



Comments for the Record

Platform Competition and the Implications of Amex

WILL RINEHART, PRANJAL DRALL | AUGUST 21, 2018

Executive Summary

Among the most important cases on the Supreme Court's 2018 docket was *Ohio v. American Express*.^[1] In it, the Court signaled its willingness to understand enterprises like Google, Facebook, and Twitter, on their own terms: as platforms that combine two groups of users for their mutual benefit. Some have rung the alarm with this case, claiming it marks the end of regulation for tech companies, but a careful understanding of the Court's decision is worthwhile. The Court's analysis wasn't expansive like some have claimed, but simply the beginning of a new line of thinking about antitrust for the platform economy.

For policymakers and those at the Federal Trade Commission (FTC), three key lessons are worth remembering:

- The value of platforms comes in bringing together two different groups of users;
- The optimal pricing for each group of users may lead to a price of zero for one side of the platform; and
- Consumer welfare should be at the core of antitrust analysis for platforms.

The History of Amex

Amex centers on what is known as anti-steering provisions. These provisions, in this case, limit merchants who take credit card payments from implying a preference for non-Amex cards; dissuading customers from using Amex cards; persuading customers to use other cards; imposing any special restrictions, conditions, disadvantages, or fees on Amex cards; or promoting other cards more than Amex. Importantly, these provisions never limited merchants from steering customers toward debit cards, checks, or cash.

In October 2010, the Department of Justice (DoJ) and several states sued Amex, Visa, and Mastercard for these contract provisions, and Amex was the only one among the three to take it to court.^[2] Initially, the District Court ruled in favor of the DoJ and states, explaining that the credit card platforms should be treated as two separate markets, one for merchants and one for cardholders. In that analysis, the court cleaved off the merchant side and declared the anti-steering provisions as being anticompetitive under Section 1 of the Sherman Act.

On appeal, the Court of Appeals for the Second Circuit reversed that decision because “without evidence of the [anti-steering provisions'] net effect on both merchants and cardholders, the District Court could not have properly concluded that the [provisions] unreasonably restrain trade in violation” of Section 1 of the Sherman Act. The Department of Justice petitioned the Appeals Court to reconsider the case en banc, but that was rejected and the case headed to the Supreme Court.^[3]

The Supreme Court agreed with this two-sided theory, as “credit-card networks are best understood as supplying only one product—the transaction—that is jointly consumed by a cardholder and a merchant.” Even though the DoJ was able to show that the provisions did increase merchant fees, “evidence of a price increase on

one side of a two-sided transaction platform cannot, by itself, demonstrate an anticompetitive exercise of market power.” To prove this, the DoJ would have to prove that Amex increased the cost of credit-card transactions above a competitive level, reduced the number of credit-card transactions, or otherwise stifled competition in the two-sided credit-card market. This invite for commentary from the Court is what the rest of this comment explores.

The Value of Networks

Multi-sided platforms create value by bringing different economic agents together.^[4] They facilitate interaction among these agents and generate welfare for individual agents by reducing transaction costs. Such platforms aren’t new. They’ve been around for decades in industries like video games, credit cards, newspapers, and radio stations. The Twin Cities’ Mall of America is as much a platform as Google is. The Internet has only facilitated the creation of such platforms by allowing agents to interact in real-time. As will be discussed later, the core concern with platforms is how the price for each side is optimally set.

Platforms create value via two sources. *Usage externalities* stem from the benefits that both sides get when they use the platform. These mostly come from reduced transaction costs. For instance, consumers can save time by using platforms like OpenTable to reserve tables at restaurants. Restaurants also save time and costs by using an online platform for reservations.

The second source relates to the number of users on each side of the platform. These *membership externalities* are generated by network effects. The value created for users on one side of the platform increases exponentially when more users join the other side of the platform. For example, the value of a credit card for merchants increases as the number of cardholders increase. Similarly, as the number of merchants that accept a certain credit card increases, cardholders benefit from increased acceptability. When an increase in one side of the market affects the value in the other, these changes are known as *indirect network effects*. They serve as the foundation of the platform economy.

The *Amex* decision only briefly mentions why these kinds of effects are important, so consider a platform with two sides, users and advertisers. If users experience an increase in price or a reduction in quality, then they are likely to exit or use the platform less. Advertisers are on the other side because they can reach users, so in response to the decline in user quality, advertiser demand will drop even if the ad prices stay constant. The result echoes back. When advertisers drop out, the total amount of content also recedes and user demand falls because the platform is less valuable to them. Demand is tightly integrated between the two sides of the platform. Changes in user and advertiser preferences have far outsized effects on the platforms because each side responds to the other. In other words, small changes in price or quality tends to be far more impactful in chasing off both groups from the platforms as compared to one-sided goods. These are called *demand interdependencies* and are a species of indirect network effect. Research on magazine price changes confirms this theory.^[5] The demand on one side of the market is interdependent with demand on the other.

One of the most common arguments against platform power is the worry that they will start excluding producers, retailers, advertisers, and app developers.^[6] Platforms, however, have a strong incentive to include all users because the effects reverberate through both sides of the platform. That isn’t to say that the pricing structure will be the same, and indeed the optimal pricing strategies for each part of the network is important to understand network behaviors.

Pricing Structure in Platforms

In work fundamental to his 2003 Nobel Prize, economist Jean Tirole found that prices charged by platforms are fundamentally different from those of traditional businesses.^[7] Three basic assumptions, which hold in the real world, help to set the stage for this conclusion. First, there are two distinct customer groups connected by the platform. Second, positive externalities exist between members of those groups. And finally, a two-sided platform provides a good or service that facilitates exchange of value in the face of these externalities. Altogether, Tirole helped to prove that an increase in marginal cost on one side of the platform doesn't necessarily increase prices on that side. Thus, the profit-maximizing price for one side may be below the marginal cost or even negative. Here, negative prices means that the consumer is getting a benefit without paying for it.

For example, OpenTables gives consumers bonuses for signing up while charging restaurants fees for having them on their network. In this structure, the network effects, or the *membership externalities*, of having consumers use OpenTable increases value for restaurants as they have access to a larger user base. OpenTable then charges fees to the restaurants in order to recover costs. This price structure is common: One entity is given discounts or charged no fee and the other side is charged fees greater than the marginal cost. Indeed, the cost structure of Twitter, Facebook, and Google only make sense through this lens.

In the last two decades, economics has been adapting to the insights and the challenges of platforms. In the case of a one-sided business, like a laundromat or a mining company, there is one downstream or upstream consumer, so demand is fairly straightforward. But platforms are more complex since value must be balanced across the different participants in a platform, which leads to demand interdependencies, as explained earlier.

In an article cited in the *Amex* decision, economists David Evans and Richard Schmalensee explained the importance of the integration of platform economics into competition analysis: "The key point is that it is wrong as a matter of economics to ignore significant demand interdependencies among the multiple platform sides" when defining markets.^[8] If they are ignored, then the typical analytical tools will yield incorrect assessments.

While it didn't employ the language of demand interdependencies, the Court did agree with that general assessment:

To be sure, it is not always necessary to consider both sides of a two-sided platform. A market should be treated as one sided when the impacts of indirect network effects and relative pricing in that market are minor. Newspapers that sell advertisements, for example, arguably operate a two-sided platform because the value of an advertisement increases as more people read the newspaper. But in the newspaper-advertisement market, the indirect networks effects operate in only one direction; newspaper readers are largely indifferent to the amount of advertising that a newspaper contains. Because of these weak indirect network effects, the market for newspaper advertising behaves much like a one-sided market and should be analyzed as such.

How the Court reached that conclusion is worth exploring. In contrast to newspapers, credit card payment platforms "cannot make a sale unless both sides of the platform simultaneously agree to use their services," so, "two-sided transaction platforms exhibit more pronounced indirect network effects and interconnected pricing and demand." The Court seems to connect two-sidedness with the simultaneity requirement. But it isn't the simultaneous nature of credit cards that makes them two-sided markets, but their demand interdependencies. Newspapers also have strong demand interdependencies even though they may not feature the simultaneity of

credit cards, in contradistinction to the *Amex* decision. Yet, the Court was correct in defining the market as a transactional one, where cardholders and merchants are intimately connected.

The Incomplete Logic of Breyer's Dissent in Amex

Justice Breyer's dissent in *Amex* offers one path to understand optimal pricing. As he wrote,

But while the market includes substitutes, it does not include what economists call complements: goods or services that are used together with the restrained product, but that cannot be substituted for that product. See *id.*, ¶565a, at 429; *Eastman Kodak Co. v. Image Technical Services, Inc.*, 504 U. S. 451, 463 (1992). An example of complements is gasoline and tires. A driver needs both gasoline and tires to drive, but they are not substitutes for each other, and so the sale price of tires does not check the ability of a gasoline firm (say a gasoline monopolist) to raise the price of gasoline above competitive levels. As a treatise on the subject states: "Grouping complementary goods into the same market" is "economic nonsense," and would "undermin[e] the rationale for the policy against monopolization or collusion in the first place." 2B Areeda & Hovenkamp ¶565a, at 431.

Here, the relationship between merchant-related card services and shopper-related card services is primarily that of complements, not substitutes. Like gasoline and tires, both must be purchased for either to have value. Merchants upset about a price increase for merchant related services cannot avoid that price increase by becoming cardholders, in the way that, say, a buyer of newspaper advertising can switch to television advertising or direct mail in response to a newspaper's advertising price increase.

Still, it isn't the case that "both must be purchased for either to have value." That is perfect complementarity, which is rare. When the price of gasoline increases, then the demand for tires is likely to decrease as well. This relation doesn't need to run the other way, however. When the price of tires decreases, the demand for gasoline doesn't typically inch up. This kind of asymmetric demand relationship is counter to the kind of relationship on platforms where demand is linked on both sides.

Justice Breyer buries the lede. Attributing a price increase to firms in the tire market might be wrong if demand fluctuations in the adjacent gasoline market partially caused those price changes. In other words, the reason why complementary demand matters in the first place is to ensure that the court's analysis is correct. Going back to Evans and Schmalensee, "The key point is that it is wrong as a matter of economics to ignore significant demand interdependencies among the multiple platform sides" when defining markets. If you do, you get the assessments wrong.

To his credit, Breyer does rightly point out the thin definition offered by the majority,

I take from that definition that there are four relevant features of such businesses on the majority's account: they (1) offer different products or services, (2) to different groups of customers, (3) whom the "platform" connects, (4) in simultaneous transactions.

Having simultaneous transactions isn't the defining feature of two-sidedness, and if the lower courts come to rely on this feature to define platforms, then some assessments of competitive effects are likely to be wrong. Instead, the courts should be focused, as they have been for some time, on consumer welfare.

The courts have long interpreted Section 2 of the Sherman Act to focus on enforcement of conduct rather than mere outcomes. Starting with *Alcoa*, Justice Hand's opinion made it clear that, "The Act does not mean to condemn the resultant of those very forces which it is its prime object to foster: finis opus coronat."^[9] This idea was reaffirmed by Justice Scalia in *Trinko* who noted that "the possession of monopoly power will not be found unlawful unless it is accompanied by an element of anticompetitive conduct."^[10] While some boosters of market intervention might want to change this standard, this focus on consumer welfare shouldn't change. It's important to note that a focus on conduct doesn't preclude antitrust enforcement of platforms.

In a piece in the *New York Times* in April, legal scholar Lina Khan worried that *Amex* would "effectively [shield] big tech platforms from serious antitrust scrutiny."^[11] Law professor Tim Wu followed up with an op-ed in the *New York Times* expressing similar concern about the ability of agencies and courts to go after bad platform actors:

To reach this strained conclusion, the court deployed some advanced economics that it seemed not to fully understand, nor did it apply the economics in a manner consistent with the goals of the antitrust laws. Justice Stephen Breyer's dissent mocks the majority's economic reasoning, as will most economists, including the creators of the "two-sided markets" theory on which the court relied. The court used academic citations in the worst way possible — to take a pass on reality.^[12]

As *Amex* stands, both Google and Facebook could still face competition scrutiny. The opinion didn't define what "weak indirect network effects" actually means in practice, so this case doesn't leave Google and Facebook untouched by any means. Moreover, the requirement of simultaneity, though probably misplaced as part of a larger theory of platforms, clearly does include both of these online platforms.

Still, *Amex* should be a cause for celebration. Economists and antitrust scholars have been actively working to extend traditional antitrust analysis to apply it to platform businesses.^[13] The Court agreed; the totality of the platform needs to be understood. As such, the Commission should work to extend the analysis first begun by the Supreme Court. Just like the OECD, the FTC should use this opportunity to reassess the work that has been done in this space and should be soliciting a larger working paper.^[14]

[1] Supreme Court of the United States, *Ohio et al. v. American Express Co. et al.*, https://www.supremecourt.gov/opinions/17pdf/16-1454_5h26.pdf.

[2] Chad Bray, *Visa, MasterCard Win Approval of Settlement in 'Anti-Steering' Case*, <https://www.wsj.com/articles/SB10001424053111904233404576458081673213422>.

[3] United States Courts of Appeals For the Second Circuit, *United States v. American Express Company*, <https://cases.justia.com/federal/appellate-courts/ca2/15-1672/15-1672-2016-09-26.pdf?ts=1474916405>.

[4] David S. Evans, *The Antitrust Economics of Multi-Sided Platform Markets*, <http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1144&context=yjreg>.

[5] Minjae Song, *Estimating Platform Market Power in Two-Sided Markets with an Application to Magazine Advertising*, <http://www.simon.rochester.edu/fac/MSONG/papers/Song-twosided.pdf>.

- [6] Lina M. Khan, *What Makes Tech Platforms So Powerful?*, <https://promarket.org/wp-content/uploads/2018/04/Digital-Platforms-and-Concentration.pdf#page=15>.
- [7] Jean-Charles Rochet and Jean Tirole, *Platform Competition in Two-sided Markets*, <http://www.rchss.sinica.edu.tw/cibs/pdf/RochetTirole3.pdf>.
- [8] David S. Evans and Richard Schmalensee, *The Antitrust Analysis of Multi-Sided Platform Businesses*, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2214252.
- [9] Justice Learned Hand, *United States v Aluminium Company of America, et. al.*, <http://www.tcd.ie/Economics/staff/masseyp/term1lecture7.htm>.
- [10] Justice Antonin Scalia, *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, https://www.justice.gov/atr/competition-and-monopoly-single-firm-conduct-under-section-2-sherman-act-chapter-1#N_7_.
- [11] Lina M. Kahn, *The Supreme Court Case That Could Give Tech Giants More Power*, <https://www.nytimes.com/2018/03/02/opinion/the-supreme-court-case-that-could-give-tech-giants-more-power.html>.
- [12] Tim Wu, *The Supreme Court Devastates Antitrust Law*, <https://www.nytimes.com/2018/06/26/opinion/supreme-court-american-express.html>.
- [13] David S. Evans, *The Antitrust Economics of Multi-Sided Platform Markets*, <http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1144&context=yjreg>.
- [14] Organisation for Economic Co-operation and Development, *Rethinking Antitrust Tools for Multi-Sided Platforms*, <http://www.oecd.org/daf/competition/Rethinking-antitrust-tools-for-multi-sided-platforms-2018.pdf>.