through innovation or efficiency) is a lawful monopoly.[116]

Accordingly, there are good reasons for the courts' concerns about RTD claims. As the shipping yard hypo shows, some RTD should be permitted even if they preserve a monopoly by preventing an increase in competition. In other words, the fact that forced sharing of a technology would stimulate competition should not, as a general rule, create liability when the technology's owner refuses to share it. We must also have some good reason to believe that liability would not chill investment.

Note, however, that current RTD doctrine does nothing constructive to address this concern. Its focus on intent is a pointless sideshow. Intent is irrelevant to the question of whether liability would facilitate harmful free-riding.[117] Indeed, in the shipping yard hypo, the RTD was plainly motivated by exclusion, and yet it was clear that liability would be inappropriate.

Existing law addresses the investment concern only in the most ham-handed way possible: by effectively eliminating RTD liability across the board. It accomplishes this by using the *Aspen* test to make it practically impossible to establish the requisite exclusionary intent. The obvious downside of this approach is that it makes no real effort to distinguish meritorious RTD claims from problematic ones. This is a major impediment to platform antitrust, as the next section explains.

3. Fixing the Problem

The core difficulty is that in many cases unilateral platform conduct qualifies as an RTD, and yet as an economic matter it operates just like a traditional vertical restraint. We saw this in the *Facebook* example, but consider an even simpler hypo. Suppose that Apple agreed (say, in exchange for a revenue share) to make Spotify the exclusive music streaming app available in its iOS app store. To do so, it would block all competing apps from

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[116] This principle manifests in the absence of "no fault monopolization"—a hypothetical doctrine that would find Section 2 liability based on the mere possession of a monopoly, even if the defendant acquired his monopoly through ordinary competition on the merits.

[117] Erik Hovenkamp, Antitrust's Refusal-to-Deal Doctrine: The Emperor Has No Clothes, CPI ANTITRUST CHRONICLE (2024).

its app store. This would be textbook exclusive dealing. But suppose instead that Apple were the owner of Spotify, and that it unilaterally chose to remove all competing streaming apps from its store. That would be an RTD.

The effects on competition are clearly the same in both scenarios. It thus makes little sense that the law treats them so differently.[118] In other words, this is a purely *formalistic* distinction, not an economically meaningful one. To that end, I have argued elsewhere that courts should subject platform RTDs like this one to essentially the same legal standards we apply to vertical restraints like tying and exclusive dealing.[119] In other words, treat the RTD like *Microsoft,* not like *Aspen*.

How would this policy address the investment and administrability concerns highlighted in *Trinko*? Take the latter first. RTD liability creates administrability problems if it is difficult for a court to issue a compulsory dealing remedy. However, in most platform RTD cases, the defendant already deals with many third parties voluntarily, so the court need not determine the terms of trade on its own. It can just order the defendant to deal with its rival on the same terms it offers to everyone else. For example, in the Apple hypo, Apple would simply have to offer rival streaming apps the same terms it offers to other third-part apps. This allays the administrability concern.

What about the concern of chilling investment? Because the platform RTD is economically equivalent to tying or exclusive dealing, there is no more reason to worry about chilling investment than there is in cases involving those kinds of restraints. Thus, if one takes the position that investment concerns ought to preclude antitrust scrutiny of these platform

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[118] One reason why it sometimes makes sense to treat unilateral conduct differently is that it may be harder to implement a suitable remedy. This is the administrability concern that *Trinko* discussed. However, in many cases (including most cases involving platforms) a compulsory dealing order does not raise remedial difficulties, because the RTD involves a good or service that the defendant provides voluntarily to third-party noncompetitors. Hence, the court can just order the defendant to deal with rivals on the same terms it offers to everyone else. For example, in the Apple hypo, the court would just have to order Apple to let rival streaming apps into the app store on the same terms it applies to other third-party apps.

[119] See Erik Hovenkamp, The Antitrust Duty to Deal in the Age of Big Tech, 131 Yale L. J. 1483 (2022).

RTDs, then one must take the same position about ordinary tying cases.

Such an argument would go something like this. If a firm creates a valuable new product, presumably through significant R&D investment, we should reward the firm substantially. Not only should the firm be entitled to earn monopoly profits on its original product, but it should also be able to exclude rival sellers of complementary products. This could instead be framed in terms of free riding. For example, in *Microsoft*, the court could have taken the position that rival browsers like Netscape were mere free riders, exploiting Windows OS for their own personal gain. Hence, to protect incentives for investment, we should permit Microsoft to exclude these free riders.

This argument, which could potentially apply either to literal tying or to economically equivalent platform RTDs, runs into two serious problems. The first is that courts have never accepted such arguments in ordinary tying cases. The basic premise of tying law is very simple. If you earn a monopoly on the merits, you are entitled to keep it; but you are not entitled to exploit that monopoly to exclude rivals *in other markets*. If this logic makes sense in tying cases, then it also makes sense in cases involving platform RTDs like those considered above.

The second problem is that such an argument is simply bad policy. Suppose a firm creates some valuable "primary" product, and many other firms can then create various complementary products. For example, the primary product could be a software platform, and the complements could be software apps. If the firm's primary product achieves a dominant position on the merits, then it should be entitled to the fruits of that monopoly. Limiting the firm's reward to those monopoly profits is a natural policy—your reward is the profits you earn on the merits.[120] In other words, you eat what you kill.

If instead we declare that the firm's reward should be even larger—that it should be entitled to engage in exclusionary practices to monopolize additional complementary markets—

[120] Of course, there are situations where a firm's creation creates a lot of social value, but not enough private value to properly incentivize its development. However, to address that problem, we rely primarily on other policy instruments, such as IP law or public grants.

then there is essentially no limiting principle. Any amount of exclusion could be justified. Such a policy would seriously undermine incentives for investment by all firms other than the defendant. Why would a firm want to develop a new complement if it knows that the defendant can introduce its own version and then exclude theirs without penalty?[121]

To reinforce this point, it is helpful to consider two of the hypos discussed above—the shipyard RTD and the Apple RTD—and ask why the former raises acute investment concerns while the latter does not. In the shipyard example, the firm earned a monopoly through investment, but RTD liability would effectively take that monopoly away by allowing rivals to share in its hard-earned advantage. This violates the principle that firms should be entitled to keep a monopoly earned on the merits. But this is not true in the Apple RTD hypo. There, liability would not take away Apple's app store monopoly. It would merely prevent Apple from exploiting that monopoly to impair competition in an adjacent market for streaming apps.

C. Ignoring the Economics of Platforms

Although *AmEx* emphasized the need to account for platform economics, there continue to be some cases where courts largely ignore it. An interesting example involves a novel type of most-favored nation (MFN) contract that prevents smaller rivals from obtaining exclusive rights. Unlike a traditional price-based MFN, which compels parity in pricing,[122] this nonprice MFN compels parity in the *selection of goods* that a seller makes available on a platform. This prevents a seller from making any goods exclusive to a rival platform. A number of powerful platforms have recently entered into such MFNs with users on the seller side of the market.[123] As explained below, platform economics gives clear

[121] Note also that it makes little sense to refer to these complementors as "free riders." They have created their own apps independently; they are not simply repackaging something made by the defendant.

[122] In a typical price-based MFN, my contracting partner agrees not to charge me a higher price than he offers to my competitors.

[123] See Erik Hovenkamp, Restraints on Platform Differentiation, 25 YALE J.L. & TECH. 271 (2023) (discussing these MFNs).

reasons to suspect these MFNs would be anticompetitive in some cases, but courts have so far overlooked this.

A good example involves Amazon's eBook retail platform, which is the market leader by a wide margin. Amazon's contracts with the "Big Five" book publishers (which collectively account for the large majority of all ebook sales) include a "selection parity clause."[124] This stipulates that any ebook made available on a rival ebook platform must also be made available on Amazon's platform at the same time. This prevents smaller ebook platforms from getting any exclusive ebooks (even on a temporary basis) from any major publishers. (By contrast, many popular ebooks are exclusive to Amazon's platform.)

To my knowledge, no American court has issued an opinion Amazon's catalogue parity clause. But other cases involving similar MFNs by dominant platforms have reached final judgment. One recent example involved real estate listing platforms.[125] The court held that the defendant's MFN was not anticompetitive. It reasoned that, because the plaintiff (a failed entrant) had sought exclusive listings, it was actually the plaintiff who behaved anticompetitively.[126] After all, exclusivity limits access. The defendant's MFN merely put a stop to that restriction.

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[124] See European Commission Competition Directorate General, Commission Decision relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union (TFEU) and Article 54 of the EEA Agreement (April 5, 2017) (discussing Amazon's ebook contracts).

[125] Top Agent Network, Inc. v. Nat'l Ass'n of Realtors, 554 F. Supp. 3d 1019 (N.D. Cal. 2021). The case centers on the NAR-operated multiple listings service (MLS), which is by far the biggest platform for home listings. As such, the large majority of realtors regard access to the MLS as essential. Some rival platforms attempted to enter the market by differentiating themselves in various ways—for example, by offering sellers greater privacy protections than the MLS. The NAR responded by instituting a new policy under which, as a condition of NAR membership (which is required to access the MLS), a realtor who places any home listing on any rival platform must also put it on the MLS at the same time. As result, listings that would otherwise be on rival platforms exclusively would also be available on the MLS. **CITE** For further discussion of the case, see Hovenkamp differentiation at XXX.

[126] Top Agent Network, Inc. v. Nat'l Ass'n of Realtors, 554 F. Supp. 3d 1019, 1032 (N.D. Cal. 2021) ("[The plaintiff's] business model is itself anticompetitive in a way that [the defendant's] policy would tend to remedy.")

Another court offered substantially the same argument when it withheld liability for a similar restraint in a different market.[127]

At first blush, the courts' argument seems to make sense. These MFNs simply prevent rivals from engaging in exclusive dealing. But exclusive dealing is a restraint, and we are accustomed to thinking of it as a potential antitrust violation.

But this argument is too glib. Many economics articles consider the effects of exclusive dealing in network industries.[128] One common finding in this literature is that exclusive dealing can be important for entry in platform markets. For example, it can help to resolve the "chicken-and-egg" problem that makes entry difficult in two-sided markets.[129] It can also facilitate entry by allowing entrants to differentiate themselves from incumbents—something that is critically important in network industries.[130]

A good example involves video game consoles. Suppose all games available on a new game console are also available on more established consoles, whereas some games are available only on the more established ones. Then it will be hard to persuade consumers to adopt the new console—they can get all the same games and more by picking the more established console instead. To draw in consumers, the new console will have to offer them something they can't get elsewhere: some exclusive games. An influential economics article by Robin Lee showed that video

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[127] See, e.g., Pulse Network L.L.C. v. Visa, Inc., 30 F4th 480, 490 (5th Cir. 2022).

[128] CITE platform exclusivity papers

[129] The chicken-and-egg problem refers to the fact that each side of the market is interested in joining a platform only if there is already significant participation by users of the other side. Exclusive dealing can help, as a new platform can pay some members of one side (e.g. the drivers on a ride-sharing platform) to be exclusive to its platform for some period of time, which will persuade the other side to join. See, e.g., David S. Evans, The Antitrust Economics of Multi-Sided Platform Markets, 20 YALE J. REGUL. 325, 372 (2003).

[130] If a new platform is almost identical to an established one, then consumers have almost no reason to join it. After all, the established platform has more users, and substantially the same functionality. A real-world example is the failure of Google+, a short-lived social media platform that was broadly viewed as similar to Facebook.

game exclusivity is very important to entry by game consoles.[131] If exclusive rights were banned, the market would be less competitive, as no one could seriously challenge the leading console.[132]

To be sure, broad exclusive deals by a powerful platform could be harmful. But these MFNs are used to prevent small-scale exclusive dealing by small rivals and entrants. And the economics literature shows that such exclusive dealing is often critical to competitive entry. This explains why these nonprice MFNs may be anticompetitive. Unfortunately, the courts evaluating these contracts have largely ignored the economics of platforms, leading them to conclude erroneously that the MFNs must be procompetitive.

III. DISCUSSION AND CONCLUDING REMARKS

TBD.

[131] Robin S. Lee, Vertical Integration and Exclusivity in Platform and Two-Sided Markets, 103 AM. ECON. REV. 2960 (2013).

[132] Id.