



Two-Sided Market Definition and
Competitive Effects for Credit Cards
After *United States v. American Express*

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A two-sided market involves two distinct groups of consumers. Network externalities exist between those two groups: the value that consumers on one side of the market derive from the consumption of the good or service increases with the number of consumers on the other side of the market.¹ To prosper in a two-sided market, a firm needs to compete against alternative platforms by appealing to both groups of consumers with optimally balanced prices and benefits for each side of the market, such that it achieves an optimal *aggregate* price posture.² Despite the ubiquity of two-sided markets,³ antitrust practitioners have struggled to analyze properly the competitive effects of firm conduct in those markets. In September 2016, however, the opinion of the U.S. Court of Appeals for the Second Circuit in *United States v. American Express Co.* incorporated into antitrust doctrine important economic principles for analyzing alleged restraints of trade in a two-sided market.⁴ Given the current and growing importance of multi-sided platforms

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¹ See Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-Sided Markets*, 1 J. EUR. ECON. ASS'N 990, 990 (2003).

² *Id.* (“Platform owners or sponsors in these industries must address the celebrated ‘chicken-and-egg problem’ and be careful to ‘get both sides on board.’”).

³ Prominent examples range from shopping malls to video games, as well as credit cards. *Id.* (“More generally, many if not most markets with network externalities are characterized by the presence of two distinct sides whose ultimate benefit stems from interacting through a common platform.”); see also David S. Evans & Richard Schmalensee, *Industrial Organization of Markets with Two-Sided Platforms*, 3 COMPETITION POL'Y INT'L 150, 152 (2007).

⁴ 838 F.3d 179 (2d Cir. 2016).

in the U.S. economy, the Second Circuit's decision is a significant contribution to antitrust jurisprudence.

The Second Circuit's decision addressed antitrust claims that the U.S. Department of Justice and seventeen states (which, for brevity, we will collectively call the government) brought against credit-card networks in 2010, including Visa, MasterCard, and American Express (Amex).⁵ The government challenged the defendants' use of "non-discriminatory provisions" (NDPs) that prohibit merchants from "steering" customers toward using less expensive or otherwise preferred payment-card networks.⁶ Specifically, the NDPs prohibited merchants from (1) offering customers incentives, either monetary or nonmonetary, to use credit cards that were less costly for the merchants, (2) expressing preference for any card, or (3) disclosing the merchant's costs of processing a sale on a different card network.⁷ The government alleged that the NDPs suppressed competition among rival credit card networks by removing their incentives to reduce merchant discounts, which they said constituted an unreasonable restraint of trade in violation of section 1 of the Sherman Act.⁸ Visa and MasterCard each entered into a consent decree with the U.S. government, pledging to eliminate NDPs from their agreements with merchants, but Amex proceeded to trial.⁹ In February 2015, Judge Nicholas Garaufis of the U.S. District Court for the Eastern District of New York found that the government showed, by a preponderance of the evidence, that Amex's use of NDPs violated section 1, and the court permanently enjoined Amex from enforcing its NDPs.¹⁰

In December 2015, one day after hearing oral argument in the appeal of the case, the Second Circuit's three-judge panel, *sua sponte*, temporarily stayed (1) Judge Garaufis's injunction prohibiting Amex's enforcement of the NDPs and (2) proceedings in all matters related to the litigation.¹¹ In September 2016, Judge Richard Wesley, writing for the Second Circuit, reversed and remanded the case with instructions that the district court enter judgment in favor of Amex.¹² The Second Circuit found that the district court incorrectly defined the relevant market.¹³ The Second Circuit emphasized that, by focusing the analysis on only the merchant side of the market, while ignoring implications for the cardholder side of the market, the district court did not properly account for the interdependence between the two sides of the

⁵ *Id.* at 192.

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

⁹ *Id.*

¹⁰ *United States v. American Express Co.*, 88 F. Supp. 3d 143, 190 (E.D.N.Y. 2015).

¹¹ *United States v. American Express Co.*, No. 15-1672 (2d Cir. Dec. 18, 2015), ECF No. 206.

¹² *American Express*, 838 F.3d at 207.

¹³ *Id.* at 202.

market.¹⁴ It also found that the “erroneous market definition” led the district court to conclude incorrectly that the challenged practice had an anticompetitive effect on the relevant market.¹⁵ The Second Circuit said that separating the two sides of the markets could erroneously penalize “legitimate competitive activities . . . no matter how output-expanding such activities may be.”¹⁶

We explain here why the Second Circuit’s reasoning is sound. In Part I, we present the basic features of a two-sided market for credit-card networks. In Part II, we explain that the proper definition of the relevant market needs to account for the two-sided nature of credit-card markets. In Part III, we explain that evidence of cardholder insistence and of Amex’s ability to raise prices profitably for merchants is insufficient to prove market power. In Part IV, we explain that, in a two-sided market, the proper analysis of a conduct’s effect on competition must include the analysis of the effect on competition on both sides of the market.

I. THE TWO-SIDED MARKET FOR CREDIT CARDS

A credit-card network facilitates the interaction between cardholders and merchants by performing various functions, such as issuing credit cards, extending credit to cardholders, collecting amounts due, and paying retailers for their sales using the network’s cards. Like shopping malls, executive recruiting firms, dating services, computer games, and social networking websites, credit-card networks exemplify two-sided platforms since their success depends upon both cardholder and merchant mutually reinforcing widespread acceptance, based on both groups’ benefits from their own utilization of the credit card.

Economists have produced an extensive literature on two-sided markets. In a seminal article published in the *Journal of Law & Economics* in 1983, Stanford law professor William Baxter, then serving as Assistant Attorney General at the Antitrust Division, studied the two-sided nature of credit-card markets.¹⁷ Since the early 2000s, others (including Nobel laureate Jean Tirole) have expanded that literature.¹⁸ Economists now widely accept

¹⁴ *Id.* at 197–98.

¹⁵ *Id.* at 204.

¹⁶ *Id.* at 198.

¹⁷ See William F. Baxter, *Bank Interchange of Transactional Paper: Legal and Economic Perspectives*, 26 J.L. & ECON. 541 (1983). For commentary on the significance of Baxter’s insight, see Richard Schmalensee, *Bill Baxter in the Antitrust Arena: An Economist’s Appreciation*, 51 STAN. L. REV. 1317 (1999).

¹⁸ See, e.g., David S. Evans, *The Antitrust Economics of Multi-Sided Platform Markets*, 20 YALE J. ON REG. 325 (2003); Jean-Charles Rochet & Jean Tirole, *Two-Sided Markets: A Progress Report*, 37 RAND J. ECON. 645 (2006); Roberto Roson, *Two-Sided Markets: A Tentative Survey*, 4 REV. NETWORK ECON. 142 (2005); Mark Armstrong, *Competition in Two-Sided Markets*, 37 RAND J. ECON. 668 (2006); Andrei Hagiu, *Two-Sided Platforms: Product Variety and Pricing Structures*, 18 J. ECON. & MGMT. STRATEGY 1011 (2009); Sujit Chakravorti & Roberto Roson, *Platform Competition in Two-Sided Markets: The Case of Payment Networks*, 5 REV. NETWORK

the definition of Tirole and Jean-Charles Rochet that a multi-sided market is a market “in which one or several platforms enable interactions between end-users and try to get the two (or multiple) sides ‘on board’ by appropriately charging each side.”¹⁹ Antitrust scholars have further applied the economic principles of two-sided markets to a wide range of cases and regulatory policies.²⁰

Typically, platforms in two-sided markets charge a low, sometimes negative, price to attract customers on one side of the market and a higher price on the other side of the market.²¹ For example, a shopping mall may offer free parking and entertainment to attract shoppers, while charging merchants rents that reflect the value to the shops of the volume of potential customers. Analogously, a credit-card network might charge the cardholder a negative price by offering rewards or discounts to entice consumers to use the network’s card. The aggregate price in a two-sided market equals the sum of the prices that each side of the market pays. By allocating a relatively small, or even negative, portion of the aggregate price to the consumer and allocating a relatively large portion to the merchant, a credit-card network encourages cardholders to use credit cards that belong to its network, which in turn increases a merchant’s incentive to accept that network’s credit cards. Thus, network effects magnify the effect of a price change on one side of the two-sided market.²² In other words, a credit-card network’s allocation of the aggregate price between consumers and merchants affects the total

ECON. 118 (2006); Jean-Charles Rochet & Jean Tirole, *Platform Competition in Two-Sided Markets*, 1 J. EUR. ECON. ASS’N 990, 990–91 (2003); Marc Rysman, *The Economics of Two-Sided Markets*, 23 J. ECON. PERSP. 125, 125–27 (2009).

¹⁹ Rochet & Tirole, *Two-Sided Markets: A Progress Report*, *supra* note 18, at 645. Rochet and Tirole clarify that a market is two-sided only if the volume of transactions between the end users on each side of the platform depends on the allocation of the aggregate price—the sum of the price that the platform charges each side. *Id.* at 648. In a one-sided market, the volume of transactions would depend only on the aggregate price.

²⁰ See, e.g., Bryan Keating & Robert D. Willig, *Unilateral Effects*, in 1 THE OXFORD HANDBOOK OF INTERNATIONAL ANTITRUST ECONOMICS 466 (Roger D. Blair & Daniel Sokol eds., Oxford Univ. Press 2013); Lapo Filistrucchi, Tobias J. Klein & Thomas Michielsen, *Assessing Unilateral Effects in a Two-Sided Market: An Application to the Dutch Daily Newspaper Market*, 8 J. COMPETITION L. & ECON. 297 (2012); Robert H. Bork & J. Gregory Sidak, *What Does the Chicago School Teach About Internet Search and the Antitrust Treatment of Google?*, 8 J. COMPETITION L. & ECON. 663 (2012); Daniel F. Spulber, *Solving the Circular Conundrum: Communication and Coordination in Two-Sided Networks*, 104 NW. U. L. REV. 537 (2010); David S. Evans & Richard Schmalensee, *The Industrial Organization of Markets with Two-Sided Platforms*, 3 COMPETITION POL’Y INT’L 151 (2007); J. Gregory Sidak, *A Consumer-Welfare Approach to Network Neutrality Regulation of the Internet*, 2 J. COMPETITION L. & ECON. 349 (2006); Hagiu, *supra* note 18; David S. Evans & Michael Noel, *Defining Antitrust Markets When Firms Operate Two-Sided Platforms*, 3 COLUM. BUS. L. REV. 101 (2005).

²¹ See, e.g., Rochet & Tirole, *Two-Sided Markets: A Progress Report*, *supra* note 18, at 992, 1013–14; J. Gregory Sidak & David J. Teece, *Innovation Spillovers and the “Dirt Road” Fallacy: The Intellectual Bankruptcy of Banning Optional Transactions for Enhanced Delivery Over the Internet*, 6 J. COMPETITION L. & ECON. 521, 541–42 (2010).

²² Rochet & Tirole, *Two-Sided Markets: A Progress Report*, *supra* note 18, at 648. Economists have recognized the relevance of this insight to telecommunications regulation since at least the mid-1990s. See, e.g., Robert W. Crandall & J. Gregory Sidak, *Competition and Regulatory Policies for Interactive Broadband Networks*, 68 S. CAL. L. REV. 1203, 1219–20 (1995).

volume of transactions on that card network and therefore the success of that network.

II. DEFINING A MARKET WITH TWO-SIDED DEMAND

When defining the relevant product market, a court seeks to identify the “products that have reasonable interchangeability” from the perspective of the relevant consumers of the defendant’s product.²³ The purpose of the market-definition inquiry is “to identify the market participants and competitive pressures that restrain an individual firm’s ability to raise prices or restrict output.”²⁴

In *United States v. American Express*, Judge Garaufis said that the market definition “must account for the two-sided features of the credit card industry in its market definition inquiry.”²⁵ However, he ultimately defined the relevant product market to be the market for “general purpose credit and charge card network services” offered to merchants—a market in which Visa, MasterCard, Amex, and Discover compete.²⁶ When Amex urged the court to define the relevant market as the market for “transactions” (rather than the market for “network services”) to account for both the merchant side and cardholder side of the market, Judge Garaufis rejected that approach as “tak[ing] the concept of two-sidedness too far.”²⁷ He said that, because “the customer neither sees nor pays the additional cost when networks increase the price of network services to merchants (other than in the form of higher retail prices[]) . . . the customer cannot be expected to initiate substitution in the first instance.”²⁸ He considered cardholder behavior in defining the relevant market only when he determined that a significant price increase in the relevant market would be unlikely to cause significant merchant attrition, “given the high rates of credit-insistent spend merchants would place at risk by switching away from credit card acceptance.”²⁹ He thus concluded that, “[n]otwithstanding the two-sidedness of the credit card industry[,] . . . the court finds inadequate cause to depart from. . . defin[ing] the relevant market by reference to network services, rather than transactions.”³⁰

The Second Circuit found that definition of the relevant market to be incorrect.³¹ From an economic perspective, that conclusion is clearly correct.

²³ *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 404 (1956).

²⁴ *Geneva Pharm. Tech. Corp. v. Barr Labs. Inc.*, 386 F.3d 485, 496 (2d Cir. 2004); *see also* U.S. DEPARTMENT OF JUSTICE & FEDERAL TRADE COMMISSION, HORIZONTAL MERGER GUIDELINES § 4 (2010).

²⁵ 88 F. Supp. 3d 143, 174 (E.D.N.Y. 2015).

²⁶ *Id.* at 170, 172.

²⁷ *Id.*

²⁸ *Id.* at 177.

²⁹ *Id.* at 179.

³⁰ *Id.*

³¹ *United States v. American Express Co.*, 838 F.3d 179, 197–200 (2d Cir. 2016).

The definition of the relevant market must account for all sides of a market, if “a change in demand or cost on one side . . . will necessarily affect the level and relationship of prices on all sides”³² of a market. The correct application of the hypothetical monopolist test (HMT) in a two-sided market thus requires a court to determine whether a hypothetical profit-maximizing monopolist could profitably implement a small but significant and nontransitory increase in price (SSNIP) on one side of the market, while accounting for the SSNIP’s indirect impact on the other side of the market.³³

Judge Garaufis presumed that any decrease in the quantity of network services that merchants demanded in response to a SSNIP would not be large enough to render the price increase unprofitable.³⁴ However, he failed to consider in his analysis the potential change in cardholder demand that the decreased merchant demand could stimulate. As the Second Circuit said, “[a] proper application of the HMT . . . would not have merely assumed that a decrease in quantity of network services demanded by merchants facing a SSNIP would be too small to render the accompanying price increase unprofitable,” but would have instead examined “the extent to which even a low level of merchant attrition might cause some cardholders to switch to alternative forms of payment.”³⁵ Any cardholder attrition would generate “a feedback effect on merchant demand (and thus influences the price charged to merchants).”³⁶ Hence, the Second Circuit concluded, correctly on economic grounds, that the district court had erred by “excluding the market for cardholders from [the] relevant market definition.”³⁷

In sum, the Second Circuit recognized that, in defining a relevant market, proper application of the HMT must capture the effects that a SSNIP would have on both sides of a two-sided market. A one-sided HMT in a two-sided market ignores the hypothetical monopolist’s *net* price and therefore distorts the analysis of the effect that a SSNIP would have on a hypothetical monopolist’s profits. The Second Circuit was also correct as an economic matter in finding that the district court’s “definition of the relevant market” was “fatal to [the district court’s] conclusion that Amex violated § 1,”³⁸ because it undermined the assessment of Amex’s market power and its determination of the NDPs’ net competitive effect, subjects to which we now turn.

³² David S. Evans, *The Antitrust Economics of Multi-Sided Platform Markets*, 20 YALE J. ON REG. 325, 355 (2003); see also Rochet & Tirole, *Two-Sided Markets: A Progress Report*, *supra* note 18, at 648, 664–65; Filistrucchi, Klein & Michielsen, *supra* note 20, at 301–02.

³³ *American Express*, 838 F.3d at 199–200.

³⁴ *American Express*, 88 F. Supp. 3d at 179.

³⁵ *American Express*, 838 F.3d at 200.

³⁶ *Id.*

³⁷ *Id.* at 197.

³⁸ *Id.* at 196.

III. ANALYZING MARKET POWER IN A TWO-SIDED MARKET

The Second Circuit criticized the district court's conclusion that the government presented evidence sufficient to show Amex's market power in the relevant market.³⁹ Judge Garaufis found that Amex's market share of 26.4 percent "in a highly concentrated market with significant barrier to entry" was evidence of market power.⁴⁰ Nonetheless, he said that such evidence would not suffice to prove market power, if it were not "for the amplifying effect of the cardholder insistence"—that is, the tendency for cardholders to "insist on paying with their Amex cards and [their tendency to] shop elsewhere or spend less if unable to use their cards of choice."⁴¹ Judge Garaufis said that, because of cardholders' insistence on using Amex cards, merchants were unable to resist Amex's potentially anticompetitive practices by, for example, steering customers to using credit cards with lower merchant fees.⁴² He found it to indicate Amex's market power that the company, as part of its Value Recapture (VR) initiative between 2005 and 2010, was able to profit by increasing, "with little or no meaningful buyer attrition," the fee (called the merchant discount) that Amex charges the merchant for handling the transaction between the cardholder and the merchant.⁴³

However, the district court's conclusion had no support in economic theory or analysis. The Second Circuit correctly recognized that cardholder insistence does not indicate market power.⁴⁴ Such loyalty of cardholders exists because of the rewards and other associated benefits that Amex offers.⁴⁵ That loyalty in turn makes accepting Amex's cards and paying the merchant discount a worthwhile proposition for the merchants that accept Amex's cards.⁴⁶ Hence, the cardholders' insistence on using Amex's cards is not evidence of market power, but rather evidence of competitive benefits to the cardholder side of the two-sided market and, consequently, evidence of

³⁹ *Id.* at 200–04.

⁴⁰ *American Express*, 88 F. Supp. 3d at 190. It is worth noting that Amex had a 26.4-percent market share for "general purpose credit and charge card purchase volume in the United States." *Id.* at 188. Although Judge Garaufis defined the relevant product market as the market including merchants only, he used Amex's market share of a different market—that is, one including both merchants and cardholders—as evidence of Amex's market power. We do not discuss the implications of this evidentiary inaccuracy in this article.

⁴¹ *Id.* at 191.

⁴² *Id.*

⁴³ *Id.* at 195–96.

⁴⁴ *American Express*, 838 F.3d at 202–04.

⁴⁵ *Id.*

⁴⁶ Customer loyalty, which the phenomenon of cardholder insistence exemplifies, can have procompetitive effects. See Richard A. Posner, *Vertical Restraints and Antitrust Policy*, 72 U. CHI. L. REV. 229, 240 (2005) ("Another name for [loyalty] might be low transaction costs and customer inertia, which might be another name for economizing on transaction costs.").

the concomitantly resulting competitive benefits to merchants that accept American Express cards.⁴⁷

It would be similarly incorrect to consider Amex's ability to increase merchant fees profitably through its VR program as direct evidence of its market power. Judge Garaufis found that American Express's costs were increasing concurrently with the VR program.⁴⁸ By itself, a simultaneous increase in price and costs is not evidence of market power. Moreover, Judge Garaufis recognized that Amex invested substantially in new co-branding programs that had marketing and promotional effects.⁴⁹ Competitive firms raise prices when expensive marketing and promotional efforts succeed in expanding demand for their products. When demand for Amex's products expands on the cardholder side of the two-sided market, value also expands for merchants on the other side of the market. Thus, an increase in merchant discounts is not a result of market power, but rather a concomitant of successful investment in creating output and value.

Therefore, the Second Circuit was correct to conclude that neither cardholder insistence nor Amex's increase of merchant fees was evidence of market power sufficient to have an adverse effect on competition.⁵⁰

IV. ANALYZING COMPETITIVE EFFECTS IN A TWO-SIDED MARKET

The Second Circuit found that the "erroneous market definition" distorted the district court's assessment of the net competitive effect of the non-discriminatory provisions on all Amex customers.⁵¹ Although the district court said that there was no evidence that the NDPs resulted in "higher two-sided price[s]," it found that the government produced sufficient circumstantial evidence "to support the conclusion that the NDPs had anticompetitive effects on the market as a whole."⁵² However, the Second Circuit reasoned that, to determine the NDPs' net competitive effect, one must account for the competitive effect of the NDPs on the merchant side of the market as well as on the cardholder side of the market.⁵³

In the district court, the government successfully argued that Amex's use of the NDPs caused an actual harm to competition on the merchant side of the market.⁵⁴ The government said that, "with the NDPs in place, merchants lack any meaningful means of controlling their consumption

⁴⁷ *American Express*, 838 F.3d at 202-04.

⁴⁸ *American Express*, 88 F. Supp. 3d at 196.

⁴⁹ *Id.* at 203.

⁵⁰ *American Express*, 838 F.3d at 202-05.

⁵¹ *Id.* at 204.

⁵² *Id.*

⁵³ *Id.* at 204-05.

⁵⁴ *American Express*, 88 F. Supp. 3d at 208.

of network services in response to changes in price.⁵⁵ In other words, the NDPs prevented merchants from influencing their customers' payment choices, which allegedly diminished the incentive of Amex's competitors, Visa and MasterCard, to offer merchants lower discount fees.⁵⁶ The government argued that, by decreasing the incentive for Amex and its competitors to compete by offering merchants a lower price, the use of NDPs decreased competition in the market for payment-card network services.⁵⁷ Judge Garaufis found that "proof of anticompetitive harm to merchants, the primary consumers of Ame[x] network services, is sufficient to discharge Plaintiffs' burden in this case."⁵⁸

The Second Circuit correctly disagreed. It observed that "[t]he NDPs simultaneously affect competition for merchants and cardholders by protecting the critically important revenue that Amex receives from its relatively high merchant fees."⁵⁹ Amex could not have supplied its cardholders with the optimal level of cardholder benefits if merchants could discriminate by steering Amex cardholders at the critical point of sale to a different form of payment. Merchant steering would reduce Amex's revenue from merchant discount fees, which Amex used to fund enhanced benefits to its cardholders. The Second Circuit observed that "[a] reduction in revenue that Amex earns from merchant fees may decrease the optimal level of cardholder benefits, which in turn may reduce the intensity of competition among payment-card networks on the cardholder side of the market."⁶⁰ The Second Circuit said that the district court's analysis "erroneously elevated the interests of merchants above those of cardholders."⁶¹

A rigorous economic analysis of the NDPs' competitive effects would have been two-sided, accounting for both the effects on network services to merchants and the effects on credit-card services to cardholders. The total price charged on both sides of the market is what drives output in the general-purpose credit-card industry. This insight required the district court to balance the welfare gains on the cardholder side of the market against possible welfare losses on the merchant side of the market, so as to determine the net effect of the NDPs. Hence, the Second Circuit was correct as a matter of economic analysis to require the government to examine the competitive effects that the NDPs had on both sides of the platform and show that Amex's consumers were "worse off overall."⁶² By entirely excluding one side

⁵⁵ *Id.* at 207.

⁵⁶ *Id.* at 207–08.

⁵⁷ *Id.* at 212.

⁵⁸ *Id.* at 208.

⁵⁹ *American Express*, 838 F.3d at 205.

⁶⁰ *Id.*

⁶¹ *Id.* at 204.

⁶² *Id.* at 205.

of the two-sided market from its relevant product market, the district court never could have analyzed correctly the net competitive effects of the challenged conduct.

The two-sided competitive-effects analysis that the Second Circuit performed does not necessarily address whether efficiency justifications (such as economies of scale or prevention of free riding) offset adverse competitive effects and thus excuse the defendant from liability. The Second Circuit said that “[w]hether the NDPs had procompetitive effects on cardholders—let alone whether any alleged procompetitive effects on cardholders outweigh ‘anticompetitive’ effects on merchants—has no bearing on whether [the government] carried [its] initial burden.”⁶³ A court would reach that question of procompetitive justification only after the government had carried its burden of proving that the challenged conduct had an actual adverse effect on competition in the relevant market, which here would assuredly be the two-sided market that includes both cardholders and merchants as consumers.⁶⁴ Even where substitution by the merchants alone might be viewed as insufficient to underlie effective competition for Amex, substitution by cardholders together with concomitant substitution by merchants might well be understood to underlie effective competition to Amex from rival payment mechanisms, including other general purpose credit card systems. Only after a finding of an actual adverse impact on competition in the relevant two-sided market would the burden shift to the defendant to produce evidence that the restraint generated a mitigating procompetitive effect that outweighs its anticompetitive effect.⁶⁵

CONCLUSION

In September 2016, the U.S. Court of Appeals for the Second Circuit issued a decision that recognized and applied important economic principles concerning the antitrust analysis of single-firm conduct in two-sided markets. The Second Circuit reversed a February 2015 decision of the U.S. District Court for the Eastern District of New York that found Amex’s NDPs, which prohibited merchants from steering customers toward using other credit cards that charge lower merchant fees, unreasonably restrained trade and violated section 1 of the Sherman Act. Specifically, the district court found that the government had shown by a preponderance of the evidence that Amex’s use of NDPs created an environment in which credit-card networks had little incentive to lower merchant fees, which allegedly restricted interbrand competition among those networks. The Second

⁶³ *Id.*

⁶⁴ *See, e.g.,* Geneva Pharm. Tech. Corp. v. Barr Labs. Inc., 386 F.3d 485, 506–07 (2d Cir. 2004).

⁶⁵ *Id.*

Circuit, however, found that the district court's analysis focused erroneously on only the merchant side of the market. Consequently, the Second Circuit reversed the district court's conclusions that Amex possessed significant market power and that its NDPs had an actual adverse effect on competition as a whole. In a two-sided market, network externalities exist between the two sides. The value that a consumer on one side of the market derives from her consumption of the good or service increases as the number of consumers on the other side of the market increases. Hence, the proper definition of a two-sided market must focus on how a hypothetical monopolist's SSNIP on one side of the market would affect demand on both sides of the market. Similarly, a two-sided market analysis is necessary to examine the effects that the challenged conduct has on market competition. Examining only one side of the market would necessarily distort the outcome of that analysis and could condemn legitimate business conduct that enhances, rather than decreases, consumer welfare.