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Multisided Platforms and Antitrust Enforcement

ABSTRACT. Multisided platforms are ubiquitous in today's economy. Although newspapers demonstrate that the platform business model is scarcely new, recent economic analysis has explored more deeply the manner of its operation. Drawing upon these insights, we conclude that enforcers and courts should use a multiple-markets approach in which different groups of users on different sides of a platform belong in different product markets. This approach appropriately accounts for cross-market network effects without collapsing all of a platform's users into a single product market. Furthermore, we advocate the use of a separate-effects analysis, which rejects the view that anticompetitive conduct harming users on one side of a platform can be justified so long as that harm funds benefits for users on another side. Courts should consider the price structure of a platform, and not simply the net price, in assessing competitive effects. This approach in turn supports our final conclusion: that antitrust plaintiffs should not be required to prove as part of their prima facie case more than occurrence of competitive harm in a properly-defined market; thereafter, the burden to produce procompetitive justifications should shift to defendants.

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INTRODUCTION

Many of the world's most prominent firms today operate as "platforms" that facilitate interactions among different groups of users. For example, Amazon brings together merchants and consumers; Google joins advertisers and consumers engaged in online search; Facebook connects advertisers with consumers engaged in social networking; the Apple "App Store" links app sellers with iPhone and iPad users; and Airbnb introduces landlords to short-term renters.

The platform business model is hardly new. For centuries, newspapers have acted as a means for advertisers to reach consumers attracted to the platform by the provision of news and other information. Similarly, by providing means of payment, credit and debit card networks have long served as intermediaries between merchants and consumers. Antitrust scrutiny of platforms is also not novel. In the last three-quarters of a century, the U.S. Department of Justice (DOJ) has brought major antitrust cases against several platforms.[1]

What is new, however, is the development of extensive economic analyses of platform competition. Following the pioneering 2006 work of Jean-Charles Rochet and Jean Tirole,[2] scholars have explored the economics of platform conduct and the manner in which antitrust principles should be applied to platforms.[3] Platforms are different, but how different? And how do these differences inform the correct application of legal and economic antitrust principles? In this Feature, we build on recent economic scholarship to address two foundational questions for the application of antitrust enforcement to platforms: first, how courts should account for the distinct characteristics of platforms when defining

1. Examples include *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951) (newspaper publisher selling both advertising and newspapers); *United States v. Visa U.S.A., Inc.*, 344 F.3d 229, 238-39 (2d Cir. 2003) (credit card companies serving both banks and merchants); *United States v. Microsoft Corp.*, 253 F.3d 34, 46 (D.C. Cir. 2001) (operating system serving applications developers and PC users); and *United States v. Florist's Telegraph Delivery Ass'n*, 1956 Trade Cas. (CCH) ¶ 68,367 (E.D. Mich.) (florist-by-wire association serving both florist shops receiving orders and florist shops fulfilling orders).

2. *See* Jean-Charles Rochet & Jean Tirole, *Two-Sided Markets: A Progress Report*, 37 RAND J. ECON. 645 (2006) (providing a roadmap to the early literature and developing a canonical model of two-sided platforms).

3. *See* David 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., 2014) (surveying, inter alia, the influence of and responses to Rochet and Tirole's work).

an antitrust market,[4] and second, how, if at all, courts should weigh user groups' gains and losses on different sides of a platform against one another.

The first question is important because established antitrust analysis generally begins with defining the relevant antitrust market(s), and vigorous, ongoing debate centers on the appropriate approach to market definition in platform industries.[5] A characteristic feature of platforms — close linkages between different sides of a platform (e.g., advertisers want to be on the platform where readers are) — has given rise to the fundamental question of how market definition should reflect these linkages.

One approach, advocated by Lapo Filistrucchi and others for an important class of multisided platforms, defines the relevant product market as encompassing both sides of a platform.[6] Under their approach, one would view Airbnb as competing in a single product market encompassing the rental-matchmaking services sold to landlords on one side and renters on the other. We call this the *single-market approach*.[7] We ultimately argue, however, that platforms are better

4. Particularly in the early literature, platforms were described as operating in "multi-sided markets" to reflect a platform's need to attract multiple groups of users. *See, e.g.*, David S. Evans, *The Antitrust Economics of Two-Sided Markets*, 20 YALE J. REG. 325, 328 (2003). Because of the distinct meaning of the term "market" in antitrust, we will typically refer to such business models as "multisided platforms" for the purposes of this Feature.

5. Courts generally require that antitrust plaintiffs plead the existence of one or more relevant markets. *See, e.g.*, United States v. Gen. Dynamics Corp., 415 U.S. 486, 498 (1974) (merger case); Agnew v. NCAA, 683 F.3d 328, 332 (7th Cir. 2012) (rule of reason case); Heerwagen v. Clear Channel Commc'ns, 435 F.3d 219, 227 (2d Cir. 2006) (monopolization case). The U.S. Department of Justice (DOJ) and the Federal Trade Commission (FTC) also address market definition in their horizontal merger guidelines. U.S. DEP'T JUST. & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES § 4 (Aug. 19, 2010) [hereinafter HORIZONTAL MERGER GUIDELINES], http://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf [http://perma.cc/V4G8-CF26]. As we discuss *infra* Section III.A and notes 31-32, market definition is not always required; it may be sufficient to look directly at competitive effects.

Although market definition requires the establishment of both product and geographic boundaries, *see* HORIZONTAL MERGER GUIDELINES, *supra* § 4, this Feature addresses only the definition of the product market; debates over the geographic borders of competition have not been part of the discussion concerning the proper treatment of platforms, although they could be important in any particular case (for example, in considering whether two local newspapers serve sufficient numbers of overlapping subscribers to be treated as competitors). *See, e.g.*, Complaint, United States v. Tribune Publ'g Co., No. 2:16-cv-01822 (C.D. Cal. Mar. 17, 2016).

6. *See, e.g.*, Lapo Filistrucchi et al., *Market Definition in Two-Sided Markets: Theory and Practice*, 10 J. COMPETITION L. & ECON. 293, 301-02 (2014).

7. LAPO FILISTRUCCHI ET AL., MERGERS IN TWO-SIDED MARKETS – A REPORT TO THE NETHERLANDS COMPETITION AUTHORITY 88 (2010), http://www.acm.nl/sites/default/files/old_download/documenten/nma/NMa_Two-Sided_Markets_-_Report_-_16_July_2010.pdf [http://perma.cc/L49U-MCGE], and Filistrucchi et al., *supra* note 6, at 300-04, survey the

viewed as operating in multiple separate, yet deeply interrelated, markets. Under this view, Airbnb participates in one market in the provision of support services to landlords and in another market in the provision of services to short-term renters. We call this alternative the *multiple-markets approach*. Crucially, when applied appropriately, this approach gives careful consideration to any significant linkages between the markets on the different sides of a platform that might be present. And as we discuss, an advantage over the single-market approach is that the multiple-markets approach fully recognizes that the interests of users on different sides of a platform are not fully aligned with one another, and that the state of competition, and indeed the sets of competitors, on different sides of a platform can significantly differ from one another.[8]

The second foundational question—how should antitrust weigh distinct gains and losses experienced by users on different sides of a platform—arises because, in some cases, anticompetitive conduct harms users on one side of a platform while benefitting users on another.[9] In terms of overarching philosophy, there are two polar approaches. One, *net-effect analysis*, argues that the appropriate consumer-welfare standard[10] should weigh all platform users equally and focus solely on the net effects.[11] The other pole, *separate-effects analysis*, insists that each buyer group is entitled to the benefits of competition and, consequently, that harm to one user group due to harm to competition cannot be offset by gains to another user group that result from the loss of competition. By ensuring each group of users enjoys the benefits of competition, separate-effects

use of this approach. It was used, for example, by the Dutch competition authority in reviewing a merger between two horticultural auction platforms. Nederlandse Mededingingsautoriteit: Besluit [Dutch Competition Authority: Decision], 5901/Bloemenveiling Aalsmeer - FloraHolland, No. 5901/184, ¶ 28 (Feb. 21, 2007), http://www.acm.nl/sites/default/files/old_publication/bijlagen/3983_5901BCV.pdf [http://perma.cc/PV9P-ZJZR].

8. *See infra* Section III.B.

9. For example, Przemysław Jeziorski found that a merger wave in the U.S. radio broadcasting industry harmed advertisers but benefited listeners. Przemysław Jeziorski, *Effects of Mergers in Two-Sided Markets: The US Radio Industry*, 6 AM. ECON. J.: MICROECON. 35, 37 (2014). Economists have also shown that conduct that requires or induces users on one side of the marketplace to participate on at most one platform may harm users on another side. *See* Mark Armstrong & Julian Wright, *Two-Sided Markets, Competitive Bottlenecks and Exclusive Contracts*, 32 ECON. THEORY 353, 373-74 (2007) (demonstrating that exclusivity requirements can have complex competitive effects).

10. As used in antitrust, the term "consumer" applies to platform users even when they are themselves business enterprises, such as merchants utilizing a credit card platform.

11. In *United States v. American Express*, the Second Circuit found that "[p]laintiffs' initial burden was to show that the [challenged contractual terms imposed on merchants] made *all* Amex consumers on both sides of the platform—i.e., both merchants and cardholders—worse off overall." 838 F.3d 179, 205 (2d Cir. 2016), *cert. granted sub nom.* Ohio v. Am. Express Co., 138 S. Ct. 355 (2017).

analysis would resolve that harm to a group of users on one side of a platform due to anticompetitive conduct cannot be offset by gains to a user group on another side that are a consequence of that conduct. We will show that such an understanding better comports with the fundamental purposes of antitrust law.

This Feature proceeds as follows. Part I offers simple hypothetical and real-world analogues through which we illustrate several critical issues pertaining to antitrust enforcement and multisided platforms. Part II discusses the surprising lack of consensus regarding what constitutes a multisided platform. With the issues identified and the nature of platforms themselves examined, Part III turns to the primary role of market definition in assessing market power. Part IV addresses competitive effects between and within markets, examining the effect of a narrow focus on the net price and its implications on balancing harms to users on one side of a platform against gains (if any) to users on the other side. Finally, Part V develops our normative framework for how antitrust law should treat market definition and cross-market effects, in addition to noting the practical implications of such analysis.

I. A PARADIGMATIC EXAMPLE

Imagine the following: a hypothetical, application-based service named "Dine Out" provides restaurants access to potential customers by making it easy for customers to make reservations. Dine Out is thus a platform facilitating transactions between restaurants and diners. Dine Out charges each restaurant a fee, a portion of which it uses to provide consumers with reward points having monetary value. Imagine further that Dine Out imposes contractual limitations on all participating restaurants that bars them from asking diners to use other means of making reservations that are cheaper for the restaurant or otherwise "steering" diners to such alternatives. These limitations also prevent each restaurant from imposing a surcharge on those diners who use Dine Out rather than a less expensive means of booking, such as calling the restaurant directly.

Such circumstances can arise in a variety of settings. For example, in 2002, the Reserve Bank of Australia required leading credit-card companies to eliminate their rule against surcharges, and subsequent efforts led to the elimination of anti-steering rules that had denied merchants the ability to ask a customer to use a means of payment other than the credit card he or she initially intended to use.[12] Issues regarding limitations on surcharging and steering remain central to

12. Brief for Amicus Curiae Australian Retailers Association in Support of Petitioners at 4-5, Ohio v. Am. Express Co., (No. 16-1454), 2017 WL 6398767 (Dec. 14, 2017). Co-author Katz served as an expert witness retained by the Reserve Bank of Australia in litigation challenging the Bank's decision.

Ohio v. American Express.[13] Similar issues arise with respect to the use of platform-parity policies by online booking companies that facilitate transactions between hotels and travelers wishing to purchase travel services. Under such a policy, a hotel must charge its customers the same room rate regardless of the platform through which they book their rooms.[14]

In other situations, platform users themselves, rather than platforms, can impose anti-steering provisions. For example, health insurance companies could be seen to constitute platforms that facilitate the interaction between healthcare providers and patients. The Charlotte-Mecklenburg Hospital Authority allegedly imposed contractual restrictions on insurers to prevent them from telling their members that care was available from a higher quality or lower cost hospital.[15]

Returning to the Dine Out hypothetical, how should courts consider the competitive impact of the restrictions on restaurants?[16] On the one hand, a plaintiff could argue that the contractual provisions harm restaurants by limiting price competition between Dine Out and its rivals because, even if a restaurant participates on both Dine Out and a competing reservation platform, the restaurant has no means of inducing its customers to utilize the platform that is, from the restaurant's point of view, cheaper. Consequently, it would be argued, Dine Out and its rivals face diminished competitive pressures to hold down their fees to restaurants.[17] The plaintiff might also argue that the contractual provisions artificially limit entry by rendering ineffective those business models of new competitors to Dine Out that would charge lower fees to restaurants. Among its responses, Dine Out might contend that the no-surcharge rule and other contractual limitations promote consumer welfare by facilitating the rewards program, which conveys value to customers, and by catalyzing competition among Dine Out and its competitors to offer the best customer rewards.

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13. *See, e.g.*, United States v. Am. Express Co., 88 F. Supp. 3d 143 (E.D.N.Y. 2015), *rev'd*, *Am. Express Co.*, 838 F.3d, *cert. granted sub nom. Am. Express Co.*, 138 S. Ct.

14. In 2013, the Bundeskartellamt (German antitrust authority) found that the use of parity clauses by the online travel platform HRS-Hotel Reservation Service infringed competition laws. HRS-Hotel Reservation Service et al., No. B 9 - 66/10 (Dec. 20, 2013), http://www.bundeskartellamt.de/SharedDocs/Entscheidung/EN/Entscheidungen/Kartellverbot/B9-66-10.pdf;jsessionid=9BE25EB94E65170764A6BA609635D89A.1_cid378?__blob=publicationFile&v=3 [http://perma.cc/DST3-2M3F].

15. United States v. Charlotte-Mecklenburg Hosp. Auth., No. 3:16-cv-00311-RJC-DCK, slip op. at 3-4 (W.D.N.C. Mar. 30, 2017) (denying defendant's motion to dismiss).

16. This is a stylized description. Other issues would be litigated, such as whether Dine Out has market power.

17. Plaintiffs made a similar argument in *American Express*. Amended Complaint, Am. Express Co., 88 F. Supp. 3d 143 (No. CV 10-4496).

In terms of our fundamental questions, the plaintiff might adopt the multiple-markets approach and argue that, under a separate-effects analysis, it should prevail if it can demonstrate that merchants are harmed by Dine Out's policies. By contrast, Dine Out might adopt the single-market approach and insist that, under a net-effect analysis, only a showing that merchants were harmed *more than* diners benefitted would be sufficient for the plaintiff to prevail. As this hypothetical illustrates, the choices of whether to adopt a single- or multiple-markets approach and conduct a net-effects analysis or a separate-effects analysis can fundamentally shape the nature of a court's examination of whether a platform's conduct is anticompetitive. However, before we can discuss the appropriate antitrust treatment of multisided platforms, we have to confront the fact that there is a disturbing lack of consensus regarding what constitutes a multisided platform.

II. WHAT'S IN A NAME? THE PROBLEM OF IDENTIFYING WHAT QUALIFIES AS A PLATFORM

The lack of consensus regarding the definition of a platform is important, because some commentators emphasize the distinction between single-sided businesses and multisided platforms and suggest that antitrust enforcement reflect this distinction.[18] Yet, it is much harder to distinguish single-sided business from multisided ones than one might initially suspect, which indicates that the nature of enforcement should not dramatically change based on whether a firm is labeled as a multisided platform.

The seminal scholarly definition of a multisided platform comes from Rochet and Tirole. Consider a platform charging per-interaction prices p_1 and p_2 to the two sides. The market is *not* two sided if the volume of transactions realized on the platform depends only on the aggregate, or "net," price level, $P \equiv p_1 + p_2$. By contrast, if the volume varies with p_i while holding P constant, then the market is said to be two-sided.[19] In other words, according to Rochet and Tirole, the defining feature of "two-sidedness" is whether the *structure* of prices (the individual values of p_1 and p_2) matters, or if solely the *level* (the net price, P) matters.[20] If modifying the structure of prices while holding the net price con-

18. *See, e.g.*, David S. Evans, *The Antitrust Economics of Two-Sided Markets* 59-60 (Mar. 1, 2014) (unpublished manuscript), http://ssrn.com/abstract_id=332022 [http://perma.cc/AD24-UBZ8].

19. Rochet & Tirole, *supra* note 2, at 648.

20. *Id.*

stant affects the total transaction volume, then the firm is a platform; if the structure does not matter, then, under their definition, the firm is not a multisided platform.

For Dine Out, the net price would be the difference between the reservation fee it charges to restaurants and the rewards it pays to diners. Thus, under the Rochet-Tirole definition, Dine Out would be a two-sided platform as long as its transaction volume would be affected by raising the per-reservation fee charged to restaurants and the per-reservation reward paid to diners by equal amounts, which would leave the net price unchanged.

Rochet and Tirole offered their definition to identify a phenomenon of analytical interest, not as a tool for delineating an alternative antitrust enforcement regime.[21] Their definition has two fundamental weaknesses when used in the latter way. First, on their view, *any* firm that sets the prices it pays for inputs and charges for its output can be characterized as a platform facilitating "transactions" between its input suppliers and output buyers in a multisided market. A "standard" firm can therefore be squeezed into the multisided market pigeonhole by treating the prices it pays for inputs as negative prices charged for using the firm as a platform to reach buyers.[22] Although the concept of negative prices may seem odd, the various forms of rewards paid by online restaurant reservation and travel-booking services to customers who patronize their platforms exemplify such prices. Reward points paid to credit card users (without regard to whether the card users also pay a membership fee) are another commonplace example. Viewing prices in this way, the net two-sided price is the difference between what the firm charges for its output and pays for its inputs.

An automobile manufacturer is commonly viewed as a one-sided business — selling vehicles. But consider an automobile manufacturer that procures windshields for the vehicles that it sells. Suppose that it pays $-p_1$ per windshield and charges p_2 per vehicle, such that the firm's net price is $P = p_1 + p_2$. Clearly, the automobile manufacturer's sales would fall if it dramatically increased the price it charges for automobiles even if it held the net, two-sided price, P, constant by increasing what it pays for windshields by an equal amount. Because its price structure affects the transaction volume, the Rochet-Tirole definition would classify the automobile manufacturer as a multisided platform.[23]

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21. *Id.* at 664-65.

22. For additional discussion of this point, see Benjamin E. Hermalin & Michael L. Katz, *What's So Special About Two-Sided Markets?*, *in* TOWARDS A JUST SOCIETY: JOSEPH STIGLITZ AND 21ST CENTURY ECONOMICS (forthcoming 2018).

23. Rochet and Tirole recognize this problem, using the example of a manufacturer that both manufactures widgets and pays employees, which they resolve by concluding that, at least in competitive environments, such firms "are often de facto one-sided platforms" on the ground

Second, under the Rochet-Tirole definition, whether a firm constitutes a multisided platform may depend on its conduct. In the absence of Dine Out's no-surcharge rule, restaurants could in theory perfectly offset changes in Dine Out's consumer rewards by levying an equivalent booking fee on diners who utilize Dine Out, with the result that Dine Out's price structure would have no effect on restaurants' and consumers' incentives to use Dine Out. Therefore, Dine Out would not be a platform.[24] In other words, Dine Out would satisfy the Rochet-Tirole definition of a multisided platform only when the no-surcharge policy was in place because only then would a change in the price structure change the volume of transactions. To the extent being identified as a platform for antitrust purposes is intended to provide courts with guidance regarding the need to account for specific economic characteristics of the defendant, it would be confusing to base that identification on the existence of particularized, and potentially changing, business practices.

Several other well-regarded definitions for multisided platforms have been proposed.[25] In the absence of a consensus definition, we believe that a good approach for antitrust purposes is to define a firm as a multisided platform when *cross-platform network effects* occur in at least one direction and the firm facilitates interactions between two or more groups of users, can set distinct prices to different user groups, and has market power with respect to those groups.[26] Cross-platform network effects exist when the presence of members of group A as users on one side of the platform makes the platform more attractive to members of group B on another side.[27] This definition captures the characteristics of firms

that they have little "wriggle room" to change the price structure. Rochet & Tirole, *supra* note 2, at 648-49. That is not the case in the example we give.

24. For example, suppose that Dine Out raised both the fee to restaurants and the rewards to consumers by $1 per reservation, so that its net price remains constant but its price structure changes. If restaurants imposed a $1 per-reservation booking fee for using Dine Out, then the $1 value would have no effect on a consumer's incentives to use Dine Out because he or she would get a $1 larger reward but would have to pay $1 more to obtain it. Similarly, a restaurant's incentives would be unaffected because it would have to pay $1 more per reservation but would also obtain $1 additional revenue per reservation. For a seminal discussion of this type of pricing neutrality, see Joshua S. Gans & Stephen P. King, *The Neutrality of Interchange Fees in Payment Systems*, 3 TOPICS IN ECON. ANALYSIS & POL'Y 1 (2003).

25. For a review of alternative definitions of multisided platforms and the issues associated with them, see Hermalin & Katz, *supra* note 22.

26. This definition is based on the features identified by E. Glenn Weyl as being common to a "style of industrial organization modeling." E. Glen Weyl, *A Price Theory of Multi-Sided Platforms*, 100 AM. ECON. REV. 1642, 1644 (2010). Our inclusion of market power is meant to capture the likely circumstances in which antitrust issues arise, not to suggest that all firms with multisided business models have market power.

27. For example, an increase in the number of merchants accepting Visa credit cards will make holding a Visa credit card more attractive to consumers. Similarly, the greater the number of

that are commonly labeled as platforms or multisided markets in recent antitrust litigation[28] and, thus, allows us to examine the implications of these underlying characteristics for appropriate antitrust enforcement.

That said, this definition should be used with caution. As does Rochet and Tirole's, our definition also runs the risk of being overbroad. Almost any firm selling an input to a manufacturer would prefer that the manufacturer have more customers, as then the manufacturer will demand more of the input. To return to the example above, the windshield supplier would prefer that the automobile manufacturer it supplies have a larger number of customers, so that the supplier's auto glass sales would be larger and it could possibly gain valuable brand recognition. Our point is not that this definition is perfect whereas the others are not; it's that this definition identifies a cluster of factors that allows the key issues to be confronted without extensive definitional debate but that it, like all such definitions, carries risks.

There is a general lesson to be drawn here. Given the lack of definitional consensus regarding multisided platforms, coupled with the prospective applicability of the existing definitions to a vast range of firms, it would be a mistake for antitrust enforcement to dramatically differ based on the threshold, and easily manipulable, question of whether a defendant is classified as a multisided platform. As Dennis Carlton and Ralph Winter explain, "[c]reating different legal rules for the same economic conduct depending on whether the market can be described as one-sided or two-sided is a mistake that could lead to widespread confusion" in the evaluation of the questioned conduct.[29] Instead, the potential anti-competitive effects of challenged conduct and the firm's competitive environment, rather than inherently imprecise labels, should be the focus of antitrust analysis.

service providers using an online booking platform, the more valuable using that application is to a consumer.

28. Recent examples include *United States v. American Express*, 838 F.3d 179 (2d Cir. 2016), *cert. granted sub nom. Ohio v. American Express Co.*, 138 S. Ct. 355 (2017); and *United States v. Tribune Publishing Co.*, No. 2:16-cv-01822 (C.D. Cal. Mar. 17, 2016). We note that the degree to which the defendants possessed market power and/or the strength of cross-platform network effects were subject to dispute in these matters, and we are not here endorsing any specific factual findings.

29. Dennis W. Carlton & Ralph A. Winter, *Vertical MFN's and the Credit Card No-Surcharge Rule*, at 40 (2017), http://www.tse-fr.eu/sites/default/files/TSE/documents/sem2017/concurrence/carlton-winter-credit_cards_-_sept_6_2017.pdf [http://perma.cc/4L8N-KXTY].

III. MARKET DEFINITION AND THE ASSESSMENT OF MARKET POWER

In this Part, we evaluate the single-market and multiple-markets approaches to market definition. After reviewing the underlying purpose of market definition in antitrust analysis, we assess the case for the single-market approach, which we find wanting, and then demonstrate how the relevant interrelationships among user groups that constitute a multisided platform can be better assessed through the use of our preferred, multiple-markets approach.

A. The Role of Market Definition

It is often said that, as a practical matter, market definition proves critical to the outcome of antitrust litigation. However, it is important to recognize that market definition is not an end in itself but rather a tool. As the Supreme Court stated in *FTC v. Indiana Federation of Dentists*, "[T]he purpose of the inquiries into market definition and market power is to determine whether an arrangement has the potential for genuine adverse effects on competition."[30] Cases involving multisided platforms are no different in this regard.

Although market definition is often a convenient tool, direct evidence can also be used to show that a firm possesses market power and has harmed competition. In those instances, formal delineation of market boundaries is unnecessary. As the Court has emphasized, "'[P]roof of actual detrimental effects, such as a reduction of output,' can obviate the need for an inquiry into market power, which is but a 'surrogate for detrimental effects.'"[31] Economists, too, have long observed that formal market delineation may not be a necessary prerequisite to a sound competitive-effects analysis.[32] Indeed, many economic tools, such as

30. 476 U.S. 447, 460 (1986).

31. *Id.* at 460-61 (quoting 7 PHILIP AREEDA, ANTITRUST LAW 429 (1986)); *see also* United States v. Visa U.S.A., Inc., 344 F.3d 229, 240 (2d Cir. 2003) ("In short, Visa U.S.A. and MasterCard have demonstrated their power in the network services market by effectively precluding their largest competitor from successfully soliciting any bank as a customer for its network services and brand."); Todd v. Exxon Corp., 275 F.3d 191, 207 (2d Cir. 2001) (recognizing "[t]he use of anticompetitive effects to demonstrate market power" in a full rule of reason analysis). This is also true of so-called *per se* cases where the conduct itself, such as horizontal price-fixing, establishes antitrust liability. Nat'l Soc'y of Prof'l Eng'rs v. United States, 435 U.S. 679, 692 (1978) ("[A]greements whose nature and necessary effect are so plainly anticompetitive that no elaborate study of the industry is needed to establish their illegality – they are 'illegal *per se*.'").

32. *See* Jonathan B. Baker, *Contemporary Empirical Merger Analysis*, 5 GEO. MASON L. REV. 347, 347-351 (1997); Janusz A. Ordover & Daniel M. Wall, *Understanding Econometric Methods of Market Definition*, ANTITRUST, Summer 1989, at 20.

econometric studies of the effects of a given practice,[33] do not depend on the formal delineation of market boundaries at all.

There is a general lesson to be drawn here as well. Given that formal market definition is not a prerequisite to sound analysis, one should be wary of arguments that a particular choice of formal boundaries inevitably dooms one to reaching incorrect conclusions.[34] Instead, antitrust enforcers and courts should employ market definition, in accordance with its intended purpose: as a means by which to assist the assessment of market power and competitive harms in conjunction with all of the relevant evidence.

B. One Market or Two?

Delineating the set of included products is a key part of defining an antitrust market.[35] A product-market analysis might ask, for example, whether sellers of organic vegetables and conventionally grown vegetables compete in the same market.[36] The fact that a multisided platform must attract two or more distinct groups of users to succeed raises the question: in how many product markets does this platform participate? In other words, does a platform offer a single product to users on its different sides, or does it offer different (albeit closely linked) products to its different user groups?

In this Section, we argue that the fundamental principle of market definition, legal precedent, and sound economics all counsel against use of the single-market approach. As we will discuss, although there is widespread agreement with

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33. *See generally* Timothy F. Breshnahan, *Empirical Studies of Industries with Market Power*, *in* HANDBOOK OF INDUSTRIAL ORGANIZATION 1011 (Richard Schmalensee & Robert D. Willig eds., 1989) (surveying econometric techniques for estimating market power, none of which rely on market definition).

34. In *United States v. American Express Co.*, the Second Circuit found that "[t]he District Court's definition of the relevant market in this case is fatal to its conclusion that Amex violated § 1." 838 F.3d 179, 196 (2016), *cert granted sub nom.* Ohio v. Am. Express Co., 138 S. Ct. 355. The District Court found that there were "at least two separate, yet deeply interrelated, markets: a market for card issuance, in which Amex and Discover compete with thousands of Visa- and MasterCard-issuing banks; and a network services market, in which Visa, MasterCard, Amex, and Discover compete to sell acceptance services." United States v. Am. Express Co., 88 F. Supp. 3d 143, 151 (E.D.N.Y. 2015).

35. An antitrust market is also defined in terms of its geographic scope. *See* Jonathan B. Baker, *Market Definition: An Analytical Overview*, 74 ANTITRUST L.J. 129, 130 (2007) ("The output of the process of market definition—a collection of products and geographic locations—is used to identify the firms that participate in the market.").

36. *See* FTC v. Whole Foods Market, Inc., 548 F.3d 1028, 1038-40 (D.C. Cir. 2008) (noting that a majority of Wild Oats customers would switch to Whole Foods rather than shop for perishables at lower priced conventional grocery stores).

this view for many types of platforms, there is an important class of platforms for which there is significant disagreement.

When defining the product scope of a market, economists and courts will include two goods or services in the same relevant market if potential purchasers view them as sufficiently close substitutes, and they will not include them in the same relevant market if consumers do not view them as sufficiently close substitutes.[37] The rationale for this approach is clear: antitrust enforcers and courts look to assess the strength of competition faced by one or more firms. If a producer of conventional corn raises prices and accounts for only a small share of the conventional-corn market in the United States, then its price hike is unlikely to succeed, because buyers have so many close alternatives. By contrast, a monopoly, such as a water company, faces little or no competition because its customers have few or no realistic alternatives.

Some platforms, such as newspapers, have long been considered by courts to compete in two distinct markets. In 1953, the Supreme Court acknowledged in *Times-Picayune Publishing Co. v. United States*: "[E]very newspaper is a dual trader in separate though interdependent markets; it sells the paper's news and advertising content to its readers; in effect, that readership is in turn sold to the buyers of advertising space."[38] Recognizing the two markets, the Court nonetheless emphasized that "[t]his case concerns solely one of these markets."[39] And more recently, in successfully seeking a temporary restraining order against the acquisition of the *Orange County Register* and the *Riverside Press-Enterprise* by the owners of the *Los Angeles Times*, DOJ attempted to define separate product markets for the sale of newspapers to readers and the sale of advertising to advertisers.[40] These definitions are consistent with the principle that two products are in the same antitrust market only if they are sufficiently close substitutes: reading a newspaper clearly is not a substitute for purchasing advertising.

For advertising-supported media markets, there is broad agreement that defining two, closely linked but distinct markets is preferable to defining a single,

37. *E.g.*, Brown Shoe Co., Inc. v. United States, 370 U.S. 294, 325 (1962); United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 395 (1956). For recent examples of cases in which market definition played an important role in government enforcement actions, see *United States v. Aetna Inc.*, 240 F. Supp. 3d 1 (D.D.C. 2017); and *FTC v. Sysco Corp.*, 83 F. Supp. 3d 1 (D.D.C. 2015).

38. 345 U.S. 594, 610 (1953).

39. *Id.*

40. Complaint at 5-6, United States v. Tribune Publ'g Co., No. 2:16-cv-01822 (C.D. Cal. Mar. 17, 2016); Order Granting Application for a Temporary Restraining Order at 5, *Tribune Publ'g Co.*, No. 2:16-cv-01822 (Mar. 18, 2016) (finding that DOJ was likely to establish its market definition). Notably, the order uses the singular "market" to refer to two different markets, as is evident when it refers to the different geographic markets using the singular.

platform market. One reason is that, in addition to violating the principle of substitution, defining a single, two-sided market risks confusing the definition of a market with identification of a firm's business model. For example, some streaming video services (e.g., Netflix) provide services to consumers for a fee without also seeking advertising revenue, while others (e.g., YouTube) offers services for free in order to gather "eyeballs" to attract advertisers, and still others (e.g., Hulu) charge both consumers and advertisers. The first model is considered one-sided; the latter two, multisided. But that difference cannot be taken to mean that two-sided models are inherently in different antitrust markets than one-sided ones against which they compete for viewers.[41]

The single-market approach can also be problematic because competitive conditions may differ on the two sides of a platform. Assessing the competitiveness of "the" market might therefore lead to a confusing or incomplete picture of competition. For one, competitive conditions may differ because different sets of suppliers are competing to serve users on the different sides of a given platform.[42] Even where the set of competitors is the same on the different sides of a platform, users on different sides may differ in their sophistication and knowledge of the marketplace, or they may perceive different degrees of product differentiation among the platforms. Moreover, platforms may vertically integrate to different degrees on different sides.[43] These distinctions can result in significant differences across the sides of a platform in terms of the platform's unilateral incentives to compete as well as its ability and incentive to engage in coordinated behavior with rival platforms.

There is still another reason that competitive conditions may be very different on the two sides of a platform. In some industries, certain user groups tend to patronize a single platform. For example, most smartphone owners either utilize Apple's mobile operating system or Android's, but not both. This practice is known as single-homing.[44] By contrast, the developers of the majority of mobile

41. *See* Jonathan Sallet, *The Creation of Value: The Value Circle and Evolving Market Structures*, 11 J. ON TELECOMM. & HIGH TECH. L. 185, 232-34 (2013).

42. For example, one can examine whether Microsoft's Bing search and television broadcasting compete for advertising dollars. But that is a very different question than asking if Bing search competes against broadcast television to attract viewers.

43. For example, a mobile operating system is a platform that facilitates interaction among consumers, handset manufacturers, and app providers. Although they compete to attract consumers, Apple's iOS and Google's Android do not compete with each other to attract handset manufacturers because Apple manufactures its own handsets and does not license iOS to other handset manufacturers.

44. *See, e.g.*, Mark Armstrong, *Competition in Two-Sided Markets*, 37 RAND J. ECON. 668, 669 (2006).

phone apps participate on both the Apple and Android platforms simultaneously—a practice known as multi-homing.[45] Economic analysis has shown that, all else equal, much greater competition exists among platforms to attract the single-homing users than those on the multi-homing side.[46] The only way for a user on one side of the platform marketplace to transact with a single-homing user on the other side is to join the same platform as that single-homing user. For instance, it is not possible for an app developer to reach the user of an Android operating system without building an app that works with Android. From an app developer's perspective, Android has a monopoly in the provision of access to Android smartphone users. As Mark Armstrong, one of the seminal authors in the multisided platform literature, explains:

> [When users multi-home on one side and single home on the other] it does not make sense to speak of the competitiveness of "the market." There are two markets: the market for single-homing agents which is, to a greater or lesser extent, competitive, and a market for multi-homing agents where each platform holds a local monopoly.[47]

Although there is widespread agreement with respect to the appropriate approach to market definition for media platforms, there is considerably less agreement with respect to platforms such as payment networks (e.g., Visa) or online auction sites (e.g., eBay) that facilitate specific transactions between users on the two sides of the platform and are largely paid based on the volume of completed transactions.[48] Proponents of the single-market view argue that the appropriate market definition for a "transaction platform" is one that encompasses both sides

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45. Timothy Bresnahan, Joe Orsini & Pai-Ling Yin, *Demand Heterogeneity, Inframarginal Multihoming, and Platform Market Stability: Mobile Apps* 13 fig.2 (Sept. 15, 2015) (unpublished manuscript), http://idei.fr/sites/default/files/IDEI/documents/conf/Internet_2016/Articles/yin.pdf [http://perma.cc/U4Q7-PQXV].

46. *See, e.g.*, Armstrong, *supra* note 44, at 677-90.

47. *Id.* at 680. We note that Armstrong uses the terms "market" and "monopoly" as economic terms, not in their legal sense as understood in the United States.

48. *See, e.g.*, Filistrucchi et al., *supra* note 6, at 296-300; FILISTRUCCHI ET AL., *supra* note 7, at 60-70; Lapo Filistrucchi, *A SSNIP Test for Two-Sided Markets: The Case of Media*, (Networks, Elec. Commerce, & Telecomm Inst., Working Paper No. 08-34, Oct. 2008), http://ssrn.com/abstract_id=1287442 [http://perma.cc/Y59B-MKFV]; *see also* David S. Evans & Michael D. Noel, *The Analysis of Mergers that Involve Multisided Platform Businesses*, 4 J. COMPETITION L. & ECON. 663, 674 (2008) (arguing that "if the two sides are very highly complementary and closely linked—for example, if the [multisided platform] facilitates transactions between the groups that occur in fixed proportions—and [multisided platforms] in an industry all tend to serve the same two sides, then it can be reasonable to include both sides in the market definition and the 'transaction' as the product," but warning against applying the single-market approach in industries where platforms "may all cater to the same side *A* customers but cater to very different kinds of side *B* customers").

of the platform, because, as a practical matter, no platform competes to facilitate only one side of the transaction: unless both sides choose to use the platform to complete their transaction, there is no transaction over that platform.[49] Hence, these authors argue, competitive pressures should be assessed at the transaction level.[50] Moreover, a virtue of the single-market approach is that it focuses attention on the potential interactions of users on different sides of the platform.

There are, however, two broad arguments against the use of the single-market approach, even when restricted to transaction platforms. The first builds on the principle that relevant markets contain substitute products. Some opponents of the single-market approach point out that services offered to users on one side of a platform generally are *not* substitutes for services offered to users on the other side; these opponents argue that the services therefore cannot be in the same market, regardless of whether the situation is a transaction market or not.[51]

Some proponents of the single-market approach reject the claim that they are failing to adhere to the principle that product markets are composed of substitutes. Specifically, they contend that the substitution is among a single product (e.g., transaction facilitation) that contains the offerings to the two sides as component parts. Proponents of the single-market view would say that arguing for two separate product markets is like arguing that gloves are not a relevant product because left gloves are not substitutes for right gloves.[52]

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49. *See, e.g.*, Filistrucchi et al., *supra* note 6, at 301-02. In Bloemenveiling Aalsmeer/FloraHolland, the Dutch competition authority concluded that a single market should be defined to evaluate the merger of two horticultural auction platforms because of the cross-platform network effects running in both directions between buyers and sellers. Nederlandse Mededingingsautoriteit: Besluit, *supra* note 7, ¶ 28. Filistrucchi et al. observe that, taken at face value, this argument is very broad and could include non-transaction platforms. FILISTRUCCHI ET AL., *supra* note 7, at 55-56. They hypothesize that the decision was also based on the fact that the platforms facilitate transactions. *Id.*

50. FILISTRUCCHI ET AL., *supra* note 7, at 55-56.

51. Writing with respect to credit and charge card platforms, law professor amici argued: "[T]he very different services that payment card companies offer to merchants and cardholders respectively are not substitute products, and so do not belong in the same relevant market from the standpoint of antitrust law and economics. Treating products that cannot be substituted for each other as part of one relevant market is not even intelligible; it prevents the relevant-market inquiry from accurately answering the questions for which it is asked." Brief of 25 Professors of Antitrust Law as Amici Curiae Supporting Petitioners at 4-5, Ohio v. Am. Express Co. (No. 16-1454), 2017 WL 2963573 (July 6, 2017); *see also* PHILLIP E. AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION 104 (4th ed. Supp. 2017) ("[A] magazine might obtain revenue from readers and advertisers, but that does not entail a single 'reader/advertiser' market.").

52. *See* Brief for American Express in Opposition to Petition for Certiorari at 16-17 (No. 16-1454), 2017 WL 3669431 (Aug. 21, 2017) (using shoes as an example).

But this analogy neglects the fact that two very different groups utilize the transaction service, and their interests are not fully aligned. For this reason, the situation is not the same as that of complements such as left and right gloves. When a single buyer purchases a pair of gloves, he or she cares only about the total price paid. There is no internal conflict regarding whether it would be better to pay less for one glove while paying an equal amount more for the other. By contrast, in the case of a transaction product, there are two different buyers, with distinct preferences.[53] For example, for any given credit card transaction, the merchant would rather pay a lower fee to the network, while the consumer would rather receive a higher reward; neither party is interested in the net, two-sided price. Hence, for the two sides of the platform to be analogous to right and left gloves, the right hand would have to know what the left hand was doing but also be indifferent to its wellbeing.

The second argument against the single-market approach is that it fails to recognize that the competitive conditions on two sides of a transaction platform may be very different from one another. Proponents of the single-market approach argue that the set of platforms offering services that users on one side of the marketplace accept as substitutes for one another will necessarily be the same as the set of platforms offering services that users on the other side of the marketplace consider as substitutes for one another.[54] However, even if it faces the same set of competitors on all sides, a transaction platform may nevertheless face very different competitive conditions on its different sides. The effects of product differentiation, vertical integration, user sophistication, and multi-homing described for media markets all apply to transaction platforms markets as well. For example, merchants tend to engage in much more multi-homing across credit card networks than do consumers.

As demonstrated for both advertising-supported media platforms and transaction platforms, the single-market approach fails to accurately account for product substitution and competitive conditions in multisided platform industries. Such a reality lends strong weight to the conclusion that a more fine-grained analytical framework, namely the multiple-markets approach, is necessary.

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53. *See, e.g.*, Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-Sided Markets*, 1 J. EUR. ECON. ASS'N 990, 991 (2003) ("The interaction between the two sides gives rise to strong complementarities, but the corresponding externalities are not internalized by end users, unlike in the multiproduct literature (the same consumer buys the razor and the razor blade).").

54. We observe in passing that the distinction between transaction and non-transaction platforms is not always clear, and it need not be true that, because a platform is paid on a per-transaction basis, it must face the same competitors on both sides. For example, even though advertisers pay Google on a per-click basis, the set of firms with which Google competes for advertisers need not be identical to the set of firms with which it competes to attract search users.

C. *Defining Markets and Assessing Market Power Using the Multiple-Markets Approach*

In this Section, we explain how the multiple-markets approach adheres to the fundamental reasons that antitrust defines product markets and, within product markets, market power.

Note first that a standard economic approach to identifying the set of products in a market asks whether a single firm having a hypothetical monopoly as the supplier of those products would maximize its profits by undertaking a small but significant and nontransitory increase in price (SSNIP) above the competitive level for some or all of the products that it supplies.[55] This approach defines the scope of the products whose suppliers should then be considered market participants. There may be products outside of the resulting relevant market that are, to a degree, substitutes for those products inside the relevant market. However, when the boundaries of the market are determined by the hypothetical monopoly construct, it follows that competition from these outside substitutes is insufficient to protect buyers from the exercise of market power by suppliers of those products in the relevant market.[56] For example, both beer and water can be drunk to satisfy thirst, but tap water would not be expected to protect beer drinkers from the exercise of market power by one or more beer producers.

One must be careful to consider cross-platform network effects when applying this Hypothetical Monopolist Test to a multisided platform. One way to do this in the multiple-markets framework is to consider price changes on one side of the platform while holding prices on the other side constant and examining whether there are significant, plausible feedback effects. If there are no such effects, then focusing on a single side manifestly will give a clear overall picture. But if there are feedback effects, then they must be taken into account to avoid reaching misleading conclusions.

Consider the application of the Hypothetical Monopolist Test to determine whether daily newspaper advertising in a given city constitutes a relevant market. Raising the price of advertising while holding subscription prices constant

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55. *See* HORIZONTAL MERGER GUIDELINES, *supra* note 5, § 4.1. Some courts have also adopted this approach. *See, e.g.*, Coastal Fuels of P.R., Inc. v. Caribbean Petroleum Corp., 79 F.3d 182, 198 (1st Cir. 1996) (citing Rebel Oil Co. v. Atlantic Richfield Co., 51 F.3d 1421, 1434 (9th Cir. 1995)) ("The touchstone of market definition is whether a hypothetical monopolist could raise prices.").

56. Because price is more easily quantified than product quality, market definition is typically conducted by analyzing a hypothetical monopolist's pricing decision. However, the underlying principle is broader: other products are sufficiently close substitutes if they would constrain the hypothetical monopolist to offer consumers a combination of product features, service quality, and price that would make consumers as well off as they would be under the competitive outcome.

would be very unlikely to reduce the number of readers (i.e., there would be no plausible cross-platform feedback mechanism). Thus, one could consider the advertising side of newspapers in isolation for these purposes. By contrast, feedback effects more plausibly exist with respect to subscription prices. Specifically, an increase in subscription prices may lead to a fall in the number of subscribers, which would then adversely affect advertisers' demand for ads and, thus, advertising revenues. Hence, in assessing whether a hypothetical monopolist selling newspapers to readers would find a SSNIP profitable, one would have to consider the effects on advertising revenues in addition to effects on subscription revenues. Critically, there is nothing about the multiple-markets framework that prevents one from doing so.

Several authors have concluded that a SSNIP test for a transaction platform must be conducted using the net price charged by the platform.[57] Although it might appear that the net-price approach to a SSNIP test requires adopting the single-market approach, it does not; this, too, can be done under the multiple-markets approach. Consider Dine Out again. One way to raise Dine Out's net price (i.e., the price charged to restaurants minus the reward paid to consumers) is to raise the price charged to restaurants while holding the rewards constant. Of course, one must consider the possibility of feedback effects on the consumer side due to any significant changes in restaurant participation in Dine Out. And Dine Out might also change the rewards level. But this analysis can all be done in the multiple-markets framework while ultimately seeking to assess harm in the market for reservation services sold to restaurants.

In this regard, considering prices on both sides of a platform (even if the prices are in separate markets) is much less novel than it may appear. There is an important sense in which analyzing a multisided platform is no different from analyzing any other firm: in each case, accounting for prices and costs is critical. When assessing the profitability of a SSNIP by a hypothetical monopolist that is a "standard" firm, it is necessary to hold the firm's costs constant; otherwise one risks confusing a price increase triggered by a cost increase with one due to the exercise of market power. Similarly, in the presence of cross-platform network effects, users on one side of a platform can be viewed as inputs to the supply of services to users on the other side, and the cost of that input has to be held constant in applying the Hypothetical Monopolist Test. These similarities are yet another indication that multisided platforms do not require a *new* antitrust. Instead, as with any antitrust case, courts can and should apply existing principles with care.

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57. *See, e.g.*, Eric Emch & T. Scott Thomson, *Market Definition and Market Power in Payment Card Networks*, 5 REV. NETWORK ECON. 45, 56 (2006); Filistrucchi et al., *supra* note 6, at 332-33; Evans & Schmalensee, *supra* note 3, at 423-27.

As described above, market definition is not an end in itself; it is a tool to aid in the assessment of market power and the potential for conduct to harm competition.[58] As many scholars have observed, it is essential to account for any significant feedback effects and possible changes in prices on both sides of a platform when assessing whether a particular firm has substantial market power.[59] However, this assessment of market power can also be accomplished within the multiple-markets approach. In many respects, the considerations are the same as those with respect to the Hypothetical Monopolist Test, except that now they apply to the actual defendant rather than the hypothetical monopolist.

Several authors have correctly cautioned against reaching conclusions regarding market power by examining the pricing on only one side of a platform without considering whether the platform is charging prices above cost when all sides are taken into consideration.[60] We also caution that, even when considering a transaction platform, looking solely at the net, two-sided price can lead to an incomplete understanding of whether the firm possesses sufficient market power to harm competition and consumers. For example, suppose that, starting from competitive prices, a platform would find it profitable to raise its prices by twenty percent to users on one side of the platform while simultaneously reducing the prices to users on the other side by an amount that results in a two-percent increase in the net, two-sided price. Under a separate-effects analysis, the gains to users on the side with lower prices would not offset the harms suffered by users facing the twenty-percent price increase. Hence, one would not want to accept the price changes as de minimis based on the small change in the net price. This is yet another way of saying that the price structure matters in addition to the price level.

IV. COMPETITIVE EFFECTS BETWEEN AND WITHIN MARKETS

In this Part, we examine if, in assessing whether conduct harms competition, adverse impacts to one group of users should be weighed against benefits that the challenged conduct might confer on another group of users. We advocate the use of separate-effects analysis, which rejects the view that anticompetitive conduct harming users on one side of a platform can be justified so long as that harm

58. *See supra* Section III.A.

59. *See, e.g.*, Emch & Thomson, *supra* note 57; Evans & Schmalensee, *supra* note 3.

60. *See, e.g.*, Julian Wright, *One-Sided Logic in Two-Sided Markets*, 3 REV. NETWORK ECON. 44 (2004).

funds benefits for users on another side of the platform.[61] We then focus specifically on the extent to which relying solely on the net price is an appropriate means of weighing the interests of affected groups.

A. Balancing of Effects Between Different Groups of Users

By any definition, multisided platforms involve consumption by multiple groups of users that the platform can treat differently from one another.[62] Both the literature and real-world experience demonstrate that certain platform conduct can significantly alter the equilibrium distribution of economic surplus. Indeed, one user group may benefit from the platform's conduct while another is harmed.[63] These possibilities raise the question of whether—and if so, how—one should balance welfare gains enjoyed by one group of users against welfare losses caused by anti-competitive conduct suffered by another.[64]

As described in the Introduction, there are two polar approaches. Separate-effects analysis insists that each distinct group of market participants is entitled to the benefits of competition; and, consequently, that harm to one user group due to harm to competition cannot be offset by gains to another user group that result from the loss of competition. Net-effect analysis argues that a consumer-welfare standard should weigh all platform users equally and focus solely on the net effects.

The separate-effects analysis draws key precedent from *United States v. Philadelphia National Bank*,[65] which involved the merger of two commercial banks in

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61. It should be emphasized at the outset that we are not arguing that all conduct that causes "harms" should be found to violate the antitrust laws. It is a familiar observation, after all, that the antitrust laws "protect[] competition, not competitors." Brown Shoe., Inc. v. United States, 370 U.S. 294, 320 (1962). Thus, our concern here is with harm to users that arises from harm to competition. See Joseph Farrell & Michael L. Katz, *The Economics of Welfare Standards in Antitrust*, 2 COMPETITION POL'Y INT'L 3 (2006) for additional discussion of antitrust enforcement's use of a two-pronged analysis that considers both harm to competition and welfare effects.

62. *See* discussion *supra* Part II.

63. For example, while anti-surcharging provisions can harm restaurants by increasing the prices they pay to Dine Out, the restraints may benefit some consumers in the form of increased rewards. Also consider the merger and exclusivity examples discussed *supra* note 9.

64. There can be an even broader issue. In some cases, the challenged platform conduct may even affect consumers who do not purchase the goods or services to which the challenged practices apply. For instance, in the Dine Out hypothetical, to the extent that the challenged conduct raises the fees paid by restaurants to Dine Out, customers who do not utilize Dine Out are harmed by the higher meal prices that restaurants charge in order to cover costs associated with consumers who do use Dine Out.

65. 374 U.S. 321 (1963).

the Philadelphia metropolitan area. The merging parties presented as an affirmative justification that the new company would be better able to compete with large banks, such as those in New York, for the supply of large loans. The Supreme Court summarily rejected their contention that "anticompetitive effects in one market could be justified by procompetitive effects in another."[66] This principle also arose in a recent merger of healthcare insurance companies (which can be viewed as platforms that bring together policyholders and healthcare providers,[67] though the merging parties do not appear to have been treated as platforms in the litigation).[68] More broadly, the accepted approach of the antitrust agencies is to "assess competition in each relevant market affected by a merger independently."[69]

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66. *Id.* at 370; *see also* Nat'l Collegiate Athletic Ass'n v. Bd. of Regents of the Univ. of Okla., 468 U.S. 85 (1984) (noting that competitive harms in the broadcast market could not be offset by alleged benefits for the live-attendance market in non-merger contexts); United States v. Topco Assocs., Inc., 405 U.S. 596, 609-10 (1972) ("Our 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.").

European competition analysis similarly, and explicitly, protects each side. For example, in a matter in which certain MasterCard practices were challenged, the European Commission stated that, "Under the second condition of Article 81(3) of the Treaty consumers (that is merchants and their subsequent purchasers) must get a fair share of the benefits which result from" the conduct. Summary of Commission Decision of 19 December 2007 Relating to a Proceeding Under Article 81 of the EC Treaty and Article 53 of the EEA Agreement (Case COMP/34.579 – MasterCard, Case COMP/36.518 – EuroCommerce, and Case COMP/38.580 – Commercial Cards), 2009 O.J. (C 264) 8, 10 ¶ 23. In other words, under EU antitrust law, harms to merchants cannot be offset by benefits to cardholders.

67. *See, e.g.*, David Bardey & Jean-Charles Rochet, *Competition Among Health Plans: A Two-Sided Market Approach*, 19 J. ECON. & MGMT. STRATEGY 435 (2010).

68. *See* United States v. Anthem, Inc., 855 F.3d 345 (D.C. Cir. 2017); *see also* discussion *supra* Part I. Although the majority appellate opinion in *Anthem* did not address this issue, DOJ argued, and the concurring judge agreed, that an efficiency "cannot arise from anticompetitive effects" and that lowering provider rates "through an exercise of unlawful market power . . . would be an antitrust violation, not an efficiency," even if some of the savings were passed on to insurance customers. *Anthem*, 855 F.3d at 369 (Millett, J., concurring). *See generally* C. Scott Hemphill & Nancy L. Rose, *Mergers that Harm Sellers*, 127 YALE L.J. 2078 (2018) (claiming that harm to sellers in an input market is sufficient to support antitrust liability); Jonathan Sallet, *Buyer Power in Recent Merger Reviews*, ANTITRUST, Fall 2017, at 43 (discussing the *Philadelphia National Bank* ruling in the context of buyer-power analysis).

69. HORIZONTAL MERGER GUIDELINES, *supra* note 5, 30 n.14. The antitrust agencies "in their prosecutorial discretion will consider efficiencies not strictly in the relevant market, but so inextricably linked with it that a partial divestiture or other remedy could not feasibly eliminate the anticompetitive effect in the relevant market without sacrificing the efficiencies in the other market(s)," but they are careful to note that such circumstances are most likely to arise where such efficiencies "are great and the likely anticompetitive effect in the relevant market(s) is small so the merger is likely to benefit customers overall." *Id.* Moreover, we draw a distinction between situations in which a platform's conduct generates true efficiencies and those in which

The treatment of predatory pricing can raise a very similar issue regarding balancing because consumers buying during the predatory period benefit from lower prices, while consumers buying during the recoupment period suffer harms from higher prices. Under the standard established in *Brooke Group, Ltd. v. Brown & Williamson Tobacco Corp.*, a defendant is liable if it is shown to have priced below an appropriate measure of cost and had a reasonable expectation of recoupment.[70] No exception exists allowing the defendant to argue that welfare gains enjoyed by buyers during the predatory period were greater than the harms suffered by buyers during the recoupment period.[71]

The U.S. antitrust treatment of harm to indirect purchasers is also relevant. Courts generally refuse to consider impacts on indirect purchasers because doing so requires potentially difficult assessments of the extent to which direct purchasers pass price increases onto their customers.[72] Assessing the extent to which a platform passes through to one side an increase in the price charged to another side raises similar issues.

Returning to our Dine Out hypothetical, separate-effects analysis asks whether competition for the provision of online reservation services to restaurants has been harmed without considering whether benefits have simultaneously been conveyed to diners.[73]

On the other hand, some scholars have argued courts should conduct net-effects analysis. Under this framework, in order to reach an assessment of net harm, courts must treat a platform's sharing some of the profits derived from the harm to competition with its users on one side of the platform as a *benefit* to be weighed against the harms suffered by users on the other side.[74] In the context of our Dine Out hypothetical, the platform's claim would be that harm to the

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the defendant seeks to justify its conduct by using the gains to one user group that result from the loss of competition to offset the losses suffered by another user group due to the harm to competition.

70. 509 U.S. 209, 222 (1993).

71. It would be a mistake to interpret the *Brooke Group* recoupment requirement as an indirect balancing requirement—the linkage between recoupment and net consumer harm is weak because of the wedge created by the prey's loss of profits. For instance, in theory, the profitability of recoupment could be driven primarily by the diversion of sales from the prey, as opposed to the elevation of prices.

72. *See* Ill. Brick. Co. v. Illinois, 431 U.S. 720, 737, 741-42 (1977) (declining to consider effects on indirect purchasers).

73. As noted above, this analysis would take cross-platform feedback effects into account. For example, it would ask whether the reactions of diners to the challenged conduct would limit the ability of online reservation platforms to harm restaurants.

74. Evans & Schmalensee, *supra* note 3, § 18.4.4 (arguing that a merger that harmed users on one side of a platform but benefitted users on another would not necessarily be "socially undesirable").

restaurants needs to be balanced against the benefit, through dining rewards provided to consumers, perhaps because the increased fee to the merchants provides the revenue that funds the additional rewards. By looking at gains to users on one side as an offset to harms suffered by users on the other, proponents seek to justify firms' market power as a force that could be used for good instead of relying on competition to get the job done. The underlying rationale is a utilitarian one that antitrust should seek to promote average consumer welfare and focus on outcomes without regard for the processes that generated those outcomes.[75]

This is not a novel theory. Across a variety of settings, advocates have unsuccessfully argued that restraints on competition should be allowed in order to promote consumer welfare. In *National Society of Professional Engineers v. United States*, members of an engineering association argued that limits on competitive bidding would protect customers from subpar service that might result from bids that were too low.[76] But the Supreme Court concluded that "the statutory policy [of the Sherman Act] precludes inquiry into the question whether competition is good or bad."[77] And, looking to the impact on the administration of justice, the Court concluded that any application of the rule of reason "based on the assumption that competition itself is unreasonable" would create an undesirable "sea of doubt."[78] A contention that competition had to be restrained to be protected was also made in the context of a Sherman Act Section 1 case, where a dissenting Second Circuit opinion argued that what the district court found to be a price-fixing conspiracy among book publishers orchestrated by Apple was pro-competitive because it would facilitate Apple's entry as an e-book seller and, thus, counter Amazon's market power.[79] However, the majority of the panel rejected that net-welfare argument as "marketplace vigilantism."[80]

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75. This argument is distinct from the need to consider feedback effects. As discussed *supra* Section III.C, in the presence of feedback effects, a platform's treatment of one group of users may be constrained by the behavior of another group (for example, charging higher prices to newspaper subscribers may not be profitable if an exodus of subscribers causes a newspaper to lose substantial advertising revenue when advertisers respond to the loss of subscribers). One can properly account for feedback effects when assessing harm to competition while utilizing a separate-effects analysis.

76. 435 U.S. 679, 694-95 (1978).

77. *Id.* at 695.

78. *Id.* at 696.

79. 15 U.S.C. § 1 (2012); United States v. Apple Inc., 791 F.3d 290, 340 (2d Cir. 2015) (Jacobs, J., dissenting).

80. *Apple Inc.*, 791 F.3d at 298; *see also* Arizona v. Maricopa Cty. Med. Soc'y, 457 U.S. 332, 339, 41-42 (1982) (rejecting the claim that the creation of a maximum fee schedule by doctors could be justified on the ground that it would ultimately lower prices); United States v. Phila. Nat'l Bank, 374 U.S. 321, 391 (1971) ("[A] merger the effect of which 'may be substantially to lessen

Courts' historical rejection of net-welfare defenses reflects the foundational antitrust principle that competition promotes economic efficiency and buyer welfare. Indeed, as the Supreme Court has stated, "The Sherman Act reflects a legislative judgment that, ultimately, competition will produce not only lower prices but also better goods and services. 'The heart of our national economic policy long has been faith in the value of competition.'"[81] Economists too have long recognized the intrinsic benefits of competition.[82] In theory, limited situations exist in which a less competitive market may provide greater innovation, variety, or quality than will a competitive one.[83] But in practice, economists widely agree that competition generally benefits consumers; thus, we believe, the creation of benefits from the activities of a platform should be a matter of competition, not allegedly fueled by anti-competitive restraints.[84]

Lastly, if courts must assess whether the losses suffered by one user group due to harm to competition are offset by gains to another user group that result from that loss of competition, then the shape of antitrust may well resemble an open Pandora's Box, as the following hypothetical example suggests. Could airlines claim to be platforms that bring together pilots and passengers? Applying the flawed logic of the net-effects approach, one might conclude that collusion among airlines to raise fares on one side of the platforms would be fine as long as it led to higher wages for airline pilots on the other side, which it plausibly would in the case of unionized pilots.

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competition' is not saved because, on some ultimate reckoning of social or economic debits and credits, it may be deemed beneficial. A value choice of such magnitude is beyond the ordinary limits of judicial competence, and, in any event, has been made for us already, by Congress."). None of this is inconsistent with the view that, in evaluating the impact of past or potential conduct on a single group of users, it is wholly permissible to balance anti-competitive against pro-competitive effects. *See* sources cited *supra* note 66.

81. *Nat'l Soc'y of Prof'l Eng'rs*, 435 U.S. at 695 (quoting FTC v. Standard Oil Co., 340 U.S. 231, 248 (1980)).

82. *See, e.g.*, ROBERT B. EKELUND, JR. & ROBERT D. TOLLISON, MICROECONOMICS: PRIVATE MARKETS AND PUBLIC CHOICE 97 (5th ed. 1997) ("Economic efficiency means that, under competitive conditions, the net value of society's scarce resources is maximized . . . a competitive market creates a maximum of net social value.").

83. For example, as Judge Posner explained, "It has long been understood that monopoly in broadcasting could actually promote rather than retard programming diversity. If all the television channels in a particular market were owned by a single firm, its optimal programming strategy would be to put on a sufficiently varied menu of programs in each time slot to appeal to every substantial group of potential television viewers in the market, not just the largest group." Schurz Commc'ns, Inc. v. FCC 982 F. 2d 1043, 1054 (7th Cir. 1992). It should be noted that Judge Posner made this point in the context of assessing the validity of the stated rationale for a regulatory policy, not the conduct of a private firm.

84. *See* AREEDA & HOVENKAMP, *supra* note 51; William E. Kovacic & Carl Shapiro, *Antitrust Policy: A Century of Economic and Legal Thinking*, 14 J. ECON. PERSPS. 43 (2000).

B. Net Price and the Calculation of Impact

In this Section, we examine whether courts can appropriately focus on net, two-sided prices when assessing the effects of a transaction platform's conduct on competition and consumer welfare. As we argue, such an approach would implicitly both adopt the cross-platform balancing of net-effects analysis *and* assume that there is a tight linkage between the net price and overall consumer welfare. We have already shown in Section IV.A that the better view is to reject net-effect analysis. Below, we will also explain that there is not a sufficiently tight linkage between net price and consumer welfare to rely on the net price alone to the exclusion of considering the price structure. Instead, proper antitrust analysis necessitates a comprehensive, multisided view of revenues and costs.

The Dine Out hypothetical illustrates these points. Suppose one defined a single, two-sided market comprising services sold to both restaurants and consumers. Although both scenarios below correspond to a net price of $1 per consummated reservation, merchant and consumer welfare can be significantly different depending on whether: (a) restaurants pay a $2 fee and consumers receive incentive payments equal to $1, or (b) restaurants pay a $10 fee and consumers receive payments equal to $9. Holding the number of participating restaurants and consumers fixed, restaurants are clearly worse off under scenario (b), while consumers are better off. Because the net price is $1 in each case, the net-price approach would consider consumers' gains to fully offset the restaurants' losses. The two situations might also differ in terms of consumers' and restaurants' participation in Dine Out, another major point that the net-price approach would miss.[85] In sum, looking solely at the size of the platform's net, two-sided price fails to adequately capture the full set of welfare effects. To understand output and welfare effects, one must also examine the individual components of the net price.[86] Indeed, a central point of the literature on two-sided platforms is that

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85. Notice that, in the absence of surcharging, a consumer's incentive to use Dine Out is unaffected by the price the platform charges a restaurant as long as the restaurant continues to participate in Dine Out.

86. One might attempt to justify focusing on the level of the net price charged by a transaction platform by noting that, given its per-transaction margin, a profit-maximizing transaction platform chooses the price structure that maximizes its transaction volume, which under some conditions also maximizes efficiency. However, the set of conditions is limited. For example, Benjamin E. Hermalin & Michael L. Katz, *Sender or Receiver: Who Should Pay To Exchange an Electronic Message?*, 35 RAND J. ECON. 423, 424 (2004), show that there can be a distortion because the platform seeks to maximize transaction volume without regard to whether the transactions promoted are the most valuable transactions from the users' joint perspective. A profit-maximizing platform may also choose a price structure that exploits the fact that users on two different sides do not have perfectly aligned interests by favoring the side that has the power to choose the network. For instance, Marius Schwartz & Daniel R. Vincent, *The No Surcharge Rule and Card User Rebates: Vertical Control by a Payment Network*, 5 REV. NETWORK

the price *structure*, as well as the net, two-sided price level, matter for competition and welfare.[87]

In looking at the individual components, it can be necessary to consider their interaction. For example, one can examine whether restaurants benefitted from the higher fees that resulted from Dine Out's challenged practices, as those higher fees induced Dine Out to pay larger rewards payments to diners. Notice, however, that a restaurant would benefit from the larger rewards only if they induced consumers to patronize the restaurant to a greater degree. And because the benefits to the restaurant due to higher rewards would be mediated by consumer behavior, there is no guarantee that the benefits to the restaurants would equal the change in rewards paid to consumers, contrary to the assumption of the net-price approach. For example, it is possible that the rewards merely shift diners' choice of reservation mechanism to Dine Out without changing the restaurants at which they ultimately dine. If this were the case, then the increase in rewards paid to diners would not offset harm suffered by the restaurants at all.

An actual case in a non-U.S. jurisdiction further illustrates the pitfalls of focusing on the net price. Napp Pharmaceutical and subsidiaries sold oral sustained-release morphine to two market segments in the United Kingdom: hospital (i.e., patients in hospitals) and community (i.e., patients under the care of a general practitioner).[88] The UK Director General of Fair Trading found that purchase decisions of the community segment were strongly influenced by purchase decisions of the hospital segment. This influence gave rise to a form of cross-platform network effect: all else equal, greater hospital sales could be expected to lead to greater community sales.[89] Moreover, a supplier lacking substantial hospital sales would have difficulty effectively competing in the community segment.

The Director found, in part, that Napp charged predatory, below-cost prices to the hospital segment in order to prevent entry and weaken competition in the community segment. Napp countered that its prices to the hospital segment were not predatory because they generated profitable sales in the community segment. In other words, Napp argued for a focus on a net price. On appeal, the

ECON. 72 (2006), show that a single credit card network competing against cash may choose a price structure that induces excessive use of credit cards. There can also be differences between profit- and welfare-maximizing price structures because the former are driven by firm-specific price elasticities, while the latter depends in part on market elasticities.

87. *See, e.g.*, Rochet & Tirole, *supra* note 2.

88. This summary of this matter is based on *Napp Pharmaceutical Holdings Limited and Subsidiaries v. Director General of Fair Trading* [2002] Competition Appeal Tribunal, No. 1001/1/1/01, [1] (UK).

89. Some readers might object that Napp is not a platform because it does not facilitate interactions between the two sides. But whatever label one attaches to it, the logical structure of the analysis remains identical to that of a two-sided media platform.

Competition Appeal Tribunal found that Napp earned "high compensating margins in the community segment . . . precisely because its discount policy in the hospital segment has hindered competition in the community segment."[90] As the Tribunal explained, "[T]he fact that Napp's below-cost pricing in the hospital sector enables it to make money from 'follow-on' sales in the community sector merely signifies that the particular form of 'recoupment' available to Napp is more direct and more immediate than it is in other cases of predatory pricing."[91] By contrast, antitrust analysis that focused solely on net price or permitted pricing on one side of the platform to offset pricing on the other would overlook this form of predation entirely.

As we have shown, net-effects analysis is inconsistent with long-accepted antitrust principles and does not afford all user groups protection from harm to competition. These deficiencies are compounded if courts attempt to use a net-price test as a shortcut.

V. ANALYSIS AND IMPLICATIONS

In this Part, we lay out our normative framework for how the antitrust issues we have discussed should be applied to platforms, in the order of their discussion above. We then turn to an additional, and important, practical consideration—namely, how should courts allocate the evidentiary burden in antitrust cases involving a platform?[92]

A. Existing Antitrust Principles Permit the Appropriate Analysis of Platforms

As we have demonstrated earlier in our Feature, there is no need to create a specialized doctrine applicable only to multisided platforms. Existing antitrust principles are capable of evaluating the competitive effects of a multisided platform's conduct. Moreover, as described above, creating a specialized doctrine that hinges on ill-defined labels risks creating confusion and elevating form over substance. A better approach is for courts and enforcers to apply existing antitrust principles in ways that account for the economic forces present with multisided platforms. In this Section, we offer several recommendations on how to do so.

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90. *Id.* ¶ 51.

91. *Id.* ¶ 261.

92. For additional policy recommendations, see Michael L. Katz, *Exclusionary Conduct in Multi-Sided Markets*, ORG. ECON. COOPERATION & DEV. (Nov. 15, 2017), http://one.oecd.org/document/DAF/COMP/WD(2017)28/FINAL/en/pdf [http://perma.cc/88PV-8QMM].

First, and most fundamentally, the antitrust treatment of a firm should turn on the nature of its conduct and its competitive environment, not blind allegiance to whether the firm is labeled a platform. As described in Part II, there is no consensus regarding where one draws the line between platform and nonplatform firms and, indeed, firms are likely to fall at various points on a continuum with respect to relevant characteristics. Consequently, it would be illogical to adopt an antitrust enforcement approach that changes dramatically depending on whether a court labels a given firm as a platform. And, as we discuss, it is not necessary to do so to capture the economic characteristics of a platform.

Second, as demonstrated in Part III, it is appropriate to use the multiple-markets approach to market definition. In order to reach sound conclusions about market power, competition, and consumer welfare, any significant linkages and feedback mechanisms among the different sides must be taken into account.[93] This can be done whether adopting a single-market or a multiple-markets approach.[94] Indeed, because it is possible to conduct a sound economic analysis without engaging in any formal market definition exercise at all, one should be very wary of putting too much weight on market definition itself as a driver of the key conclusions.[95]

That said, we strongly favor defining multiple, closely related markets by applying sound economic principles that define markets based on substitutability.[96] Because users on different sides of a platform have different economic interests, it is inappropriate to view platform competition as being for a single product offered at a single (i.e., net, two-sided) price. And, as discussed in Part IV, competitive conditions and harm to competition may manifest very differently on the different sides of a platform. The need to analyze prices and assess

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93. As we established *supra* Section III.B, considering competition on one side of a platform without giving any consideration to the other side can lead to misleading conclusions regarding the existence of market power and possible competitive effects of challenged conduct. Suppose, for example, that, when a newspaper raises its subscription rates substantially above the competitive level, a significant number of consumers cancel their subscriptions, but the net effect is to raise subscription revenues because the price increase outweighs the quantity decrease. The newspaper would appear to possess market power. However, due to the subscriber losses, advertisers would be less willing to pay to be in the newspaper. If the lost advertising revenue were sufficient to make the subscription price increase unprofitable, then the newspaper would correctly be found to lack market power.

94. To be clear, neither author believes that a sound analysis can be undertaken by using the single-market approach and focusing exclusively on the net price. Under the single-market approach, it would be essential to give individual attention to the price on each side of a platform.

95. *See* discussion *supra* Section III.A. For this reason, we would not require a plaintiff to formally define relevant markets on all sides of a platform. A plaintiff could sufficiently define a relevant market on the side on which user harm is alleged while accounting for interactions with the other sides without formally defining markets on those sides.

96. *See* discussion *supra* Section III.B.

competition on all sides[97] furnishes substantial justification for the multiple-markets approach.

Third, antitrust analysis has consistently rejected, and should continue to reject, the notion that harm to competition can be justified on the grounds that it also confers benefits to another group of users. Regardless of whether one defines a single, multisided market or a set of closely linked one-sided markets, courts should continue to apply separate-effects analysis. Stated another way, the doctrinal principles in *Philadelphia National Bank*[98] and *Illinois Brick Co.*[99] counsel against balancing harms and benefits across distinct user groups, regardless of how the markets are labeled. Moreover, the difficulty in even assessing when a multisided platform exists,[100] further counsels against the identification of a particular firm's business model as the fulcrum on which to decide whether a net-effects approach is permissible.

Fourth, courts should consider price structure and not simply the net price, or two-sided price level, in assessing consumer welfare effects. Focusing purely on the net price can deny users on one or more sides of a platform legal protection from harm to competition—protections to which they are entitled regardless of whether the platform shares with users on some other side some of the fruits of the harm to competition. Because users on different sides of a platform generally do not have coincident interests, it is a mistake to treat them as a unitary economic agent, which an exclusive focus on the net, two-sided price inherently does. Reliance solely on a two-sided price ignores the fundamental lesson of the multisided platform literature: the price structure matters in addition to the net price level.[101] Consequently, our preferred, separate-effects analysis considers the prices charged to each distinct user group.

To sum up the last two points, coupling the single-market approach to market definition with an exclusive focus on the net price as the measure of consumer

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97. For example, as the ABA SECTION OF ANTITRUST LAW, MARKET DEFINITION IN ANTITRUST: THEORY AND CASE STUDIES 448 (2012) explains:

> [S]oftware platforms such as Sony PlayStation provide game developers with software code to help them write games and supply users with game consoles and software enabling them to play games. Although game users and game developers are relying on the same code and hardware, they are paying different prices and are receiving different services. No single market share metric accurately summarizes the position of Sony or of competing video console makers. To understand market dynamics, one must consider both the competitors' shares of video console sales and their shares of game sales.

98. 374 U.S. 321 (1963).

99. 431 U.S. 720 (1977).

100. *See* discussion *supra* Part II.

101. *See* discussion *supra* Section IV.B.

welfare effects runs counter to the core of what it means to be a platform and the necessity of considering the prices on the two sides of the platform separately from one another in order to assess effects on competition and consumer welfare. It is a mistake to argue that this approach is appropriate, let alone that it is the only appropriate approach. By contrast, our recommended combination of the multiple-markets approach and separate-effects analysis, which considers closely-interrelated markets and appropriately evaluates the full set of prices charged to users on the different sides, allows a more complete view of the competitive and consumer welfare effects of the platform conduct at issue.

B. Maintaining the Presumption in Favor of Competition

In this Section, we consider how the structured rule of reason should incorporate our analytical framework for multisided platforms. We do so by considering the economic rationale for the structured rule of reason and then applying that rationale to the consideration of platforms.

The set of presumptions and evidentiary burdens placed on opposing parties can have significant impacts on the ability of each side to succeed in obtaining a favorable verdict. Under a structured rule of reason, the plaintiff has the initial burden to present a prima facie case of harm to competition.[102] If the plaintiff satisfies that burden, then "the burden shifts to the defendant to show that the challenged conduct promotes a sufficiently pro-competitive objective,"[103] for example, by demonstrating efficiencies that inure to consumers' benefit.[104] This is true both for mergers[105] and unilateral conduct.[106]

This requirement that the plaintiff initially establish a prima facie case of harm to competition, but not more than that, to trigger the obligation of the defendant to offer pro-competitive justifications roughly accords with the economic principles of reducing the costs of, and thereby promoting efficiency in,

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102. *See, e.g.*, United States v. Baker Hughes Inc., 908 F.2d 981, 982 (D.C. Cir. 1990).

103. United States v. Brown Univ., 5 F.3d 658, 669 (3d Cir. 1993) (Section 1 claim).

104. The ultimate burden always remains on the plaintiff. As the D.C. Circuit has explained in the context of the government's challenge to a merger, once the government meets its initial burden, then the defendant must rebut the presumption, *Baker Hughes Inc.*, 908 F.2d at 982, and, if that is done, "the burden of producing additional evidence of anticompetitive effects shifts to the government, and merges with the ultimate burden of persuasion, which remains with the government at all times," *id.* at 983.

105. *See, e.g.*, *id.*

106. *See, e.g.*, Cal. Dental Ass'n v. FTC, 526 U.S. 756 (1999); *see also* FTC v. Actavis, Inc., 570 U.S. 136, 148 (2013) (noting "procompetitive antitrust policies" as a factor in measuring the antitrust legality of a patent settlement); Cal. Dental Ass'n, 526 U.S at 788 (Breyer, J., dissenting) ("In the usual Sherman Act § 1 case, the defendant bears the burden of establishing a procompetitive justification.").

litigation. One economic principle reasons that it is generally more efficient to place the evidentiary burden on the side more likely to be wrong: doing so reduces costs because a party that knows the evidence will not support its case is less likely to expend resources producing the evidence.[107] Requiring a plaintiff to make a prima facie case reduces its incentives to bring a weak case and reduces the defendant's costs of challenging such cases. However, if a plaintiff succeeds in making a prima facie showing of harm to competition, then the antitrust principle that competition promotes economic efficiency and buyer welfare suggests that, at that point in the process the defendant is more likely to be wrong, and so the burden to rebut the prima facie case should shift to the defendant.

A second economic principle, that the burden should tend to fall on the side with the lower expected cost of producing the evidence,[108] also supports the conclusion that the burden should shift to the defendant to defend its conduct as procompetitive. The defendant is likely better positioned than the plaintiff to produce evidence that the defendant's challenged conduct has benefited its own users, and can most likely furnish this evidence at a lower cost.

Now consider the application of these economic principles to platforms. The presumption that competition is beneficial should be maintained for multisided platforms as for firms generally. This is especially true given that almost any firm can be considered to be a platform to some degree.[109] When applied to multisided platforms in particular, this presumption would find that a plaintiff has met its initial burden under a structured rule of reason analysis if, for example, it has shown that the price structure has been affected by harm to the competitive process.

Our recommended analysis would not require the plaintiff to show that there is net harm after balancing effects on both sides of the platform (say, by showing that the two-sided, net price had risen in the case of transaction platform). We adopt this approach for two reasons. First, users on each side of a platform are entitled to the benefits of competition, a fundamental principle of antitrust doctrine in both the United States and Europe.[110] In other words, price structure matters and, therefore, antitrust analysis should adopt a rebuttable presumption that the equilibrium price structure resulting from competition is the appropriate one, whether or not the net price is affected the challenged conduct. Second, harm to competition that shifts the price structure typically also affects the price

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107. Bruce L. Hay & Kathryn E. Spier, *Burdens of Proof in Civil Litigation: An Economic Perspective*, 26 J. LEGAL STUD. 413, 418 (1997) (asserting that "the party with the burden will present the evidence if and only if the evidence supports his position" (emphasis omitted)).

108. *Id.* (observing that courts want to "assign the burden of proof to minimize the expected costs").

109. *See* discussion *supra* Part II.

110. *See* discussion *supra* Section IV.A.

level. As a general matter, economic analysis provides no basis for assuming that price increases on one side of a platform will always fully pass through to the other side of the platform in the form of lower prices or higher quality.

That said, it can often be difficult for the plaintiff to establish the precise effects on the net, two-sided price or the quality levels of the services the platform offers each side. For example, when users on one side of a platform view themselves as the beneficiaries of a platform's anticompetitive conduct, they may be reluctant to cooperate with an antitrust investigation.[111] Moreover, third-party discovery is likely to be especially difficult or costly for private plaintiffs. Hence, it is appropriate to shift the burden to the defendant to defend the resulting price structure. Specifically, the defendant should bear the burden of showing that the challenged conduct leads to prices or quality levels that are no worse for the users that the plaintiff alleges to have been (or, in the case of a merger, are likely to be) harmed as the result of anticompetitive conduct. Requiring defendants to show a lack of harm reflects the fundamental principle of the separate-effects analysis that all platform users are entitled to protection from harm to competition.[112]

Consider how our proposed doctrinal application would apply in the Dine Out hypothetical. Although economic analysis has shown that it is very difficult, if not impossible, to provide a definition of harm to competition that is both general and precise, Dine Out's hypothetical contractual provisions directly limited use of price signals, which are at the heart of competition. Thus, in our view, if a plaintiff presented evidence sufficient to establish that Dine Out had market power and that these provisions affected the price structure and harmed restaurants, then the plaintiff would have met its initial burden. If the government alleged harm only to restaurants, then the defendant's rebuttal would have to focus on demonstrating that restaurants have not been harmed. If the government alleged harm to both restaurants and consumers, then the defendant's burden of rebuttal would be present for both markets.

In summary, our recommended legal standard proceeds as follows. If the plaintiff can show harm to the competitive process and that the resulting change in the platform's price structure has harmed one or more user groups, then the burden of proof should shift to the defendant to show that its challenged conduct does not harm the competitive process.

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111. *See* Joseph E. Stiglitz, Professor, Columbia University, PowerPoint Presentation (unpublished) (on file with authors).

112. Note that, even if one believed that it were appropriate to balance welfare effects across user groups and therefore conduct net-effect analysis, it would be appropriate to balance effects in the defendant's rebuttal case, rather than the plaintiff's prima facie case given the second economic principle and the defendant's likely lower costs of producing evidence regarding efficiencies.

CONCLUSION

The antitrust treatment of multisided platforms has become increasingly important. We are concerned that both the single-market approach to market definition and net-effect approach to assessing harm advocated by some economists and attorneys risk creating unnecessary confusion and hindering sound antitrust enforcement. In particular, these forms of analysis misunderstand both the fundamental precepts that govern antitrust law and the economic principles that explain and predict the behavior of multisided platforms and other types of firms alike. In this Feature, we have concluded that enforcers and courts should use a multiple-markets approach, in which different groups of users on different sides of a platform belong in different product markets. This approach appropriately accounts for cross-market network effects without collapsing all of a platform's users into a single product market. Furthermore, we advocate the use of a separate-effects analysis, which rejects the view that anticompetitive conduct harming users on one side of a platform can be justified so long as that harm funds benefits for users on another side. By applying these tools, the courts can apply economic reasoning to multisided platforms in a manner that respects the foundational purposes of antitrust while accounting for how a platform's interaction with multiple groups of users affects its incentives and ability to engage in anticompetitive conduct.