

# IGNORING TWO-SIDED BUSINESS REALITY CAN ALSO HURT PLAINTIFFS



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## I. INTRODUCTION

The two-sided analysis of platform businesses isn't pro-defendant or pro-plaintiff. By accounting for business reality and modern economics, it helps courts and enforcement agencies reach the right decision and thereby reduces the likelihood of false negatives as well as false positives. Sometimes two-sided analysis is essential for uncovering how conduct harms competition and consumers. Other times it helps establish that conduct is innocuous or beneficial. Fears, and hopes, that two-sided analysis will discourage enforcement efforts are misplaced.

## II. BUSINESS REALITY REQUIRES ACCOUNTING FOR INTERDEPENDENT CUSTOMERS

Stripped to the essence, platforms enable two distinct types of participants to interact more readily and realize gains from trade or other interaction.<sup>2</sup> The participants on one side generate externalities for the participants on the other. Customers on each side benefit when they can interact with the customers on the other side, so there is a value to having a joint standard for interacting, and customers on each side benefit when they can interact with more customers on the other side, so there are positive indirect network effects.<sup>3</sup> As a result the demand for joining and using the platform by one group of participants depends on the demand for joining and using the platform by the other group of participants. In the case of ride-sharing apps, for example, drivers value a platform that has more riders in their area who have the app and use it, and passengers value a platform that has more drivers who are on the platform and available to pick them up.

The interdependent demands between the two groups that result from these externalities infuse many aspects of the business reality of platforms and determine their economics. Managing one of these businesses requires getting these participants on board, in the right proportions, getting them to interact with each other, and helping them secure gains from trade. This is seen from considering one key business strategy, setting prices, but it extends to many other aspects of running these firms.

The economic theory of two-sided platforms shows it can pay to subsidize one group of participants to join and use the platform and make up the losses from the other group of participants.<sup>4</sup> The profit-maximizing access and transaction prices can be less than the marginal cost of provision, and can even be zero or negative, subject to at least some of these prices being sufficiently above marginal cost so that the platform earns a profit. These sorts of pricing structures are common in practice. OpenTable, for example, doesn't charge diners for making reservations and instead gives them reward points for using its service, resulting in discounts at participating restaurants. It makes money by charging restaurants for each diner who makes a reservation through OpenTable and for software services.

There is no material controversy over the basic economics of two-sided platforms in the industrial organization literature, which now consists of hundreds of papers, many published in top journals, and several books.<sup>5</sup> A few economists have nonetheless argued for marginalizing the role of this new field in antitrust matters. One line of attack is that the two sides of the platform are just complements, like tennis balls and tennis racquets, and don't raise new issues that haven't been dealt with before, such as in after-market cases.<sup>6</sup> This argument ignores the fact that a platform business *must* serve both its sides, because it is in the business of connecting them. Many businesses sell one complement but not the other, and sometimes when they sell both they sell them to the same customer. It would surprise many platform managers that they could learn much about strategies for their businesses from the basic theory of complements.

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2 For a nontechnical overview of the economics of platforms, see Evans & Schmalensee, *MATCHMAKERS: THE NEW ECONOMICS OF MULTISIDED PLATFORMS* (Harv. Bus. Rev. Press 2016). Some platforms have more than two sides but we focus on two-sided ones here to simplify the discussion. Participants are distinct for the purposes of the interaction but they don't have to be different entities. For marketplaces for second-hand furniture, for example, sometimes people are buyers, and other times they are sellers.

3 It is sufficient to have just one side that benefits from access to the other side. For ad-supported media, for example, advertisers want access to consumers but consumers may not care about ads or may even dislike ads.

4 See, e.g., Rochet & Tirole, *Two-Sided Markets: A Progress Report*, 37 RAND J. Econ. 645 (2006).

5 For an overview, see Evans & Schmalensee, *The Antitrust Analysis of Multisided Platform Businesses*, in 1 Oxford Handbook Int'l Antitrust Econ. 404 (Blair & Sokol eds., 2014). The online appendix to our Oxford Handbook paper lists over 350 significant economic articles published through December 2012; see: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2185373](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2185373).

6 *Amici Curiae* Connor, Gaynor, McFadden, Noll, Perloff, Stiglitz, White & Winter in Support of Petitioners (Dec. 14, 2017), *State of Ohio et al. v. American Express*, S.Ct. No. 16-1454.

Another critical argument is that two-sided analysis doesn't apply when markets are mature.<sup>7</sup> The basic idea is that indirect network effects aren't important once all relevant participants have joined. Neither the theoretical literature nor empirical studies provide any basis for believing that indirect network effects are exhausted commonly in mature markets. But even if all potential participants had joined one or more platforms at the overall market level, individual two-sided platforms would still generally compete, on both sides, for participants to join and use their platforms. The pricing and other business strategies that are common to two-sided platforms occur in theory and in practice regardless of market maturity. Platform managers in mature industries would also be surprised to learn that they could ignore interdependent demand and all its ramifications for running their businesses.

### III. ACCOUNTING FOR BUSINESS REALITY REDUCES BOTH FALSE NEGATIVES & FALSE POSITIVES

Just as both sides matter to platform executives, both sides matter to antitrust analysts. Any practice that affects the demand by one set of customers has an impact on the demand by the other set of customers. Positive feedback effects between the two sides tend to magnify these impacts. A shopping mall that imposes an exclusivity requirement on an anchor store will tend to get greater foot traffic from shoppers who have to come to patronize that store. That might inconvenience those shoppers but might enable the mall operator to attract smaller stores, which benefits those shoppers.

These two-sided effects are also important for practices that affect competitors. A practice by a rival that affects one side, such as by reducing demand, has an impact on the other side, and feedbacks between the two sides magnify these effects. A shopping mall that imposes an exclusivity requirement on an anchor store could make it more difficult for a competing mall to get traffic and recruit other stores.

Whether these cross-side impacts are material is an empirical question, but one could not know the answer without considering both sides. When they are important, antitrust analysis, like economic analysis more generally, needs to account for the implications of interdependent demand.

Accounting for business reality, and using the appropriate economic models, should tend to minimize errors. Consider conduct that directly affects customers on one side of a platform. Analyzing conduct on just that side could reach a false negative by ignoring harms on the other side and a false positive by ignoring benefits on the other side. There doesn't appear to be any *a priori* reason to believe that doing the correct two-sided analysis should increase errors in making decisions concerning antitrust matters or that it should disproportionately reduce false positives relative to false negatives.

Comcast's proposed acquisition of Time Warner Cable illustrates the potential for false negatives. These companies operated local cable systems but never in the same zip code. Given this lack of overlap the parties, as well as many analysts and commentators, argued that there was no possible anticompetitive harm. Viewed from a single-sided perspective that position is obviously correct since the merger wouldn't change the choices available to consumers.

These cable systems, however, operated two-sided platforms. As Internet Service Providers ("ISPs") they connected households and Internet content providers and as Multichannel Video Distribution Providers ("MVPDs") they connected households and video programming providers. Focusing just on the households that participated on one side ignored the possible impact of the merger on the Internet content providers and video programmers as well as the possible feedbacks between those participants and households.

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<sup>7</sup> Shy, *A Short Survey of Network Economics*, 38 *Review of Indus. Org.* 119, 136 (2011), ("The example of payment cards highlights the limitation of the two-sided market theory, because under full capacity no new spillovers between buyers and merchants can be created. More precisely, no additional network effects can be generated once most buyers already use payment cards and most merchants accept merchant cards. Therefore, *policy conclusions of two-sided market models should be confined to immature markets.*"). Also see *Amici Curiae*, *id.*

The U.S. Department of Justice found that the merger would increase bargaining leverage over Internet content providers and video programmers and thereby impose harm on those customers.<sup>8</sup> Moreover, the merger would increase the risk that the parties would use their control over broadband access to soften competition between the MVPD businesses and the emerging streaming video business, thereby harming consumers. These conclusions are predicated on the lack of competition on the household side. Consumers have few good alternatives for broadband service, and the costs of switching are high. The merger wouldn't change this competitive situation on the household side but it would on the other Internet content and video programming sides through the agglomeration of these households into larger bottlenecks.<sup>9</sup>

Predatory pricing clearly illustrates the possibility of both false positives and false negatives.

Profit-maximizing platforms often set prices above marginal cost on one side and below marginal cost on the other side. These skewed pricing structures persist in the face of competition. There is therefore no basis for inferring that a firm is engaging in price predation from the fact that price is below cost on one side. The traditional price-cost test applied to one side leads to a false positive decision.

A French predatory pricing case against Google Maps shows this danger. Bottin Cartographe sold mapping software that buyers could embed in their websites for the purpose of showing people directions. Google provided mapping software to websites for free but in return secured the right to deliver ads when people clicked on the directions shown; it also had a paid premium service. Bottin Cartographe sued Google for predatory pricing in the French commercial court.

The lower court agreed, on the grounds that Google charged websites nothing for a service that had positive marginal cost.<sup>10</sup> The Paris Appeals Court reversed that false positive finding.<sup>11</sup> It relied on an analysis by the French competition authority, which showed that Google Maps' revenue exceeded its costs after accounting for the advertising revenue that resulted from people viewing the free ad-supported maps.<sup>12</sup>

Of course, two-sided platforms can engage in price predation by lowering their overall prices below the profit-maximizing levels to drive out rivals and then recouping profits after they have secured monopoly power. A single-sided analysis, however, wouldn't necessarily detect this behavior and could reach a false negative finding.

Consider a city with two daily newspapers and suppose, as is usually the case, that the profit-maximization results in a pricing structure in which readers pay less than marginal cost and advertisers pay more than marginal cost. The dominant newspaper reduces advertising prices so that they are below the profit-maximizing level but above marginal cost and leaves reader prices unchanged. As a result it loses money overall since the profits on the advertiser side do not cover the losses on the reader side. The smaller newspaper can't survive at the lower advertising prices and exits.

A single-sided analysis would focus on the conduct on the advertiser side since that is where prices are being lowered. It would find that prices are greater than marginal cost and therefore conclude that there was no basis for a price predation claim. That is a false negative. A two-sided analysis accounting for prices and costs on both sides would prevent this error.

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8 Hill, Rose & Winston (2015), "Economics at the Antitrust Division 2014-2015: Comcast/Time Warner Cable and Applied Materials/Tokyo Electron," Review of Industrial Organization, 47:425-435. Also see Baer, "Video Competition: Opportunities and Challenges," Remarks as Prepared for the Duke Law Center for Innovation Policy, Fall Conference on the Future of Video Competition and Regulation, Washington DC, October 9, 2015, <https://www.justice.gov/opa/file/782401/download>.

9 Evans presented economic studies to the FCC and Justice Department, on behalf of Netflix, concerning the competitive effects of the transaction, and Schmalensee also did to the FCC, on behalf of a trade association. See Evans, Economic Analysis of the Impact of the Comcast/Time Warner Cable Transaction on Internet Access to Online Video Distributors (December 23, 2014). Available at: <https://ssrn.com/abstract=2600715> or <http://dx.doi.org/10.2139/ssrn.2600715>.

10 Tribunal De Commerce [ordinary court of original jurisdiction] Paris, Jan. 31, 2012, Case No. 2009061231.

11 Cour d'appel [regional court of appeal] Paris, civ., Nov. 25, 2015, Case No. 12/02931.

12 Autorité de la Concurrence, *Rendu à la Cour D'appel de Paris Concernant un Litige Opposant la société Bottin Cartographes SAS aux sociétés Google Inc. et Google France* [Report to the Paris Court of Appeals Concerning the Litigation between Bottin Cartographes SAS and Google Inc. and Google France] ¶ 50 (Dec. 16, 2014).

Single-sided analyses can reach false negatives or false positives for any conduct involving two-sided platforms for the same reasons they can arise in predatory pricing. Examining one side provides an incomplete picture of the benefits and costs of the conduct to customers as well as to the platform and a distorted view of what's happening to competition among platforms. Filling in the picture by considering both sides and accounting for the linkages between them provides a complete view. That could expose anticompetitive behavior, or reveal the procompetitive reasons for conduct that looks dubious viewed from one side.

## IV. TECH GIANTS, AND ALL PLATFORMS, HAVE AS MUCH TO FEAR AS TO GAIN FROM ACCOUNTING FOR TWO-SIDED BUSINESS REALITY

Some of the advocacy presented to the Supreme Court in *State of Ohio v. American Express* fails to appreciate that single-sided analysis of two-sided platforms can result in false negatives as well as false positives. The U.S. Department of Justice and several of the *Amici* in support of the state plaintiffs have essentially argued that the courts should confine rule of reason analyses to the side of the platform on which the conduct has taken place for the first stage of the rule of reason analysis.<sup>13</sup> That approach would help secure a verdict against American Express and could help plaintiffs in other similar cases. But it would also make it more difficult to secure verdicts against platforms in which conduct on one side inflicts harm through its impact on the other side.

More generally, applied across all platform enterprises, there is no apparent reason to expect that the single-sided approach would tend to reduce false negatives more than false positives. From the standpoint of antitrust enforcement, the Justice Department has therefore taken a shortsighted approach towards analyzing conduct by platform businesses.

Some commentators seem to think that two-sided analysis will give tech companies a free pass to engage in anticompetitive conduct.<sup>14</sup> To begin with, two-sided analysis accounts for business reality and gets the economics right. If that analysis doesn't find that conduct harmed competition and consumers, then chances are that the conduct isn't anticompetitive. More importantly, however, imposing single-sided analysis on two sided platforms would likely have two related adverse effects.

The first is that it would lead to false negatives. Consider a platform that provides an enormous amount of free content for users and earns profit from advertising. The single-sided approach advocated by the Justice Department would enable the platform to engage in conduct on the advertising side that harmed users (but not advertisers) and conduct on the user side that harmed advertisers (but not users) through its effect on competition.

The second is that it would shift anticompetitive behavior to conduct that evades detection. To do that the platform just needs to come up with conduct on one side that inflicts harm on competitors on the other side. Two-sided predation discussed above is a good example. If a platform lowered the price on the advertiser side, but kept the price above marginal cost, it could drive competing ad-supported platforms out of business by drying up their profitable advertising revenue.

It is hard to predict the net effect of single-sided analysis versus two-sided analysis on tech companies, but there's no apparent reason why tech foes should be rooting for single-sided analysis and tech friends should be cheering for two-sided analysis. A good default position would be to advocate two-sided analysis when there is significant interdependent demand on the theory that getting the right answer is probably best, on average, for everyone — at least for consumers.

<sup>13</sup> The Justice Department argues that benefits to the other side could be considered in the second stage of the rule of reason analysis. U.S. Br. 43-47, 52. Remarkably, the *Amici* Law Professors and *Amici* Economists for the Petitioners argue that the courts should not consider pro-competitive justifications involving the second side even in the second stage of the rule of reason analysis. See Petitioner *Amici* Law Professors' Br. 32-34; Petitioner *Amici* Economists' Br. 23.

<sup>14</sup> Bernstein, "A Lawsuit Over Credit Card Fees Could Further Empower Big Tech," *Bloomberg*, January 24, 2018. <https://www.bloomberg.com/news/articles/2018-01-24/a-lawsuit-over-credit-card-fees-could-further-empower-big-tech>. ("Even the most extreme scenarios could be immune to antitrust complaints if the tech platforms could argue that benefits accrue to someone else, said Tim Wu, a professor at Columbia Law School. 'Don't you realize you're insulating a whole class of business from the reach of the law?'" ) See also *Amici* Brief of Open Markets Institute, *State of Ohio et al. v. American Express*, S.Ct. No. 16-1454.