

Platform Antitrust

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Platforms like Uber, Google Search, and Hulu pervade the modern economic landscape. A platform caters to distinct but strongly-interdependent “sides” of customers that derive value or revenues from one another, such as the merchants and cardholders on a credit card network, or the advertisers and consumers on a social media platform. Platform economics has important implications for antitrust policy. A hallmark of two-sided markets—those in which platforms operate—is the need to get both sides “on board.” Each side’s demand for the platform’s service hinges on active participation by the other side. As such, it is important to consider whether a platform’s restrictive practice might be reasonably necessary to maintain a critical mass of participating users on both sides of the market.

But it is just as important not to overstate the novelties of platform commerce and their propensity to justify restraints on trade. The Supreme Court did just that in its recent AmEx III decision. The majority held that a plaintiff cannot make an initial (and rebuttable) showing of harm without demonstrating a net injury across both sides of the market. This kind of onerous balancing task is conventionally reserved for the last stage of antitrust’s rule of reason burden-shifting framework—after the defendant has demonstrated a countervailing efficiency that warrants balancing. The majority was also confused on the economic issues, characterizing the defendant’s restrictive practice as a courtesy to consumers, when in fact it deprives them of a valuable option while simultaneously undermining price competition market-wide.

This paper considers the antitrust challenges presented by platform competition and how to confront them in practice, with focus on conduct evaluated under the rule of reason. I conclude that, while platform economics does necessitate a number of important considerations, it does not warrant the upheaval of the antitrust laws that the AmEx III majority prescribed. Rather, the established rule of reason framework already provides sufficient flexibility to address platform conduct. Moreover, by allocating burdens with reasonable parity, it is far better equipped to arrive at the right conclusions.

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* Assistant Professor, USC Gould School of Law. I am grateful for helpful feedback provided by Rebecca Crootof; Louis Kaplow; Doug Melamed; Mike Meurer; Kyle Rozema; Steve Salop; Ted Sichelman; and seminar participants in Harvard’s private law Project. A previous version of this article was circulated under the title “Antitrust Policy for Two-Sided Markets.”

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I. INTRODUCTION

About two decades ago, economists began to recognize that many firms face a complex “chicken-and-egg” problem that is not accounted for in conventional theories of competition and pricing.¹ The firm, acting as an intermediary, caters to two or more distinct “sides” of users that derive value from interacting with one another. But, the firm’s service will not attract one side unless there are participating users on the other. Commenters had already recognized that the credit card industry is fundamentally “two-sided” in this way, with both merchants and consumers valuing the payment network only if the other side is actively participating.² But it has now become clear that such firms— known as two-sided

1. See, e.g., Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-Sided Markets*, 1 J. EUR. ECON. ASS’N 990, 991 (2003) [hereinafter Rochet & Tirole, *Platform Competition*] (“[F]rom both positive and normative viewpoints, two-sided markets differ from the textbook treatment of multiproduct oligopoly or monopoly.”); Bernard Caillaud & Bruno Jullien, *Chicken & Egg: Competition Among Intermediation Service Providers*, 34 RAND J. ECON. 309, 310 (2003) (arguing that two-sidedness “give[s] rise to a ‘chicken & egg’ problem: to attract buyers, [the platform] should have a large base of registered sellers, but these will be willing to register only if they expect many buyers to show up”).

2. See, e.g., William F. Baxter, *Bank Interchange of Transactional Paper: Legal and Economic Perspectives*, 26 J.L. & ECON. 541 (1983); Richard Schmalensee, *Payment Systems and Interchange Fees*, 50 J.

(or multi-sided) platforms—are broadly scattered throughout the modern economy.³ This has been fueled in part by advancements in technology and interconnectivity,⁴ which provide the infrastructure for many prominent tech platforms like Facebook, Google Search, and Microsoft Windows. The prevalence of this business model, once deemed an idiosyncrasy of payment card networks, has provoked an outpouring of economic research on platforms and platform competition.⁵

Consider an example. Airbnb lets homeowners list their spare bedrooms or entire homes for potential short-term rentals by prospective guests who subscribe to the service. For each stay booked over the platform, Airbnb takes a separate fee from each party. Further, the two sides of users—hosts and guests—use the service on a purely voluntary basis. For instance, Airbnb cannot necessarily guarantee a prospective guest that she will be able to book a home in a particular city on a particular night; there has to be a host in that city who has listed his home as being available. As such, each side’s demand for the platform depends not only on the fees it is charged by the platform, but also on the extent of active participation by users on the other side: guests value the service only if there are reasonably many homes available for booking; and it is only worthwhile to be an active host if there are reasonably many guests who might submit booking requests.

As such, the platform faces a significant coordination challenge. It must maintain an adequate balance of participation levels within the two sides in order for *anyone* to derive value from its service. Such balancing is a tangled and dynamic process: anything affecting participation on one side (such as the fees charged to its users) will necessarily influence the platform’s appeal to users on the other side, which, in turn, affects the latter side’s participation as well.⁶

Two-sidedness adds new layers of complexity to the analysis of pricing and competition, and the results sometimes run counter to conventional economic intuition. As a consequence, platform economics has important implications for antitrust. However, this article’s central policy claim is that such considerations can (and should) be accounted for within the established structure of antitrust’s “rule of reason” analysis, which is a multi-stage burden shifting framework.⁷ In particular, the courts should address two-sided commerce by continuing to rely on the rule of reason as a tool for sorting through complex cases incrementally—not by forcing all of the added complexities, including all conceivable efficiencies that might justify a platform’s conduct, into the plaintiff’s initial

INDUS. ECON. 103 (2003); Jean-Charles Rochet & Jean Tirole, *Cooperation Among Competitors: Some Economics of Payment Card Associations*, 33 RAND J. ECON. 549 (2002) [hereinafter Rochet & Tirole, *Card Associations*].

3. Rochet & Tirole, *Platform Competition*, *supra* note 1, at 990 (“The recognition that many markets are multisided leads to new and interesting positive and normative questions.”).

4. Some early work on internet-based platforms stylized them as “gatekeepers” that charge each side money to interact with the other. *See generally* Michael R. Baye & John Morgan, *Information Gatekeepers on the Internet and the Competitiveness of Homogeneous Product Markets*, 91 AM. ECON. REV. 454 (2001).

5. *See, e.g.*, Jean-Charles Rochet & Jean Tirole, *Two-Sided Markets: A Progress Report*, 37 RAND J. ECON. 645 (2006) [hereinafter Rochet & Tirole, *Progress Report*] (synthesizing advances in the early literature on platform economics); Andrei Hagiu & Julian Wright, *Multi-Sided Platforms*, 43 INT’L J. INDUS. ORG. 162 (2015) (discussing the pivotal tradeoffs driving a firm’s decision to organize as a platform); Mark Armstrong, *Competition in Two-Sided Markets*, 37 RAND J. ECON. 668 (2006); E. Glen Weyl, *A Price Theory of Multi-Sided Platforms*, 100 AM. ECON. REV. 1642 (2010).

6. These “feedback” effects are discussed *infra* Part II.A.2.

7. *See infra* Part V (providing an overview of the rule of reason framework and its intermediate stages).

burden.

A hallmark of platform commerce is the acute need to garner (and maintain) a sufficient balance of active participants across the two sides of the market. In some cases, this may require that the platform impose restrictions or coordinate transactions in ways that facially intervene in the competitive process. For example, Uber sets ride prices on drivers' behalf, which necessarily prevents them from competing with each other on price.⁸ But if such competition were permitted, the resulting decline in prices would diminish drivers' earnings, potentially leading many fewer drivers to sign up in the first place. This makes the platform less attractive to riders, as their ability to book a trip on relatively short notice requires widespread availability of drivers. The ensuing decline in the rider base further diminishes drivers' interest in joining the platform, which further diminishes riders' interest, and so on. As in this example, when a platform's restraint is procompetitive (for reasons relating specifically to platform commerce), it is almost always because it helps to establish cross-platform participation, or else to prevent such participation from unraveling.

However, it is critical to distinguish cases in which restrictive practices are plausibly necessary from those in which such explanations are merely pretextual. Platforms are profit-seeking firms, just like more conventional antitrust defendants. They may attempt to restrain trade not because it is commercially necessary, but simply because it is profitable.⁹ For example, in *Microsoft*, the defendant tied the Windows operating system (which is a platform) to its own web browser, among other challenged practices.¹⁰ Whatever its potential motivations, it seems unlikely that Microsoft's conduct was necessary to maintain demand for the Windows platform, which was already dominant. Instead, such conduct was likely an effort to monopolize the browser market by excluding smaller rivals.

Antitrust commenters have increasingly emphasized the need to account for the distinctive features of platform competition, though there is no consensus on precisely how this should be undertaken in practice.¹¹ By contrast, until very recently, antitrust case law had given almost no substantive attention to these issues. While a few opinions had recognized the relevant commercial environment as involving distinct but highly-interrelated strands of transactions,¹² this typically amounted to little more than a passing observation.

That is no longer the case, however, as the Supreme Court recently confronted platform commerce head-on in *AmEx III*.¹³ In June of 2018, the Court issued its first

8. Uber's centralized pricing is the subject of an ongoing antitrust case. *Meyer v. Kalanick*, 174 F. Supp. 3d 817, 822 (S.D.N.Y. 2016) (denying motion to dismiss claims of vertical and horizontal antitrust conspiracy).

9. See *infra* Parts III–IV.

10. *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30, 35 (D.D.C. 2000), *aff'd in part, rev'd in part*, 253 F.3d 34 (D.C. Cir. 2001).

11. See generally David S. Evans, *The Antitrust Economics of Multi-Sided Platform Markets*, 20 YALE J. REG. 325 (2003) [hereinafter Evans, *Multi-Sided Markets*]; Michael Katz & Jonathan Sallet, *Multisided Platforms and Antitrust Enforcement*, 127 YALE L. J. 2142 (2018); David S. Evans & Richard Schmalensee, *The Antitrust Analysis of Multi-Sided Platform Businesses*, in 1 THE OXFORD HANDBOOK OF INTERNATIONAL ANTITRUST ECONOMICS 404 (Roger D. Blair & D. Daniel Sokol eds., 2015) [hereinafter Evans & Schmalensee, *Multi-Sided Platforms*]; Dennis W. Carlton & Ralph A. Winter, *Vertical Most-Favored-Nation Restraints and Credit Card No-Surcharge Rules*, 61 J. L. & ECON. 215 (2018).

12. See, e.g., *Times-Picayune Pub. Co. v. United States*, 345 U.S. 594, 610 (1953) (noting that “every newspaper is a dual trader in . . . news and advertising content”).

13. *Ohio v. American Express Co. (AmEx III)*, 138 S. Ct. 2274 (2018) [hereinafter *AmEx III*, 138 S. Ct.

decision on how antitrust’s rule of reason¹⁴ is to be applied in cases involving platform defendants.¹⁵ It was superficially a question of how to define the “relevant market” for purposes of an antitrust adjudication.¹⁶ In particular, the question was whether the market definition must include both groups of users, which would require a plaintiff to prove a *net* injury to competition across both user groups—not just to win on the merits, but simply to carry its initial burden. The Supreme Court held that it does.¹⁷

Most of the important complexities arising under two-sided competition center on the juxtaposition of countervailing effects—that is, pro and anticompetitive effects—arising within the separate sides of the market. In fact, even outside the platform context, such a juxtaposition of plausible effects is very common in antitrust disputes. And the rule of reason ordinarily divides the burdens of establishing them; it bifurcates them into separate stages, delaying the need for potential balancing or “netting out” of the effects (which is notoriously difficult) until the final stage of the adjudication. By evaluating the effects carefully and independently, a court is better equipped to determine whether such balancing is genuinely necessary; and, if so, the court is at least in a better position to compare the relevant effects. However, the Court’s *AmEx III* decision largely abandoned this burden-shifting framework, effectively collapsing the entire rule of reason analysis—and all of its intermediate inquiries—into the plaintiff’s initial burden.

Whether or not one agrees with its holding, the *AmEx III* decision is inarguably a watershed moment for platform antitrust. Against this backdrop, this Article considers how antitrust ought to accommodate the distinctive features of platforms and platform competition. It focuses principally on conduct evaluated under the rule of reason,¹⁸ with emphasis on vertical restraints and unilateral conduct.¹⁹ The analysis is organized as follows: I begin by providing an overview of the distinctive features of platforms and platform competition, as reflected within the platform economics literature.²⁰ Part III then explains how such factors may bear on the analysis of various restrictive practices that are already familiar within antitrust, but whose effects may become more or less concerning when undertaken by two-sided defendants. In Part IV, I address the economic effects of an important category of restraints that are unique to platform markets. Finally, Part V turns to the broad question of law that was at issue in *AmEx III*.

One of the important competitive dynamics arising in platform markets is known as “steering.”²¹ This refers to any efforts aimed at inducing users to opt for one platform over another. The restraint at issue in *AmEx III* was an example of this: it prohibits its merchants from offering AmEx cardholders a better price at checkout if they agree to switch to an alternative card (e.g. Visa), since competing cards generally charge lower network usage

2274 (2018)].

14. Because the judgment is limited to the rule of reason cases, it does not apply to disputes centering on mergers or naked collusion.

15. *AmEx III*, 138 S. Ct. at 2290. Justice Breyer, joined by three other Justices, dissented. *Id.* at 2290–305.

16. In many antitrust cases, it is necessary to construct a definition of the “relevant market” in order to assess potential competitive effects. *See, e.g.*, Dennis W. Carlton, *Market Definition: Use and Abuse*, 3 COMPETITION POL’Y INT’L 3 (2007).

17. *AmEx III*, 138 S. Ct. at 2287.

18. As such, I do not discuss platform mergers, which is a separate but important topic.

19. A “vertical” restraint is one applied between firms who do not compete directly, but rather are in a buyer-seller relationship (e.g. a producer and its supplier). *See infra* Part II.

20. *See infra* Part II.

21. *See infra* Part II.C.1, for an overview of steering tactics in platform competition.

fees to merchants.²² But, more generally, steering restraints take many different forms, and arise in many platform markets.²³ In general, steering strategies are usually procompetitive, as they typically act as a vehicle for price competition among rival platforms. Restraints on steering should therefore be regarded as a potential source of serious antitrust concerns.

However, as discussed in detail in Part III, many research articles suggest that such restraints may be necessary to maintain adequate participation, and thus regard their welfare effects as highly ambiguous.²⁴ The *AmEx III* opinion cites these commentaries copiously. Importantly, however, these arguments stem primarily from economic models involving a platform monopolist, with the operative restraint merely precluding efforts to steer users toward a *nonplatform alternative* (e.g. toward cash rather than using a monopolist's payment card platform).²⁵ But this is not a good representation of how such restraints usually operate in real-world commerce. In practice, most of the relevant restraints seek to prevent steering toward competing platforms, rather than a nonplatform alternative that lacks the same transactional efficiencies.

As I argue below, when a restraint merely prevents steering toward competing platforms, there is substantially less reason to presume that it might be justified for reasons relating to the market's two-sidedness. Instead, the more likely result is simply that it prevents users from switching to rival platforms that would provide them with better joint-value. That would suggest the restraint does not enhance the market-wide volume of trade. Rather, at best, it merely reallocates transactions among platforms, albeit in a way that leaves transacting parties with diminished welfare on average. At worst, it affirmatively reduces the overall volume of trade by undermining price competition generally. This can occur for two reasons. First, the restraint may extinguish rival platforms' incentive to make competitive price offerings, as it may prevent transacting parties from switching to the competitor's platform in response to its price cut. Second, the restraint may induce sellers who transact over the platform to set higher retail prices for their own wares, which injures all consumers, whether or not they take advantage of the platform's transaction service.

The question of law addressed in *AmEx III* is extremely broad in scope, as it bears on the application of antitrust law to all kinds of restrictive practices that might be undertaken by transaction platforms. As noted above, while facially a holding about market definition, the Supreme Court's decision is in fact a major alteration of the rule of reason's burden shifting framework. The Court's analysis was guided principally by a number of antitrust academics that focus most of their attention on a simple point—in effect that “both sides matter,” and that it would be inappropriate to focus on one side myopically.²⁶ While

22. *United States v. American Express Co. (AmEx I)*, 88 F. Supp. 3d 143, 162–66 (E.D.N.Y. 2015) [hereinafter *AmEx I*, 88 F. Supp. 3d 143 (E.D.N.Y. 2015)].

23. *See infra* Part III.

24. *See infra* references in notes 127.

25. *See infra* notes 123–24. However, several more recent economics articles (some of which allow for competition between platforms) find that steering restraints are almost certainly harmful. *See, e.g.*, Benjamin Edelman & Julian Wright, *Price Coherence and Excessive Intermediation*, 130 Q. J. ECON. 1283 (2015); Rong Ding, *Merchant Internalization Revisited*, 125 ECON. LETTERS 347 (2014); Rong Ding & Julian Wright, *Payment Card Interchange Fees and Price Discrimination*, 65 J. INDUS. ECON. 39 (2017).

26. *See, e.g.*, Brief for Amici Curiae Antitrust Law & Economics Scholars in Support of Respondents at *12–13, *AmEx III*, 138 S. Ct. 2274 (2018) [hereinafter Brief for Antitrust Law & Economics Scholars] (“[I]t is necessary to consider what is happening on both sides of a two-sided platform. . . . Looking to effects on one side simply cannot distinguish between [pro- versus anticompetitive] scenarios.”) (emphasis omitted); David S. Evans & Michael Noel, *Defining Antitrust Markets When Firms Operate Two-Sided Platforms*, 2005 COLUM. BUS. L. REV.

correct, this point was actually never in dispute. Even the district court, whose market definition was formally limited to the merchant side of the market,²⁷ expressly emphasized the importance of accounting for the market’s two-sidedness.²⁸ Indeed, its analysis gives substantial attention to cardholders, and it even concluded that they were likely injured in addition to merchants.²⁹ Despite this, the *AmEx III* majority chastised the district court’s approach as “looking at only one side of the platform in isolation.”³⁰

It is indeed true that a platform’s conduct may have countervailing effects within the two sides, and that this requires courts to take the market’s two-sidedness into account.³¹ But it does not follow that the appropriate way to deal with this is to require a plaintiff to “net out” all such considerations merely in order to support its prima facie case—before the defendant has substantiated its asserted efficiency defense. This approach is also a substantial deviation from precedent. Most difficult cases evaluated under the rule of reason involve potential countervailing pro- and anticompetitive effects.³² And the courts developed a multi-stage burden shifting framework precisely to deal with this difficulty. By construction, this framework contemplates that a plaintiff can carry its initial burden without having shown that the defendant’s conduct is definitively anticompetitive on the whole; that is why it is merely the first stage among several.

Far from providing any necessary reform, the *AmEx III* decision merely developed a “law of the horse”: a needless construction of new legal principles when the old ones would do just fine (and likely much better).³³ It is true that platform economics has important implications for antitrust policy and practice; this Article gives substantial attention to that fact. But such considerations can already be accounted for—both more practicably and more reliably—within the rule of reason’s existing structure. To that end, a much better approach would be to maintain careful consideration of platform economics throughout the established burden shifting framework, which is designed to work through complex cases in incremental steps and to cast light on countervailing effects through an efficient allocation of burdens.

II. PLATFORMS IN A NUTSHELL

In economics, the term “platform” is not reserved to well-known tech-giants like Facebook or Microsoft Windows, though these are certainly important examples. Rather, the term applies to all firms engaged in two-sided commerce. For instance, even a local

667, 671 (2005) (“[F]ocusing on one [side] . . . tends to distort the competition that actually exists among firms.”).

27. *AmEx I*, 88 F. Supp. 3d 143, 171–73 (E.D.N.Y. 2015) (defining the relevant market as that in which payment card platforms “sell network services to merchants”). Thus, cardholders were not formally included within the market district court’s definition.

28. *Id.* at 174 (“American Express is correct that the court must account for the two-sided features of the credit card industry . . .”).

29. *Id.* at 220 (noting that “[r]emoval of [AmEx’s steering restraint on merchants] would also benefit consumers”).

30. *AmEx III*, 138 S. Ct. at 2287.

31. See *infra* Part II.

32. See, e.g., C. Scott Hemphill, *Less Restrictive Alternatives in Antitrust Law*, 116 COLUM. L. REV. 927, 931 (2016).

33. See Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 208 (1996) (likening cyberlaw to a needless “law of the horse” for miscellaneous disputes that happen to involve horses). But see Lawrence Lessig, *The Law of the Horse: What Cyberlaw Might Teach*, 113 HARV. L. REV. 501, 502 (1999).

newspaper qualifies as a platform, as it caters to both readers and advertisers.

However, two-sidedness is a matter of degree. As a result, there is no universally-adopted definition of a two-sided platform,³⁴ because most bright-line definitions are either under- or over-inclusive. In some cases, such as Uber’s ride-sharing service, the market’s two-sidedness is obvious; the utility each side gets from the platform is completely dependent on the extent of cross-platform participation, and such participation is not strictly assured, but rather must accrue from private decisions to join the platform. This leads to substantial interdependence in demand between the two groups: each side’s demand for the platform’s service depends not only on the price it is charged by the platform, but also the number of users participating on the other side.³⁵ This is what gives rise to the “chicken-and-egg” problem: neither side’s users are attracted to the platform unless there are already participating users on the other side.

By contrast, in other contexts where a firm technically deals with different groups of actors—such as a restaurant’s dealings with both chefs and diners—the notion of two-sidedness is negligible. The restaurant effectively assures each group of users that it will get what it seeks (a meal for the diners, and steady employment for the chefs) without having to worry about the particular extent of participation by the other group.³⁶ In such cases, one group (the chefs) can simply be treated as a part of the firm. We can then adhere to the conventional practice of treating the firm as one-sided.

For the purposes of this Article, it will be sufficient to regard a two-sided platform as a firm that (a) deals with two distinct customer groups such that (b) each group’s demand for the platform’s services depends not only on the price it is charged, but also on the extent of the other group’s participation.³⁷ The latter point reflects *indirect network effects*³⁸ between the two sides, which are a hallmark of two-sidedness.³⁹ This is an externality⁴⁰ (which could be positive or negative) that users on one side impose on members of the other side by virtue of their participation on the platform.⁴¹

For example, an app store is a platform that deals with app developers and app users, and each of these groups gets more value as the other group grows larger: users want many apps to choose from, while developers want their apps to be available to as many prospective users as possible. Consequently, when new users join on either side, they contribute positive value to participants on the other side, although they do not

34. See, e.g., Katz & Sallet, *supra* note 11, at 6–9 (discussing some potential definitions, and noting that “there is no consensus definition of two-sided platforms”).

35. See, e.g., Julian Wright, *One-Sided Logic in Two-Sided Markets*, 3 REV. NETWORK ECON. 44, 47 (2004) [hereinafter Wright, *One-Sided Logic*].

36. Holding his paycheck constant, a chef does not otherwise care very much about how many diners the restaurant serves, so long as his workload is manageable. Similarly, so long as the food service is good, a diner does not otherwise care how many chefs the restaurant employs.

37. See Rochet & Tirole, *Progress Report*, *supra* note 5, at 657 (offering a similar definition as an alternative to a narrower one hinging on the inability of cross-platform users to contract efficiently through the price system).

38. Here the word “indirect” means “between groups.” By contrast, “direct” network effects (which are not present in all two-sided contexts) arise between members of the same group. For example, a social media platform is more valuable to its consumers as the total number of users grows, so there are direct network effects among users.

39. Evans, *Multi-Sided Markets*, *supra* note 11, at 332.

40. An externality is a positive or negative effect that one party’s actions impose on another party, but which the actor does not take into account (or “internalize”) when choosing her course of conduct.

41. Evans, *Multi-Sided Markets*, *supra* note 11, at 332.

“internalize” this contribution. Similarly, a cable TV station deals with advertisers and subscribers, and advertisers get more value when there are more subscribers to solicit. But here subscribers may prefer to have fewer commercial interruptions.⁴² As this illustrates, indirect network effects need not be positive in both directions (although, they will always be positive in at least one direction).

A. Distinctive Economic Features

Like ordinary firms, platforms are idiosyncratic in many respects. But there are some more general economic attributes of two-sidedness that apply to all varieties of platforms. These are (very briefly) summarized below. Among other things, these points provide an intuitive sense of the added complexities arising under two-sidedness, which helps clarify why platforms pose new challenges for antitrust policy and enforcement. Additionally, later sections of the paper will draw on the concepts introduced here.

I. Price Level Versus Price Distribution

The platform charges some price to each of the two sides for the use of its service. For example, to participate in a credit card network, merchants must pay a percentage of each sale they execute using the card, while consumers may be charged an annual fee to hold the card.⁴³ Similarly, Airbnb charges fees to both hosts and guests for every stay that is booked over the platform. However, the notion of price becomes more complicated in platform commerce. We must now keep track of two separate price concepts: the price *level* and the price *distribution* (also known as price “structure”).⁴⁴ To illustrate, let us call the two sides *A* and *B*, and let P_A and P_B respectively denote the prices the platform charges to these two sides.⁴⁵ The price level is simply the total price, $P = P_A + P_B$, and as such is sometimes referred to as the “two-sided price.” This captures the total amount of surplus that the platform extracts from each interaction between the two sides. By contrast, the price distribution refers to the relative magnitudes of P_A and P_B . That is, it tells us what percentage of the price level is allocated to each side.

The significance of the price level is similar to that of an ordinary price in a one-sided market.⁴⁶ But the role of the price distribution has no one-sided analogue, as its significance stems from demand interdependence between the two sides. Even holding the price level constant, adjustments to the price distribution can affect the relative participation levels on the two sides. Indeed, this is widely regarded as a hallmark of platforms generally.⁴⁷ This is what allows the platform to fine-tune the participation balance using the price

42. As discussed further *infra* Part.II.B.2, there is no categorical answer to the question of whether consumers “like” advertisements. A consumer may like to view some amount of advertising for goods that line up closely with her own interests, such as a preview of a new film in her favorite genre.

43. For an overview of the credit card industry, see John Vickers, *Public Policy and the Invisible Price: Competition Law, Regulation and the Interchange Fee*, 4 COMPETITION. L.J. 86 (2005).

44. Rochet & Tirole, *Platform Competition*, *supra* note 1, at 990 (stating “[u]nder multi-sidedness, platforms must choose a price distribution and not only a price level”).

45. To keep things simple, we will focus on prices charged “per-interaction” between users on the two sides, such as the abovementioned booking fees charged by Airbnb.

46. For example, when prices are charged per interaction, the condition that describes the profit-maximizing price level for a monopoly platform is identical to that arising under one-sided monopoly. See Rochet & Tirole, *Platform Competition*, *supra* note 1, at 997.

47. *Id.*

distribution alone (i.e. without altering the overall price level).⁴⁸ However, in some cases, the platform is able to accomplish this only by imposing a restriction that prevents one side from “passing through” its platform-usage price to the user on the other side. The restraint at issue in *AmEx III* is an example of this.⁴⁹

2. Feedback Effects

Suppose a one-sided firm alters its price. For simplicity, we will assume it is a monopolist, so we can ignore potential strategic responses by rivals. Following the price change, there is an immediate change in consumer demand, and this first order response is sufficient for the market to stabilize at a new combination of price and output. This is reflected visually in a shift along a demand curve. But matters are more complicated in a two-sided market. A price change on one side will produce feedback effects that either magnify or counteract the initial demand response, ultimately affecting participation on both sides.⁵⁰

To illustrate, suppose that Airbnb begins charging homeowners an extra \$50 for each stay they book using the platform, while leaving the booking fee for guests unchanged. The first order effect is that fewer homeowners will use the platform. But, with fewer listings to choose from, prospective guests now find the platform less appealing; from their perspective, the platform’s quality has gone down, while its price has remained unchanged. Thus, demand on this side falls. But then, with fewer prospective guests to attract, the platform becomes less appealing to homeowners—independently of the fact that it has also become more expensive. This further diminishes homeowner participation, which further diminishes guest participation, and so on.

3. Participation-Balancing

Within either side of the market, to say a user “participates” on a given platform simply means that she is “available” to users on the other side via the platform in question. Users on one side care about the extent of cross-platform participation because that determines how many such users they can transact with or otherwise encounter over the platform. For example, consumers want a video game console to permit them to play many different games from a wide range of game developers. As such, participation—and in particular the balance of participation levels—is a major determinant of demand for the platform’s service. A platform thus attempts to induce a participation balance that will best stimulate its overall appeal to all prospective users. This need not (and usually does not) involve inducing equal numbers of users to participate along the two sides. For instance, billions of people participate on Facebook as ordinary users, whereas the number of

48. This is significant, because simplistic economic theory usually suggests that it does not matter how a given “tax” is allocated between the two sides of a transaction. *Id.* at 1018 (“First-year economic students are taught that it really does not matter whether the seller or the buyer pays the tax. In the end, prices adjust so that any tax paid by the seller is passed through to the consumer.”). Thus, that the price distribution matters independently of the price level is a distinguishing feature of platforms.

49. See *infra* Part IV.

50. See, e.g., *United States v. Am. Express Co. (AmEx II)*, 838 F.3d 179, 200 (2d Cir. 2016) (discussing feedback effects between merchants and cardholders on a payment card platform) [hereinafter *AmEx II*, 838 F.3d 179 (2d Cir. 2016)]; Katz & Sallet, *supra* note 11, at 2153–58 (discussing how feedback affects market definition methodologies used in antitrust).

participating advertisers is far smaller (though surely still large).

The feedback effects discussed above arise inherently from the interdependent demand structure of a two-sided market, whether or not the initial prices formed an equilibrium.⁵¹ But one important aspect of platform pricing, the so-called “seesaw” principle, manifests specifically in equilibrium pricing.⁵² In effect, the seesaw principle says that the platform will optimally set prices that elicit opposite effects on participation levels across the two sides: if it induces greater participation on one side (e.g. by offering it a lower price), this will be accompanied by sacrificed participation on the other (by charging it a higher price), and vice versa. This ultimately explains why many two-sided markets seem to have skewed price distributions, with one side paying materially more than the other. For example, Google Search is free to consumers, with all revenues obtained from advertisers.

What might lead the platform to charge markedly different prices to the two groups? In many cases, the two sides comprise very different sets of actors with distinct motivations for using the platform. As a consequence, one side may differ from the other with respect to, among other things: (1) its sensitivity to price (holding all other variables constant),⁵³ and (2) the network value it obtains from the other side’s participation. Based on such differences, the platform will generally offer a lower price—possibly below-costs or even *negative*⁵⁴—to the side that receives a smaller cross-platform network benefit in relation to its price-sensitivity.⁵⁵

To illustrate, suppose that side *A* exhibits some characteristic (e.g. low price-sensitivity) such that the platform prefers to charge these users a higher price, relative to side *B* users. In order for this to produce a stable result, it must ensure that side *B* participation will remain sufficiently robust to avoid the sort of feedback process described above.⁵⁶ Therefore, the platform will also charge a lower price to side *B*. Note, however, that while side *A* is indeed paying a higher price, it is also enjoying the benefit of greater cross-platform participation, since there are more *B*-side users as a result of this price distribution.

B. Platform Variants

The literature on platforms often describes them as facilitating “interactions” between users on the two sides.⁵⁷ This is deliberately vague, since the precise nature of the relevant

51. Prices form an equilibrium if each firm has optimized its own prices (which usually means they maximize the firm’s profits), given the prices set by any other firms in the relevant market.

52. Rochet & Tirole, *Progress Report*, *supra* note 5, at 659 (“[A] factor that is conducive to a high price on one side, to the extent that it raises the platform’s margin on that side, tends also to call for a low price on the other side as attracting members on that other side becomes more profitable.”). *But see* Weyl, *supra* note 5, at 1664 (showing that under more general conditions, the seesaw principle must be stated in terms of participation levels, namely that factors inducing the platform to garner more participation on side *A* also induce it to sacrifice participation on side *B*).

53. This notion of price-sensitivity on a given side takes the other side’s participation level as fixed. Without this qualification, the price change will produce a “feedback” effect, as discussed below.

54. For example, a credit card that carries no annual fee but still provides rewards, such as airline miles, effectively has a negative price for cardholders (at least the ones who pay off their monthly bills in full).

55. Rochet & Tirole, *Platform Competition*, *supra* note 1, at 996.

56. Here we are assuming positive indirect network effects of *B* on *A*.

57. Hagiu & Wright, *supra* note 5, at 163.

“interaction”⁵⁸ varies widely among different contexts. But in almost all cases they fall into one of two general categories, corresponding to two distinct types of platforms.

1. Transaction Platforms

A typical transaction platform does not provide either side with anything of *intrinsic* value,⁵⁹ but rather provides instrumental value by facilitating transactions between the two sides. While in principle the two sides could execute such transactions without a platform intermediary, this would be less efficient, if not wholly infeasible. Indeed, the transacting users may not have any independent way of “finding” each other, just as it would be difficult for an Uber driver to identify interested riders without the platform.

In most cases, it will be sufficient to describe the two sides as “buyers” and “sellers,” though there are a few contexts (which we will mostly ignore) in which these terms are inapposite.⁶⁰ The eponymous transactions “run through the platform,” as opposed to occurring elsewhere, beyond the platform’s influence. As explained below, this is ultimately what distinguishes the transaction platform category in terms of the potential antitrust concerns that can arise. Note that these inter-side transactions are separate from those occurring between each user and the platform, wherein each side’s participants pay some price for the right to use the platform.⁶¹

Payment cards are a clear archetype of the transaction platform. In almost all kinds of purchases, credit and debit cards are a convenient alternative to cash, and are largely essential to online commerce.⁶² Uber and Airbnb are also familiar examples, but in these cases the platform facilitates just one specific kind of transaction (rides or short-term housing). Other common examples of transaction platforms are app stores, operating systems, auction or offer-listing services (e.g. eBay), health insurance networks, video game consoles, shopping malls, reservation booking services (e.g. OpenTable), and stock exchanges.

2. Media Platforms

A media platform’s two groups can typically be described as “consumers” and “advertisers.” The platform disseminates some valuable content to consumers, such as the music played on a radio station, or the messaging and photography functions on Snapchat. That content is then accompanied by paid advertisements, or else consumer data is used to facilitate targeted advertising.⁶³ Newspapers, magazines, and radio and television stations

58. *Id.*

59. A partial exception is that some platforms also supply the technology needed for a consumer on one side to make use of the good or service provided by the other side. For example, a video game console provides the hardware for consumers on one side to play the games or other apps made by the other side (software developers). Nevertheless, it is still the case that the platform provides no value to anyone in lieu of participation on both sides.

60. For example, a dating site for single men and women does not mediate transactions in the commercial sense, but rather facilitates “matchmaking.”

61. Note that the last section’s discussion of the price distribution applies only to transactions between the platform and the users on each side.

62. There is large literature on the two-sided economics of payment cards. *See, e.g.,* Rochet & Tirole, *Card Associations*, *supra* note 2; Schmalensee, *supra* note 2; Julian Wright, *Pricing in Debit and Credit Card Schemes*, 80 *ECON. LETTERS* 305 (2003).

63. For discussion of platform data-gathering and its antitrust relevance, see D. Daniel Sokol & Roisin

are longstanding examples of this platform model. Technological advancements, particularly the internet, have provided a foundation for many additional types of media platforms. Some prominent examples are social media networks like Facebook; web search engines like Google Search and Bing; and ad-supported software and smartphone apps. A trend among online media platforms is that the relevant content is often free to consumers, with all revenues being obtained through advertising.⁶⁴

Unlike a transaction platform, a media platform typically supplies something that one side (consumers) values intrinsically, such as the articles in a magazine. Thus, the sole impetus for the platform's two-sidedness is not necessarily to solve a chicken-and-egg problem. Instead, its motivation may be to utilize advertising as a *price alternative*. In principle, the platform could eschew advertisements altogether, and accrue all revenues by charging prices to consumers. That is the model of HBO, for example, which costs extra but includes no advertisements. But many content providers find it more profitable to charge a lower price to consumers while making up the difference by appending advertisements to its content. Consumers always dislike paying higher prices, but their attitudes toward advertising are less categorical.⁶⁵ As a consequence, the advertisers' inclusion in the platform may indirectly benefit most consumers, because the ads take the place of higher prices.

In some cases (e.g. a music radio station), the platform does not own the rights over the relevant content, but is rather an intermediary-licensee. In this case, the platform may be best-described as three-sided, with a third side comprising the content rightsholders. Further, some such platforms are "mixed" in the sense that they operate as a transaction platform between sides *A* and *B*, but as a media platform between *B* and *C*.⁶⁶ For example, YouTube TV, which is a streaming-based analogue to cable service, acts like a transaction platform between programming creators and viewers. But it also runs commercials, and therefore acts as a media platform between viewers and advertisers.

C. Platform Competition

Just as an individual platform is distinct from a conventional firm, so too is platform competition distinct from its one-sided analogue.⁶⁷ For the purposes of this article, I will

Comerford, *Antitrust and Regulating Big Data*, 23 GEO. MASON L. REV. 1129 (2016).

64. This is due in part to online platforms' capacity to perform targeted advertising by taking advantage of user data. This enables them to charge more per-ad to advertisers, while consumer prices fall to zero due to the seesaw effect. A second reason is that some online platforms, particularly social media, are subject to strong *within-platform* network effects among consumers, who get more value from the platform as it becomes more widely-used. This deters the platform from charging users prices, lest the resulting fall in usage make the platform less appealing to everyone (including advertisers). *See, e.g.*, Weyl, *supra* note 5, at 1657–63 (developing a model of platform pricing that allows for within-platform network effects).

65. First, consumer attitudes toward advertising depend heavily on context. They are probably negative in radio or television, where they displace the primary content. But in a periodical they can be effortlessly skipped over and may be desirable to the extent they line up closely with the subject of the periodical (e.g. an ad for a fishing rod in a fishing magazine). Numerous empirical studies find that advertising has only a small impact on consumer satisfaction. *See, e.g.*, Ying Fan, *Ownership Consolidation and Product Characteristics: A Study of the US Daily Newspaper Market*, 103 AM. ECON. REV. 1598, 1603 n.8 (2013) (finding that "the effect of [newspaper advertising quantity] on consumers' utility is negative [but] very small[] and statistically insignificant").

66. *Cf.* Weyl, *supra* note 5, at 1645, 1647 (generalizing a two-sided platform model to allow for additional sides, among other things, and concluding that "little is lost" by just relying on the simpler two-sided model).

67. *See, e.g.*, Rochet & Tirole, *Platform Competition*, *supra* note 1 (explaining differences with one-sided

focus on the two phenomena responsible for most of the novelties of platform competition: “multi-homing” and “steering.”⁶⁸

1. Multi-Homing and Steering

A multi-homing user is one who participates on two or more competing platforms, though she may prefer to use a particular one whenever possible. For example, a consumer may have numerous credit and debit cards, so that she can transact over a range of payment card platforms; but she may use her favorite card whenever buying from a merchant that accepts it. Similarly, a typical merchant accepts numerous cards, but prefers those that charge it the lowest network usage fees. Multi-homing will tend to arise within a given side if (a) users on this side view the alternative platforms as reasonably substitutable; and (b) there are not significant fixed costs required before users can start using a given platform,⁶⁹ nor any exclusivity contracts that prohibit users from multi-homing. For example, these conditions are generally satisfied on both sides of the ride-sharing market; both riders and drivers can (and often do) switch between Uber and Lyft without much difficulty.⁷⁰

If a user participates on only one platform, then she “single-homes.” If she does so despite viewing the platforms as reasonably substitutable, this is often because it is expensive to adopt either platform in the first place, leading her to stick to just one (at least in the short run).⁷¹ A closely-related consideration is the extent of multi-homing on the other side, which determines the extent to which single-homing will limit the set of cross-platform users available to her. When there is more multi-homing on the other side, she is not willing to pay as much to participate on a second platform. For instance, many video game consumers buy just one console (say, either Xbox or PlayStation), since they each cost several hundred dollars, and these users know that most game titles are ultimately released on both consoles anyway.⁷²

The extent of multi-homing on the two sides plays a major role in shaping the intensity of platform competition. All else being equal, if there is more multi-homing on both sides, then rival platforms will compete more aggressively, offering lower overall price levels.⁷³ This arises because users can be swayed by relatively small differences in the prices they are charged by the platforms, given that they can easily switch between them. For example,

markets); Caillaud & Jullien, *supra* note 1 (detailing the “chicken and egg” problem); Armstrong, *supra* note 5; Andrei Hagiu, *Pricing and Commitment by Two-Sided Platforms*, 37 RAND J. ECON. 720, 721 (2006); Bruno Jullien, *Competition in Multi-Sided Markets: Divide and Conquer*, 3 AM. ECON. J.: MICROECONOMICS 186 (2011); Alexander White & E. Glen Weyl, *Insulated Platform Competition* (NET. Inst., Working Paper No. 10-17, 2016).

68. Platform economics is jargon-heavy. For consistency, I am adhering to the terminology that has become standard within the literature.

69. For example, if an app store is tied to some brand-specific hardware (such as an iPhone or Android smartphone), then one cannot access the platform without first buying the hardware.

70. For an economic analysis of multi-homing in ridesharing competition, see Kevin A. Bryan & Joshua S. Gans, *A Theory of Multihoming in Rideshare Competition*, 28 J. ECON. & MGMT. STRATEGY (2019).

71. This is a form of “lock-in,” which arises when each of several competing options requires some significant fixed cost upfront, so that it is costly to switch. Even in the one-sided case, lock-in is well-understood to have adverse effects on competition. *See, e.g.*, Paul Klemperer, *Switching Costs*, in THE NEW PALGRAVE DICTIONARY OF ECONOMICS 6481 (Steven N. Durlauf & Lawrence E. Blume eds., 2d ed. 2008).

72. Note this example also illustrates that there may very different levels of multi-homing on the two sides.

73. *See, e.g.*, Rochet & Tirole, *Platform Competition*, *supra* note 1, at 1004–07. The effect on the price distribution is in general ambiguous.

it is easy for a rider to compare prices between Uber and Lyft. And, since the two platforms are highly substitutable, riders will tend to respond to even small changes in the prices quoted by these platforms.

“Steering” involves an effort to induce users to start using one platform instead of another. First, a platform may attempt to steer users to single-home on its own service, or at least to give them a preference to use it over the alternatives whenever possible. This usually involves the platform offering an inducement to one side, leading these users to prioritize its own service. In a feedback effect, some portion of users on the other side will then gravitate to the platform.⁷⁴ For example, as Lyft attempted to gain ground on Uber, it became the first of these platforms to enable tipping of drivers over its app (Uber eventually adopted this feature too). The tip function helped to steer drivers toward Lyft, which made the platform more appealing to riders, allowing the network to grow.

In this way, platform-induced steering is usually an effort to compete. In cases where it does not constrain any users’ freedom to switch between platforms, it will virtually always be procompetitive, and should be encouraged by competition policy. For example, if a platform simply offers a better price to one side (while matching its rival’s price on the other side), this is just like an ordinary price cut in a one-sided market. However, just as exclusive dealing sometimes raises concerns in conventional markets, steering efforts relying on exclusivity contracts could pose a threat to competition under certain conditions.⁷⁵

A second type of steering is undertaken by sellers on one side of a transaction platform. In most situations where buyers and sellers both multi-home, the buyer ultimately chooses the platform used to mediate his transactions. For example, a rider chooses whether to use Uber or Lyft, and a cardholder chooses which card to pay with at checkout. Although it does not get the final word on which platform the buyer will use, a seller may have an interest in inducing buyers to choose one platform over another. The strongest such strategy is for the seller to commit to single-homing on its preferred platform, ensuring that its buyers have no alternative platforms to choose.⁷⁶ For example, ExpressO and Scholastica are competing platforms that facilitate law review article submissions between authors and journal editors. But some journals only accept submissions over their preferred service. Alternatively, the seller may vary the prices it charges in transactions over different platforms, applying a surcharge to those it disfavors (or, equivalently, a discount for transactions on its preferred platform). Such steering efforts were forestalled by the restraint at issue in *AmEx III*, which is discussed further below.⁷⁷

2. Within-Side Competition

“Platform competition” usually refers to that occurring among rival platforms, or between platforms and one-sided competitors.⁷⁸ But this is not the only relevant strand of

74. *Id.* at 1001 (modeling this form of steering).

75. *See infra* Part III.

76. Note that in general this strategy is a tradeoff. It prevents transactions with buyers who don’t participate on the platform that the seller uses exclusively, but it permits the seller to use its preferred service for all its transactions. *See* Rochet & Tirole, *Platform Competition*, *supra* note 1, at 1001.

77. *See infra* Part IV.

78. For example, Uber competes both with rival platform Lyft and with ordinary (one-sided) taxi companies.

competition. Another (often overlooked) strand occurs among the sellers along one side of a transaction platform. And platform conduct sometimes raises antitrust concerns within this narrower line of competition.

In many transaction platforms, one side is comprised of competitors who happen to use the platform (or multiple platforms) to mediate most or all of their sales. For example, competing software developers are the relevant users on one side of an app store or operating system platform. A platform may engage in conduct that restrains competition among the sellers on one side of the market. Such arrangements can lead to two broad categories of anticompetitive conduct. In the first category, the platform facilitates a collusive arrangement between seller-side competitors, such as price-fixing.⁷⁹ In exchange, the competitors may agree to transact exclusively over the platform in question, or to pay larger platform-usage fees. This is an example of what is sometimes called a “hub and spoke” conspiracy: the competitors are the spokes and the hub is a common trading partner that helps to facilitate an anticompetitive arrangement on their behalf.⁸⁰ The result is a series of parallel vertical agreements that operate collectively as an ordinary horizontal price-fixing agreement.

A well-known example is the *Apple eBooks* case.⁸¹ In 2009, Apple was preparing to launch an ebook store (iBookstore) alongside the iPad. This would be a transaction platform, with readers and publishers comprising the two sides of the market. At the time, Amazon was the clear leader in ebook sales, and had a policy of setting prices no higher than \$9.99, even when this amount was less than the wholesale price it paid the relevant publisher for the requisite license. A group of major publishers—the “Big Six”—had grown increasingly frustrated with Amazon, as these cheap ebook sales were cannibalizing sales of physical books, which often sell at much higher prices.⁸² At the same time, Apple wanted iBookstore to be profitable—not merely a “loss leader”⁸³—and thus shared the publishers’ interest in maintaining higher prices than Amazon.⁸⁴

Apple offered the Big Six an “agency pricing” deal under which they could set the final price that consumers pay for their ebooks, with Apple getting 30% of that price.⁸⁵ But it also included a “most-favored nation” clause that prohibited the price from being lower than that charged by competing platforms, including Amazon. This gave the Big Six a strong interest in requiring Amazon to set higher prices or else to transition to agency pricing—Amazon’s current \$9.99 rate would prevent them from charging more over iBookstore. However, this would be profitable only if they all shifted away from Amazon together; otherwise, there would not be a sufficient critical mass to attract consumers to the

79. Alternatively, the platform could facilitate an effort to exclude certain firms from the seller side of the market to prevent it from becoming too competitive. *See, e.g.,* Armstrong, *supra* note 5, at 686 (hypothesizing that “[a] shopping mall might charge a higher rent to a retailer with the promise that it will not let a competing retailer into the same mall”).

80. *See, e.g.,* Interstate Circuit, Inc. v. United States, 306 U.S. 208, 213–18, 232 (1939) (condemning a hub-and-spoke conspiracy in which movie theater operators facilitated collusive price requirements by film distributors).

81. United States v. Apple, Inc. (*Apple eBooks*), 791 F.3d 290 (2d Cir. 2015) [hereinafter *Apple eBooks*, 791 F.3d 290 (2d Cir. 2015)].

82. *Id.* at 298–308.

83. A loss leader is a product that a retailer deliberately sells below cost as a way of getting customers in the door.

84. *Apple eBooks*, 791 F.3d at 298–308.

85. *Id.*

iBookstore platform.⁸⁶ The evidence strongly suggested that the Big Six made a concerted agreement—facilitated in large part by Apple—to join iBookstore together.⁸⁷ The court deemed this sufficient to find an unlawful hub-and-spoke conspiracy.⁸⁸

The second category of restraints on within-side competition arises when the platform is vertically integrated into the seller side of the market. That is, it operates as a seller in addition to running the platform itself. For example, aside from controlling the Windows operating system, Microsoft also offers many kinds of software (e.g. Microsoft Word). It thus competes with some of the same software developers that utilize its platform. If the platform is dominant, it may exploit this to exclude some such competitors—for instance, by tying platform access to its own goods or services. For instance, in *United States v. Microsoft*, the government challenged a number of Microsoft’s practices, most notably tying Windows to Internet Explorer, which was allegedly designed to exclude competing web browsers such as Netscape.⁸⁹ Similarly, Google has faced some controversy—mostly overseas—for prioritizing its own services over the Google Search platform, and separately, for tying its own apps to its Android smartphone operating system.⁹⁰ The European Union recently fined Google nearly three billion dollars for these practices.⁹¹

III. PLATFORM RESTRAINTS: GENERAL ANTITRUST CONSIDERATIONS

What do the foregoing aspects of two-sided commerce imply for antitrust policy in rule of reason cases? The most fundamental question, which was the focus of *AmEx II* and *III* on appeal, is how the rule of reason should approach platform cases *in general*—that is, regardless of the particular practice at issue. Discussion of this overarching question is left for a later section.⁹² Below, I address some more specific considerations that bear on the evaluation of various kinds of platform conduct, and whose relevance is independent of the more general issues tackled later. Specifically, this section considers potential antitrust claims surrounding restraints that are already familiar within the case law, but where the market’s two-sidedness might bear on the harmfulness or reasonableness of the relevant practice. I also explain how the differences between transaction and media platforms lead to some distinct antitrust challenges.

With respect to the latter point, it is easy to see that the two types of platforms present some distinct risks of anticompetitive conduct. A transaction platform directly mediates the dealings between the two sides, and thus has a clear mechanism by which it can influence the terms of inter-side exchange. It may attempt to use this mechanism in ways that undermine seller-side competition. The *Apple eBooks* case was a clear illustration of this.⁹³ In that case, Apple was actively colluding with the major publishers on the seller

86. *Id.* (noting that none of the publishers believed the arrangement would be profitable unless all of the others also participated).

87. *Id.*

88. *Id.* at 339. The publishers had already entered into consent decrees when this judgment was issued.

89. *United States v. Microsoft Corp.*, 87 F. Supp. 2d 30, 35 (D.D.C. 2000) *aff’d in part, rev’d in part*, 253 F.3d 34 (D.C. Cir. 2001). The parties ultimately settled.

90. Mark Scott, *Google Fined Record \$2.7 Billion in E.U. Antitrust Ruling*, N.Y. TIMES (June 27, 2017), <https://www.nytimes.com/2017/06/27/technology/eu-google-fine.html>.

91. *Id.*

92. *See infra* Part V.

93. *Apple eBooks*, 791 F.3d 290 (2d Cir. 2015).

side, acting as a sort of cartel ringleader.⁹⁴ But transaction platforms have the capacity to make wholly unilateral decisions that similarly influence or even eliminate competition among sellers. For instance, Uber forestalls price competition among drivers by setting ride prices unilaterally. However, some non-negligible restraint may be necessary to get both sides on board, and the extent of such necessity depends on the context.⁹⁵

In media platforms, by contrast, the relevant contracting between the two sides—purchases induced by advertisements placed on the platform—typically occur outside the platform’s influence. For example, if a toaster advertisement in a newspaper induces a reader to buy the toaster, she will buy it from a retail store or online; either way, the newspaper is not involved. Thus, in a media platform, the platform has very limited ability (frequently none) to manipulate seller-side competition.

Media platforms also challenge our conception of one of the most basic aspects of competition: substitutability among alternatives. A market is a collection of goods (and corresponding producers) that are sufficiently substitutable with one another from the perspective of consumers. But, in a two-sided market, the two customer groups may disagree as to whether two alternative media platforms are substitutable. Consumers will appraise substitutability based principally on the nature of the content disseminated by the platform, but advertisers will assess substitutability based on what kinds of consumers the platforms cater to and how their ad content is delivered (e.g. targeted versus blanket advertising). For example, suppose two cities are far apart, but with very similar populations, and each city is served by a local newspaper. National advertisers would view the newspapers as very similar, while readers in both cities have the opposite perception. It is therefore unsurprising that competition authorities have occasionally struggled with how to approach questions of substitutability in platform mergers, including newspaper mergers.⁹⁶ With transaction platforms, by contrast, it is more likely that the two sides will agree on the substitutability of alternative platforms.⁹⁷

Significantly, due to the feedback arising in platform pricing, the adverse effects of exclusionary practices like tying or exclusive dealing can be magnified (at least if both sides view the platforms as substitutes).⁹⁸ Suppose a transaction platform induces many users on side *A* to agree to use its service exclusively. Such agreements are known as exclusive dealing.⁹⁹ But in the platform context, the arrangement may generate a

94. *Id.* at 327.

95. *See infra* Part III.A.

96. For a broad overview of the different approaches competition authorities have taken toward substitutability in periodical mergers, see David S. Evans, *Two-Sided Market Definition*, in *ESSAYS ON THE ECONOMICS OF TWO-SIDED MARKETS: ECONOMICS, ANTITRUST, AND INDUSTRY STUDIES* (David S. Evans ed., 2009).

97. However, the two sides of a transaction platform may disagree on which platform they prefer most, based on how the platforms differ in the prices they charge to a given side. Competing platforms may also differ in ways that are ancillary to their transactional efficacy, and which matter more to one side than the other, such as the different types of rewards that credit cards offer cardholders (e.g. miles versus cash back).

98. Some studies find that exclusive dealing has smaller foreclosure effects when the two sides are more likely to disagree as to inter-platform substitutability, although this result is hardly categorical. *See, e.g.*, Johan Stennek, *Exclusive Quality – Why Exclusive Distribution May Benefit the TV-Viewers*, 26 *INFO. ECON. & POL’Y* 42, 42 (2013) (finding that exclusive content distribution by a media (television) platform can benefit all users). *But see, e.g.*, Andrei Hagiu & Robin S. Lee, *Exclusivity and Control*, 20 *J. ECON. & MGMT. STRATEGY* 679, 695 (2011) (“[F]ierce bidding [and] competition between platforms for content exclusivity . . . does not imply—nor should be mistaken for—fierce competition for consumers.”).

99. Exclusive dealing involves an agreement between a firm and its supplier such that the firm is to buy the

reinforcing feedback effect: users on side *B* now deem the platform more attractive due to the fact that many *A*-siders can only be reached on this platform. Thus, many *B*-side users will now switch to the platform and away from competitors. This feedback effect enlarges the agreement's competitive footprint, which could amplify the foreclosure of rivals' sales.¹⁰⁰

Tying arrangements, which require a buyer of one good to further purchase another, are also a frequent subject of rule of reason claims.¹⁰¹ However, some instances of tying by platforms are functionally just a way to charge a “negative price” to one side.¹⁰² That is, the platform charges no literal price to one side, and instead provides this user group with some kind of “freebie” for each transaction.¹⁰³ Credit card rewards (e.g. miles) are a good example of this.¹⁰⁴ A cardholder may get small rewards on every transaction made with the card, despite not paying any annual fee for carrying it.

This is a way of skewing the price distribution substantially without having to increase the overall price level. For example, suppose the platform wants the price level to be no higher than five dollars, but also wants the distribution to be highly skewed—perhaps because one side is far more price-sensitive. One option is just to charge one side five dollars per transaction while making the service free to the other side's users. But it can go even further by, for example, charging one side seven dollars and giving the other side some reward that a typical recipient values at about two dollars.

Importantly, a skewed price distribution does not inherently raise any welfare concerns,¹⁰⁵ nor is it necessarily a signal of anticompetitive animus or market power.¹⁰⁶ The side paying a higher price generally enjoys the countervailing benefit of greater cross-platform participation. As such, one can infer very little about welfare by simply looking at the price distribution.¹⁰⁷ One implication, which numerous authors have noted,¹⁰⁸ is that

relevant good exclusively from the supplier in question (usually in exchange for a better price). Such restraints are evaluated under the reason, and typically require substantial foreclosure of rivals' sales in order to support liability. *See, e.g.,* *McWane, Inc. v. FTC*, 783 F.3d 814, 837 (11th Cir. 2015); *United States v. Dentsply Int'l, Inc.*, 399 F.3d 181, 187, 191 (3d Cir. 2005).

100. *Evans & Schmalensee, Multi-Sided Platforms, supra* note 11, at 432 (“strategies that prevent platform entrants from gaining critical mass or that push platforms below critical mass can therefore exclude competitors and preserve the market for the [platform-defendant].”).

101. *See generally* *Suture Express, Inc. v. Owens & Minor Distrib., Inc.*, 851 F.3d 1029 (10th Cir. 2017).

102. *Andrea Amelio, Tying and Freebies in Two-Sided Markets*, 30 INT'L J. INDUS. ORG. 436, 436 (“[T]ying can be deployed by platforms as a tool to introduce implicit subsidies.”).

103. *Id.* at 436–37.

104. Antitrust has confronted the same thing in regulated industries, where price-regulated utilities have occasionally bundled their services with free complementary goods as a way of lowering the effective price. *See, e.g.,* *Cantor v. Detroit Edison Co.*, 428 U.S. 579, 579 (1976) (reversing summary judgment for an electricity utility that “also furnishes . . . without additional charge . . . the most frequently used standard-size light bulbs”).

105. “Welfare” for buyers is measured as ordinary consumer surplus (the difference between the most she would pay for a good, and the price she actually did pay, including that paid for use of the platform) for transactions reached over the platform. For sellers or advertisers, the relevant measure of welfare is generally the profits they obtain as a result of using the platform.

106. *See, e.g.,* *Wright, One-Sided Logic, supra* note 35, at 47 (a skewed price distribution “does not . . . imply anything about the market power of the [platform]”). *Cf.* *Kenneth A. Bamberger & Orly Lobel, Platform Market Power*, 32 BERKELEY TECH. L.J. 1051, 1053–54 (2017).

107. For example, even a nonprofit platform, which maximizes the total welfare of users on both sides (subject to covering its own operating costs), will skew the price distribution as needed to garner the right balance of participation levels across the two sides. *Rochet & Tirole, Platform Competition, supra* note 1, at 997–98.

108. *See, e.g.,* *Wright, One-Sided Logic, supra* note 35, at 48.

if the price on one side is below cost, this does not suggest that the platform is engaging in predatory pricing, because the overall price level may still be above cost.¹⁰⁹ However, as emphasized in Part III, when considering how increased cross-platform participation may countervail the higher price charged to one side, it is important to consider *market-wide* participation, and not merely that arising within one platform. For instance, a mere reshuffling of users among platforms does not constitute an increase in total platform output, and does not necessarily signal a welfare improvement.

A. Potential Defenses Reflecting Two-Sidedness

In evaluating a restraint imposed by a platform, the most important economic question is whether it is reasonably necessary to maintain adequate participation on both sides of the market. If one side would lose interest absent the restraint, then the restraint is presumptively procompetitive, since the platform cannot mediate transactions without dual participation. Throughout this inquiry, it is important to remember that the platform's impact on each side's users is not limited to what price they are charged.¹¹⁰

One possibility is that seller-side competition would be very intense by default, and that this would diminish their interest in participating. In particular, it could be that no matter what price the platform charges to sellers per transaction, competition leads the sellers to lower their own prices to the point at which they essentially break even.¹¹¹ Then it is natural to expect that fewer sellers will participate on the platform. This is particularly likely to produce an adverse result if each seller can offer only a limited supply of the relevant good, for diminished seller-side participation then implies a reduction in the total supply available for purchase.¹¹² As a consequence, though buyers pay lower prices per transaction, they are not able to execute nearly as many transactions. The balance of these effects can make the platform less valuable to buyers overall.

Uber's business model is an instructive example, and a likely case in which a restraint on seller-side competition enhances the volume of trade. The platform is the target of an ongoing antitrust action alleging a vertical and horizontal conspiracy—that is, a hub and spoke arrangement—to fix driver prices.¹¹³ But, in fact, the above discussion suggests that Uber's centralized pricing is probably justified. If drivers can set their own prices, there may be aggressive price competition for riders, who are likely to pick the cheapest option available. No matter what booking fee Uber charges, this competition would drive prices down to the point where a typical trip gives the driver only a tiny profit. This might lead many (perhaps most) drivers to determine that they cannot earn a satisfactory rate of pay,

109. Predatory pricing is an exclusionary practice in which a firm prices below cost in order to exclude a less efficient rival who cannot survive at such low prices.

110. See, e.g., Wright, *One-Sided Logic*, *supra* note 35, at 47.

111. This embodies a possibility discussed earlier, which is that the platform's ability to use the price distribution to adjust participation levels sometimes requires contractual limitations that prevent pass-through in inter-side transactions. See *supra* notes 55–60 and the accompanying text. See also Rochet & Tirole, *Platform Competition*, *supra* note 1, at 1020.

112. For instance, an Uber driver can supply only one ride at any given time.

113. *Meyer v. Kalanick*, 174 F. Supp. 3d 817, 822 (S.D.N.Y. 2016) (denying motion to dismiss claims of vertical and horizontal antitrust conspiracy). The action was initially aimed at Uber's then-CEO Travis Kalanick, who was also a driver on the platform, making him a party to the alleged horizontal conspiracy in which Kalanick allegedly "colluded and agreed with driver-partners to raise fares." First Amended Complaint at ¶ 86, *Kalanick*, 174 F. Supp. 3d 817 (No. 1:15 Civ. 9796).

and to abandon the platform. This, in turn, makes the platform much less attractive to riders.

This illustrates why it would be inapposite to characterize Uber as a cartel ringleader akin to the role Apple played in the *eBooks* case. In lieu of Uber, there would not be a more competitive market in which the same number of drivers are still providing rides, but at lower prices. Indeed, the drivers probably have no practical alternative means of supplying ad hoc rides on their own time schedules. Rather, absent some central coordinator like Uber, the market for rides would probably collapse back into ordinary taxi services. In the end, the per-transaction price increase that results from Uber's centralized pricing can be viewed as reflecting the cost of maintaining sufficient driver participation. Further, this restraint does not undermine competition between ridesharing services (nor competition with one-sided taxis), which will discipline efforts to set supra-competitive ride prices.

This is intuitively similar to minimum resale price maintenance (RPM), wherein an “upstream” manufacturer sets a lower limit on the retail prices that its downstream distributors can charge consumers.¹¹⁴ Aggressive downstream competition among the retailers can diminish their interest in stocking or promoting the manufacturer's product.¹¹⁵ As a result, some restraint on “intra-brand” competition—that arising between the manufacturer's own distributors—can enhance total output. Further, this arrangement does not inhibit “inter-brand” competition—that between different producers of the relevant good—which is the sort of competition that antitrust is principally concerned with.

However, this justification hardly applies categorically. In fact, it probably only applies when the sellers' wares are essentially fungible, which ensures that price competition would be very intense. In the RPM context, the sellers' goods are not just fungible: they are literally the same product, produced by the same manufacturer. In the Uber context, the ride experiences offered by different drivers are not literally identical. But they are pretty close. For instance, most riders do not care very much what kind of car they are transported in, so long as they are in sufficiently good condition. By contrast, in the Airbnb platform (which is very similar to Uber in certain respects), the hosts' offerings are hardly fungible. On the contrary, there is generally substantial differentiation among the dwellings offered over the platform's service. It is thus not surprising that Airbnb permits hosts to set their own prices.

A restraint like exclusive dealing may help a transaction platform to solve its initial “chicken-and-egg” problem. Imagine a brand-new platform has been introduced. Initially, there are no users on either side. But, as a consequence, the platform seemingly has no appeal to any prospective users on either side; then which side would join first? To solve the puzzle, the platform might rely on an exclusive dealing arrangement to coax sellers to offer their product exclusively over the new platform. This will spur demand on the other side, since these sellers cannot be reached over other platforms. For example, a recent study by Robin Lee suggests that exclusivity arrangements have helped to facilitate entry by video game consoles.¹¹⁶

114. Like many vertical restraints, RPM was initially illegal per se, but is now evaluated under the rule of reason and rarely deemed unlawful. See *Leegin Creative Leather Prod., Inc. v. PSKS, Inc.*, 551 U.S. 877, 877–78 (2007) (overturning per se rule against RPM).

115. See Carlton & Winter, *supra* note 11, at 242 (“[Many of the] claims about two-sided markets . . . are in fact the same as the features of one-sided markets with promotion.”).

116. See, e.g., Robin S. Lee, *Vertical Integration and Exclusivity in Platform and Two-Sided Markets*, 103 AM. ECON. REV. 2960, 2961, 2986 (2013) (“[E]xclusivity may be a tool used by entrant platforms to break into established markets: by preventing contracting partners from supporting the incumbent, an entrant can spur

Although I disagree with the Supreme Court's majority decision in *AmEx III*, I agree with its contention that the volume of inter-side transactions is the relevant measure of a transaction platform's output. However, when evaluating how a transaction platform's conduct affects the volume of exchange, it is important to consider the *market-wide* volume, and not just those transactions reached over the platform in question. This is analogous to focusing on total output in a conventional one-sided market. The point is that antitrust is concerned with competition itself, not the individual competitors who engage in it.

IV. RESTRAINTS ON STEERING

The previous section discussed platforms' engagement in various restrictive practices that have been the subject of many case filings throughout antitrust's history, albeit usually in ordinary one-sided settings. But restraints on steering—which inhibit parties' ability to induce users to opt for one platform over another—will only arise in two-sided markets and are thus comparatively novel. Indeed, in conventional markets there are no such steering tactics to restrain.

In these cases, assuming the challenged conduct is purely vertical (rather than involving horizontal collusion), platform economics will necessarily dominate the antitrust analysis. In this section, I explain why steering restraints pose serious antitrust concerns, particularly when they merely inhibit switching between competing platforms. More broadly, I emphasize that steering is an important aspect of platform competition generally, and would ideally be left undisturbed. However, I do not deny that reasonably limited exceptions may be appropriate or benign in some cases.

Steering restraints are used in many platform markets. In terms of their animating structure, they often take the form of “most-favored nations” (MFN) provisions, which have long been a subject of more general discussion in antitrust.¹¹⁷ Although they can take many different forms, the general function of an MFN is to provide some assurance to its beneficiary that the grantor will not offer better terms or treatment (in some relevant sense) in its dealings with third parties, where the relevant third parties are usually competitors of the MFN's beneficiary. Such provisions may be motivated by various considerations, both pro- and anticompetitive. In the platform context specifically, they are frequently intended to curb steering efforts in some way. We saw a clear example this (albeit one accompanied by horizontal conspiracy) in the *Apple eBooks* case, as the ebook publishers were restrained from permitting their books to be sold at lesser prices on Amazon than on Apple's iBookstore.¹¹⁸

More commonly, the platform's restrictive conduct is purely vertical. For instance, MFNs are rampant in dealings between television programming creators (e.g. Turner Broadcasting) and pay-TV distributors (e.g. Comcast).¹¹⁹ And some MFNs are used to

adoption of its own platform and spark greater platform competition.”).

117. See, e.g., Jonathan B. Baker & Judith A. Chevalier, *The Competitive Consequences of Most-Favored-Nation Provisions*, 27 ANTITRUST 20 (2013); Steven C. Salop & Fiona Scott Morton, *Developing an Administrable MFN Enforcement Policy*, 27 ANTITRUST 15 (2013); Jonathan B. Baker & Fiona Scott Morton, *Antitrust Enforcement Against Platform MFNs*, 127 YALE L. J. 2176 (2018).

118. *Apple eBooks*, 791 F.3d 290 (2d Cir. 2015).

119. See, e.g., Bill Toth, *How Parallel Most-Favored Nation Clauses in the Television Industry Exclude Competitors and Stifle Innovation*, 15 COLUM. SCI. & TECH. L. REV. 194 (2013).

restrain efforts to steer consumers toward competing distributors, such as emerging streaming-based distributors like YouTube TV.¹²⁰ To similar effect, such restraints are also widely used by health insurance networks in their dealings with care providers.¹²¹ Similarly, an app store or video game console may require software developers to promise not to offer their games or apps for lower prices on alternative platforms. And movie theaters may require that film studios promise not to charge lower license fees to competing theaters.

The restraint at issue in *AmEx I* provides a useful vehicle for this discussion, as the relevant economic issues are particularly salient in this context. Most merchants accept a range of payment cards, and of course their preference is for consumers to use cards that charge them lower “swipe fees.” As such, they have an interest in steering buyers toward low-fee cards. A natural way to do this is to apply a surcharge to purchases made with the high-fee card, or, equivalently, to offer a discount for using the low-fee alternative. However, the platform may attempt to restrain such efforts by requiring merchants to agree not to attempt to steer buyers toward other cards. When such a restraint targets steering efforts relying on price inducements, they are known variously as “no-surcharge rules”; “nondiscrimination provisions”; or “price-parity requirements.”

AmEx charges higher merchant fees than competing credit cards like Visa, while also tending to give cardholders larger per-transaction rewards (e.g. miles) to cardholders.¹²² These higher fees give AmEx’s merchants an interest in offering better retail prices to buyers who use an alternative payment method. To curb this, AmEx insists on a restraint that precludes merchants from steering buyers toward rival payment platforms, or even from telling consumers about the fee disparity.¹²³ It does not preclude discounting for purchases made with cash, debit, or check, however.¹²⁴

In the subsection below, I address the potential concerns posed by restrictive practices designed to forestall steering by seller-side participants on a transaction platform. This discussion relies in large part on the payment card example to help illustrate the more general issues that will tend to drive the antitrust analysis in challenges to platform steering restraints.

A. Evaluating Overall Competitive Effects

Numerous economics articles attempt to shed light on the dynamics and effects of steering restraints, often in the context of payment card networks. Some of these studies conclude that their welfare effects are in general ambiguous,¹²⁵ while others conclude that such restraints are likely to injure welfare overall.¹²⁶ Importantly, however, many of the

120. See Erik Hovenkamp & Neel Sukhatme, *Vertical Mergers and the MFN Thicket in Television*, 1 ANTITRUST CHRON. 21, 22–23 (2018) (discussing MFNs in television and their impact on consumers).

121. See, e.g., Anthony J. Dennis, *Potential Anticompetitive Effects of Most Favored Nation Contract Clauses in Managed Care and Health Insurance Contracts*, 4 ANNALS HEALTH L. 71 (1995).

122. *AmEx II*, 838 F.3d 179, 188–89 (2d Cir. 2016).

123. *Id.* at 191.

124. *Id.*

125. See, e.g., Rochet & Tirole, *Card Associations*, *supra* note 2; Joshua S. Gans & Stephen P. King, *A Theoretical Analysis of Credit Card Reform in Australia*, 79 ECON. REC. 462 (2003); Marius Schwartz & Daniel R. Vincent, *The No Surcharge Rule and Card User Rebates: Vertical Control by a Payment Network*, 5 REV. NETWORK ECON. 72 (2006).

126. See, e.g., Julian Wright, *Optimal Card Payment Systems*, 47 EUR. ECON. REV. 587 (2003) [hereinafter

papers identifying an ambiguous result (as well as some arguing that harm is likely) consider a lone platform whose restraint prevents its sellers from steering buyers toward some *nonplatform alternative*, such efforts to induce purchasers to pay with cash rather than transacting over a monopoly payment card platform.¹²⁷ As such, in these studies, the restraint does not intervene in inter-platform competition, because there is no such competition to inhibit. As clarified below, it is critical to distinguish this special case from those in which the restraint operates to prevent switching to competing platforms.

To set the stage for this analysis, it is helpful to begin by unpacking the argument for a potential welfare improvement in the special case of platform monopoly. At the outset, it is assumed that the platform offers some transactional efficiencies or other advantages that the nonplatform alternative does not, although not all consumers value these benefits by more than the platform's marginal cost of facilitating the attendant transaction. This suggests that it is efficient for many, but not all, transactions to occur over the monopolist's platform. The welfare effects of a steering restraint will then turn on how the extent of platform usage in equilibrium compares to the optimal level, and how the restraint affects the gap between these two levels.

On one hand, if merchants can apply discounts to purchases made with cash, then demand for the monopolist's credit card network will be less robust on both sides of the market. Cardholders who get relatively little value from card usage will prefer the cash discount, resulting in less buyer participation, which makes the platform less appealing to merchants. The ensuing feedback effects erode participation on both sides.¹²⁸ Hence, without the steering restraint, there may be too little card usage. That is, the platform might not get enough buyers and sellers on board to take full advantage of the efficiencies offered by the payment network. This is due to the externality problem addressed earlier, namely that neither side's users internalize the network value they contribute to the other side.

On the other hand, the restraint would increase demand for card services, and the relevant concern is potential excessive use of platform services. With the restraint in place, cardholders never feel any particular reason to pay with cash, even if they happen to derive little added value from using the card. This, in turn, bolsters platform demand on the merchant side, even though they are likely paying more fees as a result. Prospective buyers have become increasingly reliant on cards, and merchants do not want to lose out on potential sales by refusing the card, particularly when rival retailers do not refuse them. Due to the restraint, the buyers cannot be made to "internalize" the extra fees merchants pay in card-based transactions.¹²⁹ If the restraint's effect on platform demand is not too large, the resulting equilibrium will involve greater welfare than the unrestrained one. But if the effect is large, the restraint will diminish welfare by overcorrecting for the initial externality problem.¹³⁰ It is worth noting, however, that it would be very difficult for an

Wright, *Optimal Card*]; Carlton & Winter, *supra* note 11; Edelman & Wright, *supra* note 25. See also Julian Wright, *Why Payment Card Fees Are Biased Against Retailers*, 43 RAND J. ECON. 761, 775 (2013) [hereinafter Wright, *Why Payment Card Fees Are Biased*].

127. Articles focusing on restraints on steering to cash include: Rochet & Tirole, *Card Associations*, *supra* note 2; Gans & King, *supra* note 125; Schwartz & Vincent, *supra* note 125; Wright, *Optimal Card*, *supra* note 126.

128. See, e.g., Rochet & Tirole, *Card Associations*, *supra* note 2, at 562.

129. *Id.*

130. The steering restraint also has problematic collateral effects, such as raising prices for buyers who prefer to pay with cash or check. See discussion *infra* Part IV.A.3.

antitrust plaintiff to prevail on a theory of “overreliance” on the platform’s service. In practice, it is nearly impossible to overcome the presumption that welfare rises with output.

I. Restraints on Inter-Platform Steering

Most markets offer prospective customers several (often many) competing alternatives, and this is true in platform markets as well. To that end, antitrust is concerned with the market-wide volume of transactions, not merely the amount facilitated by one particular platform. Moreover, unlike a nonplatform alternative, a competing platform will typically provide the same kinds of transactional efficiencies as the platform that is imposing the restraint, even if the two firms’ services differ in some ancillary respects (such as alternative credit cards offering different kinds of rewards).

For these reasons, a steering restraint that merely constrains inter-platform switching does not enhance welfare simply by virtue of maintaining greater participation on its own platform, which is just one of several platform competitors. On the contrary, such conduct may soften platform competition without providing any cognizable procompetitive benefit. In such cases, the steering restraint is anticompetitive and should be condemned.¹³¹

If a seller offers discounts to buyers who use a low-cost alternative card, resulting in some buyers agreeing to switch, there is no *prima facie* reason to expect diminished use of platform services market-wide. Rather, this is more likely a mere reallocation of platform usage from more expensive outlets to less expensive ones.¹³² The one-sided analogue to this is a consumer switching from a high-priced producer to a lower-priced competitor. The consumer is not dropping out of the market—as occurs when transacting parties switch to a nonplatform alternative—but is rather redirecting her demand to a competing provider that offers more bang for the buck.

That switching to a cheaper platform necessarily gives increased market share to these lower-priced rivals hardly suggests it is at odds with competition policy, as the Second Circuit concluded in *AmEx II*.¹³³ On the contrary, this process *is* competition. The threat of losing customers to rivals is what disciplines high prices and maintains the incentive to behave competitively. To the extent the restraint acts to “protect” a defendant-platform from losing customers to lower-priced rivals,¹³⁴ it does not serve any special purpose relating to two-sided commerce. It just subverts the ordinary forces of competition.¹³⁵

The Supreme Court majority was similarly confused as to the difference between protecting competition itself and protecting individual competitors—perhaps the most fundamental distinction emphasized in antitrust.¹³⁶ It suggested that exposure to

131. See also Edelman & Wright, *supra* note 25, at 1286 (“[F]ar from curing the problems [with steering restraints], competition between intermediaries [i.e. platforms] can cause the effects to become larger and to occur more broadly.”).

132. And, as the previous section explained, revealed preference implies this reallocation diminishes welfare on both sides.

133. *AmEx II*, 838 F.3d 179, 204 (2d Cir. 2016) (“Outlawing the . . . [restraints] would appear to reduce [AmEx’s] protection [of its “program and prestige”]—and likely with the result of increasing the market shares of Visa and MasterCard.”).

134. *Id.*

135. The district court emphasized this point in *AmEx I*. *AmEx I*, 88 F. Supp. 3d 143, 151 (E.D.N.Y. 2015) (finding that AmEx’s restraints “short-circuit the ordinary price-setting mechanism in the network services market by removing the competitive ‘reward’”).

136. See, e.g., *Spectrum Sports, Inc. v. McQuillan*, 506 U.S. 447, 458 (1993) (“The purpose of [antitrust] is

competition “endangers the viability of the entire Amex network.”¹³⁷ To be sure, a firm will find it difficult to stay in business while setting markedly higher prices than its rivals. To weather the storm, it will have to behave more competitively. But that is exactly the kind of inducement antitrust seeks to create. By contrast, the majority erroneously concluded that this dynamic is contrary to antitrust policy. The Court overlooked that the *threat* of losing sales does not imply that such loss will actually occur in equilibrium, and that this threat is in fact an inherent and essential part of the competitive process.

The opinion goes on to characterize the steering restraint as a courtesy to cardholders because it ensures “welcome acceptance” of the AmEx card.¹³⁸ According to the majority, when a merchant offers a lower price for an alternative card, this prevents the buyer from enjoying a “frictionless transaction.”¹³⁹ The implication is evidently that a consumer is better off not knowing that she has access to a better price, lest this conflict with her assumption that there is no downside to choosing AmEx over the alternatives. But the most perverse aspect of the Court’s analysis is its characterization of a competitive price offering—a fundamental element of the competitive process—as a “friction” whose avoidance is not just permissible, but efficient. In light of these remarks, a reader of the opinion may reasonably come away with the impression that the majority regards competition as a nuisance rather than a virtue.

Importantly, merchants do not necessarily benefit from increased cardholder participation on a particular platform if almost all of these new participants were already carrying some alternative card that the merchant accepts. Indeed, increased buyer participation on a high-fee platform is actually *bad* for merchants to the extent that this just reflects a shift away from the low-fee alternative. However, the Second Circuit missed this point, criticizing the district court opinion for “failing to recognize that increased demand on the cardholder side of the platform expands value on the merchant side.”¹⁴⁰ Here and elsewhere, the court overlooks the fact that maintaining greater participation *on one particular platform* does not imply anything about the restraint’s overall competitive effects within the industry at large.

This point is worth unpacking. Recall that the difficulty in getting both sides on board is that users do not internalize the positive value they contribute to the other side by virtue of participating on the platform.¹⁴¹ In the case of a monopoly platform, a reduction in participation by cardholders diminishes the platform’s appeal to merchants, resulting in a diminished volume of transaction. However, when buyers and sellers agree to shift participation from a high-fee platform to a low-fee competitor, there are offsetting externality effects. These users no longer contribute network value to the high-fee platform, but they create new network value on the low-fee platform. There is no *prima facie* basis for thinking this will reduce market-wide trade. Combining this with the fact that the steering restriction results in a less efficient allocation of transactions among platforms, this supports a presumption that the restraint diminishes welfare overall.

not to protect businesses from the working of the market. . . . The law directs itself not against conduct which is competitive, even severely so, but against conduct which unfairly tends to destroy competition itself.”).

137. *AmEx III*, 138 S. Ct. 2274, 2289 (2018).

138. *Id.*

139. *Id.*

140. *AmEx II*, 838 F.3d 179, 204 (2d Cir. 2016); *see id.* at 205 (stating that “[b]y attracting cardholders, Amex delivers a significant benefit to merchants . . .”).

141. *See supra* Part I.

Another simple but important point is that courts should not presume that the relevant restraint is the only thing that influences the overall volume of transactions. There are frequently broader economic factors that shape platform usage, particularly in sectors undergoing rapid technological growth. For example, the increased presence of online and digital commerce obviously contributes to the demand for payment cards generally. To that end, the dissenting Justices rightly criticized the *AmEx III* majority for casually attributing the broader growth in payment card usage to AmEx's steering restraint.¹⁴² As Justice Breyer noted, “[t]he fact that credit-card use in general has grown over the last decade . . . says nothing about whether such use would have grown more or less without the [steering restraint].”¹⁴³

In fact, a steering restraint becomes *less* likely to enhance welfare when the field of platform competitors has essentially saturated the market, with a large majority of potential users on both sides subscribing to one or more platforms. Under these conditions, we should feel secure in having overcome the primary obstacle to platform commerce: both sides are on board. We should then presume that no further restraints on competition are necessary to keep the market from toppling over.

2. Undermining Incentives for Price Competition

The kind of steering restraint employed by AmEx may also undermine competitors' incentive to behave competitively. The usual strategic impetus for a price cut is to steal sales from one's rival. But the steering restraint undermines this process.¹⁴⁴ This is deeply problematic, as a market's propensity to elicit competitive behavior requires that a firm can gain an edge by offering consumers a better deal. More generally, there must be a payoff for competitive behavior if we want such conduct to appeal to private firms. Thus, aside from the problematic effects discussed above, the restraint also softens inter-platform competition generally.¹⁴⁵

Given that the no-steering rule does not affirmatively block a buyer and seller from switching to a different card—it just prohibits merchants from using price inducements to persuade some consumers to switch—there is no analogous tactic that could be employed in a conventional one-sided market. In a conventional market, an individual consumer who gets better value from a cheaper alternative will switch to it unilaterally; there is no separate need to ensure “sharing” of the resulting gains. But the steering restraint exploits the fact that, due to the market's two-sidedness, switching requires an agreement between a

142. *AmEx III*, 138 S. Ct. at 2302 (Breyer, J., dissenting) (“[T]he relevant restriction of output is as compared with a hypothetical world in which the restraint was not present and prices were lower.”).

143. *Id.*

144. For example, the district court emphasized that Discover had attempted to offer a lower fee to merchants, but this did not translate into more sales, due to the no-steering rules that were at that time maintained by Visa, Mastercard, and AmEx. *AmEx I*, 88 F. Supp. 3d 143, 213–15 (E.D.N.Y. 2015). Note, however, that in 2011 Visa and Mastercard entered into a consent decree in which they agreed to stop imposing restraints on steering. See *In re Payment Card Interchange Fee and Merch. Disc. Antitrust Litig.*, 986 F. Supp. 2d 207, 215 (E.D.N.Y. 2013), *rev'd and vacated by In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, 827 F.3d 223 (2d Cir. 2016). Unlike AmEx, Visa and Mastercard are joint ventures of many banks, and thus the decision to implement a steering restraint constituted a horizontal agreement among competitors. But, in AmEx's case, the decision is wholly unilateral.

145. *AmEx I*, 88 F. Supp. 3d at 209 (“American Express's [restraint] suppress its network competitors' incentive to offer lower prices. . .”).

merchant and a cardholder in order for gains to be shared and thereby effect a mutually-beneficial result. Thus, even if the transacting parties would earn more joint-surplus from using a different card, they will stick with AmEx. But that means that they are effectively unable to respond to price cuts by rival payment networks. This is a substantial threat to the competitive process. But, as with most of the potential problems created by the steering restraint, the *AmEx* majority never even mentioned it.

3. Collateral Harm

The steering restraint's competitive footprint extends beyond the AmEx user base. By raising merchants' costs,¹⁴⁶ it leads them to charge higher prices to everyone for their goods and services. This injures all consumers, including those who do not pay with cards. Holding constant the terms offered by non-AmEx platforms, the restraint leads merchants to set a single price that is (a) higher than the discounted price it would otherwise offer for non-AmEx purchases and (b) lower than the undiscounted (surcharged) price it would otherwise apply to AmEx purchases.¹⁴⁷ This means that all buyers who do not use AmEx, including cash buyers, are effectively "taxed" in order to support the higher fees charged by a credit card they do not even use.

The result is that the rewards obtained by AmEx cardholders are countervailed by higher retail prices. However, even if a cardholder recognizes this problem, she lacks an incentive to abstain from using an AmEx card. She is just one consumer out of many and has no ability to correct the problem herself. From her perspective, she will face the same inflated prices regardless of what payment option she picks. And, since the steering restriction prevents her from getting a better price when using a different card, she sees little reason to stop using AmEx. However, if all AmEx cardholders had the capacity to agree to abandon it, and thereby avoid inflated retail prices, they could mutually benefit from doing so.¹⁴⁸

B. Two-Sided Harm and Revealed Preference

It is a mistake to presume that a showing of harm on the seller side (as was found by the district court in *AmEx*) does not reveal anything about how the restraint affects buyer-side users. Here too the payment card context illustrates the point nicely. In every instance in which a merchant is injured by the steering restraint, there must also be an injured cardholder. That is because the restraint only binds (i.e. affects the choice of platform) in cases where a merchant and cardholder would have obtained a larger joint-surplus by switching to a different card.¹⁴⁹ The merchant would discount the price for a non-AmEx

146. To illustrate this cost effect, let α be the fraction of customers that would initially opt to use an AmEx card, but who could be persuaded to switch to a different card in exchange for a discount of δ dollars. Then the steering restraint acts like a uniform marginal cost increase of $\Delta MC = \alpha[\Delta Fee - \delta]$ on all transactions. As before, ΔFee is the amount by which the AmEx fee exceeds that of an alternative card. Some portion of ΔMC would be passed through to all consumers in the form of higher retail prices.

147. See, e.g., Rochet & Tirole, *Card Associations*, *supra* note 2; Carlton & Winter, *supra* note 11.

148. See Edelman & Wright, *supra* note 25, at 1286 ("Buyers participate, even though they are jointly worse off from doing so, due to a coordination failure. . . . If buyers could coordinate, they would take into account the higher price that results from their individual decisions to join the [platform], and collectively they would prefer not to join [it].").

149. The joint-surplus (or trade surplus) is the net value created by a mutually-beneficial agreement, which is divided between the parties in some agreed-upon way.

purchase by up to the incremental amount by which its AmEx fee exceeds that of the alternative card. And the buyer would accept this discount only if it exceeds his incremental valuation of the AmEx reward relative to that provided by the alternative card.¹⁵⁰ As such, there is no basis for imputing an apparent harm to the seller alone; the buyer would have shared in the gains from switching, too.

However, both the Second Circuit and Supreme Court put substantial weight on the fact that, while the district court found evidence of harm on the merchant side, it had not found robust empirical evidence demonstrating an increase in AmEx's two-sided price level (which Justice Thomas called the "transaction price").¹⁵¹ This is a red herring. The two-sided price level for an AmEx transaction is the merchant fee minus the buyer's valuation of the AmEx reward it stands to receive, which depends on her subjective preferences over the relevant reward. Consequently, there simply is no concrete, objective two-sided price.¹⁵² That is why presumably only some consumers would switch to a low-fee card if offered a discount.¹⁵³

Note, however, that antitrust cares about price effects only because of what they imply about changes in welfare. At the individual level, a consumer's welfare—usually called her "consumer surplus"—is equal to the difference between her valuation for the relevant good and the price she pays for it. A better (i.e. lower) price is one that leaves the buyer with more surplus. Similarly, the two-sided price of using a payment network is lower if and only if it leaves a merchant and consumer with greater joint-surplus.

As a result, the absence of empirical evidence relating to AmEx's two-sided price is impertinent, for the parties would opt for the price level they like best, if only they were allowed to barter over the choice of platform. That is, if the transacting parties would have switched but for the steering restraint, they *must* consider AmEx's two-sided price to be higher. This is just an application of "revealed preference" theory, which is an economic concept that involves deducing consumers' subjective preferences based on what decisions they make.¹⁵⁴ As applied here, it clarifies that it was a fool's errand to search empirically for an objective two-sided price. It is the transacting parties' decision-making that would reveal what combination of fees and rewards provides them with the most joint-welfare.

The Supreme Court overlooked the parties' capacity to balance fees against rewards through bilateral contracting. Intuitively, when a buyer and seller are permitted to bargain over alternative payment platforms, their common objective is the same as that of all contracting parties: to maximize their joint-welfare and split the surplus in a way that leaves them both better off than the status quo.¹⁵⁵ To that end, after picking the platform that gives

150. For example, suppose the AmEx fee on a \$100 purchase is \$5, while the Visa fee is \$2. Then Visa will offer a discount of up to \$3. The consumer will accept this if, and only if, she deems the AmEx reward less than \$3 better than the Visa reward.

151. *AmEx III*, 138 S. Ct. 2274, 2288 (2018) ("As the District Court found, the plaintiffs failed to offer any reliable measure of Amex's transaction [i.e. two-sided] price."); *AmEx II*, 838 F.3d 179, 204 (2d Cir. 2016).

152. Note that the cost of providing the reward cannot be used as a substitute for the consumer's valuation of that reward, just as one cannot equate the cost of making a toaster with the price a consumer pays for it.

153. If there were really an objective dollar value to the negative price on the consumer side then, upon being offered a given discount, either all cardholders would switch or else none would—just as all consumers would opt to pay fewer dollars for a given product.

154. See, e.g., Paul A. Samuelson, *Consumption Theory in Terms of Revealed Preference*, 15 *ECONOMICA* 243, 243 (1948); Marcel K. Richter, *Revealed Preference Theory*, 34 *ECONOMETRICA* 635, 635–45 (1966).

155. Of course, the parties do not internalize the network value they provide to other users on a payment card network. But as noted in the previous section, steering between platforms has offsetting network effects:

them the largest joint-surplus, the buyer and seller would rely on a discount or surcharge to share the gains.

The upshot is that, if the evidence indicates that welfare losses are accruing on the merchant side, then the evidence indicates losses on both sides. Figure 1 illustrates this graphically. The horizontal line (denoted ΔFee) reflects the incremental increase in the merchant's fee when using the high-fee card rather than a low-fee competitor. This is the same for all merchants. By contrast, consumers vary in terms of the incremental reward valuation (denoted ΔRV) they impute to AmEx, relative to their second-favorite card. This is what the cardholder gives up by switching to her second-favorite card. Aside from placing different valuations on the AmEx reward, consumers also differ in their *comparative* valuations of their second favorite cards. The x-axis arranges consumer types such that their ΔRV -levels are in decreasing order, as reflected in the downward sloping curve.

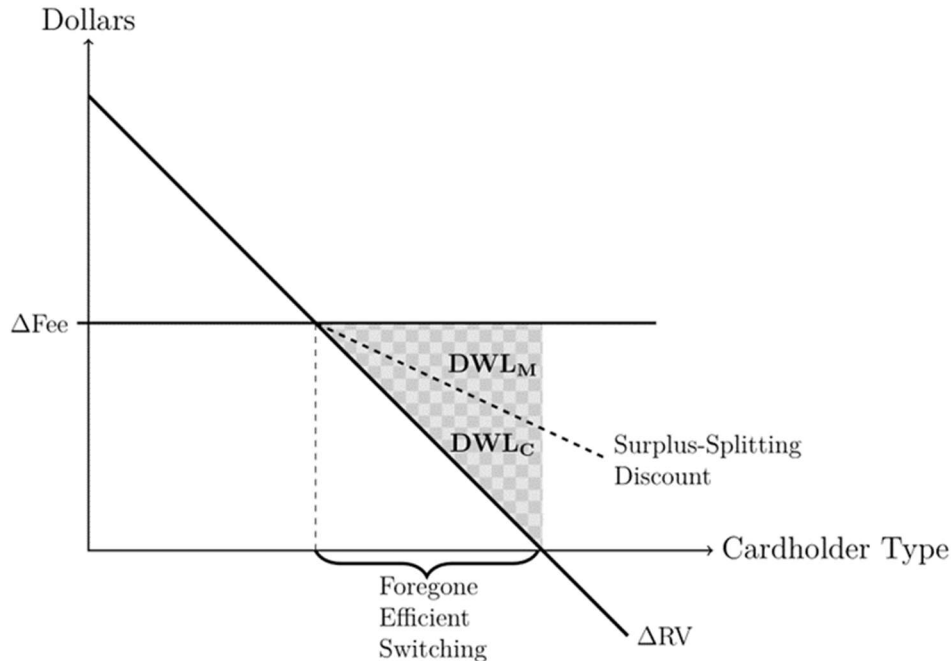


FIGURE 1: LOSSES ACCRUE ON BOTH SIDES

For a given cardholder, switching is efficient whenever $\Delta\text{Fee} > \Delta\text{RV}$, reflecting that it benefits the merchant by more than it harms the buyer. In such cases, the cardholder and merchant could use a discount to make switching mutually beneficial.¹⁵⁶ The downward-sloping dashed line contemplates discounting such that cardholders and merchants always split the total gains from switching ($\Delta\text{Fee} - \Delta\text{RV}$) equally. But the steering restraint precludes this, resulting in deadweight losses, denoted DWL_C for the cardholder side and

upon switching, the parties deprive network value to the high-fee card network, but provide new network value to the low-fee network. See *supra* Part IV.B.

156. That is, the discount for switching must be larger than ΔRV but no larger than ΔFee .

DWL_M on the merchant side.

Since this argument does not consider the restraint's impact on the market-wide volume of transactions, it does not by itself imply a presumptive reduction in welfare.¹⁵⁷ (However, numerous economic models suggest that a welfare reduction is likely.)¹⁵⁸ But, as noted in the previous section, the fact that the no-steering rule merely restrains switching to rival platforms supports a presumption that, at best, it merely maintains the same total volume of transactions, albeit with diminished allocative efficiency (of transactions among platforms). Juxtaposing these arguments, the plaintiff in *AmEx* should have been held to carry its initial burden, even under a market definition subsuming both sides of users.

V. PLATFORMS AND THE RULE OF REASON

The courts have previously confronted situations in which the relevant industry was apparently two-sided.¹⁵⁹ But, until recently, the courts had not made any broad-sweeping determinations about how the antitrust laws are to be administered in such contexts. In *AmEx III*, the Supreme Court rendered its first opinion on the issue.¹⁶⁰ As explained below, the Court's decision was deeply confused on issues of both economics and law. The result is that transaction platforms will enjoy substantial and unwarranted insulation against antitrust enforcement moving forward.

Many practices evaluated in antitrust have countervailing pro- and anticompetitive effects. The rule of reason attempts to address this tension by working through the countervailing considerations incrementally. It does so by structuring the analysis into a multi-stage burden-shifting framework.¹⁶¹

First, the plaintiff must establish a prima facie injury to competition within a "relevant market."¹⁶² It is a "prima facie" showing, rather than a dispositive one, because it is merely a signal that the antitrust concerns are reasonably sufficient to warrant further scrutiny. If the plaintiff succeeds here, the burden shifts to the defendant to show that its conduct serves a legitimate procompetitive purpose, though it need not demonstrate that this efficiency outweighs the potential injury identified in stage one.¹⁶³ If the defendant succeeds, the burden shifts back to the plaintiff to demonstrate a "less restrictive alternative"—an alternative (and reasonably practicable) practice that would generate substantially the same procompetitive efficiency, but with a milder competitive footprint.¹⁶⁴ If the plaintiff cannot demonstrate such an alternative, the final and most difficult stage involves the court's

157. In principle, the per-transaction losses identified above could be overshadowed by an increased volume of trade, as it could be that platform demand would unravel in lieu of the restraint. *But see supra* Part III.B.

158. *See, e.g.*, Edelman & Wright, *supra* note 25, at 1288 (noting that platform intermediation under a no-steering rule "reduces consumer surplus compared to the situation without [the no-steering restraint], as well as compared to the situation without intermediation"). To clarify the latter point, the authors' results show that consumers would be better off if the platform did not exist than they are under the no-steering restraint.

159. *See, e.g.*, *Times-Picayune Publ'g Co. v. United States*, 345 U.S. 594, 610 (1953) (noting that "every newspaper is a dual trader in . . . news and advertising content").

160. *See AmEx III*, 138 S. Ct. 2274, 2280 (2018).

161. PHILLIP E. AREEDA & HERBERT HOVENKAMP., *ANTITRUST LAW* ¶ 1502, 371–72 (4th ed. 1986) (synthesizing the stages of the burden-shifting framework).

162. *Id.* As discussed in the text below, at this stage, the plaintiff usually must also establish that the defendant has market power.

163. *See, e.g.*, *O'Bannon v. Nat'l Collegiate Athletic Ass'n*, 802 F.3d 1049, 1070 (9th Cir. 2015) (holding in stage two, "the defendant must come forward with evidence of the restraint's procompetitive effects").

164. *See, e.g.*, Hemphill, *supra* note 32, at 929.

attempt to balance the apparent pro- and anticompetitive effects of the defendant's conduct.¹⁶⁵

In practice, many cases do not devote significant attention to the delimitation of these stages, because it is obvious where the relevant tensions lie among the various intermediate inquiries. For instance, it might be clear that the challenged practice constitutes a restraint on trade, with the only meaningful controversy centering on whether there is a countervailing procompetitive efficiency. Additionally, many cases turn on whether the defendant has market power. This can be regarded as a subpart of the plaintiff's prima facie case, though it is only necessary in lieu of "direct" evidence of an apparent injury to competition, such as direct empirical evidence of diminished total output.¹⁶⁶

By design, this framework does not demand that a plaintiff resolve the balance of pro- and anticompetitive effects to carry its initial burden. Consistent with this, the district court in *AmEx I* held that the plaintiff had provided sufficient evidence of anticompetitive harm within the merchant side of the market, and that this was sufficient to discharge the plaintiff's initial burden.¹⁶⁷ Despite not formally including cardholders within its market definition, the court held that the plaintiffs had "appropriately accounted for the two-sided features and competitive realities" of the payment card industry.¹⁶⁸

On appeal, the Second Circuit reversed.¹⁶⁹ It held that, as a matter of law, the "relevant market"—which is as much a legal construct as an economic one—must be defined to include both sides. It thus concluded that a plaintiff's initial burden requires a showing of *net* harm across these two groups.¹⁷⁰ A divided Supreme Court affirmed.¹⁷¹ The majority opinion is surprisingly brief, and includes virtually no discussion of the record. Much of it is devoted to citations of carefully-selected economics articles emphasizing the distinctive features of two-sided markets, and the importance of accounting for it in antitrust litigation.

Like the Second Circuit, the majority characterized the district court's approach as "looking at only one side . . . in isolation,"¹⁷² despite the district court's repeated acknowledgement of the market's two-sidedness and the need to account for it.¹⁷³ More generally, the majority's decision, along with most of the commentaries that advocated for it, tend to focus much of their attention on a fairly trivial point, which is that "both sides

165. See, e.g., *Cty. of Tuolumne v. Sonora Cmty. Hosp.*, 236 F.3d 1148, 1160 (9th Cir. 2001) (progressing to a final "balancing stage"); Hemphill, *supra* note 32, at 941 ("[T]he final step is to determine whether there is a net anticompetitive effect."). As discussed further in Part IV.C., *infra*, the plaintiff retains the burden of persuasion as to the balance of effects.

166. See, e.g., *FTC v. Ind. Fed'n of Dentists*, 476 U.S. 447, 460–61 (1986). In a bewildering piece of dicta, the *AmEx III* majority erroneously suggested that defendants cannot rely on direct evidence in cases involving vertical restraints and must instead rely on indirect evidence. *AmEx III*, 138 S. Ct. 2274, 2285 n.7 (2018). As should be clear, it is nonsensical to suggest that indirect evidence might be preferable over direct evidence, since the former is just a proxy for the latter. The dissent rightly pointed out that the sufficiency of direct evidence is categorical. *Id.* at 2296–97.

167. *AmEx I*, 88 F. Supp. 3d 143, 171–73 (E.D.N.Y. 2015).

168. *Id.* at 171.

169. *AmEx II*, 838 F.3d 179, 184 (2d Cir. 2016).

170. *Id.* at 206–07 ("Plaintiffs bore the burden . . . to prove net harm to AmEx consumers as a whole—that is, both cardholders and merchants").

171. *AmEx III*, 138 S. Ct. 2274.

172. *Id.* at 2287.

173. *AmEx I*, 88 F. Supp. 3d 143, 174 (E.D.N.Y. 2015) ("[T]he court must account for the two-sided features of the credit card industry. . . .").

matter.”¹⁷⁴ This gives the false impression that the other side of the debate would have the courts ignore one side and focus myopically on the other. But the plaintiffs and their supporters have never actually advocated such an approach.

On the contrary, the question is not whether we should be open to *considering* potential cross-platform efficiencies; of course we should. Both the district court judgment and the dissenting Justices emphasized the importance of considering how the platform’s two-sidedness might bear on the reasonableness of its conduct.¹⁷⁵ Instead, the relevant question is whether the defendant should carry some obligation to illustrate the plausibility of such efficiencies within the circumstances of its own dealings.

Hence, if a court holds the dealings on one side to comprise a “relevant market” for purposes of an antitrust adjudication, as the district court did, this does not reflect a presumption that the other side is “irrelevant.” Rather, it reflects concern for the allocation of burden in cases where (a) a prima facie harm and a potential countervailing efficiency flow from very distinct strands of contracts; and (b) the defendant is in the unique position of having been a party to all of them. As such, the question at issue was not of what considerations are germane to the adjudication, but rather of how to divide the burdens of proving how they bear on the merits. This is not a repudiation of platform economics, but rather an effort to deal with it practicably.¹⁷⁶

The rule of reason is very flexible. It permits a defendant to rebut a prima facie case by relying on context-specific considerations—which might relate to a separate but interrelated strand of transactions¹⁷⁷—suggesting that the restraint is likely to be procompetitive on the whole. For example, in *NCAA* the Supreme Court held that, because sports fans benefit from competitive balance, this could justify a restraint designed to maintain parity among teams,¹⁷⁸ notwithstanding an analogous restraint would be illegal in most other settings. Such cases provide a useful reminder antitrust is already capable of accounting for special considerations that distinguish a particular commercial environment

174. *AmEx III*, 138 S. Ct. at 2287 (“competition cannot be accurately assessed by looking at only one side of the [market]”). Various amici argued the same point. *See, e.g.*, Brief for Amici Curiae Prof. David S. Evans and Prof. Richard Schmalensee in Support of Respondents at 6, *AmEx III*, 138 S. Ct. 2274 (“There is simply no way to know . . . whether a practice is anticompetitive without at least considering both types of customers. . . .”); Brief of the Clearing House Association L.L.C. as Amicus Curiae in Support of Respondents at 12, *AmEx III*, 138 S. Ct. 2274 (“Ignoring one side . . . may ultimately result in consumer harm by throwing off the delicate balance naturally achieved by platforms considering both sides.”).

175. *AmEx III*, 138 S. Ct. at 24 (“Neither the majority nor the academic articles it cites offer any explanation for why the features of a ‘two-sided transaction platform’ justify always treating it as a single antitrust market, rather than accounting for its economic features in other ways, as the District Court did.”); *AmEx I*, 88 F. Supp. 3d 143, 174 (E.D.N.Y. 2015) (“American Express is correct that the court must account for the two-sided features of the credit card industry . . .”).

176. *See, e.g.*, Katz & Sallet, *supra* note 11, at 2169 (advocating an approach that treats the sides as separate but strongly interrelated markets, but in which we still apply “antitrust principles in ways that account for the economic forces present with multisided platforms”).

177. *See, e.g.*, Gregory J. Werden, *Cross-Market Balancing of Competitive Effects: What is the Law, and What Should It Be?*, 43 J. CORP. L. 119, 135 (“when defendants respond to the plaintiff’s prima facie case . . . [the] restraint can be justified only on the ground that it promotes competition, but nothing in the logic or language of the Supreme Court’s Sherman Act jurisprudence requires that the justification focus on the same competitive process as the plaintiff’s prima facie case.”) (citations omitted).

178. *Nat’l Collegiate Athletic Ass’n v. Bd. of Regents of Univ. of Okla.*, 468 U.S. 85, 117 (1984) (noting that competitive balance could support a procompetitive justification, although concluding the defendant’s conduct was not reasonably necessary to facilitate such balance).

from more conventional ones.

The Supreme Court was therefore mistaken to conclude that the new economics of platforms demands a wholesale restructuring of the rule of reason.¹⁷⁹ First, when a transaction platform imposes a restraint, this must have the same output effect on both sides of the market. As such, by properly accounting for platform economics, we can look to the platform's dealings with users on one side and still inquire into the restraint's overall impact, given that a procompetitive output increase would have to show up in both user groups. Second, the rule of reason's burden shifting framework always contemplates that a plaintiff's prima facie case does not necessarily prove an overall anticompetitive effect. But, where there are countervailing efficiencies suggesting the restraint is procompetitive on balance, the defendant is in a much better position to cast light on them. Third, even under the approach advocated here, the plaintiff ultimately retains the burden of persuasion as to the balance of pro and anticompetitive effects; the difference is merely that balancing is set aside until after the defendant has established a legitimate efficiency that might warrant such balancing. And, finally, the Supreme Court's decision will force courts to devise a standard for whether a market exhibits a "qualifying" degree of two-sidedness, and disputes over this will needlessly waste time and resources.

A. Alignment of Cross-Platform Effects

Unlike participation,¹⁸⁰ there is no meaningful sense in which a transaction platform's output can vary across the two sides.¹⁸¹ Rather, the two sides are always "consuming" the platform's service in equal amounts.¹⁸² When a transaction platform implements some kind of restraint on inter-side trade, it therefore has identical output effects on the two sides: if one side engages in less consumption of platform services market-wide, then so too must the other.

Given the practical constraints on proving welfare effects in court, they are generally presumed to follow the direction of any likely output effect.¹⁸³ On that presumption, a platform's restraint will tend to push both sides' welfare in a common direction.¹⁸⁴ As

179. *Accord* Katz & Sallet, *supra* note 11, at 2160 ("[M]ultisided platforms do not require a *new* antitrust. Instead, as with any antitrust case, courts can and should apply existing principles with care.").

180. *See supra* Part II.A.3.

181. The same cannot be said of a media platform, however. In a media platform, the relevant measures of "within-platform output" are (a) the quantity of ad space sold to advertisers; and (b) the quantity of media content sold to consumers. These two measures can indeed differ from one another, and indeed may not be commensurable.

182. For example, an auction platform must facilitate exactly the same number of sales as it does purchases, since it cannot effect one without the other.

183. *See, e.g.,* Frank H. Easterbrook, *The Limits of Antitrust*, 63 TEX. L. REV. 1, 28 (1984). To be sure, the platform economics literature illustrates situations in which output might be driven to an inefficiently high level, to the detriment of at least one side (usually sellers). *See, e.g.,* Rochet & Tirole, *Card Associations*, *supra* note 2, at 550; Wright, *Why Payment Card Fees Are Biased*, *supra* note 126, at 762. But the point is that, in practice, evidentiary limitations make it very hard to overcome the presumption that welfare rises in output.

184. There is one partial exception: restraints on within-side competition may benefit sellers at the expense of buyers. This was evident in the *Apple eBooks* hub-and-spoke conspiracy discussed *supra* Part II.C.2. However, in these cases, the relevant market will be that for the good or service supplied by sellers, not the market for platform services. *Apple eBooks*, 791 F.3d 290, 311 (2d Cir. 2015) ("the relevant market in this case is 'the trade e-books market, not the e-reader market or the e-books system market'") (quoting *United States v. Apple, Inc.*, 889 F. Supp. 2d 623, 642 (S.D.N.Y. 2012)).

such, if we find that a restraint (a) injures one side on a per-transaction basis (say, by increasing its platform usage price); and (b) seems unlikely to induce this side's users to engage in greater platform usage market-wide, even when accounting for the market's two-sidedness (say, because the restraint merely forestalls switching to rival platforms), then this supports a prima facie determination that the restraint is likely to injure competition *overall*. This is so notwithstanding that we have focused on users along just one side, and have endeavored to show an injury only within this narrower line of trade.

This suggests that, so long as we are cognizant of the market's two-sidedness, an inquiry focusing on the platform's dealings within one side is not such a futile approach. By contrast, some supporters of the Supreme Court's *AmEx III* decision suggest that we just cannot learn anything about the restraint's overall impact without netting the competitive effects across the two sides. For example, a group of amici academics supporting *AmEx III* wrote that:

One side of the market may experience some burden from a rule or practice, but a significant benefit on the other may more than offset this burden; conversely, one side might experience modest benefits while the other is significantly hurt. . . . In other words, the economics literature does not support the proposition that demonstrating harm on one side of a two-sided platform is sufficient to establish any presumption that market-wide consumer welfare decreased.¹⁸⁵

With due respect, this overstates the scope of the potential asymmetries. To the extent the restraint does produce an asymmetry, this generally arises on a *per-transaction* basis, such as by raising the usage fee on one side. But if the restraint is indeed procompetitive, then there is a countervailing volume increase that will tend to allay antitrust concerns and make inter-side balancing unnecessary.

In most cases where a restraint is deemed to have a procompetitive justification, it is because it actually enhances output in the very market where the plaintiff alleges an injury to competition.¹⁸⁶ The same logic applies here. In the case of a restraint imposed by a transaction platform, this must show up on both sides of the market. That means that when we focus on how a restraint is likely to affect total platform usage by just one side of the market (again, considering potential reasons relating to the market's two-sidedness), we can rest assured that a finding of a likely rise or fall must be mirrored exactly on the other side.

The amici quoted above similarly maintain that the assessment of overall competitive effects properly hinges on output. But they dispute the notion that we can discern anything about output effects without two-sided netting.¹⁸⁷ They provide an example in which media platforms charge markups to advertisers while selling substantive content to consumers at a price below cost (which is both common and benign). Amici suggest that focusing on the consumer side alone "would then lead to the bizarre conclusion that the platforms are

185. Brief for Antitrust Law & Economics Scholars, *supra* note 26.

186. See, e.g., Werden, *supra* note 177, at 136.

187. Brief for Antitrust Law & Economics Scholars, *supra* note 26, at *4 ("[A] plaintiff should be required to demonstrate . . . that: (1) the allegedly unlawful restraint caused anticompetitive effects in the form of actual or probable restricted *output* market-wide - a showing that logically requires analyzing both sides of a two-sided market . . .").

engaging in . . . predatory [consumer-side] pricing.”¹⁸⁸

If we think a one-sided market definition would lead courts to baldly ignore all considerations relating to two-sidedness, then this example highlights a real concern. But as noted earlier, such examples object to a myopic approach that no one is advocating. The rule of reason is designed to consider any relevant factors shedding light on competitive effects. There is no basis for suggesting that the courts will spontaneously abandon this philosophy when evaluating conduct in two-sided markets.

Moreover, there is nothing analytically novel about focusing one side of the platform and searching for a plausible reason why the restraint might lead this side’s participants to increase their (market-wide) usage of platform services. Once again, the analogy to resale price maintenance (RPM) is instructive.¹⁸⁹ Minimum RPM ostensibly raises the price at which retailers sell the manufacturer’s product, relative to the case in which intra-brand competition is unrestrained. But we recognize that this per-transaction effect is generally overshadowed by an increase in output, since the restraint helps to maintain retailer interest in carrying and promoting the manufacturer’s good. Even if we are inclined to include retailers in the welfare calculus, there is no need to fuss over the balance of the effects on retailers versus consumers; the output increase supports a presumption that the restraint is procompetitive on the whole.

With respect to AmEx’s steering restraint, it is sufficient to note that it will presumptively just reallocate transactions among platforms, as opposed to enhancing the market-wide volume of exchange. This point, combined with the district court’s finding of a likely injury to merchants, ought to be sufficient to support a prima facie injury to competition. Then, as usual, the defendant will have an opportunity to rebut that presumptive injury.

What about the aforementioned concern that, absent a two-sided market definition, courts might erroneously diagnose a skewed price distribution as predatory pricing? In fact, we have a good case study. In *Wallace*, Judge Easterbrook had little difficulty concluding that the lower court had correctly thrown out the plaintiff’s claim of predation by a free open-source operating system—a claim Easterbrook amusingly likened to a proposal that “free forever” might be the ultimate deterrent to competition.¹⁹⁰ Similarly, many tying arrangements, such as printers and ink cartridges, involve one good (the printer) being sold below cost; the courts do not entertain theories of predation here either. The fact is, these kinds of exceptions to antitrust conventions are not nearly as hard to recognize as some commentaries suggest.

B. Avoiding Errors Through Stages

Supporters of *AmEx III*’s two-sided netting requirement presume that this burden shifting framework is inarguably better equipped to avoid judicial errors.¹⁹¹ But, more accurately, it would produce a tradeoff in errors. It reduces the likelihood of type one errors (mistaken finding of liability), while increasing the likelihood of type two errors (mistaken

188. *Id.* at *13.

189. *See supra* Part II.A.

190. *Wallace v. IBM*, 467 F.3d 1104, 1106 (7th Cir. 2006).

191. *See, e.g.*, Brief of the Clearing House Association L.L.C. as Amicus Curiae in Support of Respondents at 6, *AmEx III*, 138 S. Ct. 2274 (arguing that without including both sides in the relevant market, there is an unreasonable risk of errors).

denial of liability). While one may reasonably posit that it is preferable to err on the side of non-intervention, the two error types are not equally likely. A defendant is much better informed about the broader function of its restraint and its comparative effects across the two sides. That would suggest a defendant can more capably demonstrate a plausible cross-platform efficiency than a plaintiff can refute one. As such, in cases that turn on considerations of procompetitive justifications (stage two), type one errors will be substantially less likely to arise, given that the defendant need not quantify the relevant efficiencies.

Indeed, in considering procompetitive justifications, the burden is traditionally placed on the defendant precisely because it is in a much better position to cast light on them.¹⁹² As the Supreme Court has previously noted, “[t]he ordinary rule, based on considerations of fairness, does not place the burden upon a litigant of establishing facts peculiarly within the knowledge of his adversary.”¹⁹³ The defendant’s operations hinge on garnering sufficient levels of participation on both sides of its platform, and thus one expects that it is acutely familiar with this balancing act. Presumably there is no other party with a better understanding, or better documentation, of the role its restraint plays in facilitating inter-side exchange.

In consideration of the error concerns, a court might reasonably assign added weight to considerations of two-sidedness upon a defendant’s showing that its restraint is plausibly necessary to bring the two sides together. This could be an appropriate (or at least more reasonable) way to err on the side of non-intervention based on the distinctive challenges that platforms face. And such predilections are not unprecedented, as courts occasionally demand stronger or weaker showings from defendants based on the nature and circumstances of their conduct.¹⁹⁴

But the *AmEx III* decision goes much farther, requiring two-sided netting before we have any case-specific evidence of a countervailing efficiency. This is hardly an egalitarian balancing of the error risks. In fact, the majority seems to not even have the right errors in mind. Rather than focusing on errors in the ultimate outcome of the case, it places substantial emphasis on avoiding errors in the *first stage* of the burden shifting framework. But the very purpose of this framework is to sort through countervailing considerations incrementally—not to try to reconcile them all at once, before we have a clear sense of what they are. By design, the rule of reason framework contemplates that plaintiffs can carry their initial burden without having ruled out offsetting efficiencies. The remaining stages are then designed to establish any such efficiencies and, if necessary, to balance them against anticompetitive effects. By contrast, the approach prescribed by the majority effectively collapses the entire rule of reason framework—and all of its intermediate

192. See, e.g., RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 845 (9th ed. 2014) (the “burden of persuasion rests on the plaintiff for the main claim but the defendant for affirmative defenses”); *Rice v. Sunrise Express Inc.*, 217 F.3d 492, 493 (7th Cir. 2000) (“When burdens of proof are allocated, it is normally most efficient to place the burdens of production and persuasion on the party with the best access to relevant information.”); KENNETH S. BROUN ET AL., *MCCORMICK ON EVIDENCE* § 337, 717 (7th ed. 2013) (“A doctrine often repeated by the courts is that where the facts with regard to an issue lie peculiarly in the knowledge of a party, that party has the burden of proving the issue.”).

193. *United States v. N.Y., New Haven & Hartford R.R. Co.*, 355 U.S. 253, 256 n.5 (1957) (citation omitted).

194. *FTC v. Actavis*, 570 U.S. 136, 159 (2013) (noting that “[t]here ‘is always something of a sliding scale in appraising [the] reasonableness’” of defendant conduct, and that “‘the quality of proof required should vary with the circumstances’”) (quoting *Cal. Dental Ass’n v. FTC*, 526 U.S. 756, 780 (1999)).

burdens—into the plaintiff’s prima facie case.

In fact, even if the defendant goes on to prevail on final judgment, it would be inapposite to characterize the plaintiff’s advancement to stage two as an “error.” Stage one is supposed to make an intermediate determination, the proper outcome of which does not necessarily agree with that of the overall case. By analogy, if a court denies a motion to dismiss a complaint, we will not later call this an error if the defendant ended up prevailing on final judgment. Nevertheless, many commenters mistakenly suggest that the burden should not shift to the defendant until the plaintiff has effectively resolved the merits of the case in their entirety.¹⁹⁵ If that were the correct approach, there would ostensibly be no meaningful role for the remaining stages.

C. Plaintiffs Already Bear the Burden on Balancing

Balancing anticompetitive effects against procompetitive efficiencies is notoriously challenging.¹⁹⁶ It is intuitively sensible that, if there are countervailing welfare effects, the burden ought to be on the plaintiff to establish that the balance of effects results in a net injury. But it is incorrect to presume that the *AmEx III* decision—which requires balancing right out of the gates—was necessary to achieve this result.

Recall that, if the defendant establishes a procompetitive justification and the plaintiff fails to identify a less restrictive alternative, then the court must attempt to balance the countervailing effects. Here, the plaintiff carries the burden of persuasion by virtue of its underlying obligation to prove an anticompetitive effect by a preponderance of evidence.¹⁹⁷ As such, the rule of reason already ensures that the plaintiff bears the ultimate burden as to the balance of countervailing effects. But, critically, the usual approach delays the balancing inquiry until such time as the court can be sure it is necessary—namely, until after the defendant has established a significant efficiency that might warrant balancing.

Most rule of reason cases resolve before reaching the balancing stage.¹⁹⁸ However,

195. See, e.g., Brief for Amici Curiae Prof. David S. Evans and Prof. Richard Schmalensee in Support of Respondents at 6, *AmEx III*, 138 S. Ct. 2274 (2018) (“This is not a matter of burden shifting. There is simply no way to know . . . whether a practice is anticompetitive without at least considering both types of customers. . . . That analysis must, therefore, happen at the first stage of the rule of reason to assess whether the conduct is anticompetitive or not.”).

196. See, e.g., *United States v. Topco Assocs., Inc.*, 405 U.S. 596, 609–10 (1972) (“[Courts’] inability to weigh, in any meaningful sense, destruction of competition in one sector of the economy against promotion of competition in another sector is one important reason we have formulated per se rules.”). See also, e.g., Werden, *supra* note 177 (discussing welfare balancing within antitrust’s burden shifting framework, with emphasis on balancing between distinct markets); Daniel A. Crane, *Balancing Effects Across Markets*, 80 ANTITRUST L.J. 397 (2015).

197. See, e.g., EINER ELHAUGE, *UNITED STATES ANTITRUST LAW AND ECONOMICS* 142 (2d ed. 2011) (“[A]t the final stage the tribunal weighs the anticompetitive and procompetitive evidence to determine which is greater. The plaintiff has the burden of persuasion on whether the net effect is anticompetitive”); Werden, *supra* note 177, at 139 (the plaintiff “bears the burden of proof—the ultimate burden of nonpersuasion of the fact finder—and hence the burden on balancing.”); *Homsby Oil Co. v. Champion Spark Plug Co.*, 714 F.2d 1384, 1392 (5th Cir. 1983) (“Proof that the defendant’s activities, on balance, adversely affected competition . . . is essential to recovery under the rule of reason.”); *United States v. Baker Hughes, Inc.*, 908 F.2d 981, 983 (D.C. Cir. 1990) (holding that the burden of persuasion at the final stage “merges with the ultimate burden of persuasion, which remains with the [plaintiff] at all times”).

198. Michael A. Carrier, *Rule of Reason: An Empirical Update for the 21st Century*, 16 GEO. MASON L. REV. 827, 828 (2008) (finding that, in all rule of reason cases between 1999 and 2009, just 2% of cases reached the balancing stage).

this is in part due to the fact that a large majority of cases end at the first stage, with plaintiffs failing to make a prima facie case.¹⁹⁹ Michael Carrier finds that, between 1999 and 2009, plaintiffs fail at the first stage in 97% of rule of reason cases.²⁰⁰ Further, there was only one final judgment issued in a plaintiff's favor over that period (out of 222 total judgments). Thus, given that the burden of establishing a prima facie case *without balancing* is already highly demanding, we would hardly stack the deck against defendants by continuing to reserve the balancing analysis for the final stage.

Everyone agrees that platform economics makes matters more complicated, which does indeed increase the concern that courts might err in attempting to resolve the balance of countervailing effects. But the maximal possible number of type 1 errors is capped by the number of judgments issued in plaintiffs' favor. And that number is already miniscule under the traditional burden shifting rules. As such, there simply isn't any room for a large swath of plaintiff-favoring errors, because plaintiffs almost never win in the first place.

D. Testing for "Qualifying Two-Sidedness"

Payment card networks are obviously two-sided. But as noted earlier, two-sidedness is a matter of degree.²⁰¹ Not all defendants will present the court with such an easy call. Moreover, the *AmEx III* decision acts to increase the plaintiff's burden of production in making a prima facie case.²⁰² It requires the plaintiff effectively to disprove efficiencies, whereas a defendant ordinarily carries the burden of establishing a plausible procompetitive effect.²⁰³ There are no potential defendants who would not benefit from this. As such, under the *AmEx III* standard, we can expect an outpouring of defendants emphatically claiming to be two-sided, and urging courts to consider the various types of actors with whom they deal. Indeed, within a month of the majority's decision, this has already started happening. A health insurer has recently asked a court to reconsider its denial of summary judgment based on the *AmEx III* decision, claiming that the plaintiff had not properly accounted for its two-sidedness.²⁰⁴

It will thus become necessary to filter out the pretext. The *AmEx III* majority may have recognized this, as it emphasized that a two-sided market definition is required only if there are sufficiently strong indirect network effects running in both directions.²⁰⁵ This

199. *Id.* (finding that in cases between 1999 and 2009, "courts dispose of 97% of cases at the first page, on the grounds that there is no anticompetitive effect").

200. *Id.* at 837.

201. *Accord* Katz & Sallet, *supra* note 11, at 2151 (describing "the lack of definitional consensus regarding multisided platforms, coupled with the prospective applicability of the existing definitions to a vast range of firms"); Carlton & Winter, *supra* note 11, at 241 ("[T]he Supreme Court uses a very broad definition of two-sided markets in its decision—so broad that the definition could capture almost any market.").

202. The burden of production refers to the evidentiary showing a party must make in order to prevail on a claim, defense, or any other issue in dispute.

203. Brief of 25 Professors of Antitrust Law as amici curiae supporting petitioners at *14–15, *Ohio v. Am. Express Co.*, 138 S. Ct. 2274 (2018) (No. 16-1454) (supporting the petition for writ of certiorari) (this standard requires the plaintiff "to speculate as to what evidence of procompetitive effects a defendant might offer and then refute that hypothetical evidence to meet its initial burden").

204. David Garcia & Nadezhda Nikonova, *AmEx Ruling May Have Big Impact on Health Insurance*, HEALTH CARE L. BLOG (July 17, 2018), <https://bit.ly/2v5PZai> (discussing a recent court filing by Blue Cross of Rhode Island).

205. *AmEx III*, 138 S. Ct. at 2286 ("[I]t is not always necessary to consider both sides of a two-sided platform.

will require lower courts to devise a test for discerning whether a defendant's industry exhibits some "qualifying" degree of two-sidedness.²⁰⁶ The defendant ought to carry the burden of persuasion on this question, given that (a) two-sidedness is an exception to the norm and (b) the effect of passing this "two-sidedness test" will be to increase the plaintiff's initial burden of production.

There are a number of problems with this. Note that the defendant is still obligated to make a particular showing. But now the question being answered is far less useful to the underlying antitrust claim. Rather than asking the defendant to articulate a plausible efficiency, which has clear and substantial relevance, the defendant is merely asked to show that its industry is meaningfully two-sided. At most, this just tells us that there *could* be a plausible procompetitive justification relating to platform commerce. But why not just ask about such efficiencies directly? It makes little sense to replace one question with a second, the answer to which is merely suggestive of what we might have learned upon asking the first.

By sticking to the conventional burden shifting framework, we avoid any need to set an arbitrary threshold for qualifying two-sidedness. The defendant is free to assert any affirmative defense; if it shows a plausible procompetitive justification relating to two-sidedness, then it has done its part, and there is no need for a separate attempt to discern how many sides it has. This way we stick to the questions at the heart of the antitrust claim, rather than fighting over the best way to characterize the defendant's enterprise.

VI. CONCLUSION

Two-sided markets present a number of challenges to antitrust. A platform requires a critical mass of participation by members from both sides of the market in order to facilitate exchange between them. Some kind of restrictive practice may be reasonably necessary to accomplish this. However, it is important not to overstate the novelties of two-sided commerce and its propensity to justify restraints on trade. Unfortunately, that is precisely what the Supreme Court did in *AmEx III*.

This Article explores the general question of how the antitrust laws ought to confront platforms and platform competition, with emphasis on conduct evaluated under the rule of reason. To be sure, there are many conceivable scenarios in which platform economics is germane to the antitrust analysis. But they are manageable within the existing rule of reason framework. The Supreme Court was mistaken in concluding otherwise.

A market should be treated as one-sided when the impacts of indirect network effects and relative pricing . . . are minor." The Court went on to note that media platforms generally will not require a two-sided market definition, because the indirect network effect generated by advertiser participation is small. *Id.*

206. Cf. Patrick R. Ward, *Testing for Multisided Platform Effects in Antitrust Market Definition*, 84 U. CHI. L. REV. 2059, 2061 (2017) (proposing "a two-stage test for multisidedness" that courts could use to determine if a defendant is sufficiently two-sided and which, if passed, would trigger the Second Circuit's standard).